UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

DMC GLOBAL INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

84-0608431

(I.R.S. Employer Identification Number)

5405 Spine Road Boulder, Colorado 80301 (303) 665-5700

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Michelle H. Shepston Chief Legal Officer DMC Global Inc. 5405 Spine Road Boulder, Colorado 80301 (303) 665-5700

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

John A. Elofson, Esq.
Davis Graham & Stubbs LLP
1550 Seventeenth Street, Suite 500
Denver, Colorado 80202
(303) 892-9400

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement as determined by the registrant.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ¬

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer □	Accelerated filer ⊠		
Non-accelerated filer □			
(Do not check if smaller reporting company)	Smaller reporting company □		

CALCULATION OF REGISTRATION FEE

securities to be registered (1)	Proposed maximum offering price	(2) Amount of registration fee (3)
Common Stock, par value \$0.05 per share		
Preferred Stock, par value \$0.05 per share		
Warrants		
Debt Securities (4)		
Purchase Contracts		
Units (5)		<u> </u>
Total	\$ 150,000	,000 \$ 17,3

- (1) Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The securities which may be offered pursuant to this Registration Statement include, pursuant to Rule 416 of the Securities Act of 1933, as amended (the "Securities Act"), such additional number of shares of the registrant's common stock that may become issuable as a result of any stock split, stock dividends or similar event.
- (2) An indeterminate aggregate offering price and number or amount of the securities of each identified class is being registered as may from time to time be sold at indeterminate prices, with a maximum aggregate offering price not to exceed \$150 million. Separate consideration may or may not be received for securities that are issuable upon conversion of, or in exchange for, or upon exercise of, convertible or exchangeable securities.
- (3) Pursuant to Rule 457(o) under the Securities Act of 1933, as amended, the registration fee has been calculated on the basis of the maximum aggregate offering price.
- (4) The debt securities may be senior, senior subordinated or subordinated and may be secured or unsecured.

Title of each class of

(5) Each unit will be issued under a unit agreement or indenture and will represent an interest in a combination of any two or more of the securities being registered by this registration statement or debt obligations of third parties, including U.S. Treasury securities.

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MARCH 10, 2017.

PROSPECTUS

DMC Global Inc.

\$150,000,000 Common Stock Preferred Stock Warrants Debt Securities Purchase Contracts Units

We may offer from time to time to sell common stock, preferred stock, warrants, debt securities, and purchase contracts, as well as units that include any of these securities or securities of other entities. The debt securities may be senior, senior subordinated or subordinated and may be secured or unsecured. The debt securities, preferred stock, warrants and purchase contracts may be convertible into or exercisable or exchangeable for common stock or preferred stock or other of our securities or securities of one or more other entities. The securities covered by this prospectus may be offered and sold by us in one or more offerings.

We may offer these securities from time to time, in amounts, on terms and at prices that will be determined at the time of offering. We will provide specific terms of these securities, including their offering prices, in prospectus supplements to this prospectus. The prospectus supplements may also add, update or change information contained in this prospectus. You should read this prospectus and any prospectus supplement carefully before you invest.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods, on a continuous or delayed basis. The applicable prospectus supplement will provide the names of any underwriters, dealers or agents, the specific terms of the plan of distribution, any over-allotment option and any applicable underwriting discounts and commissions.

Our common stock is listed for trading on The NASDAQ Global Select under the symbol "BOOM." We have not yet determined whether any of the other securities that may be offered by this prospectus will be listed on any exchange, inter-dealer quotation system or over-the-counter market. If we decide to seek the listing of any such securities upon issuance, the prospectus supplement relating to those securities will disclose the exchange, quotation system or market on which the securities will be listed.

Investing in these securities involves risks. See "Special Note on Forward-Looking Statements" beginning on page 2 of this prospectus and the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2016 and the corresponding sections of any prospectus supplement.

Neither the United States Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is ______, 2017.

We have not authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus or in any prospectus supplement or free writing prospectus prepared by us or on our behalf or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you.

We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in or incorporated by reference in this prospectus is accurate as of any date other than the date on the

front of this prospectus. Unless the context otherwise requires, the terms "DMC," the "Company," "we," "us," and "our" refer to DMC Global Inc. and its consolidated subsidiaries

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The registration statement containing this prospectus, including the exhibits to the registration statement, provides additional information about us and the securities offered under this prospectus. The registration statement, including the exhibits and the documents incorporated herein by reference, can be read on the website or at the offices of the United States Securities and Exchange Commission ("SEC") mentioned under the heading "Where You Can Find More Information."

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC using a "shelf" registration process. Under this shelf process, we may sell any combination of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update, or change information contained in this prospectus. To the extent that information in any prospectus supplement or the information incorporated by reference in any prospectus supplement is inconsistent with information contained in this prospectus, the information in such prospectus supplement or the information incorporated by reference into such prospectus supplement shall govern. We urge you to read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information" on page 1.

We are responsible only for the information incorporated by reference or provided in this prospectus and the accompanying prospectus supplement or included elsewhere in the registration statement of which this prospectus is a part. We have not authorized anyone to provide you with different information. We are not making an offer to sell or soliciting an offer to buy these securities in any jurisdiction in which the offer or solicitation is not authorized or in which the person making the offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make the offer or solicitation. You should not assume that the information in this prospectus or the accompanying prospectus supplement is accurate as of any date other than the date on the front page of the document.

OUR COMPANY

DMC operates a diversified family of technical product and process businesses serving the energy, industrial and infrastructure markets. Our businesses operate globally through an international network of manufacturing, distribution and sales facilities. Our business segments consist of NobelClad and DynaEnergetics. NobelClad is a global leader in the production of explosion-welded clad metal plates for use in the construction of corrosion resistant industrial processing equipment and specialized transition joints. DynaEnergetics manufactures and distributes products utilized by the global oil and gas industry principally for the perforation of oil and gas wells. Our principal executive offices are located at 5405 Spine Road, Boulder, Colorado 80301, and our telephone number is (303) 665-5700.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public from the SEC's website at www.sec.gov or from our website at www.dmcglobal.com. You may also read and copy any document we file at the SEC's public reference room in Washington, D.C., located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Additional information about us is also available on our website at www.dmcglobal.com. However, the information on our website is not part of this prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" in this prospectus the information in the documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus. We expect to file additional documents with the SEC in the future that will, when filed, update the current information included in or incorporated by reference into this prospectus. Any information that is part of this prospectus or any prospectus supplement that speaks as of a later date than any other information that is part of this prospectus or any prospectus supplement updates or supersedes such other information. You should consider any statement which is so modified or superseded to be a part of this prospectus only as so modified or superseded.

We incorporate by reference in this prospectus the documents listed below and any documents or portions thereof that we file with the SEC after the date of this prospectus under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") (excluding, in each case, any portion of such document that may have been "furnished" but not "filed" for purposes of the Exchange Act) until we sell, or otherwise terminate the offering of, all of the securities that may be offered by this prospectus. We do not, however, incorporate by reference in this prospectus any documents or portions

thereof, or any other information, that we furnish or are deemed to furnish, and not file, with the SEC in accordance with the SEC rules. The following documents have been filed by us with the SEC (File No. 001-14775) and are incorporated by reference into this prospectus:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2016:
- Our Current Report on Form 8-K filed with the SEC on March 9, 2017;
- The description of our common stock, par value \$0.05 per share, as set forth under the caption "Description of Registrant's Securities to be Issued" in Amendment No. 1 to our Registration Statement on Form 8-A filed with the SEC on March 27, 2006.

You may obtain, free of charge, a copy of any of these documents (other than exhibits to these documents unless the exhibits specifically are incorporated by reference into these documents or referred to in this prospectus) by writing or calling us at the following address and telephone number:

DMC Global Inc. 5405 Spine Road Boulder, Colorado 80301 (303) 665-5700 Attention: Andy Nelson

SPECIAL NOTE ON FORWARD-LOOKING STATEMENTS

This prospectus contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 (the "Securities Act") and section 21E of the Exchange Act. We intend the forward-looking statements throughout this prospectus, any document incorporated by reference herein and any free writing prospectus to be covered by the safe harbor provisions for forward-looking statements. Statements contained in this prospectus or those documents which are not historical facts are forwardlooking statements that involve risks and uncertainties that could cause actual results to differ materially from projected results. These statements can sometimes be identified by our use of forward-looking words such as "may," "believe," "plan," "anticipate," "estimate," "expect," "intend," and other phrases of similar meaning. Such statements include projections, guidance and other statements regarding our expected future financial position and operating results, our business strategy, our financing plans, our future liquidity position and factors impacting such position, and the outcome of any pending litigation or contingencies. The forward-looking information is based on information available as of the date of the relevant document and on numerous assumptions and developments that are not within our control. Although we believe that our expectations as expressed in these forward-looking statements are reasonable, we cannot assure you that our expectations will turn out to be correct. Factors that could cause actual results to differ materially include, but are not limited to, those factors referenced in our Annual Report on Form 10-K for the year ended December 31, 2016 and such things as the following: changes in global economic conditions; the ability to obtain new contracts at attractive prices; the size and timing of customer orders and shipment; product pricing and margins; our ability to realize sales from our backlog; fluctuations in customer demand; fluctuations in foreign currencies; competitive factors; the timely completion of contracts; the timing and size of expenditures; the timely receipt of government approvals and permits; the price and availability of metal and other raw material; the adequacy of local labor supplies at our facilities; current or future limits on manufacturing capacity at our various operations; our ability to successfully integrate acquired businesses; the ability to remain an innovative leader in our fields of business; the application of governmental regulation and oversight of our operations and products and the industries in which our customers operate; the availability and cost of funds; and general economic conditions, both domestic and foreign, impacting our business and the business of the end-market users we serve. You are cautioned not to place undue reliance on these forward-looking statements, which reflect management's analysis only as of the date of the relevant document. Except as otherwise required by law, we undertake no obligation to publicly release the results of any revision to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

DESCRIPTION OF DEBT SECURITIES

General

The debt securities that we may offer by this prospectus consist of notes, debentures, or other evidences of our indebtedness, which we refer to collectively as "debt securities." This prospectus describes certain general terms and provisions of the debt securities. When we offer to sell a particular series of debt securities, we will describe the specific terms for the debt securities in a supplement to this prospectus. The prospectus supplement will also indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities. The debt securities will be issued under an indenture between us and a trustee named in the prospectus supplement. We have summarized select portions of the form of the indenture below. The summary is not complete. The form of the indenture has been filed as an exhibit to the registration statement, and you should read the indenture for provisions that may be important to you.

In this description, the words "DMC," "we," "us," and "our" refer only to DMC Global Inc., and not to any of our subsidiaries or affiliates. Additional or different provisions that are applicable to a particular series of debt securities will, if material, be described in a prospectus supplement relating to the offering of debt securities of that series. These provisions may include, among other things and to the extent applicable, the following:

- the title of the debt securities:
- the extent, if any, to which the debt securities are subordinated in right of payment to our other indebtedness;
- any provisions relating to any security provided for the debt securities;
- any limit on the aggregate principal amount of the debt securities;
- any guarantees applicable to the debt securities, and any subordination provisions or other limitations applicable to any such guarantees:
- the persons to whom any interest on the debt securities will be payable, if other than the registered holders thereof on the regular record date therefor;
- the date or dates on which the principal of the debt securities will be payable;
- the rate or rates at which the debt securities will bear interest, if any, and the date or dates from which interest will accrue:
- the dates on which interest will be payable and the regular record dates for interest payment dates;
- the place or places where the principal of and any premium and interest on the debt securities will be payable;
- the period or periods, if any, within which, and the price or prices at which, the debt securities may be redeemed, in whole or in part, at our option:
- our obligation, if any, to redeem or purchase the debt securities pursuant to sinking fund or similar provisions and the terms and conditions of any such redemption or purchase;
- the denominations in which the debt securities will be issuable, if other than denominations of \$1,000 and any integral multiple thereof;
- the currency, currencies or currency units, if other than currency of the United States of America, in which payment of the principal of and any premium or interest on the debt securities will be payable, and the terms and conditions of any elections that may be made available with respect thereto;
- any index or formula used to determine the amount of payments of principal of and any premium or interest on the debt securities:

- whether the debt securities are to be issued in whole or in part in the form of one or more global securities and, if so, the identity of the depositary, if any, for the global securities:
- the terms and conditions, if any, pursuant to which the debt securities are convertible into or exchangeable for our common stock or other securities of us or any other person;
- the principal amount (or any portion of the principal amount) of the debt securities which will be payable upon any declaration of acceleration of the maturity of the debt securities pursuant to an event of default; and
- the applicability to the debt securities of the provisions described in "-Defeasance"

We may issue debt securities at a discount from their stated principal amount. Federal income tax considerations and other special considerations applicable to any debt security issued with original issue discount (an "original issue discount security") may be described in an applicable prospectus supplement.

If the purchase price of any series of the debt securities is payable in a foreign currency or currency unit or if the principal of or any premium or interest on any series of the debt securities is payable in a foreign currency unit, the restrictions, elections, general tax considerations, specific terms, and other information with respect to the debt securities and the applicable foreign currency or currency unit will be set forth in an applicable prospectus supplement.

Unless otherwise indicated in an applicable prospectus supplement:

- the debt securities will be issued only in fully registered form (without coupons) in denominations of \$1,000 or integral multiples thereof;
- payment of principal, premium, if any, and interest on the debt securities will be payable, and the exchange, conversion, and transfer of debt securities will be registrable, at our office or agency maintained for those purposes and at any other office or agency maintained for those purposes. No service charge will be made for any registration of transfer or exchange of the debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge imposed in connection therewith.

Global Securities

The debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depositary or its nominee identified in an applicable prospectus supplement. Unless and until it is exchanged in whole or in part for debt securities in registered form, a global security may not be registered for transfer or exchange except:

- by the depositary to a nominee of the depositary;
- by a nominee of the depositary to the depositary or another nominee of the depositary;
- by the depositary or any nominee of the depositary to a successor depositary or a nominee of the successor depositary;
- in any other circumstances described in an applicable prospectus supplement.

The specific terms of the depositary arrangement with respect to any debt securities to be represented by a global security will be described in an applicable prospectus supplement. We expect that the following provisions will apply to depositary arrangements.

Unless otherwise specified in an applicable prospectus supplement, any global security that represents debt securities will be registered in the name of the depositary or its nominee. Upon the deposit of a global security with or on behalf of the depositary for the global security, the depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of the debt securities represented by the global security to the accounts of institutions that are participants in such system. The accounts to be credited will be designated by the underwriters or agents of the debt securities or by us, if the debt securities are offered and sold directly by us.

Ownership of beneficial interests in debt securities represented by a global security will be limited to participants in the book-entry registration and transfer system of the applicable depositary or persons that may hold interests through those

participants. Ownership of those beneficial interests by participants will be shown on, and the transfer of ownership will be effected only through, records maintained by the depositary or its nominee for such global security. Ownership of such beneficial interests by persons that hold through such participants will be shown on, and the transfer of such ownership will be effected only through, records maintained by the participants. The laws of some jurisdictions require that specified purchasers of securities take physical delivery of their securities in definitive form. These laws may impair your ability to transfer beneficial interests in a global security.

So long as the depositary for a global security, or its nominee, is the registered owner of the global security, the depositary or the nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the global security for all purposes under the applicable indenture. Unless otherwise specified in an applicable prospectus supplement, owners of beneficial interests in the global security will not be entitled to have any of the debt securities represented by the global security registered in their names, will not receive or be entitled to receive physical delivery of any such debt securities in certificated form, and will not be considered the owners or holders of the debt securities for any purpose under the applicable indenture. Accordingly, each person owning a beneficial interest in debt securities represented by a global security must rely on the procedures of the applicable depositary and, if the person is not a participant in the book-entry registration and transfer system of the applicable depositary, on the procedures of the participant through which the person owns its interest, to exercise any rights of an owner or holder of debt securities under the applicable indenture.

We understand that, under existing industry practices, if an owner of a beneficial interest in debt securities represented by a global security desires to give any notice or take any action that an owner or holder of debt securities is entitled to give or take under the applicable indenture:

- the applicable depositary would authorize its participants to give the notice or take the action;
- the participants would authorize persons owning the beneficial interests through the participants to give the notice or take the action or would otherwise act upon the instructions of the persons owning the beneficial interests.

Principal of and any premium and interest on debt securities represented by a global security will be payable in the manner described in an applicable prospectus supplement. Payment of principal of, and any premium or interest on, debt securities represented by a global security will be made to the applicable depositary or its nominee, as the case may be, as the registered owner or the holder of the global security. None of us, the trustee, any paying agent, or the registrar for debt securities represented by a global security will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in those debt securities or for maintaining, supervising, or reviewing any records relating to those beneficial ownership interests.

