3D SYSTEMS CORP
Form 10-Q
November 03, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

____

FORM 10 Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____________to____________

Commission File No. 001-34220

____

3D SYSTEMS CORPORATION

(Exact name of Registrant as specified in its Charter)

DELAWARE	95 4431352
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
333 THREE D SYSTEMS CIRCLE	
ROCK HILL, SOUTH CAROLINA	29730
(Address of Principal Executive Offices)	(Zip Code)

(Registrant's Telephone Number, Including Area Code): (803) 326 3900

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b 2 of the Exchange Act.) Yes No

APPLICABLE ONLY TO CORPORATE ISSUERS:

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Shares of Common Stock, par value $0.001, outstanding as of October 26, 2016: 112,359,693

3D SYSTEMS CORPORATION

Quarterly Report on Form 10-Q for the

Quarter and Nine Months Ended September 30, 2016

TABLE OF CONTENTS

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands, except par value)	September 30, 2016 (Unaudited)	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 179,358	$ 155,643
Accounts receivable, net of reserves — $15,408 (2016) and $14,139 (2015)	120,630	157,406
Inventories, net of reserves — $25,938 (2016) and $28,225 (2015)	113,717	105,877
Prepaid expenses and other current assets	15,196	13,541
Total current assets	428,901	432,467
Property and equipment, net	80,837	85,995
Intangible assets, net	133,518	157,466
Goodwill	189,018	187,875
Long term deferred income tax asset	5,374	3,216
Other assets, net	24,700	26,256
Total assets	$ 862,348	$ 893,275
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of capitalized lease obligations	$ 581	$ 529
Accounts payable	37,113	46,869
Accrued and other liabilities	46,746	54,699
Customer deposits	5,789	8,229
Deferred revenue	37,385	35,145
Total current liabilities	127,614	145,471
Long term portion of capitalized lease obligations	7,781	8,187
Long term deferred income tax liability	15,026	17,944
Other liabilities	60,338	58,155
Total liabilities	210,759	229,757
Redeemable noncontrolling interests	8,872	8,872
Commitments and contingencies (Note 13)		
Stockholders' equity:		

Common stock, $0.001 par value, authorized 220,000 shares; issued 114,301 (2016) and 113,115 (2015)	114	113
Additional paid-in capital	1,306,903	1,279,738
Treasury stock, at cost — 1,330 shares (2016) and 892 shares (2015)	(1,294)	(1,026)
Accumulated deficit	(627,017)	(583,368)
Accumulated other comprehensive loss	(33,995)	(39,548)
Total 3D Systems Corporation stockholders' equity	644,711	655,909
Noncontrolling interests	(1,994)	(1,263)
Total stockholders’ equity	642,717	654,646
Total liabilities, redeemable noncontrolling interests and stockholders’ equity	$ 862,348	$ 893,275

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

(Unaudited)

(in thousands, except per share amounts)	Quarter Ended September 30, 2016	Quarter Ended September 30, 2015	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
Revenue:				
Products	$ 94,543	$ 87,747	$ 280,406	$ 292,146
Services	61,819	63,827	186,622	190,654
Total revenue	156,362	151,574	467,028	482,800
Cost of sales:				
Products	56,321	48,472	146,682	156,432
Services	31,104	32,064	93,485	94,719
Total cost of sales	87,425	80,536	240,167	251,151
Gross profit	68,937	71,038	226,861	231,649
Operating expenses:				
Selling, general and administrative	64,814	83,212	202,009	237,242
Research and development	26,140	22,463	67,345	70,410
Total operating expenses	90,954	105,675	269,354	307,652
Loss from operations	(22,017)	(34,637)	(42,493)	(76,003)
Interest and other expense, net	1,624	1,373	1,290	4,029
Loss before income taxes	(23,641)	(36,010)	(43,783)	(80,032)
Provision (benefit) for income taxes	(2,214)	(3,524)	665	(20,563)
Net loss	(21,427)	(32,486)	(44,448)	(59,469)
Less: net loss attributable to noncontrolling interests	(214)	(237)	(799)	(343)
Net loss attributable to 3D Systems Corporation	$ (21,213)	$ (32,249)	$ (43,649)	$ (59,126)
Net loss per share available to 3D Systems Corporation common stockholders — basic and diluted	$ (0.19)	$ (0.29)	$ (0.39)	$ (0.53)
Other comprehensive income (loss):				
Pension adjustments	$ 18	$ 14	$ 54	$ 276
Foreign currency translation gain (loss)	4,282	(9,957)	5,567	(17,903)
Total other comprehensive income (loss)	4,300	(9,943)	5,621	(17,627)
Less foreign currency translation gain (loss) attributable to noncontrolling interests	22	(882)	68	(2,588)
Other comprehensive income (loss) attributable to 3D Systems Corporation	4,278	(9,061)	5,553	(15,039)

Comprehensive loss	(17,127)	(42,429)	(38,827)	(77,096)
Less comprehensive loss attributable to noncontrolling interests	(192)	(1,119)	(731)	(2,931)
Comprehensive loss attributable to 3D Systems Corporation	$ (16,935)	$ (41,310)	$ (38,096)	$ (74,165)

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited)

	Nine Months Ended September 30,	
(In thousands)	2016	2015
Cash flows from operating activities:		
Net loss	$ (44,448)	$ (59,469)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Benefit of deferred income taxes	(5,464)	(21,971)
Depreciation and amortization	45,731	63,905
Provision for arbitration award	—	11,282
Impairment of assets	8,590	1,111
Provision for bad debts	1,488	4,123
Inventory reserve of discontinued products	10,723	—
Stock-based compensation	28,405	28,850
Loss on the disposition of property and equipment	2,052	1,182
Changes in operating accounts:		
Accounts receivable	36,357	37,426
Inventories	(16,977)	(40,987)
Prepaid expenses and other current assets	(1,619)	(10,136)
Accounts payable	(9,938)	(19,657)
Accrued and other current liabilities	(8,452)	(5,348)
Customer deposits	(2,389)	566
All other operating activities	(5,819)	(1,485)
Net cash provided by (used in) operating activities	38,240	(10,608)
Cash flows from investing activities:		
Purchases of property and equipment	(12,014)	(18,064)
Additions to license and patent costs	(790)	(719)
Cash paid for acquisitions, net of cash assumed	—	(91,799)
Other investing activities	(1,000)	(3,750)
Net cash used in investing activities	(13,804)	(114,332)
Cash flows from financing activities:		
Tax benefits from share-based payment arrangements	—	467
Proceeds, repurchase and retirement of stock, net	(1,507)	748
Repayment of capital lease obligations	(786)	(788)
Net cash provided by (used in) financing activities	(2,293)	427

Effect of exchange rate changes on cash and cash equivalents	1,572	(2,896)
Net increase (decrease) in cash and cash equivalents	23,715	(127,409)
Cash and cash equivalents at the beginning of the period	155,643	284,862
Cash and cash equivalents at the end of the period	$ 179,358	$ 157,453
Cash interest payments	$ 633	$ 494
Cash income tax payments	8,040	11,532
Transfer of equipment from inventory to property and equipment, net (a)	9,395	8,812
Transfer of equipment to inventory from property and equipment, net (b)	349	300

(a) Inventory is transferred from inventory to “property and equipment, net” at cost when the Company requires additional machines for training or demonstration or for placement into on demand parts manufacturing services locations.

(b) In general, an asset is transferred from property and equipment, net, into inventory at its net book value when the Company has identified a potential sale for a used machine.

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED STATEMENT OF EQUITY

(Unaudited)

	Common Stock			Treasury Stock						
(In thousands, except par value)	Shares	Par Value $0.001	Additional Paid In Capital	Shares	Amount	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total 3D Systems Corporation Stockholders Equity	Equity Attributable to Noncontrolling Interests	Total Stockho Equity
Balance at December 31, 2015	113,115	$ 113	$ 1,279,738	892	$ (1,026)	$ (583,368)	$ (39,548)	$ 655,909	$ (1,263)	$ 654,6
Issuance, repurchase and retirement of restricted stock, net	1,186	1	(1,240)	438	(268)	—	—	(1,507)	—	(1,50
Stock-based compensation expense	—	—	28,405	—	—	—	—	28,405	—	28,40
Net loss	—	—	—	—	—	(43,649)	—	(43,649)	(799)	(44,4
Pension adjustment	—	—	—	—	—	—	54	54	—	54
Foreign currency translation adjustment	—	—	—	—	—	—	5,499	5,499	68	5,567
Balance at September 30, 2016	114,301	$ 114	$ 1,306,903	1,330	$ (1,294)	$ (627,017)	$ (33,995)	$ 644,711	$ (1,994)	$ 642,7

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

(In thousands, except per share information)

(1) Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of 3D Systems Corporation and its subsidiaries (collectively, the “Company”). All significant intercompany transactions and balances have been eliminated in consolidation. The unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America (“GAAP”) and the rules and regulations of the Securities and Exchange Commission (“SEC”) applicable to interim reports. Accordingly, they do not include all the information and notes required by GAAP for complete financial statements and should be read in conjunction with the audited financial statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2015 (“Form 10-K”).

In the opinion of management, the unaudited condensed consolidated financial statements contain all adjustments, consisting of adjustments of a normal recurring nature, necessary to present fairly the financial position, results of operations and cash flows for the periods presented. The results of operations for the quarter and nine months ended September 30, 2016 are not necessarily indicative of the results to be expected for the full year.

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements. Actual results may differ from those estimates and assumptions.

Certain prior period amounts presented in the condensed consolidated financial statements and accompanying footnotes have been reclassified to conform to current year presentation.

Recent Accounting Pronouncements

In August 2016, the FASB issued Accounting Standards Update No. 2016-15, “Statement of Cash Flows (Topic 230) – Classification of Certain Cash Receipts and Cash Payments” (“ASU 2016-15”). With the objective of reducing the existing diversity in practice, ASU 2016-15 addresses eight specific cash flow classification issues: (1) debt prepayment or debt extinguishment costs, (2) settlement of zero-coupon debt instruments, (3) contingent consideration payments made after a business combination, (4) proceeds from the settlement of insurance claims, (5) proceeds from the settlement of corporate-owned life insurance policies, (6) distributions received from equity method investees, (7) beneficial interests in securitization transactions, and (8) separately identifiable cash flows and application of the predominance principal. ASU 2016-15 is effective for annual reporting periods beginning after December 15, 2017. The amendments should be applied retrospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The Company is currently in the process of evaluating the impact of adoption of ASU 2016-15 on its financial statements.

No other new accounting pronouncements, issued or effective during the third quarter of 2016, have had or are expected to have a significant impact on the Company's consolidated financial statements.

(2) Inventories

Components of inventories, net, as of September 30, 2016 and December 31, 2015 were as follows:

(in thousands)	2016	2015
Raw materials	$ 40,576	$ 43,960
Work in process	4,999	4,067
Finished goods and parts	68,142	57,850
Inventories, net	$ 113,717	$ 105,877

During the third quarter of 2016, the Company recorded an inventory reserve of $10,723 in connection with the discontinuation of certain products as a result of the Company's recently updated strategy. No reserves in connection with the discontinuation of certain products were recorded for the nine months ended September 30, 2015.

(3) Property and Equipment

Property and equipment, net, as of September 30, 2016 and December 31, 2015 were as follows:

(in thousands)	2016	2015	Useful Life (in years)
Land	$ 903	$ 903	N/A
Building	11,032	11,007	25-30
Machinery and equipment	112,158	105,383	2-7
Capitalized software	8,856	7,391	3-5
Office furniture and equipment	4,950	4,714	1-5
Leasehold improvements	24,287	17,867	Life of lease (a)
Rental equipment	154	149	5
Construction in progress	5,020	9,578	N/A
Total property and equipment	167,360	156,992	
Less: Accumulated depreciation and amortization	(86,523)	(70,997)	
Total property and equipment, net	$ 80,837	$ 85,995	

[a] Leasehold improvements are amortized on a straight-line basis over the shorter of (i) their estimated useful lives and (ii) the estimated or contractual life of the related lease.

