As filed with the United States Securities and Exchange Commission on May 12, 2016 Registration No. 333-

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

FORM S-8

Registration Statement Under The Securities Act of 1933

DYNAMIC MATERIALS CORPORATION

(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 No.)

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

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

Michael Kuta Chief Financial Officer 5405 Spine Road Boulder CO 80301 (303) 665-5700

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

With a copy to: Garth B. Jensen, Esq. Sherman & Howard L.L.C. 633 17th Street, Suite 3000 Denver, CO 80202 (303) 299-8257

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.

Large accelerated filer \Box

Accelerated filer 🗵

Non-accelerated filer

Smaller reporting company \Box

CALCULATION OF REGISTRATION FEE				
Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee (3)
Common Stock, \$0.05 par value per share	1,000,000 shares	\$10.15	\$10,150,000	\$1,022.10

(1) This Registration Statement shall also cover any additional shares of Common Stock which become issuable by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of common stock.

(2)The offering price is estimated in accordance with Rules 457(c) and 457(h) under the Securities Act solely for the purpose of computing the amount of the registration fee and is based upon the average of the high and low prices of the Registrant's common stock on May 11, 2016, as reported on the Nasdaq Global Select Market.

(3)Pursuant to Rule 457(p) under the Securities Act \$143.75 of the registration fee previously paid under Registration Statement on Form S-8 (Commission File Number 333-188796) initially filed on May 23, 2013 is being used to offset the registration fee due in connection with this Registration Statement. Accordingly, a filing fee of \$878.35 is being paid herewith.

FORM S-8 PURSUANT TO GENERAL INSTRUCTION E

This Registration Statement registers 1,000,000 shares of the common stock (the "Common Stock"), par value \$0.05 per share, of Dynamic Materials Corporation (the "Registrant") issuable under the Dynamic Materials Corporation 2006 Stock Incentive Plan, as amended (the "Plan"). The remaining 1,617,500 shares under the Plan have been previously registered by Registration Statements on Form S-8 (Nos. 333-143355 and 333-188796).

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents filed by the Registrant with the Securities and Exchange Commission (the "Commission") are incorporated by reference into this Registration Statement:

- a. The Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, filed on March 11, 2016;
- b. The Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed on April 29, 2016;
- c. The Registrant's Current Reports on Form 8-K filed on February 22, 2016; and
- d. The description of the Registrant's common stock contained in the Registrant's Amendment No. 1 to Registration Statement on Form 8-A, filed on March 27, 2006, and any amendment or report filed for the purpose of updating that description.

All reports and other documents subsequently filed with the Commission by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), prior to the filing of a post-effective amendment which indicates that all securities offered herein have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents, excluding any information furnished under Item 7.01 or Item 2.02 of any Current Report on Form 8-K.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. 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 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 nonmonetary 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.

Article XI of our bylaws 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 7. Exemption from Registration Claimed

Not applicable.

Item 8. Exhibits

Exhibit No.	Description			
4.1	Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed with the Commission on July 29, 2014).			
4.2	Bylaws of the Registrant (incorporated by reference to the Registrant's Quarterly report on Form 10-Q/A for the quarter ended March 31, 2004).			
4.3	Form of Certificate representing shares of Common Stock of the Registrant (incorporated by reference from the Registrant's Quarterly Report on Form 10-QSB for the quarter ended September 30, 1997).			
5.1	Opinion of Sherman & Howard L.L.C.*			
10.1	Dynamic Materials Corporation 2006 Stock Incentive Plan, as amended by Amendment No. 1 to Dynamic Materials Corporation 2006 Stock Inventive Plan dated March 11, 2013 (incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K filed with the Commission on March 7, 2014).			
10.2	Amendment No. 2 to Dynamic Materials Corporation 2006 Stock Incentive Plan (incorporated by reference to Appendix A of the Registrant's definitive proxy statement filed May 1, 2016, relating to the Registrant's May 12, 2016 annual meeting of stockholders).			
23.1	Consent of Independent Registered Public Accounting Firm.*			
23.2	Consent of Sherman & Howard L.L.C. (included in Exhibit 5.1).*			
24.1	Power of Attorney (included on the signature page).*			

* Filed herewith.