Certain Covenants

Maintenance of Office or Agency. We will be required to maintain an office or agency in each place of payment for each series of debt securities for notice and demand purposes and for the purposes of presenting or surrendering debt securities for payment, registration of transfer, or exchange.

Paying Agents, Etc. If we act as our own paying agent with respect to any series of debt securities, on or before each due date of the principal of or interest on any of the debt securities of that series, we will be required to segregate and hold in trust for the benefit of the persons entitled to payment a sum sufficient to pay the amount due and to notify the trustee promptly of our action or failure to act. If we have one or more paying agents for any series of debt securities, prior to each due date of the principal of or interest on any debt securities of that series, we will be required to deposit with a paying agent a sum sufficient to pay the amount due and, unless the paying agent is the trustee, to promptly notify the trustee of our action or failure to act. All moneys paid by us to a paying agent for the payment of principal of or interest on any debt securities that remain unclaimed for two years after the principal or interest has become due and payable may be repaid to us, and thereafter the holder of those debt securities may look only to us for payment thereof.

Existence. We will be required to, and will be required to cause our subsidiaries to, preserve and keep in full force and effect our and their existence, charter rights, statutory rights, and franchises, except to the extent that our board of directors determines that the preservation thereof no longer is desirable in the conduct of our business.

Restrictive Covenants. Any restrictive covenants applicable to any series of debt securities will be described in an applicable prospectus supplement.

Events of Default

When we use the term "Event of Default" with respect to debt securities of any series, we generally mean:

- We default in the payment of any interest on any debt security of that series when due, which default continues for 30 days:
- 2. We default in the payment when due of the principal of or premium, if any, on any debt security of that series when due;
- We default in the deposit of any sinking fund payment when due, if applicable;
- 4. We default in the performance, or breach, of certain of our covenants set forth in the applicable indenture, such as covenants relating to:
 - the requirement that we maintain an office in the United States where debt securities of that series may be presented or surrendered for payment and registration of transfer or exchange and where notices and demands may be served upon us in respect of debt securities of that series and the applicable indenture,
 - the requirement to hold in trust funds for payments with respect to debt securities of that series if we act as paying agent with respect to debt securities of that series. and
 - the requirement that DMC and any guarantor deliver to the trustee an officer's certificate relating to compliance with conditions and covenants of the indenture (other than a covenant included in the indenture solely for the benefit of a series of debt securities other than that series), which default or breach continues for 90 days after written notice thereof has been given to us as provided in the indenture;
- 5. We default in the performance of, or breach, any other of our covenants in the applicable indenture (other than a covenant included in such indenture solely for the benefit of a series of debt securities other than that series), which default or breach continues for 180 days after written notice thereof has been given to us as provided in the applicable indenture:
- 6. Specified events of bankruptcy, insolvency, or reorganization involving us or certain of our subsidiaries;
- Any other Event of Default provided with respect to debt securities of that series issued under the applicable indenture.

Pursuant to the Trust Indenture Act, the trustee is required, within 90 calendar days after the occurrence of a default in respect of any series of debt securities, to give to the holders of the debt securities of that series notice of all uncured defaults known to it, except that other than in the case of a default of the character contemplated in clause (1) or (2) above, the trustee may withhold notice if and so long as it in good faith determines that the withholding of notice is in the interests of the holders of the debt securities of that series.

If an Event of Default described in clause (6) above occurs, the principal of, premium, if any, and accrued interest on the debt securities of that series will become immediately due and payable without any declaration or other act on the part of the trustee or any holder of the debt securities of that series. If any other Event of Default with respect to debt securities of any series occurs and is continuing, either the trustee or the holders of at least 25% in principal amount of the debt securities of that series may declare the principal amount of all debt securities of that series to be due and payable immediately. However, at any time after a declaration of acceleration with respect to debt securities of any series has been made, but before a judgment or decree based on such acceleration has been obtained, the holders of a majority in principal amount of the debt securities of that series may, under specified circumstances, rescind and annul such acceleration. See "-Modification and Waiver" below.

Subject to the duty of the trustee to act with the required standard of care during an Event of Default, the trustee will have no obligation to exercise any of its rights or powers under the applicable indenture at the request or direction of the holders of debt securities, unless holders of debt securities shall have furnished to the trustee reasonable security or indemnity. Subject to the provisions of the applicable indenture, including those requiring security or indemnification of the trustee, the holders of a majority in principal amount of the debt securities of any series will have the right to direct the time, method, and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series.

No holder of a debt security of any series will have any right to institute any proceeding with respect to the applicable indenture or for any remedy thereunder unless:

 the holder has previously given to the trustee written notice of a continuing Event of Default;

- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the same series have requested the trustee to institute a proceeding in respect of the Event of Default;
- the holder or holders have furnished reasonable indemnity to the trustee to institute the proceeding as trustee:
- the trustee has not received from the holders of a majority in principal amount of the outstanding debt securities of the same series a direction inconsistent with the
 request; and
- the trustee has failed to institute the proceeding within 60 calendar days

However, the limitations described above do not apply to a suit instituted by a holder of a debt security for enforcement of payment of the principal of and interest on such debt security on or after the applicable due dates for the payment of such principal and interest.

We may be required to furnish to the trustee annually a statement as to our performance of our obligations under the applicable indenture and as to any default in our performance.

Any additional Events of Default with respect to any series of debt securities, and any variations from the foregoing Events of Default applicable to any series of debt securities, will be described in an applicable prospectus supplement.

Modification and Waiver

In general, modifications and amendments of an indenture may be made by us and the trustee with the consent of the holders of not less than a majority in principal amount of the debt securities of each series affected thereby. However, no modification or amendment of an indenture may, without the consent of the holder of each debt security affected thereby:

- change the stated maturity of, or any installment of principal of, or interest on, any debt security:
- reduce the principal amount of, the rate of interest on, or the premium, if any, payable upon the redemption of, any debt security;
- reduce the amount of principal of an original issue discount security payable upon acceleration of the maturity thereof:
- change the place or currency of payment of principal of, or premium, if any, or interest on any debt security;
- impair the right to institute suit for the enforcement of any payment on or with respect to any debt security on or after the stated maturity or prepayment date thereof; or
- reduce the percentage in principal amount of debt securities of any series required for modification or amendment of applicable indenture or for waiver of compliance with certain provisions of the applicable indenture or for waiver of certain defaults.

The holders of at least a majority in principal amount of the debt securities of any series may, on behalf of the holders of all debt securities of that series, waive our compliance with specified covenants of the indenture. The holders of at least a majority in principal amount of the debt securities of any series may, on behalf of the holders of all debt securities of that series, waive any past default under the indenture with respect to that series, except:

- a default in the payment of the principal of, or premium, if any, or interest on, any debt security of that series;
- a default of a provision of the indenture that cannot be modified or amended without the consent of the holder of each debt security of that series.

Defeasance

Unless otherwise specified in a prospectus supplement applicable to a particular series of debt securities and except as described below, upon compliance with the applicable requirements described below, we:

- will be deemed to have been discharged from our obligations with respect to the debt securities of that series;
- will be released from our obligations to comply with certain covenants described under "-Certain Covenants" above with respect to the debt securities of that series, and the occurrence of an event described in any of clauses (3), (4), (5), (6), and (7) under "-Events of Default" above will no longer be an Event of Default with respect to the debt securities of that series except to the limited extent described below.

Following any defeasance described in clause (1) or (2) above, we will continue to have specified obligations under the indentures, including obligations to register the transfer or exchange of debt securities of the applicable series; replace destroyed, stolen, lost, or mutilated debt securities of the applicable series; maintain an office or agency in respect of the debt securities of the applicable series; and hold funds for payment to holders of debt securities of the applicable series in trust. In the case of any defeasance described in clause (2) above, any failure by us to comply with our continuing obligations may constitute an Event of Default with respect to the debt securities of the applicable series as described in clause (5) under "-Events of Defaults" above.

In order to effect any defeasance described in clause (1) or (2) above, we must irrevocably deposit with the trustee, in trust, money or specified government obligations (or depositary receipts therefor) that through the payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay all of the principal of, premium, if any, and interest on the debt securities of such series on the dates such payments are due in accordance with the terms of such debt securities. In addition:

- no Event of Default or event which with the giving of notice or lapse of time, or both, would become an Event of Default under an indenture shall have occurred and be continuing on the date of such deposit;
- no Event of Default described in clause (7) under "-Events of Default" above or event that with the giving of notice or lapse of time, or both, would become an Event of Default described in such clause (7) shall have occurred and be continuing at any time on or prior to the 90th calendar day following the date of deposit;
- in the event of any defeasance described in clause (1) above, we shall have delivered an opinion of counsel, stating that (a) we have received from, or there has been published by, the IRS a ruling or (b) there has been a change in applicable federal law, in either case to the effect that, among other things, the holders of the debt securities of such series will not recognize gain or loss for United States federal income tax purposes as a result of such deposit or defeasance and will be subject to United States federal income tax in the same manner as if such defeasance had not occurred; and
- in the event of any defeasance described in clause (2) above, we shall have delivered an opinion of counsel to the effect that, among other things, the holders of the debt securities of such series will not recognize gain or loss for United States federal income tax purposes as a result of such deposit or defeasance and will be subject to United States federal income tax in the same manner as if such defeasance had not occurred.

If we fail to comply with our remaining obligations under an indenture with respect to the debt securities of the applicable series following a defeasance described in clause (2) above and the debt securities of that series are declared due and payable because of the occurrence of any undefeased Event of Default, the amount of money and government obligations on deposit with the trustee may be insufficient to pay amounts due on the debt securities of that series at the time of the acceleration resulting from such Event of Default. However, we will remain liable in respect of such payments.

Satisfaction and Discharge

We, at our option, may satisfy and discharge an indenture (except for specified obligations of us and the trustee, including, among others, the obligations to apply money held in trust) when:

- either:
 - 1. all of our debt securities previously authenticated and delivered under the applicable indenture (subject to specified exceptions relating to debt securities that have otherwise been satisfied or provided for) have been delivered to the trustee for cancellation; or
 - 2. all of our debt securities not previously delivered to the trustee for cancellation have become due and payable, will become due and payable at their stated maturity within one year, or are to be called for

redemption within one year under arrangements satisfactory to the trustee for the giving of notice of redemption by the trustee, and we have deposited or caused to be deposited with the trustee as trust funds for such purpose an amount sufficient to pay and discharge the entire indebtedness on such debt securities, for principal and any premium and interest to the date of such deposit (in the case of debt securities which have become due and payable) or to the stated maturity or redemption date, as the case may be;

- we have paid or caused to be paid all other sums payable by us under the applicable indenture;
- we have delivered to the trustee an officer's certificate and an opinion of counsel, each to the effect that all conditions precedent relating to the satisfaction and discharge of the applicable indenture have been satisfied.

Limitations on Merger and Other Transactions

Prior to the satisfaction and discharge of an indenture, we may not consolidate with or merge with or into any other person, or transfer all or substantially all of our properties and assets to another person unless:

- · either:
 - 1. we are the continuing or surviving person in the consolidation or merger;
 - the person (if other than us) formed by the consolidation or into which we are merged or to which all or substantially all of our properties and assets are
 transferred is a corporation, partnership, limited liability company, business trust, trust or other legal entity organized and validly existing under the laws of
 the United States, any State thereof, or the District of Columbia, and expressly assumes, by a supplemental indenture, all of our obligations under the debt
 securities and the applicable indenture;
- immediately after the transaction and the incurrence or anticipated incurrence of any indebtedness to be incurred in connection therewith, no Event of Default exists; and
- an officer's certificate is delivered to the trustee to the effect that both of the conditions set forth above have been satisfied and an opinion of outside counsel has been delivered to the trustee to the effect that the first condition set forth above has been satisfied.

The continuing, surviving, or successor person will succeed to and be substituted for us with the same effect as if it had been named in the indenture as a party thereto, and thereafter the predecessor person will be relieved of all obligations and covenants under the indenture and the debt securities.

Governing Law

The indenture, and the debt securities issued thereunder, will be governed by, and construed in accordance with, the laws of the State of New York.

Regarding the Trustee

The indenture contains specified limitations on the rights of the trustee, should it become our creditor within three months of, or subsequent to, a default by us to make payment in full of principal of or interest on any series of debt securities issued pursuant to the applicable indenture when and as the same becomes due and payable, to obtain payment of claims, or to realize for its own account on property received in respect of any such claim as security or otherwise, unless and until such default is cured. However, the trustee's rights as our creditor will not be limited if the creditor relationship arises from, among other things:

- the ownership or acquisition of securities issued under any indenture or having a maturity of one year or more at the time of acquisition by the trustee;
- specified advances authorized by a receivership or bankruptcy court of competent jurisdiction or by the indenture:

- disbursements made in the ordinary course of business in its capacity as indenture trustee, transfer agent, registrar, custodian, or paying agent or in any other similar capacity;
- indebtedness created as a result of goods or securities sold in a cash transaction or services rendered or premises rented;
- the acquisition, ownership, acceptance, or negotiation of specified drafts, bills of exchange, acceptances, or other obligations.

The indenture does not prohibit the trustee from serving as trustee under any other indenture to which we may be a party from time to time or from engaging in other transactions with us. If the trustee acquires any conflicting interest within the meaning of the Trust Indenture Act of 1939 and there is an Event of Default with respect to any series of debt securities, the trustee must eliminate the conflict or resign.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 25,000,000 shares of common stock, par value \$0.05 per share, and 4,000,000 shares of preferred stock, par value \$0.05 per share. As of March 9, 2017, 14,761,024 shares of our common stock, and no shares of preferred stock, were outstanding.

Common Stock

Holders of shares of our common stock are entitled to one vote per share on all matters to be voted on by stockholders. The holders of our common stock are entitled to receive such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available therefor. Upon our liquidation or dissolution, the holders of our common stock are entitled to share ratably in the distribution of assets, subject to the rights of the holders of shares of preferred stock, if any. Holders of our common stock have no preemptive rights, subscription rights or conversion rights. There are no redemption or sinking fund provisions with respect to the common stock.

Preferred Stock

Our certificate of incorporation authorizes our board of directors to establish one or more series of preferred stock and to determine, with respect to any series of preferred stock, the terms and rights of the series, including dividend rights, conversion rights, exchange rights, terms of redemption, redemption price or prices, liquidation preferences, the number of shares constituting any series and the designation of such series. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock issued by us.

Purposes and Effects of Certain Provisions of Our Certificate of Incorporation and Bylaws

General

Our certificate of incorporation and bylaws contain provisions that could make more difficult the acquisition of control of our company by means of a tender offer, open market purchases, a proxy contest or otherwise. A description of these provisions is set forth below.

Preferred Stock

We believe that the availability of the preferred stock under our certificate of incorporation will provide us with flexibility in structuring possible future financings and acquisitions and in meeting other corporate needs which might arise. Having these authorized shares available for issuance will allow us to issue shares of preferred stock without the expense and delay of a special stockholders' meeting. The authorized shares of preferred stock, as well as shares of common stock, will be available for issuance without further action by our stockholders, unless action is required by applicable law or the rules of any stock exchange on which our securities may be listed. Our board of directors has the power, subject to applicable law, to issue series of preferred stock that could, depending on the terms of the series, impede the completion of a merger, tender offer or other takeover attempt. Our board of directors will make any determination to issue shares based on its judgment as to our and our stockholders' best interests. In so acting, our board of directors could issue preferred stock having terms which could discourage an acquisition attempt or other transaction that some, or a majority, of the stockholders might believe to be

in their best interests or in which stockholders might receive a premium for their stock over the then prevailing market price of the stock.

Stockholder Action and Voting Provisions

Our certificate of incorporation (i) does not permit stockholders to act by written consent, (ii) permits our board of directors to amend our bylaws and requires that amendments to our bylaws approved by stockholders receive the approval of holders of two-thirds of all voting securities then outstanding and (iii) generally prohibits our stockholders from filling any vacancies that arise on our board of directors. In addition, an amendment to these provisions would require the approval of holders of two-thirds of all voting securities then outstanding. Further, our bylaws impose certain notice requirements on stockholders seeking to propose nominees for our board of directors or other business to be conducted at a stockholders' meeting.

Limitation of Director and Officer Liability

Our certificate of incorporation and bylaws contain provisions that (i) limit the liability of our directors and officers with respect to the performance of their duties to us and (ii) generally require us to indemnify and advance expenses to our directors and officers in connection with legal proceedings associated with such duties, in each case to the extent permitted by Delaware law. These provisions may have the effect of reducing the likelihood of derivative litigation against our directors and officers and may discourage or deter stockholders or management from bringing a lawsuit against our directors or officers for breach of their duty of care, even though such an action, if successful, might otherwise have benefited our company and its stockholders. These provisions do not limit or affect a stockholder's ability to seek and obtain relief under federal securities laws.