Depreciation and amortization expense on property and equipment was $6,176 and $18,386 for the quarter and nine months ended September 30, 2016, respectively, compared to $5,908 and $15,308 for the quarter and nine months ended September 30, 2015, respectively.

For the nine months ended September 30, 2016, the Company recognized impairment charges of $7,069 on property and equipment, net. No impairment charges were recognized for the nine months ended September 30, 2015.

(4) Intangible Assets

Intangible assets, net, other than goodwill, as of September 30, 2016 and December 31, 2015 were as follows:

	2016			2015				
(in thousands)	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net	Useful Life (in years)	Weighted Average Useful Life

								Remaining (in years)
Intangible assets with finite lives:								
Patent costs	$ 16,821	$ (5,812)	$ 11,009	$ 16,251	$ (4,895)	$ 11,356	1-19	8
Acquired technology	53,773	(25,160)	28,613	52,809	(16,405)	36,404	2-15	4
Internally developed software	4,730	(3,371)	1,359	4,730	(2,919)	1,811	3	3
Customer relationships	102,265	(44,619)	57,646	101,933	(36,158)	65,775	2-15	7
Non-compete agreements	11,945	(9,377)	2,568	12,163	(8,558)	3,605	2-5	3
Trade names	28,435	(15,297)	13,138	28,108	(12,498)	15,610	1-9	6
Other	46,019	(26,834)	19,185	46,435	(23,530)	22,905	1-7	5
Total intangible assets	$ 263,988	$ (130,470)	$ 133,518	$ 262,429	$ (104,963)	$ 157,466	1-19	5

Amortization expense related to intangible assets was $8,857 and $26,536 for the quarter and nine months ended September 30, 2016, respectively, compared to $15,843 and $47,840 for the quarter and nine months ended September 30, 2015, respectively.

Annual amortization expense for intangible assets is expected to be $35,193, $32,143, $26,971, $21,635 and $16,941 for the years ending 2016, 2017, 2018, 2019, and 2020, respectively.

(5) Accrued and Other Liabilities

Accrued liabilities as of September 30, 2016 and December 31, 2015 were as follows:

(in thousands)	2016	2015
Compensation and benefits	$ 22,249	$ 24,152
Vendor accruals	9,380	12,883
Accrued professional fees	542	491
Accrued taxes	6,684	11,317
Royalties payable	1,717	1,431
Accrued interest	40	42
Accrued earnouts related to acquisitions	2,586	159
Accrued other	3,548	4,224
Total	$ 46,746	$ 54,699

Other liabilities as of September 30, 2016 and December 31, 2015 were as follows:

(in thousands)	2016	2015
Arbitration award	$ 11,282	$ 11,282
Long term employee indemnity	10,964	9,794
Defined benefit pension obligation	6,416	6,211
Long term tax liability	11,093	8,312
Long term earnouts related to acquisitions	6,977	9,673
Long term deferred revenue	7,773	7,956
Other long term liabilities	5,833	4,927
Total	$ 60,338	$ 58,155

(6) Hedging Activities and Financial Instruments

The Company conducts business in various countries using both the functional currencies of those countries and other currencies to effect cross border transactions. As a result, the Company is subject to the risk that fluctuations in foreign exchange rates between the dates that those transactions are entered into and their respective settlement dates will result in a foreign exchange gain or loss. When practicable, the Company endeavors to match assets and liabilities in the same currency on its balance sheet and those of its subsidiaries in order to reduce these risks. When appropriate, the Company enters into foreign currency contracts to hedge exposures arising from those transactions. The Company has elected not to prepare and maintain the documentation to qualify for hedge accounting treatment under Accounting Standards Codification (“ASC”) 815, “Derivatives and Hedging,” and therefore, all gains and losses (realized or unrealized) are recognized in “Interest and other expense, net” in the condensed consolidated statements of operations and comprehensive income (loss). Depending on their fair value at the end of the reporting period, derivatives are recorded either in prepaid expenses and other current assets or in accrued liabilities on the condensed consolidated balance sheet.

There were no foreign currency contracts outstanding as of September 30, 2016 or December 31, 2015.

For the quarter and nine months ended September 30, 2016, the condensed consolidated statements of operations includes a foreign currency transaction loss of $1,123 and a gain of $340, respectively, compared to a gain of $126 and a loss of $1,641 for the quarter and nine months ended September 30, 2015, respectively.

For the quarter and nine months ended September 30, 2016, the total impact of foreign currency translation on accumulated other comprehensive loss reflects gains of $4,260 and $5,499, respectively, compared to losses of $9,075 and $15,315 for the quarter and nine months ended September 30, 2015, respectively.

(7) Borrowings

Credit Facility

On October 10, 2014, the Company and certain of its subsidiaries entered into a $150,000 five-year revolving, unsecured credit facility (the "Credit Agreement") with PNC Bank, National Association, as Administrative Agent, PNC Capital Markets LLC, as Sole Lead Arranger and Sole Bookrunner, HSBC Bank USA, N.A., as Syndication Agent, and the other lenders party thereto (collectively, the "Lenders"). The Credit Agreement comprises a revolving loan facility that provides for advances in the initial aggregate principal amount of up to $150,000 (the "Credit Facility"). Subject to certain terms and conditions contained in the Credit Agreement, the Company may, at its option, request an increase in the aggregate principal amount available under the Credit Facility by an additional $75,000. The Credit Agreement includes provisions for the issuance of letters of credit and swingline loans.

The Credit Agreement is guaranteed by certain of the Company's material domestic subsidiaries (the "Guarantors"). From time to time, the Company may be required to cause additional material domestic subsidiaries to become Guarantors under the Credit Agreement.

Generally, amounts outstanding under the Credit Facility bear interest, at the Company's option, at either the Base Rate or the London interbank offered rate ("LIBOR"), in each case, plus an applicable margin. Base Rate advances bear interest at a rate per annum equal to the sum of (i) the highest of (A) the Administrative Agent's prime rate, (B) the Federal Funds Open Rate plus 0.5% or (C) the Daily LIBOR Rate for a one month interest period plus 1%, and (ii) an applicable margin that ranges from 0.25% to 0.50% based upon the Company's consolidated total leverage ratio. LIBOR Rate advances bear interest at a rate based upon the LIBOR Rate for the applicable interest period, plus an applicable margin that ranges from 1.25% to 1.50% based upon the Company's consolidated total leverage ratio. Under the terms of the Credit Agreement, (i) accrued interest on each loan bearing interest at the Base Rate is payable quarterly in arrears and (ii) accrued interest on each loan bearing interest at the LIBOR Rate is payable in arrears on the earlier of (A) quarterly and (B) the last day of each applicable interest payment date for each loan. The Credit Facility is scheduled to mature on October 10, 2019, at which time all amounts outstanding thereunder will be due and payable.

The Company is required to pay certain fees in connection with the Credit Facility, including a quarterly commitment fee equal to the product of the amount of the average daily available revolving commitments under the Credit Agreement multiplied by a percentage that ranges from 0.20% to 0.25% depending upon the Company's consolidated total leverage ratio, as well as customary administrative fees.

The Credit Agreement contains customary representations, warranties, covenants and default provisions for a Credit Facility of this type, including, but not limited to, financial covenants, limitations on liens and the incurrence of debt, covenants to preserve corporate existence and comply with laws and covenants regarding the use of proceeds of the Credit Facility. The financial covenants include a maximum consolidated total leverage ratio, which is the ratio of consolidated total funded indebtedness to consolidated EBITDA (earnings before interest, taxes, depreciation and amortization expense), as defined in the Credit Agreement, of 3.00 to 1.00, and a minimum interest coverage ratio, which is the ratio of consolidated EBITDA to cash interest expense, of 3.50 to 1.00. The Company is only required to be in compliance with the financial covenants as of the end of any fiscal quarter in which there are any loans outstanding at any time during such fiscal quarter. Based on the Company's current results of operations and financial covenants set forth in the Credit Agreement, availability at September 30, 2016 would be approximately $150,000. Future results may impact availability.

The payment of dividends on the Company's common stock is restricted under provisions of the Credit Facility, which limits the amount of cash dividends that the Company may pay in any one fiscal year to $30,000. The Company currently does not pay, and has not paid, any dividends on its common stock, and currently intends to retain any future earnings for use in its business.

There was no outstanding balance on the Credit Facility as of September 30, 2016 or December 31, 2015.

Capitalized Lease Obligations

The Company's capitalized lease obligations primarily include a lease agreement that was entered into during 2006 with respect to the Company's corporate headquarters located in Rock Hill, SC. Capitalized lease obligations decreased to $8,362 at September 30, 2016 from $8,716 at December 31, 2015, due to the normal scheduled timing of payments.

(8) Stock-based Compensation Plans

Effective May 19, 2004, the Company adopted its 2004 Incentive Stock Plan, as further amended and restated on February 3, 2015 (the "2004 Stock Plan"), and its 2004 Restricted Stock Plan for Non-Employee Directors, as further amended and restated on April 1, 2013 (the "Director Plan"). On May 19, 2015, the Company's stockholders approved the 2015 Incentive Plan of 3D Systems Corporation (the "2015 Plan" and, together with the 2004 Stock Plan, the "Incentive Plans").

The 2004 Stock Plan authorizes shares of restricted stock, restricted stock units, stock appreciation rights and the grant of options to purchase shares of the Company's common stock. The 2004 Stock Plan also designates measures that may be used for performance awards.

The Director Plan authorizes shares of restricted stock for non-employee directors of the Company.

The 2015 Plan authorizes shares of restricted stock, restricted stock units, stock appreciation rights, cash incentive awards and the grant of options to purchase shares of the Company's common stock. The 2015 Plan also designates measures that may be used for performance awards.

Generally, awards granted prior to November 13, 2015 become fully-vested on the three-year anniversary of the grant date and awards granted on or after November 13, 2015 will vest one third each year over three years.

The Company records stock-based compensation expense in selling, general and administrative expenses in the condensed consolidated statements of operations and comprehensive income (loss). Stock-based compensation expense for the quarters and nine months ended September 30, 2016 and 2015 was as follows:

	Quarter Ended September 30,		Nine Months Ended September 30,	
(in thousands)	2016	2015	2016	2015
Stock-based compensation expense	$ 9,512	$ 8,800	$ 28,405	$ 28,850

Restricted Stock

Stock award activity for the nine months ended September 30, 2016 and 2015 was as follows:

	Nine Months Ended September 30,			
	2016		2015	
(in thousands, except per share amounts)	Number of Shares/Units	Weighted Average Grant Date Fair Value	Number of Shares/Units	Weighted Average Grant Date Fair Value
Outstanding at beginning of period — unvested	2,942		2,806	
Granted	1,482	$ 13.69	729	$ 23.29
Cancelled	(446)	$ 54.61	(162)	$ 48.44
Vested	(562)	$ 35.37	(300)	$ 18.64
Outstanding at end of period — unvested	3,416		3,073	

During the nine months ended September 30, 2016, the Company awarded certain employees restricted stock under the 2015 Plan, included in the activity above, that vests under specified market conditions. Each employee was generally awarded two equal tranches of market condition restricted stock that immediately vests when the Company’s common stock trades at either $30 or $40 per share for ninety consecutive calendar days.

At September 30, 2016, there was $5,624 of unrecognized pre-tax stock-based compensation expense related to non-vested restricted stock awards with market conditions, which the Company expects to recognize over the remaining weighted-average vesting period of four years.

