

Fairness Analysis

Handy & Harman LTD.

Prepared for: The Special Committee of the Board of
Directors of Handy & Harman Ltd.

June 23, 2017

Duff & Phelps Disclaimer

- The following pages contain material that is being provided to the special committee of the board of directors (the “Special Committee”) of Handy & Harman Ltd. (the “Company”) (solely in their capacity as members of the Special Committee) in connection with the Proposed Transaction (as herein defined).
- The accompanying material was compiled and prepared on a confidential basis for the sole use of the Special Committee and not with a view toward public disclosure and may not be disclosed, summarized, reproduced, disseminated or quoted from or otherwise referred to, in whole or in part, without the prior written consent of Duff & Phelps, LLC (“Duff & Phelps”), except as provided in the Engagement Letter dated March 23, 2017.
- The information utilized in preparing this presentation was obtained from management of the Company (“Company Management”) and public sources. Any estimates and projections contained herein have been prepared by or based on discussions with Company Management and involve numerous and significant subjective determinations, which may or may not prove to be correct. Duff & Phelps has relied on the accuracy and completeness of the foregoing information. No representation or warranty, express or implied, is made as to the accuracy or completeness of such information and nothing contained herein is, or shall be relied upon as, a representation, whether as to the past, the present or the future. Duff & Phelps did not independently verify such information.
- Because this material was prepared for use solely in the context of an oral presentation to the Special Committee, which is familiar with the business and affairs of the Company, neither Duff & Phelps, nor any of its legal or financial advisors or accountants take any responsibility for the accuracy or completeness of any of the material if used by persons other than the Company and the Special Committee.
- This material is not intended to represent an opinion but rather to serve as discussion material for the Company and the Special Committee to review and as a basis upon which Duff & Phelps may render an opinion.
- No selected public company or selected transaction used in our analysis is directly comparable to the Company or the Proposed Transaction.

Table of Contents

Section

- | | |
|----|-------------------------|
| 1. | Executive Summary |
| 2. | Valuation Analysis |
| 3. | SPLP Preferred Analysis |

Appendix

- | | |
|----|--|
| 1. | Handy & Harman Ltd. Trading Analysis |
| 2. | SPLP Preferred Trading Analysis |
| 3. | Assumptions, Qualifications, and Limiting Conditions |

1.

Executive Summary

Executive Summary

Duff & Phelps' Engagement and Transaction Overview

The Engagement

- Handy & Harman Ltd. (the "Company") has engaged Duff & Phelps to serve as an independent financial advisor to the special committee of the board of directors (the "Special Committee") of the Company (solely in their capacity as members of the Special Committee) to provide an Opinion (as herein defined) in connection with the proposed transaction described below (the "Proposed Transaction").

The Proposed Transaction

- It is Duff & Phelps' understanding that the Proposed Transaction involves the tender offer to purchase by Steel Partners Holdings L.P. ("SPLP"), the holder of approximately 70% of the common stock of the Company (the "Common Stock"), of all of the outstanding shares of Common Stock of the Company not owned by SPLP or its subsidiaries or affiliates (the holders of such shares, the "Minority Holders") for consideration of approximately 1.48 Series A preferred units, no par value, of SPLP (the "SPLP Preferred") for each share of Common Stock, such SPLP Preferred having the preferences, rights, qualifications, limitations and restrictions set forth in the Sixth Amended and Restated Agreement of Limited Partnership of SPLP. Pursuant to the terms of the Merger Agreement (as defined below), each share of Common Stock held by a Minority Holder will be entitled to receive approximately \$37.10 in per share value of SPLP Preferred, subject to applicable withholding of taxes.

The Opinion

- Duff & Phelps will provide an opinion (the "Opinion"), as of the date that the Special Committee votes to approve the Proposed Transaction, as to whether the consideration to be received by the Minority Holders of Common Stock of the Company (other than SPLP and its subsidiaries and affiliates) in the Proposed Transaction is fair, from a financial point of view, to such stockholders of the Company (without giving effect to any impact of the Proposed Transaction on any particular stockholder other than in its capacity as a stockholder).