Special Meetings of Stockholders

Our bylaws provide that special meetings of stockholders may be called only by our board of directors, the chairman of the board of directors, and our Chief Executive Officer.

Transfer Agent

The transfer agent for our common stock is Computershare Trust Company N.A.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of debt securities, common stock, preferred stock, or any combination thereof. We may issue warrants independently or together with any other securities offered by a prospectus supplement. Warrants may be attached to or separate from such securities. Each series of warrants will be issued under a separate warrant agreement we will enter into with a warrant agent specified in the applicable prospectus supplement. The warrant agent will act solely as our agent in connection with the warrants of a particular series and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The applicable prospectus supplement will describe the terms of the warrants in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued:
- the designation, number or principal amount and terms of the debt securities, common stock, and/or preferred stock purchasable upon exercise of the warrants;
- the designation and terms of the other securities, if any, with which the warrants are issued and the number of warrants issued with each security;

- the date, if any, on and after which the warrants and the related underlying securities will be separately transferable:
- whether the warrants will be issued in registered form or bearer form:
- the price at which each underlying security purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants will commence and the date on which that right will
 expire:
- the identity of the warrant agent;
- the maximum or minimum number of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any:
- a discussion of any material federal income tax considerations; and
- any other terms of the warrants, including terms, procedures, and limitations relating to the transferability, exchange, and exercise of the warrants.

DESCRIPTION OF PURCHASE CONTRACTS

We may issue purchase contracts, including contracts obligating holders to purchase from us, and for us to sell to holders, a specific or varying number of debt securities, shares of our common stock or preferred stock, warrants or securities of an entity unaffiliated with us, or any combination of the above, at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or varying number or amount of debt securities, shares of our common stock or preferred stock, warrants or other property. The price per share of preferred stock or common stock or price of other securities may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula described in the purchase contracts. We may issue purchase contracts separately or as a part of units each consisting of a purchase contract and debt securities, preferred securities, common securities, warrants or debt obligations of third parties, including U.S. Treasury securities, securing the holder's obligations under the purchase contract. The purchase contracts may require us to make periodic payments to holders, or may require holders to make periodic payments to us, and the payments may be unsecured or pre-funded on some basis. The purchase contracts may require holders to secure the holder's obligations in a specified manner that we will describe in the applicable prospectus supplement which we file with the SEC in connection with a public offering relating to the purchase contracts.

The applicable prospectus supplement will describe the terms of any purchase contracts in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid or not:
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;
- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts;
 and
- whether the purchase contracts will be issued in fully registered or global form.

DESCRIPTION OF UNITS

We may issue units comprising one or more securities described in this prospectus in any combination. Units may also include debt obligations of third parties, such as U.S. Treasury securities. Each unit will be issued so that the holder of

the unit also is the holder of each security included in the unit. Thus, the holder of each unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date.

The applicable prospectus supplement will describe the terms of any units in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- the designation and terms of the units and the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provision for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units;
- whether the units will be issued in fully registered or global form.

RATIO OF EARNINGS TO FIXED CHARGES

The following table shows our historical ratio of earnings to fixed charges for each of the five years ended December 31, 2016, 2015, 2014, 2013, and 2012. For the purposes of calculating the ratio of earnings to fixed charges, "earnings" represents income from continuing operations before income taxes minus income from equity investees plus distributed earnings from equity investees and fixed charges. "Fixed charges" consist of interest expense, including amortization of debt issuance costs and that portion of rental expense considered to be a reasonable approximation of interest.

		Year Ended	December 31,		
_	2016	2015	2014	2013	2012
	N/A1	N/A ²	4.4x	5.8x	9.8x

Ratio of Earnings to Fixed Charges

- (1) The ratio of earnings to fixed charges was negative for the year ended December 31, 2016. Additional earnings of \$5.7 million would be needed to have a one-to-one ratio of earnings to fixed charges.
- (2) The ratio of earnings to fixed charges was negative for the year ended December 31, 2015. Additional earnings of \$26.2 million would be needed to have a one-to-one ratio of earnings to fixed charges.

USE OF PROCEEDS

We intend to use the net proceeds from the securities offered by this prospectus for general corporate purposes, which may include the acquisition of businesses or assets, the repayment of our outstanding indebtedness, working capital, or for any other purposes as may be described in a prospectus supplement.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus from time to time in one or more transactions, including without limitation:

- directly to purchasers;
- through agents;
- to or through underwriters or dealers;
- through a combination of these methods;
- in any other manner permitted by law.

Each time we sell securities, we will provide a prospectus supplement that will name any underwriter, dealer or agent involved in the offer and sale of the securities. The prospectus supplement will also set forth the terms of the offering,

including the purchase price of the securities and the proceeds to the issuer(s) from the sale of the securities, any underwriting discounts and other items constituting underwriters' compensation and any discounts or concessions allowed or reallowed or paid to dealers and any securities exchanges on which the securities may be listed. Each time we sell securities, we will describe the method of distribution of the securities in the prospectus supplement relating to the transaction.

A distribution of the securities offered by this prospectus may also be effected through the issuance of derivative securities, including without limitation, warrants, exchangeable securities, forward delivery contracts and the writing of options.

In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account:
- ordinary brokerage transactions and transactions in which a broker solicits purchasers;
- privately negotiated transactions.

We may also enter into hedging transactions. For example, we may:

- enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of the common stock pursuant to this prospectus, in which case such broker-dealer or affiliate may use shares of common stock received from us to close out its short positions;
- sell securities short and redeliver such shares to close out our short positions;
- enter into option or other types of transactions that require us to deliver common stock to a broker-dealer or an affiliate thereof, who will then resell or transfer the
 common stock under this prospectus;
- loan or pledge the common stock to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an event of default in the case of a pledge, sell the pledged shares pursuant to this prospectus.

In addition, we may enter into derivative or hedging transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. In connection with such a transaction, the third parties may sell securities covered by and pursuant to this prospectus and an applicable prospectus supplement or free writing prospectus, as the case may be. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and an applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement or free writing prospectus, as the case may be.

A prospectus supplement with respect to each series of securities will state the terms of the offering of the securities, including:

- the terms of the offering;
- the name or names of any underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the public offering price or purchase price of the securities and the net proceeds to be received by us from the sale;
- any delayed delivery arrangements;

- any initial public offering price:
- any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;
- any discounts or concessions allowed or reallowed or paid to dealers;
- any securities exchange on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to the prevailing market prices;
- at negotiated prices.

General

Any public offering price and any discounts, commissions, concessions or other items constituting compensation allowed or reallowed or paid to underwriters, dealers, agents or remarketing firms may be changed from time to time. Underwriters, dealers, agents and remarketing firms that participate in the distribution of the offered securities may be "underwriters" as defined in the Securities Act. Any discounts or commissions they receive from us and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify any underwriters, agents or dealers and describe their commissions, fees or discounts in the applicable prospectus supplement or free writing prospectus, as the case may be.

Underwriters and Agents

If underwriters are used in a sale, they will acquire the offered securities for their own account. The underwriters may resell the offered securities in one or more transactions, including negotiated transactions. These sales may be made at a fixed public offering price or prices, which may be changed, at market prices prevailing at the time of the sale, at prices related to such prevailing market price or at negotiated prices. We may offer the securities to the public through an underwriting syndicate or through a single underwriter. The underwriters in any particular offering will be mentioned in the applicable prospectus supplement or free writing prospectus, as the case may be.

Unless otherwise specified in connection with any particular offering of securities, the obligations of the underwriters to purchase the offered securities will be subject to certain conditions contained in an underwriting agreement that we will enter into with the underwriters at the time of the sale to them. The underwriters will be obligated to purchase all of the securities of the series offered if any of the securities are purchased, unless otherwise specified in connection with any particular offering of securities. Any initial public offering price and any discounts or concessions allowed, reallowed or paid to dealers may be changed from time to time.

We may designate agents to sell the offered securities. Unless otherwise specified in connection with any particular offering of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment. We may also sell the offered securities to one or more remarketing firms, acting as principals for their own accounts or as agents for us. These firms will remarket the offered securities upon purchasing them in accordance with a redemption or repayment pursuant to the terms of the offered securities. A prospectus supplement or free writing prospectus, as the case may be, will identify any remarketing firm and will describe the terms of its agreement, if any, with us and its compensation.

In connection with offerings made through underwriters or agents, we may enter into agreements with such underwriters or agents pursuant to which we receive our outstanding securities in consideration for the securities being offered to the public for cash. In connection with these arrangements, the underwriters or agents may also sell securities covered by this prospectus to hedge their positions in these outstanding securities, including in short sale transactions. If so,

the underwriters or agents may use the securities received from us under these arrangements to close out any related open borrowings of securities.

Dealer

We may sell the offered securities to dealers as principals. We may negotiate and pay dealers' commissions, discounts or concessions for their services. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us at the time of resale. Dealers engaged by us may allow other dealers to participate in resales.

Direct Sales

We may choose to sell the offered securities directly. In this case, no underwriters or agents would be involved.

Institutional Purchasers

We may authorize agents, dealers or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or free writing prospectus, as the case may be, will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

We will enter into such delayed contracts only with institutional purchasers that we approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions.

Indemnification; Other Relationships

We may have agreements with agents, underwriters, dealers and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

Market Making, Stabilization and Other Transactions

There is currently no market for any of the offered securities, other than our common stock which is listed on The NASDAQ Global Select market. If the offered securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. While it is possible that an underwriter could inform us that it intended to make a market in the offered securities, such underwriter would not be obligated to do so, and any such market making could be discontinued at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for the offered securities. We have no current plans for listing of the debt securities, preferred stock or warrants on any securities exchange or automated quotation system; any such listing with respect to any particular debt securities, preferred stock or warrants will be described in the applicable prospectus supplement or free writing prospectus, as the case may be.

In connection with any offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of common stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. "Covered" short sales are sales of shares made in an amount up to the number of shares represented by the underwriters' over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Transactions to close out the covered syndicate short involve either purchases of the common stock in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriters may also make "naked" short sales of shares in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares of common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect

investors who purchase in the offering. Stabilizing transactions consist of bids for or purchases of shares in the open market while the offering is in progress for the purpose of pegging, fixing or maintaining the price of the securities.

In connection with any offering, the underwriters may also engage in penalty bids. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Fees and Commissions

If more than 5% of the net proceeds of any offering of securities made under this prospectus will be received by members of the Financial Industry Regulatory Authority, or FINRA, participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with applicable FINRA Rules.

CERTAIN LEGAL MATTERS

In connection with particular offerings of the securities in the future, and if stated in the applicable prospectus supplements, the validity of those securities may be passed upon for us by Davis Graham & Stubbs LLP, and for any underwriters or agents by counsel named in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of DMC Global Inc. appearing in DMC Global Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2016 (including schedules appearing therein), and the effectiveness of DMC Global Inc.'s internal control over financial reporting as of December 31, 2016 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporate herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses in connection with the issuance and distribution of the securities registered by this registration statement, other than any underwriting discounts and commissions. All of the expenses will be borne by us.

SEC registration fee	\$ 17,385
Legal fees and expenses	*
Accounting fees and expenses	*
Printing and engraving expenses	*
Trustee's fees and expenses	*
Miscellaneous expenses	*
Total	*

^{*} These fees and expenses will be determined based on the number of issuances and amount and type of securities issued. Accordingly, they cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers.

Section 145 of the General Corporation Law of the State of Delaware provides for indemnification of our directors and officers in a variety of circumstances, which may include liabilities under the Securities Act of 1933. We maintain liability insurance protecting us, as well as our directors and officers, against liability by reason of their being or having been directors or officers.

Our Amended and Restated Certificate of Incorporation provides for the elimination of liability for monetary damages for breach of the directors' fiduciary duty of care to the Registrant and its stockholders. These provisions do not eliminate the directors' duty of care and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty, for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for any transaction from which the director derived an improper personal benefit, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision does not affect a director's responsibilities under any other laws, such as the federal securities laws or state or federal environmental laws.

As permitted by the Delaware General Corporation Law, our Amended and Restated Certificate of Incorporation generally requires us to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the corporation) by reason of the fact that such person is or was our director or officer, or is or was serving at our request as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such person in connection with such action, suit or proceeding.

Article XI of our bylaws generally provides that we shall indemnify our directors and executive officers to the fullest extent not prohibited by Delaware law.

In addition, we have entered into indemnification agreements with each of our directors and officers under which we have indemnified each of them against expenses and losses incurred for claims brought against them by reason of their being one of our directors or officers, and we maintain directors' and officers' liability insurance.

Item 16. Exhibits and Financial Statement Schedules.

The Exhibits to this registration statement are listed in the Exhibit Index and are incorporated by reference in this prospectus

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933.
 - ii. To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - iii. To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- 2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- 3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - i. Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - ii. Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

- 5. That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- 6. That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- 7. To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.
- 8. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted against the registrant by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
- 9. To supplement the prospectus, after the expiration of the subscription period, to set forth the results of the subscription offer, the transactions by the underwriters during the subscription period, the amount of unsubscribed securities to be purchased by the underwriters, and the terms of any subsequent reoffering thereof. If any public offering by the underwriters is to be made on terms differing from those set forth on the cover page of the prospectus, a post-effective amendment will be filed to set forth the terms of such offering.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the undersigned registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Boulder, State of Colorado, on March 9, 2017.

DMC GLOBAL INC.

By: /s/ Michael Kuta

Michael Kuta Chief Financial Officer

POWER OF ATTORNEY

The undersigned directors and officers of DMC Global Inc. hereby constitute and appoint Kevin T. Longe, Michael Kuta and Michelle H. Shepston, and each of them, each with full power to act and with full power of substitution and resubstitution, our true and lawful attorneys-in-fact and agents with full power to execute in our name and behalf in the capacities indicated below any and all amendments (including post-effective amendments) to this registration statement and to file the same, with all exhibits and other documents relating thereto with the United States Securities and Exchange Commission and hereby ratify and confirm all that such attorney-in-fact or his or her substitute shall lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Kevin Longe	President and Chief Executive Officer	March 9, 2017
Kevin Longe	(Principal Executive Officer)	William 9, 2017
/s/ Michael Kuta	Chief Financial Officer	March 9, 2017
Michael Kuta	(Principal Financial and Accounting Officer)	
/s/ Gerard Munera	Chairman and Director	March 9, 2017
Gerard Munera		,
/s/ David Aldous	Director	March 9, 2017
David Aldous		
/s/ Yvon Pierre Cariou	Director	March 9, 2017
Yvon Pierre Cariou		
/s/ Robert A. Cohen	Director	March 9, 2017
Robert A. Cohen		
/s/ James J. Ferris	Director	March 9, 2017
James J. Ferris		, in the second
/s/ Richard P. Graff	Director	March 9, 2017
Richard P. Graff		
/s/ Peter Rose	Director	March 9, 2017
Peter Rose		

EXHIBIT INDEX

Exhibit No.	Description
*1.1	Form of Underwriting Agreement.
4.1	Amended and Restated Certificate of Incorporation of DMC Global Inc. (Incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed on November 4, 2016).
4.2	Amended and Restated Bylaws of DMC Global Inc. (Incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed on November 4, 2016).
4.3	Form of Certificate representing shares of Common Stock of DMC Global Inc. (incorporated by reference to Exhibit 4.3 to our Current Report on Form 8-K filed on November 4, 2016).
4.4	Form of indenture.
*4.5	Form of certificate of designations for preferred stock.
*4.6	Form of warrant.
*4.7	Form of warrant agreement.
*4.8	Form of purchase contract.
*4.9	Form of unit certificate.
*4.10	Form of unit agreement.
5.1	Opinion of Davis Graham & Stubbs LLP.
12.1	Statement regarding computation of ratio of earnings to fixed charges.
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Davis Graham & Stubbs LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page hereto).
**25.1	Form T-1 Statement of Eligibility of Trustee for the Indenture.

^{*} To be filed by an amendment or as an exhibit to a document filed under the Securities Act or the Exchange Act, or otherwise filed, and incorporated by reference herein.

^{**} To be incorporated herein by reference from a subsequent filing in accordance with section 305(b)(2) of the Trust Indenture Act.

DMC Global Inc.

INDENTURE

Dated as of []

[Trustee

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DMC GLOBAL INC.