At September 30, 2016, there was $34,859 of unrecognized pre-tax stock-based compensation expense related to all other non-vested restricted stock award shares and units, which the Company expects to recognize over the remaining weighted-average vesting period of 1.5 years.

Stock Options

The Company estimates the fair value of stock options with market conditions using a binomial lattice Monte Carlo simulation model. The weighted-average fair value and the assumptions used to measure fair value were as follows:

	Quarter Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Stock option assumptions:				
Weighted-average fair value	$ 7.94	$ —	$ 7.81	$ —
Expected volatility	60.0%	—	60.0%	—
Risk-free interest rate	1.46%	—	0.76%-1.46	—
Expected dividend yield	0%	—	0%	—
Derived term in years	3-4	—	3-4	—

Stock option activity for the nine months ended September 30, 2016 was as follows:

	Nine Months Ended September 30, 2016		
(in thousands, except per share amounts)	Number of Shares	Weighted Average Exercise	Weighted Average Remaining Term (in years)
Stock option activity:			
Outstanding at beginning of period	—	$ —	
Granted	2,160	13.95	
Exercised	—	—	
Forfeited and expired	—	—	
Outstanding at end of period	2,160	$ 13.95	9.8
Exercisable at end of period	—	$ —	—

During the nine months ended September 30, 2016, the Company awarded certain employees market condition stock options under the 2015 Plan, included in the activity above, that vest under specified market conditions. Each employee was generally awarded two equal tranches of market condition stock options that immediately vest when the Company’s common stock trades at either $30 or $40 per share for ninety consecutive calendar days. At September 30, 2016, there was $15,213 of unrecognized pre-tax stock-based compensation expense related to non-vested stock options with market conditions, which the Company expects to recognize over the remaining weighted-average vesting period of four years.

(9) Loss Per Share

The Company presents basic and diluted loss per share amounts. Basic loss per share is calculated by dividing net loss attributable to 3D Systems Corporation by the weighted average number of common shares outstanding during the applicable period. Diluted loss per share is calculated by dividing net loss by the weighted average number of common and common equivalent shares outstanding during the applicable period. The following table reconciles basic weighted average outstanding shares to diluted weighted average outstanding for the quarter and nine months ended September 30, 2016 and 2015:

(in thousands, except per share amounts)	Quarter Ended September 30, 2016	Quarter Ended September 30, 2015	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
Numerator for basic and diluted net loss per share:				
Net loss attributable to 3D Systems Corporation	$ (21,213)	$ (32,249)	$ (43,649)	$ (59,126)
Denominator for basic and diluted net loss per share:				
Weighted average shares	111,008	112,010	111,194	111,920
Net loss per share, basic and diluted	$ (0.19)	$ (0.29)	$ (0.39)	$ (0.53)

The calculation for weighted average outstanding diluted loss per share excludes stock options with an exercise price that exceeds the average market price of shares during the period. In addition to unexercised stock options, there was an immaterial number of additional shares issuable upon the vesting of restricted stock units that were excluded from the diluted share calculations because they were anti-dilutive.

(10) Fair Value Measurements

ASC 820, “Fair Value Measurements and Disclosures,” defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs that may be used to measure fair value:

- Level 1 - Quoted prices in active markets for identical assets or liabilities;
- Level 2 - Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or
- Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

For the Company, the above standard applies to cash equivalents and earnout consideration. The Company utilizes the market approach to measure fair value for its financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

	Fair Value Measurements as of September 30, 2016			
(in thousands)	Level 1	Level 2	Level 3	Total
Description				
Cash equivalents (a)	$ 37,532	$ —	$ —	$ 37,532
Earnout consideration (b)	$ —	$ —	$ 9,563	$ 9,563

	Fair Value Measurements as of December 31, 2015			
(in thousands)	Level 1	Level 2	Level 3	Total
Description				
Cash equivalents (a)	$ 26,648	$ —	$ —	$ 26,648
Earnout consideration (b)	$ —	$ —	$ 9,673	$ 9,673

(a) Cash equivalents include funds held in money market instruments and are reported at their current carrying value, which approximates fair value due to the short-term nature of these instruments and are included in cash and cash equivalents in the consolidated balance sheet.

(b) The fair value of the earnout consideration, which is based on the present value of the expected future payments to be made to the sellers of the acquired businesses, was derived by analyzing the future performance of the acquired businesses using the earnout formula and performance targets specified in each purchase agreement and adjusting those amounts to reflect the ability of the acquired entities to achieve the stated targets. Given the significance of the unobservable inputs, the valuations are classified in Level 3 of the fair value hierarchy. The change in earnout consideration from December 31, 2015 to September 30, 2016 reflects a $917 adjustment to the expected payment, partially offset by $807 of accretion.

The Company did not have any transfers of assets and liabilities between Level 1, Level 2 and Level 3 of the fair value measurement hierarchy during the quarter and nine months ended September 30, 2016. In addition to the assets and liabilities included in the above table, certain of our assets and liabilities are to be initially measured at fair value on a non-recurring basis. This includes goodwill and other intangible assets measured at fair value for impairment assessment, in addition to redeemable noncontrolling interests. For additional discussion, refer to “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Significant Estimates” in our Form 10-K.

(11) Income Taxes

For the quarter and nine months ended September 30, 2016, the Company recorded a benefit of $2,214 and a provision of $665, respectively, resulting in effective tax rates of 9.4% of benefit and 1.5% of expense, respectively, compared to tax rates of 9.8% and 25.7% of benefit for the quarter and nine months ended September 30, 2015, respectively. The difference in the effective tax rates is primarily attributable to valuation allowances that the Company recorded in the fourth quarter of 2015 in the United States and certain foreign jurisdictions, as well as an adjustment that was recorded during the third quarter of 2016 in connection with completion of the Company's tax returns, which resulted in a tax benefit.

The Company has not provided for any taxes on the unremitted earnings of its foreign subsidiaries, as the Company intends to permanently reinvest all such earnings outside of the U.S. The Company believe a calculation of the deferred tax liability associated with these undistributed earnings is impracticable.

Tax years 2003 through 2015 remain subject to examination by the U.S. Internal Revenue Service, with most of the years open to examination due to the generation and utilization of net operating losses. The Company files income tax returns (which are open to examination beginning in the year shown in parentheses) in Australia (2012), Belgium (2013), Brazil (2011), China (2013), France (2013), Germany (2012), India (2013), Israel (2012), Italy (2011), Japan (2011), Korea (2011), Mexico (2011), Netherlands (2011), Switzerland (2011), the United Kingdom (2015) and Uruguay (2011).

(12) Segment Information

The Company operates in one reportable business segment. The Company conducts its business through various offices and facilities located throughout the Asia Pacific region (Australia, China, India, Japan and Korea), Europe (Belgium, France, Germany, Italy, the Netherlands, Switzerland and the United Kingdom), Israel, Latin America (Brazil, Mexico and Uruguay), Russia and the United States. The Company has historically disclosed summarized financial information for the geographic areas of operations as if they were segments in accordance with ASC 280, "Segment Reporting." Financial information concerning the Company's geographical locations is based on the location of the selling entity. Such summarized financial information concerning the Company's geographical operations is shown in the following tables:

	Quarter Ended September 30,		Nine Months Ended September 30,	
(in thousands)	2016	2015	2016	2015
Revenue from unaffiliated customers:				

Americas	$ 86,890	$ 80,724	$ 253,981	$ 257,382
Germany	16,796	18,972	56,225	61,567
Other EMEA	26,948	26,063	83,704	84,475
Asia Pacific	25,728	25,815	73,118	79,376
Total revenue	$ 156,362	$ 151,574	$ 467,028	$ 482,800

	Quarter Ended September 30,		Nine Months Ended September 30,	
(in thousands)	2016	2015	2016	2015
Revenue by class of product and service:				
Products	$ 56,484	$ 52,899	$ 163,301	$ 183,790
Materials	38,059	34,848	117,105	108,356
Services	61,819	63,827	186,622	190,654
Total revenue	$ 156,362	$ 151,574	$ 467,028	$ 482,800

	Quarter Ended September 30, 2016				
	Intercompany Sales to				
(in thousands)	Americas	Germany	Other EMEA	Asia Pacific	Total
Americas	$ 733	$ 6,163	$ 2,244	$ 6,322	$ 15,462
Germany	240	—	976	105	1,321
Other EMEA	14,972	562	1,236	1,053	17,823
Asia Pacific	606	—	113	1,053	1,772
Total	$ 16,551	$ 6,725	$ 4,569	$ 8,533	$ 36,378

	Quarter Ended September 30, 2015				
	Intercompany Sales to				
(in thousands)	Americas	Germany	Other EMEA	Asia Pacific	Total
Americas	$ 1,160	$ 8,771	$ 3,406	$ 4,583	$ 17,920
Germany	171	—	1,919	—	2,090
Other EMEA	13,320	1,790	1,132	664	16,906
Asia Pacific	710	—	50	1,153	1,913
Total	$ 15,361	$ 10,561	$ 6,507	$ 6,400	$ 38,829

	Nine Months Ended September 30, 2016				
	Intercompany Sales to				
(in thousands)	Americas	Germany	Other EMEA	Asia Pacific	Total
Americas	$ 2,011	$ 21,377	$ 8,313	$ 15,882	$ 47,583
Germany	3,604	—	2,254	169	6,027
Other EMEA	44,946	1,740	3,601	3,301	53,588
Asia Pacific	2,270	—	132	2,859	5,261
Total	$ 52,831	$ 23,117	$ 14,300	$ 22,211	$ 112,459

	Nine Months Ended September 30, 2015				
	Intercompany Sales to				
(in thousands)	Americas	Germany	Other EMEA	Asia Pacific	Total
Americas	$ 2,480	$ 28,581	$ 14,609	$ 13,025	$ 58,695
Germany	377	—	3,812	—	4,189
Other EMEA	44,634	3,325	2,715	5,055	55,729
Asia Pacific	2,140	—	68	2,495	4,703
Total	$ 49,631	$ 31,906	$ 21,204	$ 20,575	$ 123,316

	Quarter Ended September 30,		Nine Months Ended September 30,	
(in thousands)	2016	2015	2016	2015
Income (loss) from operations:				
Americas	$ (21,525)	$ (36,116)	$ (40,458)	$ (88,408)
Germany	2,761	3,760	7,732	5,052
Other EMEA	(11,043)	(9,057)	(27,225)	(11,330)
Asia Pacific	8,434	7,162	19,537	20,088
Subtotal	(21,373)	(34,251)	(40,414)	(74,598)
Intercompany elimination	(644)	(386)	(2,079)	(1,405)
Total	$ (22,017)	$ (34,637)	$ (42,493)	$ (76,003)

(in thousands)	September 30, 2016	December 31, 2015
Assets:		
Americas	$ 359,075	$ 384,054
Germany	39,157	36,782
Other EMEA	343,194	369,302
Asia Pacific	120,922	103,137
Total	$ 862,348	$ 893,275

(in thousands)	September 30, 2016	December 31, 2015
Cash and cash equivalents:		
Americas	$ 105,314	$ 98,913
Germany	8,305	3,901
Other EMEA	33,370	30,487
Asia Pacific	32,369	22,342
Total	$ 179,358	$ 155,643

(13) Commitments and Contingencies

The Company leases office space and certain furniture and fixtures under various non-cancelable operating leases. For the quarter and nine months ended September 30, 2016, rent expense under operating leases was $3,542 and $9,717, respectively, compared to $3,362 and $9,974 for the quarter and nine months ended September 30, 2015, respectively.

As of September 30, 2016 and December 31, 2015, the Company had supply commitments on printer assemblies that totaled $38,307 and $50,663, respectively.