Executive Summary

Scope of Analysis

In connection with the Opinion, Duff & Phelps has made such reviews, analyses and inquiries as it has reasonably deemed necessary and appropriate under the circumstances. Duff & Phelps also took into account its assessment of general economic, market and financial conditions, as well as its experience in securities and business valuation, in general, and with respect to similar transactions, in particular. Duff & Phelps' procedures, investigations, and financial analysis with respect to the preparation of the Opinion included, but were not limited to, the items summarized below:

- Reviewed the following documents:
 - The Company's annual reports and audited financial statements on Form 10-K filed with the Securities and Exchange Commission ("SEC") for the years ended December 31, 2013 through December 31, 2016, and the Company's unaudited interim financial statements for the three months ended March 31, 2017;
 - Unaudited segment pro forma financial information for the Company for the years ended December 31, 2013 through December 31, 2016;
 - Other internal documents relating to the history, current operations, and probable future outlook of the Company, including financial projections, provided to us by management of the Company (the "Management Projections");
 - A letter dated June [], 2017 from the management of the Company which made certain representations as to historical financial statements, financial projections and the underlying assumptions; and
 - A draft Agreement and Plan of Merger by and among Steel Partners Holdings, L.P., [Merger Sub], and Handy & Harman Ltd. dated June 12, 2017 (the "Merger Agreement");
- Discussed the information referred to above and the background and other elements of the Proposed Transaction with the management of the Company ("Management");
- Reviewed the historical trading price and trading volume of the Company's Common Stock, the SPLP Preferred, and the publicly traded securities of certain other companies that Duff & Phelps deemed relevant;
- Performed certain valuation and comparative analyses using generally accepted valuation and analytical techniques including a discounted cash flow analysis, an analysis of selected public companies that Duff & Phelps deemed relevant, and an analysis of selected transactions that Duff & Phelps deemed relevant; and
- Conducted such other analyses and considered such other factors as Duff & Phelps deemed appropriate.

Executive Summary

Valuation Summary

Valuation Conclusion

(\$ in thousands)

	Low	Mid	High	Proposed Transaction
Enterprise Value				
Discounted Cash Flow Analysis	\$829,000	\$925,000	\$1,046,000	
Selected Public Companies / M&A Transactions Analysis	833,000	894,500	956,000	
Enterprise Value Conclusion	\$831,000	\$910,000	\$1,001,000	
Plus: Cash and Equivalents (1)	\$31,535	\$31,535	\$31,535	
Plus: Investment in ModusLink Global Solutions, Inc. (2)	11,465	11,465	11,465	
Plus: Excess Working Capital Adjustment (1)	7,755	7,755	7,755	
Plus: Present Value of NOLs and Tax Credits (3)	10,542	10,689	10,840	
Plus: Value of Non-Operating Real Estate (1)(4)	7,794	7,794	7,794	
Plus: Present Value of Tax Benefit Related to Pension (5)	94,081	90,631	87,181	
Less: Pre-tax Pension Liability (6)	(322,000)	(309,000)	(296,000)	
Less: After-tax Present Value of PBGC Premiums	(17,590)	(17,360)	(17,136)	
Less: After-tax Other Post-Retirement Benefit Obligations (1)	(2,266)	(2,266)	(2,266)	
Less: After-tax Environmental Liability (1)	(5,311)	(5,311)	(5,311)	
Less: After-tax Incremental Potential Environmental Exposure (7)	(4,991)	(3,491)	(1,991)	
Less: Debt and Accrued Interest(1)	(289,595)	(289,595)	(289,595)	
Value of Handy & Harman Ltd. Common Stock and RSUs	\$352,419	\$442,846	\$545,272	
Fully Diluted Shares Outstanding (8)	12,221,429	12,221,429	12,221,429	
Value Per Share	\$28.84	\$36.24	\$44.62	\$35.05
Aggregate Value of Non-SPLP Held Stock (9)	\$105,565	\$132,651	\$163,332	\$128,316
Value Per SPLP Preferred Share		\$23.62		\$23.62
Equivalent Number of SPLP Preferred Units	4,468,858	5,615,520	6,914,334	5,432,000
Implied Multiples				
LTM PF Total Net Sales	\$955,342	0.87x	0.95x	1.05x
LTM PF Adjusted EBITDA	120,644	6.9x	7.5x	8.3x
2017E Adjusted EBITDA	125,730	6.6x	7.2x	8.0x
2018P Adjusted EBITDA	144,535	5.7x	6.3x	6.9x
2017E Adjusted EBIT	101,855	8.2x	8.9x	9.8x
2018P Adjusted EBIT	119,952	6.9x	7.6x	8.3x