Reconciliation and tie between Trust Indenture Act of 1939 and Indenture, dated as of []

§ 310(a)(1)	7.10
(a)(2)	7.10
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(a)(5)	7.10
(b)	7.10
§ 311(a)	7.11
(b)	7.11
(c)	Not Applicable
§ 312(a)	2.6
(b)	10.3
(c)	10.3
§ 313(a)	7.6
(b)(1)	7.6
(b)(2)	7.6
(c)(1)	7.6
(d)	7.6
§ 314(a)	4.2, 10.5
(b)	Not Applicable
(c)(1)	10.4
(c)(2)	10.4
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	10.5
(f)	Not Applicable
§ 315(a)	7.1
(b)	7.5
(c)	7.1
(d)	7.1
(e)	6.14
§ 316(a)	2.10
(a)(1)(A)	6.12
(a)(1)(B)	6.13
(b)	6.8
§ 317(a)(1)	6.3
(a)(2)	6.4
(b)	2.5
§ 318(a)	10.1

Note: This reconciliation and tie shall not, for any purpose, be deemed to be part of the Indenture.

Indenture dated as of [among DMC Global Inc.,	a Delaware corporation	("Company"), and	[] ("Trustee").

Each party agrees as follows for the benefit of the other party and for the equal and ratable benefit of the Holders of the Securities issued under this Indenture.

ARTICLE I DEFINITIONS AND INCORPORATION BY REFERENCE

Section 1.1 Definitions.

- "Additional Amounts" means any additional amounts which are required hereby or by any Security, under circumstances specified herein or therein, to be paid by the Company in respect of certain taxes imposed on Holders specified herein or therein and which are owing to such Holders.
- "Affiliate" of any specified person means any other person directly or indirectly controlling or controlled by or under common control with such specified person. For the purposes of this definition, "control" (including, with correlative meanings, the terms "controlled by" and "under common control with"), as used with respect to any person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such person, whether through the ownership of voting securities or by agreement or otherwise.
 - "Agent" means any Registrar, Paying Agent or Notice Agent.
 - "Board of Directors" means the Board of Directors of the Company or any duly authorized committee thereof.
- "Board Resolution" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been adopted by the Board of Directors or pursuant to authorization by the Board of Directors and to be in full force and effect on the date of the certificate and delivered to the Trustee.
- "Business Day" means, unless otherwise provided by Board Resolution, Officer's Certificate or supplemental indenture hereto for a particular Series, any day except a Saturday, Sunday or a legal holiday in The City of New York (or in connection with any payment, the place of payment) on which banking institutions are authorized or required by law, regulation or executive order to close.
 - "Capital Stock" means any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock.
 - "Company" means the party named as such above until a successor replaces it and thereafter means the successor.
 - "Company Order" means a written order signed in the name of the Company by an Officer.
- "Corporate Trust Office" means the office of the Trustee at which at any particular time its corporate trust business related to this Indenture shall be principally administered.
 - "Default" means any event which is, or after notice or passage of time or both would be, an Event of Default.
- "Depositary" means, with respect to the Securities of any Series issuable or issued in whole or in part in the form of one or more Global Securities, which shall initially be The Depositary Trust Company, New York, New York, known as DTC; and if at any time there is more than one such person, "Depositary" as used with respect to the Securities of any Series shall mean the Depositary with respect to the Securities of such Series.

"Discount Security" means any Security that provides for an amount less than the stated principal amount thereof to be due and payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.2.

"Dollars" and "\$" means the currency of The United States of America.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Foreign Currency" means any currency or currency unit issued by a government other than the government of The United States of America.

"Foreign Government Obligations" means, with respect to Securities of any Series that are denominated in a Foreign Currency, direct obligations of, or obligations guaranteed by, the government that issued or caused to be issued such currency for the payment of which obligations its full faith and credit is pledged and which are not callable or redeemable at the option of the issuer thereof.

"GAAP" means accounting principles generally accepted in the United States of America set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, which are in effect as of the date of determination.

"Global Security" or "Global Securities" means a Security or Securities, as the case may be, in the form established pursuant to Section 2.2 evidencing all or part of a Series of Securities, issued to the Depositary for such Series or its nominee, and registered in the name of such Depositary or nominee.

"Holder" or "Securityholder" means a person in whose name a Security is registered.

"Indenture" means this Indenture as amended or supplemented from time to time and shall include the form and terms of particular Series of Securities established as contemplated hereunder.

"interest" with respect to any Discount Security which by its terms bears interest only after Maturity, means interest payable after Maturity.

"Maturity," when used with respect to any Security, means the date on which the principal of such Security becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, call for redemption or otherwise.

"Officer" means the Chief Executive Officer, the President, the Chief Financial Officer, the Treasurer or any Assistant Treasurer, the Secretary or any Assistant Secretary, or any Vice President of the Company.

"Officer's Certificate" means a certificate signed by any Officer.

"Opinion of Counsel" means a written opinion of legal counsel who is acceptable to the Trustee. The counsel may be an employee of or counsel to the Company.

"person" means any individual, corporation, partnership, joint venture, association, limited liability company, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof.

"principal" of a Security means the principal of the Security plus, when appropriate, the premium, if any, on, and any Additional Amounts in respect of, the Security.

"Responsible Officer" means any officer of the Trustee in its Corporate Trust Office having responsibility for administration of this Indenture and also means, with respect to a particular corporate trust matter, any other officer to whom any corporate trust matter is referred because of his or her knowledge of and familiarity with a particular subject.

"SEC" means the Securities and Exchange Commission.

"Securities" means the debentures, notes or other debt instruments of the Company of any Series authenticated and delivered under this Indenture.

"Series" or "Series of Securities" means each series of debentures, notes or other debt instruments of the Company created pursuant to Sections 2.1 and 2.2 hereof.

"Stated Maturity" when used with respect to any Security, means the date specified in such Security as the fixed date on which the principal of such Security or interest is due and payable.

"Subsidiary" of any specified person means any corporation, association or other business entity of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by such person or one or more of the other Subsidiaries of that person or a combination thereof.

"TIA" means the Trust Indenture Act of 1939 (15 U.S. Code §§ 77aaa-77bbbb) as in effect on the date of this Indenture; provided, however, that in the event the Trust Indenture Act of 1939 is amended after such date, "TIA" means, to the extent required by any such amendment, the Trust Indenture Act as so amended.

"Trustee" means the person named as the "Trustee" in the first paragraph of this instrument until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Trustee" shall mean or include each person who is then a Trustee hereunder, and if at any time there is more than one such person, "Trustee" as used with respect to the Securities of any Series shall mean the Trustee with respect to Securities of that Series.

"U.S. Government Obligations" means securities which are direct obligations of, or guaranteed by, The United States of America for the payment of which its full faith and credit is pledged and which are not callable or redeemable at the option of the issuer thereof, and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such U.S. Government Obligation or a specific payment of interest on or principal of any such U.S. Government Obligation held by such custodian for the account of the holder of a depository receipt; provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the U.S. Government Obligation evidenced by such depository receipt.

Section 1.2 Other Definitions.

TERM	DEFINED IN SECTION				
"Bankruptcy Law"	6.1				
"Custodian"	6.1				
"Event of Default"	6.1				
"Judgment Currency"	10.16				
"Legal Holiday"	10.7				
"mandatory sinking fund payment"	11.1				
"New York Banking Day"	10.16				
"Notice Agent"	2.4				
"optional sinking fund payment"	11.1				
"Paying Agent"	2.4				
"Registrar"	2.4				
"Required Currency"	10.16				
"successor person"	5.1				

Section 1.3 Incorporation by Reference of Trust Indenture Act. Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture. The following TIA terms used in this Indenture have the following meanings:

"Commission" means the SEC.

"indenture securities" means the Securities.

"indenture security holder" means a Securityholder.

"indenture to be qualified" means this Indenture.

"indenture trustee" or "institutional trustee" means the Trustee.

"obligor" on the indenture securities means the Company and any successor obligor upon the Securities.

All other terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA and not otherwise defined herein are used herein as so defined.

Section 1.4 Rules of Construction. Unless the context otherwise requires:

- (a) a term has the meaning assigned to it;
- (b) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;
- (c) "or" is not exclusive;
- (d) words in the singular include the plural, and in the plural include the singular; and
- (e) provisions apply to successive events and transactions.

ARTICLE II THE SECURITIES

- Section 2.1 <u>Issuable in Series</u>. The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited. The Securities may be issued in one or more Series. All Securities of a Series shall be identical except as may be set forth or determined in the manner provided in a Board Resolution, supplemental indenture or Officer's Certificate detailing the adoption of the terms thereof pursuant to authority granted under a Board Resolution. In the case of Securities of a Series to be issued from time to time, the Board Resolution, Officer's Certificate or supplemental indenture detailing the adoption of the terms thereof pursuant to authority granted under a Board Resolution may provide for the method by which specified terms (such as interest rate, maturity date, record date or date from which interest shall accrue) are to be determined. Securities may differ between Series in respect of any matters, provided that all Series of Securities shall be equally and ratably entitled to the benefits of this Indenture.
- Section 2.2 <u>Establishment of Terms of Series of Securities</u>. At or prior to the issuance of any Securities within a Series, the following shall be established (as to the Series generally, in the case of Subsection 2.2.1 and either as to such Securities within the Series or as to the Series generally in the case of Subsections 2.2.2 through 2.2.21) by or pursuant to a Board Resolution, and set forth or determined in the manner provided in a Board Resolution, supplemental indenture or Officer's Certificate:
 - 2.2.1 the title of the Securities of the Series;
 - 2.2.2 the price or prices (expressed as a percentage of the principal amount thereof) at which the Securities of the Series will be issued;
 - 2.2.3 any limit upon the aggregate principal amount of the Securities of the Series;
 - 2.2.4 the date or dates, or the method of determining the dates, on which the Securities of the Series will mature;
- 2.2.5 the interest rate or rates, which may be fixed or variable, of the Securities of the Series, or the method of determining those rates, the interest payment dates and the regular record dates;
- 2.2.6 the places where payments may be made on the Securities of the Series and where the Securities of such Series may be surrendered for registration of transfer and exchange and where notices and demands in respect of the Securities of such Series may be served and the method of such payment, if by wire transfer, mail or other means;
 - 2.2.7 any mandatory or optional redemption provisions applicable to the Securities of the Series;
 - 2.2.8 any sinking fund or analogous provisions applicable to the Securities of the Series;
- 2.2.9 whether and on what terms the Company will pay additional amounts to Holders of the Securities of the Series that are not U.S. persons in respect of any tax, assessment or governmental charge withheld or deducted and, if so, whether and on what terms the Company will have the option to redeem the Securities of such Series rather than pay the additional amounts;
 - 2.2.10 whether the Securities of the Series will be senior or subordinated;
 - 2.2.11 any terms for the attachment to Securities of the Series of warrants, options or other rights to purchase or sell Company securities;
- 2.2.12 if the Securities of the Series will be secured by any collateral and, if so, a general description of the collateral and the terms and provisions of such collateral security, pledge or other agreements;

- 2.2.13 any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents;
- 2.2.14 the portion of the principal amount of the Securities of the Series payable upon the acceleration of maturity if other than the entire principal amount of the Securities of such Series;
 - 2.2.15 any deletions of, or changes or additions to, the events of default or covenants applicable to the Securities of the Series;
- 2.2.16 if other than Dollars, the currency or currencies in which payments of principal, premium and/or interest on the Securities of the Series will be payable and whether the holder may elect payment to be made in a different currency;
 - 2.2.17 the method of determining the amount of any payments on the Securities of the Series which are linked to an index;
 - 2.2.18 whether the Securities of the Series will be issued in the form of one or more global securities in temporary or definitive form;
- 2.2.19 whether the Securities of the Series will be convertible or exchangeable into or for Capital Stock or other Securities and the conversion price or exchange ratio, the conversion or exchange period and any other conversion or exchange provisions;
 - 2.2.20 any terms relating to the delivery of the Securities of the Series if they are to be issued upon the exercise of warrants; and
 - 2.2.21 any other specific terms of the Securities of the Series.

All Securities of any one Series need not be issued at the same time and may be issued from time to time, consistent with the terms of this Indenture, if so provided by or pursuant to the Board Resolution, supplemental indenture hereto or Officer's Certificate referred to above.

Section 2.3 Execution and Authentication. An Officer shall sign the Securities for the Company by manual or facsimile signature.

If an Officer whose signature is on a Security no longer holds that office at the time the Security is authenticated, the Security shall nevertheless be valid.

A Security shall not be valid until authenticated by the manual or facsimile signature of the Trustee or an authenticating agent. The signature shall be conclusive evidence that the Security has been authenticated under this Indenture.

The Trustee shall at any time, and from time to time, authenticate Securities for original issue in the principal amount provided in the Board Resolution, supplemental indenture hereto or Officer's Certificate, upon receipt by the Trustee of a Company Order. Each Security shall be dated the date of its authentication.

The aggregate principal amount of Securities of any Series outstanding at any time may not exceed any limit upon the maximum principal amount for such Series set forth in the Board Resolution, supplemental indenture hereto or Officer's Certificate delivered pursuant to Section 2.2, except as provided in Section 2.8.

Prior to the issuance of Securities of any Series, the Trustee shall have received and (subject to Section 7.2) shall be fully protected in relying on: (a) the Board Resolution, supplemental indenture hereto or Officer's Certificate establishing the form of the Securities of that Series or of Securities within that Series and the terms of the Securities

of that Series or of Securities within that Series, (b) an Officer's Certificate complying with Section 10.4, and (c) an Opinion of Counsel complying with Section 10.4.

The Trustee shall have the right to decline to authenticate and deliver any Securities of such Series: (a) if the Trustee, being advised by counsel, determines that such action may not be taken lawfully; or (b) if the Trustee in good faith by its board of directors or trustees, executive committee or a trust committee of directors and/or vice presidents or a committee of Responsible Officers shall determine that such action would expose the Trustee to personal liability to Holders of any then outstanding Series of Securities.

The Trustee may appoint an authenticating agent acceptable to the Company to authenticate Securities. An authenticating agent may authenticate Securities whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with the Company or an Affiliate of the Company.

Section 2.4 Registrar and Paying Agent. The Company shall maintain, with respect to each Series of Securities, at the place or places specified with respect to such Series pursuant to Section 2.2, an office or agency where Securities of such Series may be presented or surrendered for payment ("Paying Agent"), where Securities of such Series may be surrendered for registration of transfer or exchange ("Registrar") and where notices and demands to or upon the Company in respect of the Securities of such Series and this Indenture may be delivered ("Notice Agent"). The Registrar shall keep a register with respect to each Series of Securities and to their transfer and exchange. The Company will give prompt written notice to the Trustee of the name and address, and any change in the name or address, of each Registrar, Paying Agent or Notice Agent. If at any time the Company shall fail to maintain any such required Registrar, Paying Agent or Notice Agent or shall fail to furnish the Trustee with the name and address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations, surrenders, notices and demands.

The Company may also from time to time designate one or more co-registrars, additional paying agents or additional notice agents and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligations to maintain a Registrar, Paying Agent and Notice Agent in each place so specified pursuant to Section 2.2 for Securities of any Series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the name or address of any such co-registrar, additional paying agent or additional notice agent. The term "Registrar" includes any co-registrar; the term "Paying Agent" includes any additional paying agent; and the term "Notice Agent" includes any additional notice agent. The Company or any of its Affiliates may serve as Registrar or Paying Agent.

The Company hereby appoints the Trustee the initial Registrar, Paying Agent and Notice Agent for each Series unless another Registrar, Paying Agent or Notice Agent, as the case may be, is appointed prior to the time Securities of that Series are first issued.

Section 2.5 Paying Agent to Hold Money in Trust. The Company shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust, for the benefit of Securityholders of any Series of Securities, or the Trustee, all money held by the Paying Agent for the payment of principal of or interest on the Series of Securities, and will notify the Trustee of any default by the Company in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Company at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Company or a Subsidiary of the Company) shall have no further liability for the money. If the Company or a Subsidiary of the Company acts as Paying Agent, it shall segregate and hold in a separate trust fund for the benefit of Securityholders of any Series of Securities all money held by it as Paying Agent. Upon any bankruptcy, reorganization or similar proceeding with respect to the Company, the Trustee shall serve as Paying Agent for the Securities.

Section 2.6 Securityholder Lists. The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Securityholders of each Series of Securities and shall otherwise comply with TIA § 312(a). If the Trustee is not the Registrar, the Company shall furnish to the Trustee at least ten days before each interest payment date and at such other times as the Trustee may request in writing a list, in such form and as of such date as the Trustee may reasonably require, of the names and addresses of Securityholders of each Series of Securities.

Section 2.7 <u>Transfer and Exchange</u>. Where Securities of a Series are presented to the Registrar or a co-registrar with a request to register a transfer or to exchange them for an equal principal amount of Securities of the same Series, the Registrar shall register the transfer or make the exchange if its requirements for such transactions are met. To permit registrations of transfers and exchanges, the Trustee shall authenticate Securities at the Registrar's request. No service charge shall be made for any registration of transfer or exchange (except as otherwise expressly permitted herein), but the Company may require payment of a sum sufficient to cover any transfer tax or similar governmental charge payable in connection therewith (other than any such transfer tax or similar governmental charge payable upon exchanges pursuant to Sections 2.11, 3.6 or 9.6).