Certain of the Company’s acquisitions contain earnout provisions under which the sellers of the acquired businesses can earn additional amounts. The total liability recorded for these earnouts at September 30, 2016 was $9,563. At December 31, 2015, in addition to earnout provisions, certain of the Company’s acquisitions also contained deferred purchase payment arrangements. The total liability recorded for these earnouts and deferred purchase payment arrangements totaled $9,832 at December 31, 2015.

Put Options

The minority interest shareholders of a certain subsidiary have the right in certain circumstances to require the Company to acquire either a portion of or all of the remaining ownership interests held by them. The owners’ ability to exercise any such “put option” right is subject to the satisfaction of certain conditions, including conditions requiring notice in advance of exercise. In addition, these rights cannot be exercised prior to a specified exercise date. The exercise of these rights at their earliest contractual date would result in obligations of the Company to fund the related amounts in 2019.

Management estimates, assuming that the subsidiary owned by the Company at September 30, 2016 performs over the relevant future periods at its forecasted earnings levels, that these rights, if exercised, could require the Company, in future periods, to pay approximately $8,872 to the owners of such put rights that require the Company to acquire such ownership interests in the relevant subsidiary. This amount has been recorded as redeemable noncontrolling interests on the balance sheet as of September 30, 2016 and December 31, 2015. The ultimate amount payable relating to this transaction will vary because it is dependent on the future results of operations of the subject business.

Litigation

Securities and Derivative Litigation

The Company and certain of its former executive officers have been named as defendants in a consolidated putative stockholder class action lawsuit pending in the United States District Court for the District of South Carolina. The consolidated action is styled KBC Asset Management NV v. 3D Systems Corporation, et al., Case No. 0:15-cv-02393-MGL. The Amended Consolidated Complaint (the “Complaint”), which was filed on December 9, 2015, alleges that defendants violated the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Rule 10b-5 promulgated thereunder by making false and misleading statements and omissions and that the former officers are control persons under Section 20(a) of the Exchange Act. The Complaint was filed on behalf of stockholders who purchased shares of the Company’s common stock between October 29, 2013, and May 5, 2015 and seeks monetary damages on behalf of the purported class. Defendants filed a motion to dismiss the Complaint in its entirety on January 14, 2016, which was denied by Memorandum Opinion and Order dated July 25, 2016 (the “Order”). Defendants filed a motion for reconsideration of the Order on August 4, 2016, which is currently pending.

Nine related derivative complaints have been filed by purported Company stockholders against certain of the Company's former executive officers and members of its Board of Directors. The Company is named as a nominal defendant in all nine actions. The derivatives complaints are styled as follows: (1) Steyn v. Reichental, et al., Case No. 2015-CP-46-2225, filed on July 27, 2015 in the Court of Common Pleas for the 16th Judicial Circuit, County of York, South Carolina; (2) Piguing v. Reichental, et al., Case No. 2015-CP-46-2396, filed on August 7, 2015 in the Court of Common Pleas for the 16th Judicial Circuit, County of York, South Carolina; (3) Booth v. Reichental, et al., Case No. 15-692-RGA, filed on August 6, 2015 in the United States District Court for the District of Delaware ("Booth"); (4) Nally v. Reichental, et al., Case No. 15-cv-03756-MGL, filed on September 18, 2015 in the United States District Court for the District of South Carolina; (5) Gee v. Hull, et al., Case No. BC-610319, filed on February 17, 2016 in the Superior Court for the State of California, County of Los Angeles; (6) Foster v. Reichental, et al., Case No. 0:16-cv-01016-MGL, filed on April 1, 2016 in the United States District Court for the District of South Carolina; (7) Lu v. Hull, et al., Case No. BC629730, filed on August 5, 2016 in the Superior Court for the State of California, County of Los Angeles; (8) Howes v. Reichental, et al., Case No. 0:16-cv-2810-MGL, filed on August 11, 2016 in the United States District Court for the District of South Carolina; and (9) Ameduri v. Reichental, et al., Case No. 0:16-cv-02995-MGL, filed on September 1, 2016 in the United States District Court for the District of South Carolina.

The derivative complaints allege claims for breach of fiduciary duty, abuse of control, gross mismanagement, waste of corporate assets and unjust enrichment and seek, among other things, monetary damages and certain corporate governance actions.

The first six of the derivative complaints listed above have been stayed until the earlier of the close of discovery or the deadline for appealing a dismissal in the KBC Asset Management NV securities class action.

The Company believes the claims alleged in the putative securities class action and the derivative lawsuits are without merit and intends to defend the Company and its officers and directors vigorously.

Ronald Barranco and Print3D Corporation v. 3D Systems Corporation, et. al.

On August 23, 2013, Ronald Barranco, a former Company employee, filed two lawsuits against the Company and certain officers in the United States District Court for the District of Hawaii. The first lawsuit ("Barranco I") is captioned Ronald Barranco and Print3D Corporation v. 3D Systems Corporation, 3D Systems, Inc., and Damon Gregoire, Case No. CV 13-411 LEK RLP, and alleges seven causes of action relating to the Company's acquisition of Print3D Corporation (of which Mr. Barranco was a 50% shareholder) and the subsequent employment of Mr. Barranco by the Company. The second lawsuit ("Barranco II") is captioned Ronald Barranco v. 3D Systems Corporation, 3D Systems, Inc., Abraham Reichental, and Damon Gregoire, Case No. CV 13-412 LEK RLP, and alleges the same seven causes of action relating to the Company's acquisition of certain website domains from Mr. Barranco and the subsequent employment of Mr. Barranco by the Company. Both Barranco I and Barranco II allege the Company breached certain purchase agreements in order to avoid paying Mr. Barranco additional monies pursuant to royalty and earn out provisions in the agreements. The Company and its officers timely filed responsive pleadings on October 22, 2013 seeking, inter alia, to dismiss Barranco I due to a mandatory arbitration agreement and for lack of personal jurisdiction and to dismiss Barranco II for lack of personal jurisdiction.

With regard to Barranco I, the Hawaii district court, on February 28, 2014, denied the Company’s motion to dismiss and its motion to transfer venue to South Carolina for the convenience of the parties. However, the Hawaii court recognized that the plaintiff’s claims are all subject to mandatory and binding arbitration in Charlotte, North Carolina. Because the Hawaii court was without authority to compel arbitration outside of Hawaii, the court ordered that the case be transferred to the district court encompassing Charlotte (the United States District Court for the Western District of North Carolina) so that court could compel arbitration in Charlotte. On April 17, 2014, Barranco I was transferred in to the Western District of North Carolina. Plaintiff filed a demand for arbitration on October 29, 2014. On December 9, 2014, the Company filed its answer to plaintiff’s demand for arbitration. On February 2, 2015, plaintiff filed an amended demand that removed Mr. Gregoire as a defendant from the matter, and on February 4, 2015 the Company filed its amended answer. The parties selected an arbitrator and arbitration took place in June 2015 in Charlotte, North Carolina.

On September 28, 2015, the arbitrator issued a final award in favor of Mr. Barranco with respect to two alleged breaches of contract and implied covenants arising out of the contract. The arbitrator found that the Company did not commit fraud or make any negligent misrepresentations to Mr. Barranco. Pursuant to the award, the Company is to pay approximately $11,282, which includes alleged actual damages of $7,254, fees and expenses of $2,318 and prejudgment interest of $1,710. The Company disagrees with the single arbitrator’s findings and conclusions and believes the arbitrator’s decision exceeds his authority and disregards the applicable law. As an initial response, the Company filed a motion for modification on September 30, 2015, based on mathematical errors in the computation of damages and fees. On October 16, 2015, the arbitrator issued an order denying the Company’s motion and sua sponte issuing a modified final award in favor of Mr. Barranco in the same above-referenced amounts, but making certain substantive changes to the award, which changes the Company believes were improper and outside the scope of his authority and the American Arbitration Association rules. On November 20, 2015, the Company filed a motion to vacate the arbitration award in the federal court in the Western District of North Carolina. Claimants also filed a motion to confirm the arbitration award. A hearing was held on the motions on June 29, 2016 in federal court in the Western District of North Carolina. The court requested supplemental briefing by the parties, which briefs were filed on July 11, 2016.

On August 31, 2016, the court issued an Order granting in part and denying in part Plaintiff's motion to confirm the arbitration award and for judgment, entering judgment in the principal amount of the arbitration award and denying Plaintiff's motion for fees and costs. The court denied the Company's motion to vacate. On September 7, 2016, Plaintiff filed a motion to amend the judgment to include prejudgment interest. The Company opposed that motion and the parties submitted briefing, which is currently pending before the court. On September 28, 2016 the Company filed a motion to alter or amend the judgment. Plaintiff opposed the motion and the parties submitted briefing, which is currently pending before the court.

Notwithstanding the Company's right to appeal, given the arbitrator's decision, the Company recorded an $11,282 expense provision for this matter in the quarter ended September 30, 2015. The provision is subject to adjustment based on the ultimate outcome of the Company's appeal. If it is ultimately determined that money is owed following the full appellate process in federal court, the Company intends to fund any amounts to be paid from cash on hand. This amount has been classified as a long-term liability given the customary timeline of an appeals process. The Company will review this classification periodically.

With regard to Barranco II, the Hawaii district court, on March 17, 2014, denied the Company's motion to dismiss and its motion to transfer venue to South Carolina. However, the Hawaii court dismissed Count II in plaintiff's complaint alleging breach of the employment agreement. The Company filed an answer to the complaint in the Hawaii district court on March 31, 2014. On November 19, 2014, the Company filed a motion for summary judgment on all claims which was heard on January 20, 2015. On January 30, 2015, the court entered an order granting in part and denying in Part the Company's motion for summary judgment. The Order narrowed the plaintiff's claim for breach of contract and dismissed the plaintiff's claims for fraud and negligent misrepresentation. As a result, Messrs. Reichental and Gregoire were dismissed from the lawsuit. The case was tried to a jury in May 2016, and on May 27, 2016 the jury found that the Company was not liable for either breach of contract or breach of the implied covenant of good faith and fair dealing. Additionally, the jury found in favor of the Company on its counterclaim against Mr. Barranco and determined that Mr. Barranco violated his non-competition covenant with the Company. The Court is expected to order an accounting with respect to the counterclaim.

The Company is involved in various other legal matters incidental to its business. Although the Company cannot predict the results of litigation with certainty, the Company believes that the disposition of these legal matters will not have a material adverse effect on its consolidated results of operations or consolidated financial position.

Indemnification

In the normal course of business, the Company periodically enters into agreements to indemnify customers or suppliers against claims of intellectual property infringement made by third parties arising from the use of the Company's products. Historically, costs related to these indemnification provisions have not been significant, and the Company is unable to estimate the maximum potential impact of these indemnification provisions on its future results of operations.

To the extent permitted under Delaware law, the Company indemnifies its directors and officers for certain events or occurrences while the director or officer is, or was, serving at the Company's request in such capacity, subject to limited exceptions. The maximum potential amount of future payments the Company could be required to make under these indemnification obligations is unlimited; however, the Company has directors and officers insurance coverage that may enable the Company to recover future amounts paid, subject to a deductible and the policy limits. There is no assurance that the policy limits will be sufficient to cover all damages, if any.

(14) Accumulated Other Comprehensive Loss

The changes in the balances of accumulated other comprehensive loss by component are as follows:

(in thousands)	Foreign currency translation adjustment	Defined benefit pension plan	Total
Balance at December 31, 2015	$ (37,675)	$ (1,873)	$ (39,548)
Other comprehensive income (loss)	5,499	54	5,553
Balance at September 30, 2016	$ (32,176)	$ (1,819)	$ (33,995)

The amounts presented above are included in other comprehensive income (loss). For additional information about foreign currency translation, see Note 6.

(15) Noncontrolling Interests

As of September 30, 2016, the Company owned approximately 95% of the capital and voting rights of Phenix Systems, a global provider of direct metal 3D printers. Phenix Systems was acquired on July 15, 2013.