Footnotes

- (1) Balance as of March 31, 2017
- (2) Market value as of June 18, 2017, adjusted for block discount
- (3) NOL balance as provided by Management
- (4) As provided by Management
- (5) Represents tax deduction benefit from pension termination contribution
- (6) Estimated range provided by Willis Towers Watson equal to the pension termination contribution
- (7) Based on estimates provided by Management
- (8) Common shares outstanding as of March 31, 2017, includes 34,670 unvested restricted stock units
- (9) Based on 3,660,837 shares held by non-SPLP stockholders

Executive Summary

Consideration Summary

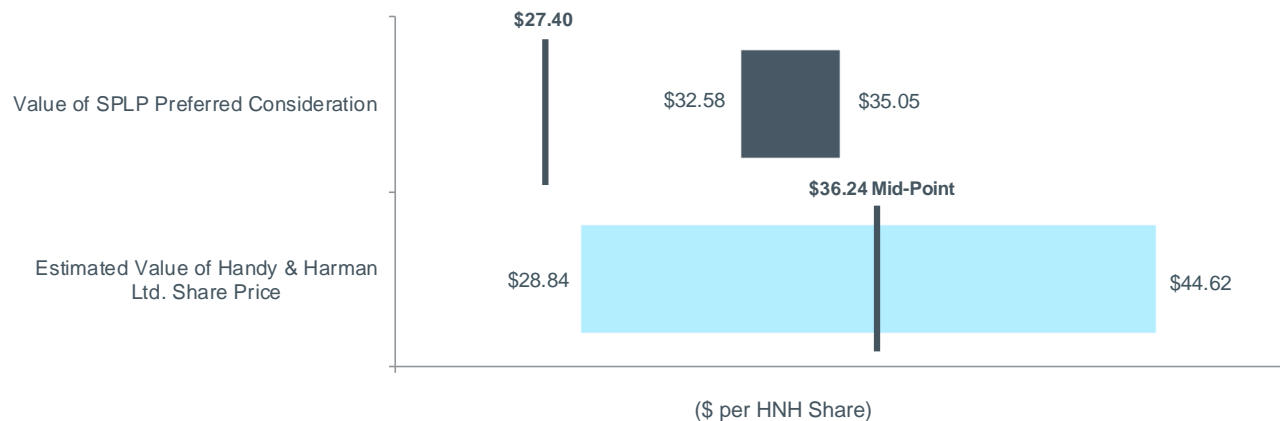
SPLP Preferred Consideration Range

(\$'s, except for Preferred Units)

	March 3, 2017 Initial Offer	SPLP Preferred Value Indications		
		June 22, 2017 Closing Spot Price	30-Day VWAP	Duff & Phelps Midpoint
SPLP Preferred Stock Value	\$23.62	\$21.96	\$21.99	\$23.62
Number of SPLP Preferred Units Issued	4,246,571	5,432,000	5,432,000	5,432,000
Aggregate Value of Non-SPLP Held Stock	\$100,313,603	\$119,286,720	\$119,449,680	\$128,316,115
Shares Held by Non-SPLP Stockholders	3,660,837	3,660,837	3,660,837	3,660,837
Value per HNH Share	\$27.40	\$32.58	\$32.63	\$35.05

Value of SPLP Preferred Consideration and Handy & Harman Ltd. Share Value (\$ Per Share)

(\$'s)



2.

Handy & Harman Ltd. Valuation Analysis

Valuation Analysis

Historical and Projected Financial Performance

Historical & Projected Financial Performance - Handy & Harman Ltd.