Neither the Company nor the Registrar shall be required (a) to issue, register the transfer of, or exchange Securities of any Series for the period beginning at the opening of business fifteen days immediately preceding the mailing of a notice of redemption of Securities of that Series selected for redemption and ending at the close of business on the day of such mailing, or (b) to register the transfer of or exchange Securities of any Series selected, called or being called for redemption as a whole or the portion being redeemed of any such Securities selected, called or being called for redemption in part.

Section 2.8 <u>Mutilated, Destroyed, Lost and Stolen Securities.</u> If any mutilated Security is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same Series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

If there shall be delivered to the Company and the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security and (ii) such security or indemnity bond as may be required by each of them to hold itself and any of its agents harmless, then, in the absence of notice to the Company or the Trustee that such Security has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and make available for delivery, in lieu of any such destroyed, lost or stolen Security, a new Security of the same Series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, pay such Security.

Upon the issuance of any new Security under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

Every new Security of any Series issued pursuant to this Section in lieu of any destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of that Series duly issued hereunder.

The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities.

Section 2.9 <u>Outstanding Securities</u>. The Securities outstanding at any time are all the Securities authenticated by the Trustee except for those canceled by it, those delivered to it for cancellation, those reductions in

the interest on a Global Security effected by the Trustee in accordance with the provisions hereof and those described in this Section as not outstanding.

If a Security is replaced pursuant to Section 2.8, it ceases to be outstanding until the Trustee receives proof satisfactory to it that the replaced Security is held by a bona fide purchaser.

If the Paying Agent (other than the Company, a Subsidiary of the Company or an Affiliate of the Company) holds on the Maturity of Securities of a Series money sufficient to pay such Securities payable on that date, then on and after that date such Securities of the Series cease to be outstanding and interest on them ceases to accrue.

The Company may purchase or otherwise acquire the Securities, whether by open market purchases, negotiated transactions or otherwise. A Security does not cease to be outstanding because the Company or an Affiliate of the Company holds the Security (but see Section 2.10 below).

In determining whether the Holders of the requisite principal amount of outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder, the principal amount of a Discount Security that shall be deemed to be outstanding for such purposes shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon a declaration of acceleration of the Maturity thereof pursuant to Section 6.2.

- Section 2.10 <u>Treasury Securities</u>. In determining whether the Holders of the required principal amount of Securities of a Series have concurred in any request, demand, authorization, direction, notice, consent or waiver, Securities of a Series owned by the Company or any Affiliate of the Company shall be disregarded, except that for the purposes of determining whether the Trustee shall be protected in relying on any such request, demand, authorization, direction, notice, consent or waiver only Securities of a Series that a Responsible Officer of the Trustee knows are so owned shall be so disregarded.
- Section 2.11 <u>Temporary Securities</u>. Until definitive Securities are ready for delivery, the Company may prepare and the Trustee shall authenticate temporary Securities upon a Company Order. Temporary Securities shall be substantially in the form of definitive Securities but may have variations that the Company considers appropriate for temporary Securities. Without unreasonable delay, the Company shall prepare and the Trustee upon receipt of a Company Order shall authenticate definitive Securities of the same Series and date of maturity in exchange for temporary Securities. Until so exchanged, temporary securities shall have the same rights under this Indenture as the definitive Securities.
- Section 2.12 <u>Cancellation</u>. The Company at any time may deliver Securities to the Trustee for cancellation. The Registrar and the Paying Agent shall forward to the Trustee any Securities surrendered to them for registration of transfer, exchange or payment. The Trustee shall cancel all Securities surrendered for transfer, exchange, payment, replacement or cancellation and shall destroy such canceled Securities (subject to the record retention requirements of the Exchange Act and the Trustee) and deliver a certificate of such cancellation to the Company, upon written request of the Company may not issue new Securities to replace Securities that it has paid or delivered to the Trustee for cancellation.
- Section 2.13 <u>Defaulted Interest</u>. If the Company defaults in a payment of interest on a Series of Securities, it shall pay the defaulted interest, plus, to the extent permitted by law, any interest payable on the defaulted interest, to the persons who are Securityholders of the Series on a subsequent special record date. The Company shall fix the record date and payment date. At least 10 days before the special record date, the Company shall mail to the Trustee and to each Securityholder of the Series a notice that states the special record date, the payment date and the amount of interest to be paid. The Company may pay defaulted interest in any other lawful manner.

Section 2.14 Global Securities.

- 2.14.1 <u>Terms of Securities.</u> A Board Resolution, a supplemental indenture hereto or an Officer's Certificate shall establish whether the Securities of a Series shall be issued in whole or in part in the form of one or more Global Securities and the Depositary for such Global Security or Securities.
- 2.14.2 <u>Transfer and Exchange.</u> Notwithstanding any provisions to the contrary contained in Section 2.7 of this Indenture and in addition thereto, any Global Security shall be exchangeable pursuant to Section 2.7 of this Indenture for Securities registered in the names of Holders other than the Depositary for such Security or its nominee only if (i) such Depositary notifies the Company that it is unwilling or unable to continue as Depositary for such Global Security or if at any time such Depositary ceases to be a clearing agency registered under the Exchange Act, and, in either case, the Company fails to appoint a successor Depositary registered as a clearing agency under the Exchange Act within 90 days of such event or (ii) the Company executes and delivers to the Trustee an Officer's Certificate to the effect that such Global Security shall be so exchangeable. Any Global Security that is exchangeable pursuant to the preceding sentence shall be exchangeable for Securities registered in such names as the Depositary shall direct in writing in an aggregate principal amount equal to the principal amount of the Global Security with like tenor and terms.

Except as provided in this Section 2.14.2, a Global Security may not be transferred except as a whole by the Depositary with respect to such Global Security to a nominee of such Depositary, by a nominee of such Depositary or another nominee of such Depositary or any such nominee to a successor Depositary or a nominee of such a successor Depositary.

2.14.3 Legend. Any Global Security issued hereunder shall bear a legend in substantially the following form:

"This Security is a Global Security within the meaning of the Indenture hereinafter referred to and is registered in the name of the Depositary or a nominee of the Depositary. This Security is exchangeable for Securities registered in the name of a person other than the Depositary or its nominee only in the limited circumstances described in the Indenture, and may not be transferred except as a whole by the Depositary to a nominee of the Depositary, by a nominee of the Depositary to the Depositary or another nominee of the Depositary or any such nominee to a successor Depositary or a nominee of such a successor Depositary."

- 2.14.4 Acts of Holders. The Depositary, as a Holder, may appoint agents and otherwise authorize participants to give or take any request, demand, authorization, direction, notice, consent, waiver or other action which a Holder is entitled to give or take under this Indenture.
- 2.14.5 <u>Payments</u>. Notwithstanding the other provisions of this Indenture, unless otherwise specified as contemplated by Section 2.2, payment of the principal of and interest, if any, on any Global Security shall be made to the Holder thereof.
- 2.14.6 <u>Consents, Declaration and Directions</u>. The Company, the Trustee and any Agent shall treat a person as the Holder of such principal amount of outstanding Securities of such Series represented by a Global Security as shall be specified in a written statement of the Depositary or by the applicable procedures of the Depositary with respect to such Global Security, for purposes of obtaining any consents, declarations, waivers or directions required to be given by the Holders pursuant to this Indenture.
- 2.14.7 <u>CUSIP Numbers</u>. The Company in issuing the Securities may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption as a convenience to Holders; provided that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of a redemption and that reliance may be placed only on the other elements of identification printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers.

ARTICLE III REDEMPTION

- Section 3.1 Notice to Trustee. The Company may, with respect to any Series of Securities, reserve the right to redeem and pay the Series of Securities or may covenant to redeem and pay the Series of Securities or any part thereof prior to the Stated Maturity thereof at such time and on such terms as provided for in such Securities. If a Series of Securities is redeemable and the Company wants or is obligated to redeem prior to the Stated Maturity thereof all or part of the Series of Securities pursuant to the terms of such Securities, it shall notify the Trustee of the redemption date and the principal amount of Series of Securities to be redeemed. The Company shall give the notice at least 15 days before the redemption date (or such shorter notice as may be acceptable to the Trustee).
- Section 3.2 Selection of Securities to be Redeemed Unless otherwise indicated for a particular Series by a Board Resolution, a supplemental indenture hereto or an Officer's Certificate, if less than all the Securities of a Series are to be redeemed, the Trustee shall select the Securities of the Series to be redeemed in any manner that the Trustee deems fair and appropriate, including by lot or other method, unless otherwise required by law or applicable stock exchange requirements, subject, in the case of Global Securities, to the applicable rules and procedures of the Depositary. The Trustee shall make the selection from Securities of the Series outstanding not previously called for redemption. The Trustee may select for redemption portions of the principal of Securities of the Series that have denominations larger than \$1,000. Securities of the Series and portions of them it selects shall be in amounts of \$1,000 or whole multiples of \$1,000 or the minimum principal denomination for each Series and the authorized integral multiples thereof. Provisions of this Indenture that apply to Securities of a Series called for redemption also apply to portions of Securities of that Series called for redemption.
- Section 3.3 Notice of Redemption. Unless otherwise indicated for a particular Series by Board Resolution, a supplemental indenture hereto or an Officer's Certificate, at least 15 days but not more than 60 days before a redemption date, the Company shall mail a notice of redemption by first-class mail to each Holder whose Securities are to be redeemed.

The notice shall identify the Securities of the Series to be redeemed and shall state:

- (a) the redemption date;
- (b) the redemption price;
- (c) the name and address of the Paying Agent;
- (d) if any Securities are being redeemed in part, the portion of the principal amount of such Securities to be redeemed and that, after the redemption date and upon surrender of such Security, a new Security or Securities in principal amount equal to the unredeemed portion of the original Security shall be issued in the name of the Holder thereof upon cancellation of the original Security;
 - (e) that Securities of the Series called for redemption must be surrendered to the Paying Agent to collect the redemption price;
 - (f) that interest on Securities of the Series called for redemption ceases to accrue on and after the redemption date;
 - (g) the CUSIP number, if any; and
 - (h) any other information as may be required by the terms of the particular Series or the Securities of a Series being redeemed.

At the Company's request, the Trustee shall give the notice of redemption in the Company's name and at its expense, provided, however, that the Company has delivered to the Trustee, at least 5 days (unless a shorter time shall be acceptable to the Trustee) prior to the notice date, an Officer's Certificate requesting that the Trustee give such notice and setting forth the information to be stated in such notice.

- Section 3.4 <u>Effect of Notice of Redemption</u>. Once notice of redemption is mailed as provided in Section 3.3, Securities of a Series called for redemption become due and payable on the redemption date and at the redemption price. Except as otherwise provided in the supplemental indenture, Board Resolution or Officer's Certificate for a Series of Securities, a notice of redemption pertaining to such Series may not be conditional. Upon surrender to the Paying Agent, such Securities shall be paid at the redemption price plus accrued interest to the redemption date.
- Section 3.5 <u>Deposit of Redemption Price</u>. On or before 11:00 a.m., New York City time, on the redemption date, the Company shall deposit with the Paying Agent money sufficient to pay the redemption price of and accrued interest, if any, on all Securities to be redeemed on that date.
- Section 3.6 Securities Redeemed in Part. Upon surrender of a Security that is redeemed in part, the Trustee shall authenticate for the Holder a new Security of the same Series and the same maturity equal in principal amount to the unredeemed portion of the Security surrendered.

ARTICLE IV COVENANTS

- Section 4.1 <u>Payment of Principal and Interest</u>. The Company covenants and agrees for the benefit of the Holders of each Series of Securities that it will duly and punctually pay the principal of and interest, if any, on the Securities of that Series in accordance with the terms of such Securities and this Indenture.
- Section 4.2 SEC Reports. The Company shall, so long as any Securities are outstanding, deliver to the Trustee within 15 days after it files them with the SEC copies of the annual reports and of the information, documents, and other reports (or copies of such portions of any of the foregoing as the SEC may by rules and regulations prescribe) which the Company is required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act. The Company also shall comply with the other provisions of TIA § 314(a). Reports, information and documents filed with the SEC via the EDGAR system will be deemed to be delivered to the Trustee as of the time of such filing via EDGAR for purposes of this Section 4.2.
- Section 4.3 <u>Compliance Certificate</u>. The Company shall, so long as any Securities are outstanding, deliver to the Trustee, within 90 days after the end of each fiscal year of the Company, an Officer's Certificate stating that a review of the activities of the Company during the preceding fiscal year has been made under the supervision of the signing Officer with a view to determining whether the Company has kept, observed, performed and fulfilled its obligations under this Indenture, and further stating, as to such Officer signing such certificate, that to the best of such Officer's knowledge the Company has kept, observed, performed and fulfilled each and every covenant contained in this Indenture and is not in default in the performance or observance of any of the terms, provisions and conditions hereof (or, if a Default or Event of Default shall have occurred, describing all such Defaults or Events of Default of which such Officer may have knowledge).

The Company will, so long as any of the Securities are outstanding, deliver to the Trustee, promptly upon becoming aware of any Default or Event of Default, an Officer's Certificate specifying such Default or Event of Default and what action the Company is taking or proposes to take with respect thereto.

Section 4.4 <u>Stay, Extension and Usury Laws</u>. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture or the Securities; and the Company (to the extent it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not, by resort to any

such law, hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law has been enacted.

ARTICLE V SUCCESSORS

- Section 5.1 When Company May Merge, Etc. The Company shall not consolidate with or merge with or into, or convey, transfer or lease all or substantially all of its properties and assets to, any person (a "successor person") unless:
- (a) the Company is the surviving corporation or the successor person (if other than the Company) is a corporation organized and validly existing under the laws of any U.S. domestic jurisdiction and expressly assumes the Company's obligations on the Securities and under this Indenture; and
 - (b) immediately after giving effect to the transaction, no Default or Event of Default, shall have occurred and be continuing.

The Company shall deliver to the Trustee prior to the consummation of the proposed transaction an Officer's Certificate to the foregoing effect and an Opinion of Counsel stating that the proposed transaction and any supplemental indenture hereto comply with this Indenture.

Notwithstanding the above, any Subsidiary of the Company may consolidate with, merge into or transfer all or part of its properties to the Company. Neither an Officer's Certificate nor an Opinion of Counsel shall be required to be delivered in connection therewith.

Section 5.2 Successor Corporation Substituted. Upon any consolidation or merger, or any sale, lease, conveyance or other disposition of all or substantially all of the assets of the Company in accordance with Section 5.1, the successor corporation formed by such consolidation or into or with which the Company is merged or to which such sale, lease, conveyance or other disposition is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor person has been named as the Company herein; provided, however, that the predecessor Company in the case of a sale, conveyance or other disposition (other than a lease) shall be released from all obligations and covenants under this Indenture and the Securities.

ARTICLE VI DEFAULTS AND REMEDIES

Section 6.1 Events of Default.

"Event of Default," wherever used herein with respect to Securities of any Series, means any one of the following events, unless in the establishing Board Resolution, supplemental indenture hereto or Officer's Certificate, it is provided that such Series shall not have the benefit of said Event of Default:

- (a) default in the payment of any interest on any Security of that Series when it becomes due and payable, and continuance of such default for a period of 30 days (unless the entire amount of such payment is deposited by the Company with the Trustee or with a Paying Agent prior to 11:00 a.m., New York City time, on the 30th day of such period); or
 - (b) default in the payment of principal or any premium of any Security of that Series when due;
 - (c) default in the payment of any sinking fund when it becomes due and payable;

- (d) default in the performance or breach of any covenant or warranty of the Company in this Indenture (other than defaults pursuant to paragraph (a), (b) or (c) above or pursuant to a covenant or warranty that has been included in this Indenture solely for the benefit of Series of Securities other than that Series), which default continues uncured for a period of 180 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the outstanding Securities of that Series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or
 - (e) the Company pursuant to or within the meaning of any Bankruptcy Law:
 - (i) commences a voluntary case,
 - (ii) consents to the entry of an order for relief against it in an involuntary case,
 - (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property,
 - (iv) makes a general assignment for the benefit of its creditors, or
 - (v) generally is unable to pay its debts as the same become due; or
 - (f) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:
 - (i) is for relief against the Company in an involuntary case,
 - (ii) appoints a Custodian of the Company or for all or substantially all of its property, or
 - (iii) orders the liquidation of the Company,

and the order or decree remains unstayed and in effect for 60 days; or

(g) any other Event of Default provided with respect to Securities of that Series, which is specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate, in accordance with Section 2.2.15.