As of September 30, 2016, the Company owned approximately 70% of the capital and voting rights of Robtec, a service bureau and distributor of 3D printing and scanning products. Robtec was acquired on November 25, 2014.

As of September 30, 2016, the Company owned approximately 65% of the capital and voting rights of Easyway, a service bureau and distributor of 3D printing and scanning products in China. Easyway was acquired on April 2, 2015.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

This discussion should be read in conjunction with the unaudited condensed consolidated financial statements and the notes thereto included in Item 1 (the “Financial Statements”) of this Quarterly Report on Form 10-Q (“Form 10-Q”) and the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2015.

We are subject to a number of risks and uncertainties that may affect our future performance that are discussed in greater detail in the sections entitled “Forward-Looking Statements” and “Cautionary Statements and Risk Factors” at the end of this Item 2 and that are discussed or referred to in Item 1A of Part II of this Form 10-Q.

Business Overview

3D Systems Corporation (“3D Systems” or the “Company” or “we” or “us”) is a holding company incorporated in Delaware in 1993 that operates through subsidiaries in the Americas, Europe and the Middle East (collectively referred to as “EMEA”) and the Asia Pacific region (“APAC” or “Asia Pacific”). We market our products and services in those areas as well as in other parts of the world. We provide comprehensive 3D products and services, including 3D printers, print materials, on demand manufacturing services and digital design tools. Our precision healthcare capabilities include simulation, Virtual Surgical Planning (“VSP™”), and printing of medical and dental devices as well as patient-specific surgical instruments. Our products and services support advanced applications from the product design shop to the factory floor to the operating room. 3D Systems has a 30 year history of enabling professionals and companies to optimize their designs, transform their workflows, bring innovative products to market and drive new business models.

Recent Developments

In September 2016, we unveiled our new strategy and discussed the digital manufacturing workflow solutions we provide through our products and services, as well as strategic partnerships and new members of our management team. We believe our strategy will better enable our customers to leverage solutions and transition from prototyping to production with 3D printing. For more information, visit our website at www.3DSystems.com.

Third Quarter Highlights

Total consolidated revenue for the quarter ended September 30, 2016 increased by 3.2%, or $4.8 million, to $156.4 million, compared to $151.6 million for the quarter ended September 30, 2015. These results primarily reflect an increase in products and materials revenue, partially offset by a decrease in services revenue, as further discussed below.

As of September 30, 2016 and 2015, our backlog was $43.8 million and $40.5 million, respectively. Backlog is primarily dependent on timing of orders and customers' requested deliveries. As of September 30, 2016 and 2015, backlog included $8.9 million and $12.9 million, respectively, of on demand parts manufacturing service orders.

Healthcare revenue includes sales of products, materials and services for health-related applications, including simulation, training and planning, and printing of surgical instruments and medical and dental devices. For the quarter ended September 30, 2016, healthcare revenue increased by 23.0%, to $42.5 million, and made up 27.2% of total revenue, compared to $34.5 million, or 22.8% of total revenue for the quarter ended September 30, 2015. The increase in healthcare revenue reflects increased products, materials and services sales in healthcare-related applications that were driven by customers increasing their investments and expanding their capabilities in precision healthcare.

For the quarter ended September 30, 2016, software revenue from products and services increased by 10.9%, to $21.4 million, and made up 13.7% of total revenue, compared to $19.3 million, or 12.7% of total revenue for the quarter ended September 30, 2015.

Gross profit for the quarter ended September 30, 2016 decreased by 3.0%, or $2.1 million, to $68.9 million, compared to $71.0 million for the quarter ended September 30, 2015, primarily reflecting charges in connection with our new strategy, partially offset by higher revenue from products and materials.

Gross profit margin for the quarter ended September 30, 2016 was 44.1%, compared to 46.9% for the quarter ended September 30, 2015, reflecting a decrease in products margins that was negatively impacted by charges related to discontinued products, and lower services margins, partially offset by higher materials margins, as further discussed below.

Operating expenses for the quarter ended September 30, 2016 decreased by 13.9%, to $91.0 million, compared to $105.7 million for the quarter ended September 30, 2015. These results primarily reflect lower amortization expense, in addition to lower legal expenses due to a provision for an arbitration award that was recorded in the third quarter of 2015, partially offset by increased research and development expenses, as further discussed below.

Our operating loss for the quarter ended September 30, 2016 was $22.0 million, compared to an operating loss of $34.6 million for the quarter ended September 30, 2015, primarily reflecting lower operating expenses, as further discussed below.

Our operating activities for the quarter ended September 30, 2016 generated $7.2 million of cash. We used $4.4 million to fund our strategic investing activities for the quarter ended September 30, 2016. Financing activities for the quarter ended September 30, 2016 used $0.5 million of cash. In total, our unrestricted cash balance at September 30, 2016 was $179.4 million, compared to $155.6 million at December 31, 2015.

Results of Operations

Comparison of revenue by class

We earn revenues from the sale of products, materials and services. The products category includes 3D printers, healthcare simulators and digitizers and design tools including software products, scanners and haptic devices. The materials category includes a wide range of print materials to be used with our 3D printers, the majority of which are proprietary. The services category includes warranty and maintenance on 3D printers and simulators, software maintenance, on demand parts manufacturing services and healthcare services.

Due to the relatively high price of certain 3D printers and a corresponding lengthy selling cycle and relatively low unit volume of the higher priced printers in any particular period, a shift in the timing and concentration of orders and shipments from one period to another can affect reported revenue in any given period. Revenue reported in any particular period is also affected by timing of revenue recognition under rules prescribed by U.S. generally accepted accounting principles (“GAAP”).

In addition to changes in sales volumes, including the impact of revenue from acquisitions, there are two other primary drivers of changes in revenue from one period to another: (1) the combined effect of changes in product mix and average selling prices, sometimes referred to as price and mix effects, and (2) the impact of fluctuations in foreign currencies. As used in this Management's Discussion and Analysis, the price and mix effects relate to changes in revenue that are not able to be specifically related to changes in unit volume.

Table 1 and Table 2 below set forth change in revenue by class for the quarter and nine months ended September 30, 2016, respectively.

Table 1

(Dollars in thousands)	Products		Materials		Services		Totals	
Revenue – third quarter 2015	$ 52,899	34.9 %	$ 34,848	23.0 %	$ 63,827	42.1 %	$ 151,574	100 %
Change in revenue:								
Volume	8,171	15.4	6,272	18.0	(1,747)	(2.7)	12,696	8.4
Price/Mix	(4,822)	(9.1)	(3,072)	(8.8)	—	—	(7,894)	(5.2)
Foreign currency translation	236	0.4	11	0.0	(261)	(0.4)	(14)	0.0
Net change	3,585	6.7	3,211	9.2	(2,008)	(3.1)	4,788	3.2
Revenue – third quarter 2016	$ 56,484	36.1 %	$ 38,059	24.4 %	$ 61,819	39.5 %	$ 156,362	100 %

Table 2

(Dollars in thousands)	Products		Materials		Services		Totals	
Revenue – nine months 2015	$ 183,790	38.1 %	$ 108,356	22.4 %	$ 190,654	39.5 %	$ 482,800	100 %
Change in revenue:								
Volume	(8,056)	(4.4)	15,286	14.1	(2,720)	(1.4)	4,510	0.9
Price/Mix	(12,254)	(6.7)	(6,489)	(6.0)	—	—	(18,743)	(3.9)
Foreign currency translation	(179)	(0.1)	(48)	0.0	(1,312)	(0.7)	(1,539)	(0.3)
Net change	(20,489)	(11.2)	8,749	8.1	(4,032)	(2.1)	(15,772)	(3.3)
Revenue – nine months 2016	$ 163,301	35.0 %	$ 117,105	25.1 %	$ 186,622	39.9 %	$ 467,028	100 %

For the quarter and nine months ended September 30, 2016, total consolidated revenue increased by 3.2% and decreased by 3.3%, respectively, compared to the quarter and nine months ended September 30, 2015. The increase in revenue for the quarter was driven by higher products and materials revenue, partially offset by lower services revenue. The decrease in revenue for the nine months was driven by lower products and services revenue, partially offset by higher materials revenue.

The increase in products revenue for the quarter is primarily driven by an increase in sales of healthcare-related applications. The decrease in products revenue for the nine months was primarily driven by lower sales of 3D printers and the discontinuation of consumer products, combined with the unfavorable impact of mix.

For the quarter and nine months ended September 30, 2016, software revenue included in the products category, including scanners and haptic devices, contributed $10.8 million and $31.7 million, respectively, compared to $10.4 and $32.0 million for the quarter and nine months ended September 30, 2015, respectively.

The increase in materials revenue for the quarter and nine months ended September 30, 2016 primarily reflects an increased demand for materials driven by production customers.

For the quarter ended September 30, 2016, sales of integrated materials increased by 7.5% to $29.3 million, or 77.1% of total materials revenue, compared to $27.3 million, or 78.3% for the quarter ended September 30, 2015. For the nine months ended September 30, 2016, sales of integrated materials increased by 7.6% to $90.5 million, or 77.2% of total materials revenue, compared to $84.1 million, or 77.6% for the nine months ended September 30, 2015.

The decrease in services revenue for the quarter and nine months ended September 30, 2016 was driven by a decrease in on demand parts manufacturing services.

For the quarter ended September 30, 2016, services revenue from on demand parts manufacturing services decreased 15.7% to $26.5 million, compared to $31.5 million for quarter ended September 30, 2015. For the nine months ended September 30, 2016, services revenue from on demand parts manufacturing services decreased 17.1% to $80.4 million, compared to $97.0 million for the nine months ended September 30, 2015.

For the quarter and nine months ended September 30, 2016, software revenue included in the services category contributed $10.6 million and $32.0 million of revenue, respectively, compared to $8.9 million and $24.3 million for the quarter and nine months ended September 30, 2015, respectively.

Comparison of revenue by geographic region

Table 3 and Table 4 below set forth change in revenue by geographic area for the quarter and nine months ended September 30, 2016, respectively

Table 3

(Dollars in thousands)	Americas		EMEA		Asia Pacific		Total	
Revenue – third quarter 2015	$ 80,724	53.3 %	$ 45,035	29.7 %	$ 25,815	17.0 %	$ 151,574	100 %
Change in revenue:								
Volume	3,148	3.9	1,496	3.3	8,052	31.2	12,696	8.4
Price/Mix	3,032	3.8	(2,019)	(4.5)	(8,907)	(34.5)	(7,894)	(5.2)
Foreign currency translation	(14)	0.0	(768)	(1.7)	768	3.0	(14)	0.0
Net change	6,166	7.7	(1,291)	(2.9)	(87)	(0.3)	4,788	3.2
Revenue – third quarter 2016	$ 86,890	55.6 %	$ 43,744	28.0 %	$ 25,728	16.4 %	$ 156,362	100 %

Table 4

(Dollars in thousands)	Americas		EMEA		Asia Pacific		Total	
Revenue – nine months 2015	$ 257,382	53.3 %	$ 146,042	30.3 %	$ 79,376	16.4 %	$ 482,800	100 %
Change in revenue:								
Volume	5,074	2.0	(2,147)	(1.5)	1,583	2.0	4,510	0.9
Price/Mix	(7,332)	(2.8)	(2,917)	(2.0)	(8,494)	(10.7)	(18,743)	(3.9)
Foreign currency translation	(1,143)	(0.4)	(1,049)	(0.7)	653	0.8	(1,539)	(0.3)
Net change	(3,401)	(1.2)	(6,113)	(4.2)	(6,258)	(7.9)	(15,772)	(3.3)
Revenue – nine months 2016	$ 253,981	54.4 %	$ 139,929	30.0 %	$ 73,118	15.6 %	$ 467,028	100 %

The increase in revenue from the Americas for the quarter primarily reflects increased sales from healthcare-related applications, while the decrease in revenue for the quarter from the EMEA and Asia Pacific regions primarily reflects lower sales of 3D printers and on demand parts manufacturing services. The decrease in revenue in all geographic regions for the nine months primarily reflects lower sales of 3D printers and on demand parts manufacturing services, partially offset by increased sales from materials, software and healthcare-related applications.