Item 9. Undertakings

(a) The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) 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 the 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 the 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 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, That: paragraphs (a)(1)(i) and (a)(1)(ii) of this section 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.

(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.
- (b) The undersigned registrant hereby undertakes 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.
- (c) 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 Act 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 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 whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 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 the 12th day of May, 2016.

DYNAMIC MATERIALS CORPORATION

By: /s/ Michael Kuta

Michael Kuta

Chief Financial Officer

POWER OF ATTORNEY

Each person whose signature appears below does hereby make, constitute and appoint Kevin T. Longe and Michael Kuta, and each of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution to execute, deliver and file with the Securities and Exchange Commission, for and on his behalf, and in any and all capacities, any and all amendments (including post-effective amendments) to this Registration Statement with all exhibits thereto and other documents in connection therewith, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his substitute may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signatures	Title	Date	
/s/ Kevin T. Longe Kevin T. Longe	President, Chief Executive Officer and Director (Principal Executive Officer)	May 12, 2016	
/s/ Michael Kuta Michael Kuta	Chief Financial Officer (Principal Financial and Accounting Officer)	May 12, 2016	
/s/ David Aldous David Aldous	Director	May 12, 2016	
/s/ Yvon Pierre Cariou Yvon Pierre Cariou	Director	May 12, 2016	
/s/ Robert A. Cohen Robert A. Cohen	Director	May 12, 2016	
/s/ James J. Ferris James J. Ferris	Director	May 12, 2016	
/s/ Richard P. Graff Richard P. Graff	Director	May 12, 2016	
/s/ Gerard Munéra Gerard Munéra	Director	May 12, 2016	

[Letterhead of Sherman & Howard, L.L.C.]

May 12, 2016

Dynamic Materials Corporation 5405 Spine Road Boulder, Colorado 80301

Re: Dynamic Materials Corporation Form S-8 Registration Statement

Ladies and Gentlemen:

Reference is made to the registration statement on Form S-8 to be filed with the Securities and Exchange Commission (the "Commission") on or about May 12, 2016 (the "Registration Statement") by Dynamic Materials Corporation, a Delaware corporation (the "Company"), for the purpose of registering under the Securities Act of 1933, as amended (the "Act"), 1,000,000 additional shares of its common stock, \$0.05 par value per share (the "Common Stock"), which may be offered and issued under the Dynamic Materials Corporation 2006 Stock Incentive Plan, as amended (the "Plan").

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act.

In connection with this opinion, we have examined originals or copies of all documents, corporate records or other writings that we consider relevant for the purposes of this opinion. In all such examinations, we have assumed, without independent investigation or inquiry, the legal capacity of all natural persons executing documents, the genuineness of all signatures on original or certified copies, the authenticity of all original or certified copies and the conformity to original or certified documents of all copies submitted to us as conformed or reproduction copies. We have relied as to factual matters upon and have assumed the accuracy of, the statements made in a certificate of an officer of the Company delivered to us and the certificates and other statements or information of or from public officials and officers and representatives of the Company.

Based on the foregoing and the limitations, qualifications, exceptions and assumptions set forth herein, we are of the opinion that the shares of Common Stock, when issued, delivered and paid for as contemplated by the Registration Statement and in accordance with the terms of the Plan, will be validly issued, fully paid and non-assessable.

We express no opinion as to the laws other than the General Corporation Law of the State of Delaware (including the statutory provisions thereof, all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws). We express no opinion with respect to the blue sky securities laws of any state, including Delaware.

We consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Act.

Sincerely, /s/ Sherman & Howard, L.L.C.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) dated May 12, 2016 pertaining to the Dynamic Materials Corporation 2006 Stock Incentive Plan of our reports dated March 10, 2016, with respect to the consolidated financial statements and schedules of Dynamic Materials Corporation and subsidiaries and the effectiveness of internal control over financial reporting of Dynamic Materials Corporation and subsidiaries included in its Annual Report (Form 10-K) for the year ended December 31, 2015, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP Denver, Colorado May 12, 2016