The term "Bankruptcy Law" means title 11, U.S. Code or any similar federal or state law for the relief of debtors. The term "Custodian" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

Section 6.2 Acceleration of Maturity; Rescission and Annulment. If an Event of Default with respect to Securities of any Series at the time outstanding occurs and is continuing (other than an Event of Default referred to in Section 6.1(e) or (f)) then in every such case the Trustee or the Holders of not less than 25% in principal amount of the outstanding Securities of that Series may declare the principal amount (or, if any Securities of that Series are Discount Securities, such portion of the principal amount as may be specified in the terms of such Securities) of and accrued and unpaid interest, if any, on all of the Securities of that Series to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by Holders), and upon any such declaration such principal amount (or specified amount) and accrued and unpaid interest, if any, on all outstanding Securities shall ipso facto become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

At any time after such a declaration of acceleration with respect to any Series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article provided, the Holders of a majority in principal amount of the outstanding Securities of that Series, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if all Events of Default with respect to Securities of that Series, other than the non-payment of the principal and interest, if any, of Securities of that Series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 6.13.

No such rescission shall affect any subsequent Default or impair any right consequent thereon.

Section 6.3 Collection of Indebtedness and Suits for Enforcement by Trustee. The Company covenants that if:

- (a) default is made in the payment of any interest on any Security when such interest becomes due and payable and such default continues for a period of 30 days, or
 - (b) default is made in the payment of principal of any Security at the Maturity thereof, or
 - (c) default is made in the deposit of any sinking fund payment when and as due by the terms of a Security,

then, the Company will, upon demand of the Trustee, pay to it, for the benefit of the Holders of such Securities, the whole amount then due and payable on such Securities for principal and interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and any overdue interest at the rate or rates prescribed therefor in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, may prosecute such proceeding to judgment or final decree and may enforce the same against the Company or any other obligor upon such Securities and collect the moneys adjudged or deemed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities, wherever situated.

If an Event of Default with respect to any Securities of any Series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such Series by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

- Section 6.4 <u>Trustee May File Proofs of Claim.</u> In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise,
- (a) to file and prove a claim for the whole amount of principal and interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceeding, and

(b) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same,

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.7.

Nothing contained in this Indenture shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

- Section 6.5 <u>Trustee May Enforce Claims Without Possession of Securities.</u> All rights of action and claims under this Indenture or the Securities may be prosecuted and enforced by the Trustee without the possession of any of the Securities or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.
- Section 6.6 <u>Application of Money Collected.</u> Any money or property collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money or property on account of principal or interest, upon presentation of the Securities and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

First: To the payment of all amounts due the Trustee under Section 7.7; and

Second: To the payment of the amounts then due and unpaid for principal of and interest on the Securities in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the amounts due and payable on such Securities for principal and interest, respectively; and

Third: To the Company.

- Section 6.7 <u>Limitation on Suits.</u> No Holder of any Security of any Series shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless:
 - (a) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that Series;
- (b) the Holders of not less than 25% in principal amount of the outstanding Securities of that Series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
- (c) such Holder or Holders have offered to the Trustee indemnity or security reasonably satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by the Trustee in compliance with such request;
 - (d) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and

(e) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the outstanding Securities of that Series;

it being understood, intended and expressly covenanted by the Holder of every Security with every other Holder and the Trustee that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders, or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders of the applicable Series.

- Section 6.8 <u>Unconditional Right of Holders to Receive Principal and Interest</u> Notwithstanding any other provision in this Indenture, the Holder of any Security shall have the right, which is absolute and unconditional, to receive payment of the principal of and interest, if any, on such Security on the Maturity of such Security, including the Stated Maturity expressed in such Security (or, in the case of redemption, on the redemption date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.
- Section 6.9 <u>Restoration of Rights and Remedies</u>. If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Company, the Trustee and the Holders shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.
- Section 6.10 <u>Rights and Remedies Cumulative</u>. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in Section 2.8, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not, to the extent permitted by law, prevent the concurrent assertion or employment of any other appropriate right or remedy.
- Section 6.11 <u>Delay or Omission Not Waiver</u>. No delay or omission of the Trustee or of any Holder of any Securities to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders, as the case may be.
- Section 6.12 <u>Control by Holders</u>. The Holders of a majority in principal amount of the outstanding Securities of any Series shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee, with respect to the Securities of such Series; provided that:
 - (a) such direction shall not be in conflict with any rule of law or with this Indenture,
 - (b) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction,
- (c) subject to the provisions of Section 6.1, the Trustee shall have the right to decline to follow any such direction if the Trustee in good faith shall, by a Responsible Officer of the Trustee, determine that the proceeding so directed would involve the Trustee in personal liability, and
- (d) prior to taking any action as directed under this Section 6.12, the Trustee shall be entitled to indemnity reasonably satisfactory to it against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction.

Section 6.13 Waiver of Past Defaults. The Holders of not less than a majority in principal amount of the outstanding Securities of any Series may on behalf of the Holders of all the Securities of such Series waive any past Default hereunder with respect to such Series and its consequences, except a Default in the payment of the principal of or interest on any Security of such Series (provided, however, that the Holders of a majority in principal amount of the outstanding Securities of any Series may rescind an acceleration and its consequences, including any related payment default that resulted from such acceleration). Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default or impair any right consequent thereon.

Section 6.14 <u>Undertaking for Costs.</u> All parties to this Indenture agree, and each Holder of any Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken, suffered or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the outstanding Securities of any Series, or to any suit instituted by any Holder for the enforcement of the payment of the principal of or interest on any Security on or after the Maturity of such Security, including the Stated Maturity expressed in such Security (or, in the case of redemption, on the redemption date).

ARTICLE VII TRUSTEE

Section 7.1 Duties of Trustee.

except that:

- (a) If an Event of Default has occurred and is continuing, the Trustee shall exercise the rights and powers vested in it by this Indenture and use the same degree of care and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.
 - (b) Except during the continuance of an Event of Default:
 - (i) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others.
- (ii) In the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon Officer's Certificates or Opinions of Counsel furnished to the Trustee and conforming to the requirements of this Indenture;

however, in the case of any such Officer's Certificates or Opinions of Counsel which by any provisions hereof are specifically required to be furnished to the Trustee, the Trustee shall examine such Officer's Certificates and Opinions of Counsel to determine whether or not they conform to the form requirements of this Indenture.

- (c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct,
 - (i) This paragraph does not limit the effect of paragraph (b) of this Section.
- (ii) The Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it is proved that the Trustee was negligent in ascertaining the pertinent facts.
- (iii) The Trustee shall not be liable with respect to any action taken, suffered or omitted to be taken by it with respect to Securities of any Series in good faith in accordance with the direction of the Holders

of a majority in principal amount of the outstanding Securities of such Series relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such Series in accordance with Section 6.12.

- (d) Every provision of this Indenture that in any way relates to the Trustee is subject to paragraph (a), (b) and (c) of this Section.
- (e) The Trustee may refuse to perform any duty or exercise any right or power unless it receives indemnity reasonably satisfactory to it against the costs, expenses and liabilities that might be incurred by it in performing such duty or exercising such right or power.
- (f) The Trustee shall not be liable for interest on any money received by it except as the Trustee may agree in writing with the Company. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.
- (g) No provision of this Indenture shall require the Trustee to risk its own funds or otherwise incur any financial liability in the performance of any of its duties, or in the exercise of any of its rights or powers, if adequate indemnity against such risk is not assured to the Trustee to its reasonable satisfaction.
- (h) The Paying Agent, the Registrar and any authenticating agent shall be entitled to the protections and immunities as are set forth in paragraphs (e), (f) and (g) of this Section, each with respect to the Trustee.

Section 7.2 Rights of Trustee.

- (a) The Trustee may rely on and shall be protected in acting or refraining from acting upon any document (whether in its original or facsimile form) believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.
- (b) Before the Trustee acts or refrains from acting, it may require an Officer's Certificate or an Opinion of Counsel. The Trustee shall not be liable for any action it takes or omits to take in good faith in reliance on such Officer's Certificate or Opinion of Counsel.
- (c) The Trustee may act through agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care. No Depositary shall be deemed an agent of the Trustee and the Trustee shall not be responsible for any act or omission by any Depositary.
- (d) The Trustee shall not be liable for any action it takes or omits to take in good faith which it believes to be authorized or within its rights or powers, provided that the Trustee's conduct does not constitute willful misconduct or negligence.
- (e) The Trustee may consult with counsel and the advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder without willful misconduct or negligence, and in reliance thereon.
- (f) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders of Securities unless such Holders shall have offered to the Trustee security or indemnity reasonably satisfactory to it against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction.
- (g) The Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order,

bond, debenture, note, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit.

- (h) The Trustee shall not be deemed to have notice of any Default or Event of Default unless a Responsible Officer of the Trustee has actual knowledge thereof or unless written notice of any event which is in fact such a default is received by the Trustee at the Corporate Trust Office of the Trustee, and such notice references the Securities generally or the Securities of a particular Series and this Indenture.
- Section 7.3 <u>Individual Rights of Trustee</u>. The Trustee in its individual or any other capacity may become the owner or pledgee of Securities and may otherwise deal with the Company or an Affiliate of the Company with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights. The Trustee is also subject to Sections 7.10 and 7.11.
- Section 7.4 <u>Trustee's Disclaimer</u>. The Trustee makes no representation as to the validity or adequacy of this Indenture or the Securities, it shall not be accountable for the Company's use of the proceeds from the Securities, and it shall not be responsible for any statement in the Securities other than its authentication.
- Section 7.5 Notice of Defaults. If a Default or Event of Default occurs and is continuing with respect to the Securities of any Series and if it is known to a Responsible Officer of the Trustee, the Trustee shall mail to each Securityholder of the Securities of that Series notice of a Default or Event of Default within 90 days after it occurs or, if later, after a Responsible Officer of the Trustee has knowledge of such Default or Event of Default. Except in the case of a Default or Event of Default in payment of principal of or interest on any Security of any Series, the Trustee may withhold the notice if and so long as its corporate trust committee or a committee of its Responsible Officers in good faith determines that withholding the notice is in the interests of Securityholders of that Series.
- Section 7.6 Reports by Trustee to Holders Within 60 days after each anniversary of the date of this Indenture, the Trustee shall transmit by mail to all Securityholders, as their names and addresses appear on the register kept by the Registrar, a brief report dated as of such anniversary date, in accordance with, and to the extent required under, TIA § 313.

A copy of each report at the time of its mailing to Securityholders of any Series shall be filed with the SEC and each national securities exchange on which the Securities of that Series are listed. The Company shall promptly notify the Trustee when Securities of any Series are listed on any national securities exchange.

Section 7.7 <u>Compensation and Indemnity</u>. The Company shall pay to the Trustee from time to time compensation for its services as the Company and the Trustee shall from time to time agree upon in writing. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Company shall reimburse the Trustee upon request for all reasonable out of pocket expenses incurred by it. Such expenses shall include the reasonable compensation and expenses of the Trustee's agents and counsel.

The Company shall indemnify each of the Trustee and any predecessor Trustee (including the cost of defending itself) against any loss, liability or expense, including taxes (other than taxes based upon, measured by or determined by the income of the Trustee) incurred by it except as set forth in the next paragraph in the performance of its duties under this Indenture as Trustee or Agent. The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have one separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent shall not be unreasonably withheld. This indemnification shall apply to officers, directors, employees, shareholders and agents of the Trustee.

The Company need not reimburse any expense or indemnify against any loss or liability incurred by the Trustee or by any officer, director, employee, shareholder or agent of the Trustee through willful misconduct or negligence.

To secure the Company's payment obligations in this Section, the Trustee shall have a lien prior to the Securities of any Series on all money or property held or collected by the Trustee, except that held in trust to pay principal of and interest on particular Securities of that Series.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 6.1(e) or (f) occurs, the expenses and the compensation for the services are intended to constitute expenses of administration under any Bankruptcy Law.

The provisions of this Section shall survive the termination of this Indenture.

Section 7.8 Replacement of Trustee. A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment as provided in this Section.

The Trustee may resign with respect to the Securities of one or more Series by so notifying the Company at least 30 days prior to the date of the proposed resignation. The Holders of a majority in principal amount of the Securities of any Series may remove the Trustee with respect to that Series by so notifying the Trustee and the Company. The Company may remove the Trustee with respect to Securities of one or more Series if:

- (a) the Trustee fails to comply with Section 7.10;
- (b) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;
- (c) a Custodian or public officer takes charge of the Trustee or its property; or
- (d) the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Company shall promptly appoint a successor Trustee. Within one year after the successor Trustee takes office, the Holders of a majority in principal amount of the then outstanding Securities may appoint a successor Trustee to replace the successor Trustee appointed by the Company.

If a successor Trustee with respect to the Securities of any one or more Series does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Company or the Holders of at least a majority in principal amount of the Securities of the applicable Series may petition any court of competent jurisdiction for the appointment of a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Company. Immediately after that, the retiring Trustee shall transfer all property held by it as Trustee to the successor Trustee subject to the lien provided for in Section 7.7, the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee with respect to each Series of Securities for which it is acting as Trustee under this Indenture. A successor Trustee shall mail a notice of its succession to each Securityholder of each such Series. Notwithstanding replacement of the Trustee pursuant to this Section 7.8, the Company's obligations under Section 7.7 hereof shall continue for the benefit of the retiring Trustee with respect to expenses and liabilities incurred by it for actions taken or omitted to be taken in accordance with its rights, powers and duties under this Indenture prior to such replacement.

Section 7.9 <u>Successor Trustee by Merger, Etc.</u> If the Trustee consolidates with, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the successor corporation without any further act shall be the successor Trustee, subject to Section 7.10.

Section 7.10 <u>Eligibility: Disqualification</u>. This Indenture shall always have a Trustee who satisfies the requirements of TIA § 310(a)(1), (2) and (5). The Trustee shall always have a combined capital and surplus of at least \$50,000,000 as set forth in its most recent published annual report of condition. The Trustee shall comply with TIA § 310(b).

Section 7.11 Preferential Collection of Claims Against Company. The Trustee is subject to TIA § 311(a), excluding any creditor relationship listed in TIA § 311(b). A Trustee who has resigned or been removed shall be subject to TIA § 311(a) to the extent indicated.

ARTICLE VIII SATISFACTION AND DISCHARGE; DEFEASANCE

- Section 8.1 <u>Satisfaction and Discharge of Indenture</u>. This Indenture shall upon Company Order cease to be of further effect (except as hereinafter provided in this Section 8.1), and the Trustee, at the expense of the Company, shall execute instruments acknowledging satisfaction and discharge of this Indenture, when
 - (a) either:
- (i) all Securities theretofore authenticated and delivered (other than Securities that have been destroyed, lost or stolen and that have been replaced or paid) have been delivered to the Trustee for cancellation; or
 - (ii) all such Securities not theretofore delivered to the Trustee for cancellation
 - (1) have become due and payable, or
 - (2) will become due and payable at their Stated Maturity within one year, or
 - (3) have been called for redemption or are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company, or
 - (4) are deemed paid and discharged pursuant to Section 8.3, as applicable;

and the Company, in the case of (1), (2) or (3) above, has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust an amount of money or U.S. Government Obligations sufficient for the purpose of paying and discharging the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal and interest to the date of such deposit (in the case of Securities which have become due and payable on or prior to the date of such deposit) or to the Stated Maturity or redemption date, as the case may be;

- (b) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and
- (c) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 7.7, and, if money shall have been deposited with the Trustee pursuant to clause (a) of this Section, the provisions of Sections 2.4, 2.7, 2.8, 8.2 and 8.5 shall survive.