For the quarter and nine months ended September 30, 2016, revenue from operations outside the U.S., including Latin America, EMEA and Asia Pacific, was 45.8% and 49.1% of total revenue, respectively, compared to 51.1% and 50.5% for the quarter and nine months ended September 30, 2015, respectively.

Gross profit and gross profit margins

Table 5 and Table 6 below set forth gross profit and gross profit margin for the quarters and nine months ended September 30, 2016 and 2015, respectively.

Table 5

	Quarter Ended September 30,							
	2016		2015		Change in Gross Profit		Change in Gross Profit Margin	
(Dollars in thousands)	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	$	%	Percentage Points	%
Products	$ 9,288	16.4 %	$ 12,824	24.2 %	$ (3,536)	(27.6)%	(7.8)	(32.2)%
Materials	28,934	76.0	26,451	75.9	2,483	9.4	0.1	0.1
Services	30,715	49.7	31,763	49.8	(1,048)	(3.3)	(0.1)	(0.2)
Total	$ 68,937	44.1 %	$ 71,038	46.9 %	$ (2,101)	(3.0) %	(2.8)	(6.0) %

Table 6

	Nine Months Ended September 30,							
	2016		2015		Change in Gross Profit		Change in Gross Profit Margin	
(Dollars in thousands)	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	$	%	Percentage Points	%
Products	$ 43,790	26.8 %	$ 53,531	29.1 %	$ (9,741)	(18.2)%	(2.3)	(7.9)%
Materials	89,934	76.8	82,183	75.8	7,751	9.4	1.0	1.3
Services	93,137	49.9	95,935	50.3	(2,798)	(2.9)	(0.4)	(0.8)
Total	$ 226,861	48.6 %	$ 231,649	48.0 %	$ (4,788)	(2.1) %	0.6	1.3 %

Total consolidated gross profit for the quarter and nine months ended September 30, 2016 decreased, primarily driven by write-down charges related to inventory and production assets in connection with our updated strategy and discontinuation of certain products. See Note 2.

Gross profit margin for products decreased for the quarter and nine months ended September 30, 2016, primarily driven by charges related to our updated strategy.

Gross profit margin for materials increased for the quarter and nine months ended September 30, 2016, reflecting improved supply chain efficiencies, partially offset by the unfavorable impact of mix.

Gross profit margin for services decreased for the quarter and nine months ended September 30, 2016, primarily driven by higher printer service costs and lower on-demand parts margins.

For the quarter and nine months ended September 30, 2016, on demand parts manufacturing services gross profit margin was 43.7% and 44.1%, respectively, compared to 43.8% and 44.5% for the quarter and nine months ended September 30, 2015, respectively.

Operating expenses

Table 7 and Table 8 below set forth components of operating expenses for the quarters and nine months ended September 30, 2016 and 2015, respectively.

Table 7

	Quarter Ended September 30,					
	2016		2015		Change	
		%		%		
(Dollars in thousands)	Amount	Revenue	Amount	Revenue	$	%
Selling, general and administrative expenses	$ 64,814	41.5 %	$ 83,212	54.9 %	$ (18,398)	(22.1)%
Research and development expenses	26,140	16.7	22,463	14.8	3,677	16.4
Total operating expenses	$ 90,954	58.2 %	$ 105,675	69.7 %	$ (14,721)	(13.9)%

Table 8

	Nine Months Ended September 30,					
	2016		2015		Change	
		%		%		
(Dollars in thousands)	Amount	Revenue	Amount	Revenue	$	%
Selling, general and administrative expenses	$ 202,009	43.3 %	$ 237,242	49.1 %	$ (35,233)	(14.9)%
Research and development expenses	67,345	14.4	70,410	14.6	(3,065)	(4.4)
Total operating expenses	$ 269,354	57.7 %	$ 307,652	63.7 %	$ (38,298)	(12.4)%

Total operating expenses decreased for the quarter and nine months ended September 30, 2016, primarily reflecting lower selling, general and administrative expenses, as discussed below.

Third quarter

For the quarter ended September 30, 2016, selling, general and administrative expenses decreased, primarily due to a $9.4 million decrease in legal expenses primarily related to a provision for arbitration award recorded in the third quarter of 2015, a $7.0 million decrease in amortization expense, and a $1.3 million decrease in compensation costs from lower stock-based compensation costs.

For the quarter ended September 30, 2016, research and development expenses increased, primarily due to $6.1 million of charges and write-offs related to our updated strategy and re-prioritization of certain R&D projects, partially offset by a $1.1 million decrease in outside services associated with product development.

Nine months

For the nine months ended September 30, 2016, selling, general and administrative expenses decreased, primarily due to a $21.3 million decrease in amortization expense and a $9.3 million decrease in legal expenses primarily related to a provision for arbitration award recorded in the third quarter of 2015.

For the nine months ended September 30, 2016, research and development expenses decreased, primarily due to a $3.9 million decrease in outside services associated with product development, a $2.7 million decrease in overhead allocations due to facility consolidations, a $1.7 million decrease in purchased materials, and a $0.5 million decrease in compensation costs, partially offset by $6.1 million of expenses related to our updated strategy and re-prioritization of certain R&D projects.

Loss from operations

Table 9 below sets forth operating loss by geographic area for the quarters and nine months ended September 30, 2016 and 2015, respectively.

Table 9

(Dollars in thousands)	Quarter Ended September 30, 2016	Quarter Ended September 30, 2015	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
Income (loss) from operations				
Americas	$ (21,525)	$ (36,116)	$ (40,458)	$ (88,408)
Germany	2,761	3,760	7,732	5,052
Other EMEA	(11,043)	(9,057)	(27,225)	(11,330)
Asia Pacific	8,434	7,162	19,537	20,088
Subtotal	(21,373)	(34,251)	(40,414)	(74,598)
Intercompany elimination	(644)	(386)	(2,079)	(1,405)
Loss from operations	$ (22,017)	$ (34,637)	$ (42,493)	$ (76,003)

The improvement in operating loss for the quarter and nine months ended September 30, 2016 was primarily driven by lower operating expenses. See “Gross profit and gross profit margins” and “Operating expenses” above.

With respect to the Americas, for the quarter and nine months ended September 30, 2016 and 2015, the changes in operating income (loss) reflected the same factors relating to our consolidated operating income (loss) that are discussed above.

The changes in operating income (loss) in our operations outside the Americas for the quarter and nine months ended September 30, 2016 and 2015 resulted primarily from transfer pricing, changes in sales volume and foreign currency translation.

Interest and other (income) expense, net

Table 10 below sets forth components of interest and other (income) expense, net, for the quarters and nine months ended September 30, 2016 and 2015, respectively.

Table 10

(Dollars in thousands)	Quarter Ended September 30, 2016	Quarter Ended September 30, 2015	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
Interest and other expense, net:				
Interest income	$ (153)	$ (120)	$ (600)	$ (362)
Foreign exchange (gain) loss	1,123	(126)	(340)	1,641
Interest expense	272	554	1,053	1,487
Other (income) expense, net	382	1,065	1,177	1,263
Total interest and other (income) expense, net	$ 1,624	$ 1,373	$ 1,290	$ 4,029

Benefit and provision for income taxes

For the quarter and nine months ended September 30, 2016, we recorded a $2.2 million benefit and $0.7 million provision for income taxes, respectively, compared to a $3.5 million and $20.6 million benefit for the quarter and nine months ended September 30, 2015. The difference in the effective tax rates is primarily attributable to valuation allowances that we recorded in the fourth quarter of 2015 in the United States and certain foreign jurisdictions, as well as an adjustment that was recorded during the third quarter of 2016 in connection with the completion of our tax returns, which resulted in a tax benefit.

Net loss

Table 11 and Table 12 below set forth components of net loss attributable to 3D Systems for the quarters and nine months ended September 30, 2016 and 2015, respectively.

Table 11

(Dollars in thousands)	Quarter Ended September 30, 2016	2015	Change
Operating loss	$ (22,017)	$ (34,637)	$ 12,620
Less:			
Interest and other (income) expense, net	1,624	1,373	251
Provision (benefit) for income taxes	(2,214)	(3,524)	1,310
Net loss attributable to noncontrolling interests	(214)	(237)	23
Net loss attributable to 3D Systems	$ (21,213)	$ (32,249)	$ 11,036
Weighted average shares, basic and diluted	111,008	112,010	
Net loss per share, basic and diluted	$ (0.19)	$ (0.29)	

Table 12

(Dollars in thousands)	Nine Months Ended September 30, 2016	2015	Change
Operating loss	$ (42,493)	$ (76,003)	$ 33,510
Less:			
Interest and other (income) expense, net	1,290	4,029	(2,739)
Provision (benefit) for income taxes	665	(20,563)	21,228
Net loss attributable to noncontrolling interests	(799)	(343)	(456)
Net loss attributable to 3D Systems	$ (43,649)	$ (59,126)	$ 15,477
Weighted average shares, basic and diluted	111,194	111,920	
Net loss per share, basic and diluted	$ (0.39)	$ (0.53)	

For further discussion of income taxes, see “Benefit and provision for income taxes” above and Note 11.

Other Financial Information

In addition to our results determined under GAAP discussed above, management believes non-GAAP financial measures are useful to investors in evaluating our operating performance and facilitate a better understanding of the impact that strategic acquisitions, non-recurring charges and certain non-cash expenses had on our financial results. These non-GAAP financial measures have not been prepared in accordance with GAAP, may be different from non-GAAP financial measures used by other companies and are subject to inherent limitations as they reflect the exercise of judgments by our management about which costs, expenses and other items are excluded from our GAAP financial statements in determining our non-GAAP financial measures. We have sought to compensate for these limitations by analyzing current and expected future results on a GAAP basis as well as a non-GAAP basis and also by providing GAAP financial statements as required in our public disclosures as well as reconciliations of our non-GAAP financial measures to our GAAP financial measures. Our non-GAAP financial measures are not meant to be considered in isolation or as a substitute for the directly comparable financial measures prepared in accordance with GAAP. These non-GAAP financial measures are meant to supplement, and be viewed in conjunction with, GAAP financial measures. We urge investors to review the reconciliation of our non-GAAP financial measures to the comparable GAAP financial measures included below, and not to rely on any single financial measure to evaluate our business. Our non-GAAP financial measures are adjusted to exclude the following items:

· Amortization and stock-based compensation. We exclude intangible asset amortization expense and non-cash stock based compensation expense.

· Legal and acquisition related expenses. We exclude charges associated with arbitration awards, litigation settlements and severance costs, in addition to charges in connection with business acquisitions, which generally include earnout amortization and other acquisition-related fees.

· Portfolio re-alignment. We exclude charges associated with discontinued product lines, strategic decisions and re-prioritization of projects.

Reconciliation of GAAP Net Loss to Non-GAAP Financial Measures

Table 13 and Table 14 reconciles GAAP net loss to non-GAAP financial measures for the quarters and nine months ended September 30, 2016 and 2015, respectively.