Section 8.2 Application of Trust Funds; Indemnification

- (a) Subject to the provisions of Section 8.5, all money or U.S. Government Obligations deposited with the Trustee pursuant to Section 8.1, all money and U.S. Government Obligations or Foreign Government Obligations deposited with the Trustee pursuant to Section 8.3 or 8.4 and all money received by the Trustee in respect of U.S. Government Obligations or Foreign Government Obligations deposited with the Trustee pursuant to Section 8.3 or 8.4, shall be held in trust and applied by it, in accordance with the provisions of the Securities and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the persons entitled thereto, of the principal and interest for whose payment such money has been deposited with or received by the Trustee or to make mandatory sinking fund payments or analogous payments as contemplated by Sections 8.3 or 8.4.
- (b) The Company shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against U.S. Government Obligations or Foreign Government Obligations deposited pursuant to Sections 8.3 or 8.4 or the interest and principal received in respect of such obligations other than any payable by or on behalf of Holders.
- (c) The Trustee shall deliver or pay to the Company from time to time upon Company Order any U.S. Government Obligations or Foreign Government Obligations or money held by it as provided in Sections 8.3 or 8.4 which, in the opinion of a nationally recognized firm of independent certified public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, are then in excess of the amount thereof which then would have been required to be deposited for the purpose for which such U.S. Government Obligations or Foreign Government Obligations or money were deposited or received. This provision shall not authorize the sale by the Trustee of any U.S. Government Obligations or Foreign Government Obligations held under this Indenture.
- Section 8.3 <u>Legal Defeasance of Securities of any Series</u>. Unless this Section 8.3 is otherwise specified, pursuant to Section 2.2, to be inapplicable to Securities of any Series, the Company shall be deemed to have paid and discharged the entire indebtedness on all the outstanding Securities of any Series on the 91st day after the date of the deposit referred to in subparagraph (d) hereof, and the provisions of this Indenture, as it relates to such outstanding Securities of such Series, shall no longer be in effect (and the Trustee, at the expense of the Company, shall, upon receipt of a Company Order, execute instruments acknowledging the same), except as to:
- (a) the rights of Holders of Securities of such Series to receive, from the trust funds described in subparagraph (d) hereof, (i) payment of the principal of and each installment of principal of and interest on the outstanding Securities of such Series on the Maturity of such principal or installment of principal or interest and (ii) the benefit of any mandatory sinking fund payments applicable to the Securities of such Series on the day on which such payments are due and payable in accordance with the terms of this Indenture and the Securities of such Series;
 - (b) the provisions of Sections 2.4, 2.7, 2.8, 8.2, 8.3 and 8.5; and
 - (c) the rights, powers, trust and immunities of the Trustee hereunder and the Company's obligations in connection therewith;

provided that, the following conditions shall have been satisfied:

(d) the Company shall have deposited or caused to be irrevocably deposited (except as provided in Section 8.2(c)) with the Trustee as trust funds in trust for the purpose of making the following payments, specifically pledged as security for and dedicated solely to the benefit of the Holders of such Securities (i) in the case of Securities of such Series denominated in Dollars, cash in Dollars and/or U.S. Government Obligations, or (ii) in the case of Securities of such Series denominated in a Foreign Currency (other than a composite currency), money and/or Foreign Government Obligations, which through the payment of interest and principal in respect thereof in accordance with their terms, will provide (and without reinvestment and assuming no tax liability will be imposed on such Trustee), not later than one day before the due date of any payment of money, an amount in cash, sufficient, in the opinion of a nationally recognized firm of independent public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, to pay and discharge each installment of principal of and interest, if any, on and any

mandatory sinking fund payments in respect of all the Securities of such Series on the dates such installments of interest or principal and such sinking fund payments are due;

- (e) such deposit will not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound;
- (f) no Default or Event of Default with respect to the Securities of such Series shall have occurred and be continuing on the date of such deposit or during the period ending on the 91st day after such date;
- (g) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling, or (ii) since the date of execution of this Indenture, there has been a change in the applicable federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, the Holders of the Securities of such Series will not recognize income, gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount and in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred;
- (h) the Company shall have delivered to the Trustee an Officer's Certificate stating that the deposit was not made by the Company with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and
- (i) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for relating to the defeasance contemplated by this Section have been complied with.
- Section 8.4 <u>Covenant Defeasance</u>. Unless this Section 8.4 is otherwise specified pursuant to Section 2.2 to be inapplicable to Securities of any Series, the Company may omit to comply with respect to the Securities of any Series with any term, provision or condition set forth under Sections 4.2, 4.3, 4.4, and 5.1 as well as any additional covenants specified in a supplemental indenture for such Series of Securities or a Board Resolution or an Officer's Certificate delivered pursuant to Section 2.2 (and the failure to comply with any such covenants shall not constitute a Default or Event of Default with respect to such Series under Section 6.1) and the occurrence of any event specified in a supplemental indenture for such Series of Securities or a Board Resolution or an Officer's Certificate delivered pursuant to Section 2.2 and designated as an Event of Default shall not constitute a Default or Event of Default hereunder, with respect to the Securities of such Series, provided that the following conditions shall have been satisfied:
- (a) With reference to this Section 8.4, the Company has deposited or caused to be irrevocably deposited (except as provided in Section 8.2(c)) with the Trustee as trust funds in trust for the purpose of making the following payments specifically pledged as security for, and dedicated solely to, the benefit of the Holders of such Secries (i) in the case of Securities of such Series denominated in Dollars, cash in Dollars and/or U.S. Government Obligations, or (ii) in the case of Securities of such Series denominated in a Foreign Currency (other than a composite currency), money and/or Foreign Government Obligations, which through the payment of interest and principal in respect thereof in accordance with their terms, will provide (and without reinvestment and assuming no tax liability will be imposed on such Trustee), not later than one day before the due date of any payment of money, an amount in cash, sufficient, in the opinion of a nationally recognized firm of independent certified public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of the Securities of such Series on the dates such installments of interest or principal and such sinking fund payments are due;
- (b) Such deposit will not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound;

- (c) No Default or Event of Default with respect to the Securities of such Series shall have occurred and be continuing on the date of such deposit;
- (d) The Company shall have delivered to the Trustee an Opinion of Counsel to the effect that Holders of the Securities of such Series will not recognize income, gain or loss for federal income tax purposes as a result of such deposit and covenant defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such deposit and covenant defeasance had not occurred;
- (e) The Company shall have delivered to the Trustee an Officer's Certificate stating the deposit was not made by the Company with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and
- (f) The Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the covenant defeasance contemplated by this Section have been complied with.
- Section 8.5 Repayment to Company. Subject to applicable abandoned property law, the Trustee and the Paying Agent shall pay to the Company upon request any money held by them for the payment of principal and interest that remains unclaimed for two years. After that, Securityholders entitled to the money must look to the Company for payment as general creditors unless an applicable abandoned property law designates another person.
- Section 8.6 Reinstatement. If the Trustee or the Paying Agent is unable to apply any money deposited with respect to Securities of any Series in accordance with Section 8.1 by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the obligations of the Company under this Indenture with respect to the Securities of such Series and under the Securities of such Series shall be revived and reinstated as though no deposit had occurred pursuant to Section 8.1 until such time as the Trustee or the Paying Agent is permitted to apply all such money in accordance with Section 8.1; provided, however, that if the Company has made any payment of principal of or interest on or any Additional Amounts with respect to any Securities because of the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Securities to receive such payment from the money or U.S. Government Obligations held by the Trustee or Paying Agent after payment in full to the Holders.

ARTICLE IX AMENDMENTS AND WAIVERS

- Section 9.1 Without Consent of Holders. The Company and the Trustee may amend or supplement this Indenture or the Securities of one or more Series without the consent of any Securityholder:
 - (a) to cure any ambiguity, defect or inconsistency;
 - (b) to comply with Article V;
 - (c) to provide for uncertificated Securities in addition to or in place of certificated Securities;
 - (d) to surrender any of the Company's rights or powers under this Indenture
 - (e) to add covenants or events of default for the benefit of the holders of Securities of any Series;
 - (f) to comply with the applicable procedures of the applicable depositary;

- (g) to make any change that does not adversely affect the rights of any Securityholder;
- (h) to provide for the issuance of and establish the form and terms and conditions of Securities of any Series as permitted by this Indenture;
- (i) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to the Securities of one or more Series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee; or
 - (j) to comply with requirements of the SEC in order to effect or maintain the qualification of this Indenture under the TIA.

Section 9.2 With Consent of Holders. The Company and the Trustee may enter into a supplemental indenture with the written consent of the Holders of at least a majority in principal amount of the outstanding Securities of each Series affected by such supplemental indenture (including consents obtained in connection with a tender offer or exchange offer for the Securities of such Series), for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner the rights of the Securityholders of each such Series. Except as provided in Section 6.13, the Holders of at least a majority in principal amount of the outstanding Securities of any Series by notice to the Trustee (including consents obtained in connection with a tender offer or exchange offer for the Securities of such Series) may waive compliance by the Company with any provision of this Indenture or the Securities with respect to such Series.

It shall not be necessary for the consent of the Holders of Securities under this Section 9.2 to approve the particular form of any proposed supplemental indenture or waiver, but it shall be sufficient if such consent approves the substance thereof. After a supplemental indenture or waiver under this section becomes effective, the Company shall mail to the Holders of Securities affected thereby, a notice briefly describing the supplemental indenture or waiver. Any failure by the Company to mail or publish such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture or waiver.

Section 9.3 Limitations. Without the consent of each Securityholder affected, an amendment or waiver may not:

- (a) reduce the principal amount of Securities whose Holders must consent to an amendment, supplement or waiver;
- (b) reduce the rate of or extend the time for payment of interest (including default interest) on any Security;
- (c) reduce the principal or change the Stated Maturity of any Security or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation;
 - (d) reduce the principal amount of Discount Securities payable upon acceleration of the maturity thereof;
- (e) waive a Default or Event of Default in the payment of the principal of or interest, if any, on any Security (except a rescission of acceleration of the Securities of any Series by the Holders of at least a majority in principal amount of the outstanding Securities of such Series and a waiver of the payment default that resulted from such acceleration);
 - (f) make the principal of or interest, if any, on any Security payable in any currency other than that stated in the Security;

- (g) make any change in Sections 6.8, 6.13 or 9.3 (this sentence); or
- (h) waive a redemption payment with respect to any Security, provided that such redemption is made at the Company's option.
- Section 9.4 <u>Compliance with Trust Indenture Act</u>. Every amendment to this Indenture or the Securities of one or more Series shall be set forth in a supplemental indenture hereto that complies with the TIA as then in effect.
- Section 9.5 <u>Revocation and Effect of Consents.</u> Until an amendment is set forth in a supplemental indenture or a waiver becomes effective, a consent to it by a Holder of a Security is a continuing consent by the Holder and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent is not made on any Security. However, any such Holder or subsequent Holder may revoke the consent as to his Security or portion of a Security if the Trustee receives the notice of revocation before the date of the supplemental indenture or the date the waiver becomes effective.

Any amendment or waiver once effective shall bind every Securityholder of each Series affected by such amendment or waiver unless it is of the type described in any of clauses (a) through (h) of Section 9.3. In that case, the amendment or waiver shall bind each Holder of a Security who has consented to it and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security.

The Company may, but shall not be obligated to, fix a record date for the purpose of determining the Holders entitled to give their consent or take any other action described above or required or permitted to be taken pursuant to this Indenture. If a record date is fixed, then notwithstanding the immediately preceding paragraph, those persons who were Holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to give such consent or to revoke any consent previously given or take any such action, whether or not such persons continue to be Holders after such record date. No such consent shall be valid or effective for more than 120 days after such record date.

- Section 9.6 Notation on or Exchange of Securities The Company or the Trustee may place an appropriate notation about an amendment or waiver on any Security of any Series thereafter authenticated. The Company in exchange for Securities of that Series may issue and the Trustee shall authenticate upon request new Securities of that Series that reflect the amendment or waiver.
- Section 9.7 <u>Trustee Protected.</u> In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 7.1) shall be fully protected in relying upon, an Officer's Certificate or an Opinion of Counsel complying with Section 10.4. The Trustee shall sign all supplemental indentures upon delivery of such an Officer's Certificate or Opinion of Counsel, except that the Trustee need not sign any supplemental indenture that adversely affects its rights.

ARTICLE X MISCELLANEOUS

- Section 10.1 <u>Trust Indenture Act Controls</u>. If any provision of this Indenture limits, qualifies, or conflicts with another provision which is required or deemed to be included in this Indenture by the TIA, such required or deemed provision shall control.
- Section 10.2 Notices. Any notice or communication by the Company or the Trustee to the other, or by a Holder to the Company or the Trustee, is duly given if in writing and delivered in person or mailed by first-class mail:

if to the Company:

DMC Global Inc.

5405 Spine Road Boulder, Colorado 80301 Attention: Michelle H. Shepston, Esq., Chief Legal Officer

With copies to (which shall not constitute notice):

Davis Graham & Stubbs LLP 1550 Seventeenth Street, Suite 500 Denver, Colorado 80202 Attention: John A. Elofson, Esq.

The Company or the Trustee by notice to the other may designate additional or different addresses for subsequent notices or communications.

Any notice or communication to a Securityholder shall be mailed by first-class mail to his address shown on the register kept by the Registrar. Failure to mail a notice or communication to a Securityholder of any Series or any defect in it shall not affect its sufficiency with respect to other Securityholders of that or any other Series.

If a notice or communication is mailed or published in the manner provided above, within the time prescribed, it is duly given, whether or not the Securityholder receives it.

If the Company mails a notice or communication to Securityholders, it shall mail a copy to the Trustee and each Agent at the same time.

Notwithstanding any other provision of this Indenture or any Security, where this Indenture or any Security provides for notice of any event (including any notice of redemption) to a Holder of a Global Security (whether by mail or otherwise), such notice shall be sufficiently given to the Depositary for such Security (or its designee) pursuant to the customary procedures of such Depositary.

- Section 10.3 <u>Communication by Holders with Other Holders.</u> Securityholders of any Series may communicate pursuant to TIA § 312(b) with other Securityholders of that Series or any other Series with respect to their rights under this Indenture or the Securities of that Series or all Series. The Company, the Trustee, the Registrar and anyone else shall have the protection of TIA § 312(c).
- Section 10.4 <u>Certificate and Opinion as to Conditions Precedent.</u> Upon any request or application by the Company to the Trustee to take any action under this Indenture, the Company shall furnish to the Trustee:
- (a) an Officer's Certificate stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and
 - (b) an Opinion of Counsel stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

- Section 10.5 <u>Statements Required in Certificate or Opinion</u>. Each certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (other than a certificate provided pursuant to TIA § 314(a)(4)) shall comply with the provisions of TIA § 314(e) and shall include:
 - (a) a statement that the person making such certificate or opinion has read such covenant or condition;
- (b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;
- (c) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and
 - (d) a statement as to whether or not, in the opinion of such person, such condition or covenant has been complied with.
- Section 10.6 <u>Rules by Trustee and Agents</u>. The Trustee may make reasonable rules for action by or a meeting of Securityholders of one or more Series. Any Agent may make reasonable rules and set reasonable requirements for its functions.
- Section 10.7 <u>Legal Holidays</u>. Unless otherwise provided by Board Resolution, Officer's Certificate or supplemental indenture hereto for a particular Series, a "Legal Holiday" is any day that is not a Business Day. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period.
- Section 10.8 No Recourse Against Others. A director, officer, employee or stockholder (past or present), as such, of the Company shall not have any liability for any obligations of the Company under the Securities or this Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. Each Securityholder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Securities.
- Section 10.9 <u>Counterparts</u>. This Indenture may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.
- Section 10.10 <u>Governing Law.</u> THIS INDENTURE AND THE SECURITIES, INCLUDING ANY CLAIM OR CONTROVERSY ARISING OUT OF OR RELATING TO THIS INDENTURE OR THE SECURITIES, SHALL BE GOVERNED BY THE LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICTS OF LAWS PROVISIONS THEREOF OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW).
- Section 10.11 No Adverse Interpretation of Other Agreements. This Indenture may not be used to interpret another indenture, loan or debt agreement of the Company or a Subsidiary of the Company. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.
- Section 10.12 Successors. All agreements of the Company in this Indenture and the Securities shall bind its successor. All agreements of the Trustee in this Indenture shall bind its successor.

Section 10.13 <u>Severability</u>. In case any provision in this Indenture or in the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 10.14 <u>Table of Contents, Headings, Etc.</u> The Table of Contents, Cross Reference Table, and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

Section 10.15 Securities in a Foreign Currency. Unless otherwise specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate delivered pursuant to Section 2.2 of this Indenture with respect to a particular Series of Securities, whenever for purposes of this Indenture any action may be taken by the Holders of a specified percentage in aggregate principal amount of Securities of all Series affected by a particular action at the time outstanding and, at such time, there are outstanding Securities of any Series which are denominated in more than one currency, then the principal amount of Securities of such Series which shall be determed to be outstanding for the purpose of taking such action shall be determined by converting any such other currency into a currency that is designated upon issuance of any particular Series of Securities. Unless otherwise specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate delivered pursuant to Section 2.2 of this Indenture with respect to a particular Series of Securities, such conversion shall be at the spot rate for the purchase of the designated currency as published in The Financial Times in the "Currency Rates" section (or, if The Financial Times is no longer published, or if such information is no longer available in The Financial Times, such source as may be selected in good faith by the Company) on any date of determination. The provisions of this paragraph shall apply in determining the equivalent principal amount in respect of Securities of a Series denominated in currency other than Dollars in connection with any action taken by Holders of Securities pursuant to the terms of this Indenture.

All decisions and determinations provided for in the preceding paragraph shall, in the absence of manifest error, to the extent permitted by law, be conclusive for all purposes and irrevocably binding upon the Trustee and all Holders.

Section 10.16 <u>Judgment Currency</u>. The Company agrees, to the fullest extent that it may effectively do so under applicable law, that (a) if for the purpose of obtaining judgment in any court it is necessary to convert the sum due in respect of the principal of or interest or other amount on the Securities of any Series (the "Required Currency") into a currency in which a judgment will be rendered (the "Judgment Currency"), the rate of exchange used shall be the rate at which in accordance with normal banking procedures the Trustee could purchase in The City of New York the Required Currency with the Judgment Currency on the day on which final unappealable judgment is entered, unless such day is not a New York Banking Day, then the rate of exchange used shall be the rate at which in accordance with normal banking procedures the Trustee could purchase in The City of New York the Required Currency with the Judgment Currency on the New York Banking Day preceding the day on which final unappealable judgment is entered and (b) its obligations under this Indenture to make payments in the Required Currency (i) shall not be discharged or satisfied by any tender, any recovery pursuant to any judgment (whether or not entered in accordance with subsection (a)), in any currency other than the Required Currency, except to the extent that such tender or recovery shall result in the actual receipt, by the payee, of the full amount of the Required Currency expressed to be payable in respect of such payments, (ii) shall be enforceable as an alternative or additional cause of action for the purpose of recovering in the Required Currency the amount, if any, by which such actual receipt shall fall short of the full amount of the Required Currency so expressed to be payable, and (iii) shall not be affected by judgment being obtained for any other sum due under this Indenture. For purposes of the foregoing, "New York Banking Day" means any day except a Saturday, Sunday or a legal holiday in The City of New York on which banking inst

ARTICLE XI SINKING FUNDS Section 11.1 <u>Applicability of Article</u>. The provisions of this Article shall be applicable to any sinking fund for the retirement of the Securities of a Series if so provided by the terms of such Securities pursuant to Section 2.2, except as otherwise permitted or required by any form of Security of such Series issued pursuant to this Indenture.

The minimum amount of any sinking fund payment provided for by the terms of the Securities of any Series is herein referred to as a "mandatory sinking fund payment" and any other amount provided for by the terms of Securities of such Series is herein referred to as an "optional sinking fund payment." If provided for by the terms of Securities of any Series, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 11.2. Each sinking fund payment shall be applied to the redemption of Securities of any Series as provided for by the terms of the Securities of such Series.

Section 11.2 Satisfaction of Sinking Fund Payments with Securities The Company may, in satisfaction of all or any part of any sinking fund payment with respect to the Securities of any Series to be made pursuant to the terms of such Securities (1) deliver outstanding Securities of such Series to which such sinking fund payment is applicable (other than any of such Securities previously called for mandatory sinking fund redemption) and (2) apply as credit Securities of such Series to which such sinking fund payment is applicable and which have been repurchased by the Company or redeemed either at the election of the Company pursuant to the terms of such Securities (except pursuant to any mandatory sinking fund) or through the application of permitted optional sinking fund payments or other optional redemptions pursuant to the terms of such Securities, provided that such Securities have not been previously so credited. Such Securities shall be received by the Trustee, together with an Officer's Certificate with respect thereto, not later than 15 days prior to the date on which the Trustee begins the process of selecting Securities for redemption, and shall be credited for such purpose by the Trustee at the price specified in such Securities for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly. If as a result of the delivery or credit of Securities in lieu of cash payments pursuant to this Section 11.2, the principal amount of Securities of such Series to redemption, except upon receipt of a Company Order that such action be taken, and such cash payment shall be held by the Trustee or a Paying Agent and applied to the next succeeding sinking fund payment, provided, however, that the Trustee or such Paying Agent shall from time to time upon receipt of a Company Order pay over and deliver to the Company and unpaid principal amount equal to the cash payment required to be released to the Company.

Section 11.3 Redemption of Securities for Sinking Fund. Not less than 45 days (unless otherwise indicated in the Board Resolution, supplemental indenture hereto or Officer's Certificate in respect of a particular Series of Securities) prior to each sinking fund payment date for any Series of Securities, the Company will deliver to the Trustee an Officer's Certificate specifying the amount of the next ensuing mandatory sinking fund payment for that Series pursuant to the terms of that Series, the portion thereof, if any, which is to be satisfied by payment of securities of that Series pursuant to Section 11.2, and the optional amount, if any, to be added in cash to the next ensuing mandatory sinking fund payment, and the Company shall thereupon be obligated to pay the amount therein specified. Not less than 30 days (unless otherwise indicated in the Board Resolution, Officer's Certificate or supplemental indenture in respect of a particular Series of Securities) before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 3.2 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 3.3. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 3.4, 3.5 and 3.6.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed as of the day and year first above written.

DMC Global Inc.

March 9, 2017

DMC Global Inc. 5405 Spine Road Boulder, CO 80301

Re: DMC Global Inc.

Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to DMC Global Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-3 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") on March 9, 2017 under the Securities Act of 1933, as amended (the "Securities Act").

The Registration Statement relates to the issuance and sale from time to time by the Company on a delayed or continuous basis pursuant to Rule 415 of the General Rules and Regulations ("Rule 415") promulgated under the Securities Act of up to \$150,000,000 aggregate initial offering price of: (i) shares of the Company's common stock, par value \$0.05 per share (the "Common Stock"); (ii) shares of the Company's preferred stock, par value \$0.05 per share (the "Preferred Stock"); (iii) senior and/or subordinated debt securities of the Company (the "Debt Securities"); (iv) warrants to purchase Common Stock, Preferred Stock, Debt Securities or any combination of those securities (the "Warrants"); (v) contracts for the purchase and sale of Common Stock, Preferred Stock, Debt Securities, Warrants, or securities of an entity unaffiliated with the Company (the "Purchase Contracts"); (vi) units consisting of any combination of the foregoing securities (the "Units"); and (vii) such indeterminate amount and number of each class or series of the foregoing securities as may be issued upon conversion, exchange, exercise or settlement, as applicable, of any other securities that provide for such conversion, exchange, exercise or settlement (the "Indeterminate Securities"). The Common Stock, the Preferred Stock, the Debt Securities, the Warrants, the Purchase Contracts, the Units, and the Indeterminate Securities are hereinafter referred to collectively as the "Securities." The Securities may be issued and sold or delivered from time to time as set forth in the Registration Statement, any amendment thereto, the prospectus contained therein and any prospectus supplements (collectively the prospectus and any prospectus supplements are referred to as the "Prospectus") and pursuant to Rule 415.

The Debt Securities may be issued in one or more series under one or more indentures (each, an "Indenture"), each of which will be between the Company and a financial institution named therein as trustee (the "Trustee").

The Warrants will be issued pursuant to one or more warrant agreements (each, a "Warrant Agreement") between the Company and such warrant agent as shall be named therein (the "Counterparty").

The Purchase Contracts will be issued pursuant to one or more purchase contract agreements (each a "Purchase Contract Agreement") between the Company and such purchase contract agent as shall be named therein (the "Purchase Contract Agent").

The Units may be issued under one or more unit agreements (each, a "Unit Agreement"), each to be between the Company and a counterparty or counterparties identified therein (the "Unit Agents").

In connection with this letter, we have examined (i) the Certificate of Incorporation of the Company, as amended to date, (ii) the Bylaws of the Company, as amended to date, (iii) the Registration Statement, (iv) the form of Indenture, which has been filed with the Commission as an exhibit to the Registration Statement, and (v) the resolutions of the Board of Directors of the Company relating to the approval of the filing of the Registration Statement and transactions in connection therewith. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company, such agreements, certificates of public officials, and certificates of officers or other representatives of the Company, and such other documents, instruments, certificates and records as we have deemed necessary or appropriate as a basis for the opinions set forth herein.

In our examination we have assumed: (i) the legal capacity of all natural persons; (ii) the genuineness of all signatures; (iii) the authenticity of all documents submitted to us as originals; (iv) the conformity to original documents of all documents submitted to us as certified, conformed, photostatic or facsimile copies and the authenticity of the originals of such documents; (v) the truth, accuracy and completeness of the information, representations and warranties contained in the records, instruments, certificates and other documents we have reviewed; and (vi) the absence of any undisclosed modifications to the documents reviewed by us. As to any facts material to the opinions expressed herein which were not independently established or verified, we have relied upon oral or written statements and representations of officers and other representatives of the Company and others whom we have further assumed were authorized to make such statements and representations.

We also have assumed that (i) at the time of execution, countersignature, issuance and delivery of the Warrants, the related Warrant Agreement will be the valid and legally binding obligation of each Counterparty thereto; (ii) at the time of execution, authentication, issuance and delivery of the Debt Securities, the Indenture will be the valid and legally binding obligation of the Trustee thereunder and the Indenture and the Trustee will have been qualified under the Trust Indenture Act of 1939; (iii) at the time of execution, issuance and delivery of the Purchase Contracts, the related Purchase Contract Agreement will be the valid and legally binding obligation of the applicable Purchase Contract Agent; and (iv) at the time of the execution, issuance and delivery of the Units, the related Unit Agreement (if any) will be the valid and legally binding obligation of the applicable Unit Agent.

In rendering the opinions expressed herein, we have assumed further that: (i) the Registration Statement, and any amendments thereto, will comply with all then applicable laws and regulations and the effectiveness of the Registration Statement under the Securities Act will not have been terminated or rescinded; (ii) an applicable Prospectus Supplement will have been prepared and timely filed with the Commission describing the Securities offered thereunder; (iii) all Securities will be issued and sold in compliance with then applicable federal and state securities laws and in the manner stated in the Registration Statement and the applicable Prospectus Supplement; (iv) with respect to an underwritten offering, a definitive purchase, underwriting or similar agreement with respect to any Securities offered thereunder will be duly authorized and validly executed and delivered by the Company and the other parties thereto; (v) there will be sufficient shares of Common Stock or Preferred Stock, as the case may be, authorized under the Certificate of Incorporation of the Company as in effect at the time of the offering of Securities and not otherwise reserved for other issuance; (vi) the consideration for the Common Stock or Preferred Stock is not less than the par value thereof, and (vii) with respect to any Securities offered, any other proceedings that are required by then applicable laws will be timely and properly completed in connection with such offering.

Based upon the foregoing, and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that:

- 1. With respect to the Common Stock, assuming (a) the taking by the Board of Directors of the Company or a duly constituted and acting committee of such Board of Directors (such Board of Directors or committee being referred to herein as the "Board") of all necessary corporate action to authorize and approve the issuance of the Common Stock, the terms of the offering thereof and related matters, and (b) due issuance and delivery of the Common Stock, upon payment therefor in accordance with the applicable definitive purchase, underwriting or similar agreement approved by the Board, or, if the Common Stock is issued upon exercise of Warrants or exchange or conversion of Debt Securities, Preferred Stock or Purchase Contracts, in accordance with the applicable Warrant Agreement, Indenture, Preferred Stock or Purchase Contract, the Common Stock will be validly issued, fully paid and nonassessable.
- 2. With respect to the Preferred Stock, assuming (a) the taking by the Board of all necessary corporate action to authorize and approve the issuance and terms of the Preferred Stock, the terms of the offering thereof and related matters, (b) due filing of the Certificate of Designation related thereto and (c) due issuance and delivery of the Preferred Stock, upon payment therefor in accordance with the applicable definitive purchase, underwriting or similar agreement approved by the Board, or, if the Preferred Stock is issued upon exercise of Warrants or exchange or conversion of Debt Securities, Preferred Stock or Purchase Contracts, in accordance with the applicable Warrant Agreement, Indenture, Preferred Stock or Purchase Contract, the Preferred Stock will be validly issued, fully paid and, except to the extent set forth in the Certificate of Designations, nonassessable.
- 3. With respect to the Warrants, assuming (a) the taking of all necessary corporate action by the Board to authorize and approve the execution and delivery of any related Warrant Agreement, the terms of the offering thereof and related matters, and (b) the due execution, countersignature, issuance and delivery of such Warrants, upon payment of the consideration for such Warrants provided for in the applicable definitive purchase, underwriting or similar agreement approved by the Board and otherwise in accordance with the provisions of the applicable Warrant Agreement and such agreement, such Warrants will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms.
- 4. With respect to the Debt Securities, assuming (a) the taking of all necessary corporate action to authorize and approve the issuance and terms of the Indenture or Indenture Supplement and any Debt Securities, the terms of the offering thereof and related matters by the Board and (b) the due execution, authentication, issuance and delivery of the Indenture or Indenture Supplement and such Debt Securities, upon payment of the consideration therefor provided for in the applicable definitive purchase, underwriting or similar agreement approved by the Board and otherwise in accordance with the provisions of the applicable Indenture and such agreement, such Debt Securities will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms.
- 5. With respect to the Purchase Contracts, assuming (a) the taking of all necessary corporate action by the Board to authorize and approve the execution and delivery of any related Purchase Contract Agreement, the terms of the offering thereof and related matters by the Board, and (b) the due execution, issuance and delivery of the Purchase Contracts, upon payment of the consideration for such Purchase Contracts provided for in the applicable definitive

purchase, underwriting or similar agreement approved by the Board and otherwise in accordance with the provisions of the applicable Purchase Contract Agreement and such agreement, the Purchase Contracts will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms.

6. With respect to the Units, assuming (a) the taking of all necessary corporate action by the Board to authorize and approve (1) the issuance and terms of the Units, the terms of the offering thereof and related matters, (2) the execution and delivery of any related Unit Agreement and (3) the issuance and terms of the Securities that are a component part of the Units, the terms of the offering thereof and related matters, (b) the due execution, countersignature, authentication, issuance and delivery of each Security that is a component of Unit, in each case upon the payment of the consideration therefor provided for in the applicable definitive purchase, underwriting or similar agreement approved by the Board and otherwise in accordance with the provisions of the applicable Unit Agreement (if any) and such agreement, such Units will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms.

Our opinions set forth in paragraphs 3 through 6 above are subject to the effects of (i) bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting creditors' rights generally, (ii) general equitable principles (whether considered in a proceeding in equity or at law), (iii) an implied covenant of good faith and fair dealing and (iv) potential judicial rulings that particular contractual terms may be unenforceable as contrary to public policy.

We express no opinion (i) concerning the enforceability of any waiver of rights or defenses with respect to stay, extension or usury laws or (ii) with respect to whether acceleration of Debt Securities may affect the collectability of any portion of the stated principal amount thereof that might be determined to constitute unearned interest thereon.

We express no opinion under, or view with respect to, either directly or indirectly, laws other than the Delaware General Corporation Law and the federal law of the United States. The Securities may be issued from time to time on a delayed or continuous basis, and the opinions expressed herein are limited to the foregoing laws, including applicable rules and regulations, as in effect on the date hereof, which laws are subject to change with possible retroactive effect and to the facts as they presently exist.

We hereby consent to the filing of this letter with the Commission as an exhibit to the Registration Statement. We also hereby consent to the use of our name under the heading "Certain Legal Matters" in the prospectus which forms a part of the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder. The opinions in this letter are expressed as of the date hereof unless otherwise expressly stated, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law.

Sincerely,

/s/ Davis Graham & Stubbs LLP

Davis Graham & Stubbs LLP

DMC Global Inc. Ratio of Earnings to Fixed Charges \$ in millions

	Year Ended December 31,							
		2016	2015	2014	2013	2012		
Income (loss) before income taxes, discontinued operations and non-controlling interest	\$	(5.7) \$	(26.1) \$	5.8 \$	9.8 \$	15.1		
Plus:								
Interest expensed and capitalized		1.1	1.9	0.7	1	0.9		
Interest expense within rent		0.6	0.9	1	1	0.8		
Amortization of capitalized interest		_	_	_	_	_		
Less:								
Interest capitalized		_	(0.1)	(0.1)	(0.3)	(0.1)		
Adjusted earnings		(4.0)	(23.4)	7.4	11.5	16.7		
Fixed charges ¹		1.7	2.8	1.7	2	1.7		
Ratio of earnings to fixed charges		N/A ²	N/A ³	4.4x	5.8x	9.8x		

- (1) Fixed charges include interest expensed and capitalized as well as interest expense within rent.
- (2) The ratio of earnings to fixed charges was negative for the year ended December 31, 2016. Additional earnings of \$5.7 million would be needed to have a one-to-one ratio of earnings to fixed charges.
- (3) The ratio of earnings to fixed charges was negative for the year ended December 31, 2015. Additional earnings of \$26.2 million would be needed to have a one-to-one ratio of earnings to fixed charges.

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in this Registration Statement (Form S-3) and related Prospectus of DMC Global Inc. for the registration of common stock, preferred stock, warrants, debt securities, purchase contracts, and units and to the incorporation by reference therein of our reports dated March 9, 2017, with respect to the consolidated financial statements and schedules of DMC Global Inc., and the effectiveness of internal control over financial reporting of DMC Global Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Denver, Colorado March 9, 2017