Table 13

	Quarter Ended September 30, 2016					
		Adjustments				
(in thousands, except per share amounts)	GAAP	Amortization and Stock-Based Compensation	Legal and Acquisition-Related	Portfolio	Re-alignment	Non-GA
Revenue	$ 156,362	$ —	$ —	$ —		$ 156,362
Cost of sales	87,425	(83)	—	(10,723)		76,619
Gross profit	68,937	83	—	10,723		79,743
Gross profit margin	44.1%					51.0%
Operating expenses:						
Selling, general and administrative	64,814	(18,286)	(1,781)	(35)		44,712
Research and development	26,140	—	—	(6,072)		20,068
Total operating expenses	90,954	(18,286)	(1,781)	(6,107)		64,780
Income (loss) from operations	(22,017)	18,369	1,781	16,830		14,963
Interest and other expense, net	1,624	—	—	—		1,624
Income (loss) before income taxes	(23,641)	18,369	1,781	16,830		13,339
Provision (benefit) for income taxes (a)	(2,214)	—	—	—		(2,214)
	(21,427)	18,369	1,781	16,830		15,553

Net income (loss)					
Less: net loss attributable to noncontrolling interests	(214)	—	—	—	(214)
Net income (loss) attributable to 3D Systems Corporation	$ (21,213)	$ 18,369	$ 1,781	$ 16,830	$ 15,767
Net income (loss) per share available to 3D Systems Corporation common stockholders — basic and diluted	$ (0.19)				$ 0.14

(a) Tax effect for the quarter ended March 31, 2016 and earlier periods was calculated quarterly, based on the Company's overall tax rate for each quarter. Tax effect for the quarter ended September 30, 2016 was calculated based on the Company's quarterly U.S. tax rate, which was 0% as a result of the valuation allowance that was recorded in the fourth quarter of 2015, in connection with GAAP net losses.

27

Table 14

	Nine Months Ended September 30, 2016						Nine
		Adjustments					
(in thousands, except per share amounts)	GAAP	Amortization and Stock-Based Compensation	Legal and Acquisition-Related	Portfolio	Re-alignment	Non-GAAP	GA
Revenue	$ 467,028	$ —	$ —	$ —		$ 467,028	$ 48
Cost of sales	240,167	(248)	—	(10,723)		229,196	25
Gross profit	226,861	248	—	10,723		237,832	23
Gross profit margin	48.6%					50.9%	48
Operating expenses:							
Selling, general and administrative	202,009	(54,693)	(4,491)	(35)		142,790	23
Research and development	67,345	—	—	(6,072)		61,273	70
Total operating expenses	269,354	(54,693)	(4,491)	(6,107)		204,063	30
Income (loss) from operations	(42,493)	54,941	4,491	16,830		33,769	(7
Interest and other expense, net	1,290	—	—	—		1,290	4,
Income (loss) before income taxes	(43,783)	54,941	4,491	16,830		32,479	(8
Provision (benefit) for income taxes (a)	665	(1,452)	(67)	—		(854)	(2
Net income (loss)	(44,448)	56,393	4,558	16,830		33,333	(5
Less: net loss attributable to	(799)	—	—	—		(799)	(3

noncontrolling interests						
Net income (loss) attributable to 3D Systems Corporation	$ (43,649)	$ 56,393	$ 4,558	$ 16,830	$ 34,132	$ (59
Net income (loss) per share available to 3D Systems Corporation common stockholders — basic and diluted	$ (0.39)				$ 0.31	$ (0.

(a) Tax effect for the quarter ended March 31, 2016 and earlier periods was calculated quarterly, based on the Company’s overall tax rate for each quarter. Tax effect for the quarters ended June 30, 2016 and September 30, 2016 was calculated based on the Company’s quarterly U.S. tax rate, which was 0% as a result of the valuation allowance that was recorded in the fourth quarter of 2015, in connection with GAAP net losses.

Financial Condition and Liquidity

Table 15

(Dollars in thousands)	September 30, 2016	December 31, 2015	Change $	Change %
Cash and cash equivalents	$ 179,358	$ 155,643	$ 23,715	15.2 %
Accounts receivable:				
Gross accounts receivable	136,038	171,545	(35,507)	(20.7)
Allowance for doubtful accounts	(15,408)	(14,139)	(1,269)	9.0
Accounts receivable, net	120,630	157,406	(36,776)	(23.4)
Inventories:				
Raw materials	55,574	59,444	(3,870)	(6.5)
Work in process	4,999	4,067	932	22.9
Finished goods	79,082	70,591	8,491	12.0
Inventories, gross	139,655	134,102	5,553	4.1
Inventory reserves	(25,938)	(28,225)	2,287	(8.1)
Inventories, net	113,717	105,877	7,840	7.4
Prepaid expenses and other current assets	15,196	13,541	1,655	12.2
Total current assets	$ 428,901	$ 432,467	$ (3,566)	(0.8) %
Current portion of capitalized lease obligations	581	529	52	9.8
Accounts payable	37,113	46,869	(9,756)	(20.8)
Accrued and other liabilities	46,746	54,699	(7,953)	(14.5)
Customer deposits	5,789	8,229	(2,440)	(29.7)
Deferred revenue	37,385	35,145	2,240	6.4
Total current liabilities	$ 127,614	$ 145,471	$ (17,857)	(12.3) %
Working capital	$ 301,287	$ 286,996	$ 14,291	5.0 %
Stockholders' equity attributable to 3D Systems	$ 644,711	$ 655,909	$ (11,198)	(1.7) %

We believe our existing cash and cash equivalents will be sufficient to satisfy our working capital needs, capital expenditures, outstanding commitments and other liquidity requirements associated with our existing operations in the foreseeable future, or to consummate significant acquisitions of other businesses, assets, products or technologies. However, it is possible that, in the future, we may need to raise additional funds to finance our activities. If needed, we may be able to raise such funds by issuing equity or debt securities to the public or selected investors, or by borrowing from financial institutions, selling assets or restructuring debt. There is no assurance, however, that funds will be available from these sources in the amounts or on terms acceptable to us. Cash equivalents comprise funds held in money market instruments and are reported at their current carrying value, which approximates fair value due to the short term nature of these instruments. We strive to minimize our credit risk by investing primarily in investment grade, liquid instruments and limit exposure to any one issuer depending upon credit quality. See Cash flow, Credit facilities and Capitalized lease obligations below.

If we need to raise additional funds in the future to fund our activities, or for other reasons, and raise additional funds by issuing equity or convertible debt securities, the ownership percentages of existing shareholders would be diluted. In addition, the equity or debt securities that we may issue may have rights, preferences or privileges senior to those of our common stock.

Cash held outside the U.S. at September 30, 2016 was $78.0 million, or 43.5% of total cash and equivalents, compared to $59.0 million, or 37.6% of total cash and equivalents at December 31, 2015. Cash held outside the U.S. is used in our foreign operations for working capital purposes and is considered to be permanently invested; consequently, we have not provided for any taxes on repatriation.

Days’ sales outstanding was 71 days at September 30, 2016 compared to 79 days at December 31, 2015 and accounts receivable more than 90 days past due decreased to 13.4% of gross receivables, from 17.6% at December 31, 2015. We review specific receivables quarterly to determine the appropriate reserve for accounts receivable based on the change in days’ sales outstanding.

The majority of our inventory consists of finished goods, including products, materials and service parts. Inventory also consists of raw materials and spare parts for the in-house assembly and support service products. We outsource the assembly of certain 3D printers; therefore, we generally do not hold most parts for the assembly of these printers in inventory.

The changes that make up the other components of working capital not discussed above arose in the ordinary course of business. Differences between the amounts of working capital item changes in the cash flow statement and the balance sheet changes for the corresponding items are primarily the result of foreign currency translation adjustments.

Cash flow

Table 16 below sets forth components of cash flow for the nine months ended September 30, 2016 and 2015, respectively.

Table 16

	Nine Months Ended September 30,	
	2016	2015
(Dollars in thousands)		
Cash provided by (used in) operating activities	$ 38,240	$ (10,608)
Cash used in investing activities	(13,804)	(114,332)
Cash provided by (used in) financing activities	(2,293)	427
Effect of exchange rate changes on cash	1,572	(2,896)
Net increase (decrease) in cash and cash equivalents	$ 23,715	$ (127,409)

Cash flow from operating activities

Table 17

Nine Months Ended
September 30,

(Dollars in thousands)	2016	2015
Net loss	$ (44,448)	$ (59,469)
Non-cash charges	91,525	88,482
Changes in working capital and all other operating assets	(8,837)	(39,621)
Net cash provided by (used in) operating activities	$ 38,240	$ (10,608)

For further discussion of net loss, see “Net loss” above.

Non-cash charges primarily consist of depreciation, amortization, stock-based compensation, inventory reserve of discontinued products, and asset impairment, partially offset by the benefit of deferred income taxes.

For further discussion of changes in working capital, see “Financial Condition and Liquidity” above. Differences between the amounts of working capital item changes in the cash flow statement and the balance sheet changes for the corresponding items are primarily the result of foreign currency translation adjustments.

Cash flow from investing activities

Table 18

(Dollars in thousands)	Nine Months Ended September 30, 2016	2015
Cash paid for acquisitions, net of cash assumed	$ —	$ (91,799)
Purchases of property and equipment	(12,014)	(18,064)
Other investing activities	(1,000)	(3,750)
Additions to license and patent costs	(790)	(719)
Net cash used in investing activities	$ (13,804)	$ (114,332)

Purchases of property and equipment primarily consisted of expenditures for leasehold improvements, including expanding facilities and investing in infrastructure, equipment to support our on demand parts manufacturing service and printers associated with new product development efforts. Other investing activities consist of minority investments of less than 20% made through 3D Ventures, our venture investment initiative, in promising enterprises that we believe will benefit from or be powered by our technologies. We made no acquisitions during the quarter or nine months ended September 30, 2016.

Cash flow from financing activities

Table 19

(Dollars in thousands)	Nine Months Ended September 30, 2016	2015
Tax benefits from share-based payment arrangements	$ —	$ 467
Proceeds, repurchase and retirement of stock, net	(1,507)	748
Repayment of capital lease obligations	(786)	(788)
Net cash provided by (used in) financing activities	$ (2,293)	$ 427

Contractual commitments and off-balance sheet arrangements

Credit facilities

In October 2014, we entered into a $150.0 million five-year revolving, unsecured credit facility. The agreement provides for advances in the initial aggregate principal amount of up to $150.0 million. Subject to certain terms and conditions contained in the agreement, we may, at our option, request an increase in the aggregate principal amount available under the credit facility by an additional $75.0 million. As of September 30, 2016 and December 31, 2015, there was no outstanding balance on the credit facility. As of September 30, 2016, we meet all financial covenant requirements and have full availability on the credit facility. Future results may impact availability. See Note 7 for additional information related to the credit facility.

Capitalized lease obligations

Our capitalized lease obligations include a lease agreement that we entered into during 2006 with respect to our Rock Hill, SC facility, in addition to other lease agreements assumed through acquisitions. In accordance with ASC 840, “Leases,” we are considered an owner of the properties, therefore, we have recorded the amounts shown in the table below as “building” in our consolidated balance sheet with a corresponding capitalized lease obligation in the liabilities section of the consolidated balance sheet.

Table 20 below sets forth outstanding capitalized lease obligations carrying values as of September 30, 2016 and December 31, 2015, respectively.

Table 20

(Dollars in thousands)	September 30, 2016	December 31, 2015
Capitalized lease obligations:		
Capitalized lease obligations — current	$ 581	$ 529
Capitalized lease obligations — long term	7,781	8,187
Total capitalized lease obligations	$ 8,362	$ 8,716

Other contractual arrangements

Certain of our acquisitions contain earnout provisions under which the sellers of the acquired businesses can earn additional amounts. The total liability recorded for these earnouts at September 30, 2016 was $9.6 million. At December 31, 2015, in addition to earnout provisions, certain of our acquisitions also contained deferred purchase payment arrangements. The total liability recorded for these earnouts and deferred purchase payment arrangements totaled $9.8 million at December 31, 2015.

As of September 30, 2016, we have supply commitments related to printer assemblies that total $38.3 million compared to $50.7 million at December 31, 2015.

The minority interest shareholders of a certain subsidiary have the right to require us to acquire either a portion of or all ownership interest under certain circumstances pursuant to a contractual arrangement, and we have a similar call option under the same contractual terms. The amount of consideration under the put and call rights is not a fixed amount, but rather is dependent upon various valuation formulas and on future events, such as revenue and gross margin performance of the subsidiary through the date of exercise, as described in Note 13. Management estimates, assuming that the subsidiary owned by us at September 30, 2016 performs over the relevant future periods at its forecasted earnings levels, that these rights, if exercised, could require us in a future period to pay a maximum of approximately $8.9 million to the owners of such put rights. This amount has been recorded as redeemable noncontrolling interests on the balance sheet at September 30, 2016 and December 31, 2015.

Off-balance sheet arrangements

We have no off-balance sheet arrangements and do not utilize any “structured debt,” “special purpose,” or similar unconsolidated entities for liquidity or financing purposes.

Financial instruments

We conduct business in various countries using both the functional currencies of those countries and other currencies to effect cross border transactions. As a result, we are subject to the risk that fluctuations in foreign exchange rates between the dates that those transactions are entered into and their respective settlement dates will result in a foreign exchange gain or loss. When practicable, we endeavor to match assets and liabilities in the same currency on our balance sheet and those of our subsidiaries in order to reduce these risks. We also, when we consider it to be appropriate, enter into foreign currency contracts to hedge exposures arising from those transactions. There were no foreign exchange contracts at September 30, 2016 or December 31, 2015.

We do not hedge for trading or speculative purposes, and our foreign currency contracts are generally short-term in nature, typically maturing in 90 days or less. We have elected not to prepare and maintain the documentation to qualify for hedge accounting treatment under ASC 815, “Derivatives and Hedging,” and therefore, we recognize all gains and losses (realized or unrealized) in interest and other expense, net in our Consolidated Statements of Operations and Other Comprehensive Income (Loss).

Changes in the fair value of derivatives are recorded in interest and other expense, net, in our unaudited condensed consolidated statements of operations and comprehensive income (loss). Depending on their fair value at the end of the reporting period, derivatives are recorded either in prepaid and other current assets or in accrued liabilities in our unaudited condensed consolidated balance sheets.

Recent Accounting Pronouncements

For information with respect to recent accounting pronouncements and the impact of these pronouncements on our unaudited condensed consolidated financial statements, see Note 1.

Critical Accounting Policies and Significant Estimates

For a discussion of our critical accounting policies and estimates, refer to “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Significant Estimates” in our Annual Report on Form 10-K for the year ended December 31, 2015 (“Form 10-K”).

Forward-Looking Statements

Certain statements made in this Form 10-Q that are not statements of historical or current facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. In many cases, you can identify forward-looking statements by terms such as “believes,” “belief,” “expects,” “may”, “will”, “estimates,” “intends,” “anticipates,” or “plans” or the negative of these terms or other comp terminology.

Forward-looking statements are based upon management’s beliefs, assumptions and current expectations concerning future events and trends, using information currently available, and are necessarily subject to uncertainties, many of which are outside our control. Although we believe that the expectations reflected in the forward-looking statements are reasonable, forward-looking statements are not, and should not be relied upon as a guarantee of future performance or results, nor will they necessarily prove to be accurate indications of the times at or by which any such performance or results will be achieved. A number of important factors could cause actual results to differ materially from those indicated by the forward-looking statements. These factors include without limitation:

- competitive industry pressures;
- our ability to deliver products that meet changing technology and customer needs;
- our ability to identify future, strategic acquisitions and to integrate such acquisitions into our business without disruption;
- our ability to acquire and enforce intellectual property rights and defend such rights against third party claims;
- our ability to protect our intellectual property rights and confidential information, including our digital content, from third-party infringers or unauthorized copying, use or disclosure;
- failure of our information technology infrastructure or inability to protect against cyber-attack;
- our ability to generate net cash flow from operations;
- our ability to obtain additional financing on acceptable terms;
- impact of global economic, political and social conditions and financial markets on our business;
- fluctuations in our gross profit margins, operating income or loss and/or net income or loss;
- our ability to efficiently conduct business outside the U.S.;
- our dependence on our supply chain for components and sub-assemblies used in our 3D printers and other products and for raw materials used in our print materials;
- our ability to manage the costs and effects of litigation, investigations or similar matters involving us or our subsidiaries;
- product quality problems that result in decreased sales and operating margin, product returns, product liability, warranty or other claims;
- our ability to retain our key employees and to attract and retain new qualified employees, while controlling our labor costs;
- our exposure to product liability claims and other claims and legal proceedings;
- disruption in our management information systems for inventory management, distribution, and other key functions;
- compliance with U.S. and other anti-corruption laws, trade controls, economic sanctions, and similar laws and regulations;
- changes in, or interpretation of, tax rules and regulations;

- compliance with, and related costs concerning, privacy, environmental, health and safety laws and regulations;
- compliance with, and related expenses and challenges concerning, conflict-free minerals regulations; and
- the other factors discussed in the reports we file with or furnish to the SEC from time to time, including the risks and important factors set forth in additional detail in “Risk Factors” in Part I, Item 1A of our Form 10-K filed with the SEC.

Certain of these and other factors are discussed in more detail in “Item 1A. Risk Factors” of our Form 10-K. Readers are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements included herein are made only as of the date of this Form 10-Q and we undertake no obligation to publicly update or review any forward-looking statement made by us or on our behalf, whether as a result of new information, future developments, subsequent events or circumstances or otherwise. All subsequent written or oral forward-looking statements attributable to us or individuals acting on our behalf are expressly qualified in their entirety by the cautionary statements referenced above.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

For a discussion of market risks at December 31, 2015, refer to Item 7A, “Quantitative and Qualitative Disclosures about Market Risk,” in our Form 10-K. During the quarter and nine months ended September 30, 2016, there were no material changes or developments that would materially alter the market risk assessment performed as of December 31, 2015.

Item 4. Controls and Procedures.

Evaluation of disclosure controls and procedures

As of September 30, 2016, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) pursuant to Rules 13a-15 and 15d-15 under the Exchange Act. These controls and procedures were designed to provide reasonable assurance that the information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, in a manner to allow timely decisions regarding required disclosures. Based on this evaluation, including an evaluation of the rules referred to above in this Item 4, management has concluded that our disclosure controls and procedures were effective as of September 30, 2016 to provide reasonable assurance that the information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, in a manner to allow timely decisions regarding required disclosures.

Changes in Internal Controls over Financial Reporting

There were no material changes in our internal controls over financial reporting during the period covered by this Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

The information set forth in Note 13 to the Financial Statements in Part I, Item 1 of this Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors.

There have been no material changes from the risk factors as previously disclosed in our Form 10-K.

Item 6. Exhibits.

3.1 Certificate of Incorporation of Registrant. (Incorporated by reference to Exhibit 3.1 to Form 8-B filed on August 16, 1993, and the amendment thereto, filed on Form 8-B/A on February 4, 1994.)

3.2 Amendment to Certificate of Incorporation filed on May 23, 1995. (Incorporated by reference to Exhibit 3.2 to Registrant's Registration Statement on Form S-2/A, filed on May 25, 1995.)

3.3 Certificate of Designation of Rights, Preferences and Privileges of Preferred Stock. (Incorporated by reference to Exhibit 2 to Registrant's Registration Statement on Form 8-A filed on January 8, 1996.)

3.4 Certificate of Designation of the Series B Convertible Preferred Stock, filed with the Secretary of State of Delaware on May 2, 2003. (Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed on May 7, 2003.)

3.5 Certificate of Elimination of Series A Preferred Stock filed with the Secretary of State of Delaware on March 4, 2004. (Incorporated by reference to Exhibit 3.6 of Registrant's Annual Report on Form 10-K for the year ended December 31, 2003, filed on March 15, 2004.)

3.6 Certificate of Elimination of Series B Preferred Stock filed with the Secretary of State of Delaware on September 9, 2006. (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K, filed on September 9, 2006.)

3.7 Certificate of Amendment of Certificate of Incorporation filed with Secretary of State of Delaware on May 19, 2004. (Incorporated by reference to Exhibit 3.1 of the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2004, filed on August 5, 2004.)

3.8 Certificate of Amendment of Certificate of Incorporation filed with Secretary of State of Delaware on May 17, 2005. (Incorporated by reference to Exhibit 3.1 of the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2005, filed on August 1, 2005.)

3.9 Certificate of Amendment of Certificate of Incorporation filed with the Secretary of State of Delaware on October 7, 2011. (Incorporated by reference to Exhibit 3.1 to Form 8-K filed on October 7, 2011.)

3.10 Certificate of Designations, Preferences and Rights of Series A Preferred Stock, filed with the Secretary of State of Delaware on December 9, 2008. (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K, filed on December 9, 2008.)

3. 11 Certificate of Elimination of Series A Preferred Stock, filed with the Secretary of State of Delaware on November 14, 2013. (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K, filed on November 15, 2013.)

3.12 Amended and Restated By-Laws of 3D Systems Corporation (as adopted February 16, 2015). (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K filed on February 17, 2015.)

3.13 Certificate of Amendment of Certificate of Incorporation filed with the Secretary of State of Delaware on May 21, 2013. (Incorporated by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K, filed on May 22, 2013.)

10.1* Employment Agreement, dated July 1, 2016, by and between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.1 of the Registrant's current report on Form 8-K, filed July 5, 2016).

10.2* First Amendment, dated July 1, 2016, to Restricted Stock Purchase Agreement, dated January 14, 2015, by and between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.2 of the Registrant's current report on Form 8-K, filed July 5, 2016).

10.3* First Amendment, dated July 1, 2016, to Restricted Stock Award Agreement, dated May 19, 2015, by and between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.3 of the Registrant's current report on Form 8-K filed July 5, 2016).

10.4* First Amendment, dated July 1, 2016, to Restricted Stock Award Agreement, dated November 13, 2015, by and between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.4 of the Registrant's current report on Form 8-K filed July 5, 2016).

10.5* Employment Agreement, dated August 4, 2016, by and between 3D Systems Corporation and Charles W. Hull (Incorporated by reference to Exhibit 10.1 of the Registrant's current report on Form 8-K filed August 8, 2016).

10.6* First Amendment, dated August 4, 2016, to Restricted Stock Purchase Agreement, dated November 18, 2013, by and between 3D Systems Corporation and Charles W. Hull (Incorporated by reference to Exhibit 10.2 of the Registrant’s current report on Form 8-K filed August 8, 2016).

10.7* First Amendment, dated August 4, 2016, to Restricted Stock Purchase Agreement, dated November 17, 2014, by and between 3D Systems Corporation and Charles W. Hull (Incorporated by reference to Exhibit 10.3 of the Registrant’s current report on Form 8-K filed August 8, 2016).

10.8*	First Amendment, dated August 4, 2016, to Restricted Stock Purchase Agreement, dated November 13, 2015, by and between 3D Systems Corporation and Charles W. Hull (Incorporated by reference to Exhibit 10.4 of the Registrant's current report on Form 8-K filed August 8, 2016).
31.1	Certification of Principal Executive Officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 dated November 3, 2016.
31.2	Certification of Principal Financial Officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 dated November 3, 2016.
32.1	Certification of Principal Executive Officer filed pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 dated November 3, 2016.
32.2	Certification of Principal Financial Officer filed pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 dated November 3, 2016.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

* Management contract or compensatory plan or arrangement

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

3D Systems Corporation

By /s/ John N. McMullen
John N. McMullen
Executive Vice President and Chief Financial Officer
(principal financial and accounting officer)
(duly authorized officer)

Date: November 3, 2016