(\$ in thousands)

	2013PF	2014PF	2015PF	2016PF(1)	Management Projections					2016PF-2021P
					2017E	2018P	2019P	2020P	2021P	CAGR
Building Materials	\$226,806	\$253,643	\$266,858	\$281,112	\$291,614	\$320,477	\$342,804	\$367,381	\$394,554	7.0%
Tubing	69,650	68,088	67,324	68,163	70,484	77,450	83,024	90,924	99,866	7.9%
Performance Materials	NA	NA	NA	93,206	92,372	100,417	104,287	108,563	111,277	3.6%
Joining Materials	195,187	207,321	182,702	175,134	186,762	197,766	204,132	212,048	219,406	4.6%
Electrical Products	NA	NA	NA	259,432	263,667	284,356	297,879	312,800	324,916	4.6%
Kasco	58,177	58,251	60,833	59,919	62,435	67,302	70,212	71,894	73,499	4.2%
Total Net Sales	\$549,820	\$587,303	\$577,717	\$936,966	\$967,334	\$1,047,767	\$1,102,338	\$1,163,610	\$1,223,519	5.5%
Growth	NA	6.8%	(1.6%)	62.2%	3.2%	8.3%	5.2%	5.6%	5.1%	
Building Materials	\$32,341	\$35,178	\$43,044	\$46,501	\$47,854	\$53,427	\$58,541	\$63,693	\$69,446	8.4%
Tubing	17,923	14,845	13,778	15,574	14,908	16,814	18,579	21,030	24,225	9.2%
Performance Materials	NA	NA	NA	10,768	11,811	14,085	15,017	16,097	16,614	9.1%
Joining Materials	19,239	22,871	22,644	21,993	19,615	23,286	23,174	24,112	24,625	2.3%
Electrical Products	NA	NA	NA	35,349	41,058	45,594	51,757	55,648	60,033	11.2%
Kasco	6,545	5,911	6,373	5,005	6,568	7,411	7,897	8,365	8,736	11.8%
Corporate	(15,922)	(12,995)	(14,690)	(14,047)	(16,082)	(16,082)	(16,082)	(16,082)	(16,082)	2.7%
Adjusted EBITDA	\$60,126	\$65,810	\$71,149	\$121,143	\$125,730	\$144,535	\$158,883	\$172,864	\$187,596	9.1%
Margin	10.9%	11.2%	12.3%	12.9%	13.0%	13.8%	14.4%	14.9%	15.3%	
Growth	NA	9.5%	8.1%	70.3%	3.8%	15.0%	9.9%	8.8%	8.5%	
Capital Expenditures	\$11,744	\$12,658	\$15,225	\$25,622	\$35,300	\$25,800	\$22,189	\$17,984	\$18,313	
as % of Total Net Sales	2.1%	2.2%	2.6%	2.7%	3.6%	2.5%	2.0%	1.5%	1.5%	
Net Working Capital	\$77,805	\$76,330	\$100,511	\$129,230	\$142,939	\$154,832	\$162,902	\$171,962	\$180,821	

(1) Tubing is pro forma to exclude Micro-Tube Fabricators; Performance Materials is pro forma to exclude divestitures; Electrical Products is pro forma for the full year

Valuation Analysis

Discounted Cash Flow Analysis – Key Assumptions

- As the basis of our discounted cash flow analysis, Duff & Phelps utilized the Management Projections for Handy & Harman Ltd. for the fiscal years (“FY”) ending December 31, 2017 to December 31, 2021.
- The following is a summary of the key assumptions used in our discounted cash flow analysis:
 - The 5-year sales compounded annual growth rate (“CAGR”) is projected to be 5.5% for Handy & Harman Ltd.
 - » Building Materials: Revenue growth over the forecast period is led by the development and introduction of new products and improved selling and marketing initiatives within the new construction housing sector, as well as within the lumberyard and home center distribution channels.
 - » Electrical Products: Revenue growth over the forecast period is led by the expansion of the traction and propulsion motor family for new hybrid electric vehicles; a focus on increasing market share within the Carrier refrigeration market with the introduction of next generation configuration; the penetration of adjacent digital monitoring and control sub-segments with the introduction of mid to high power products; improved distribution to heating, ventilation and air conditioning (“HVAC”) customers; and the expansion of variable-frequency drives to original equipment manufacturers (“OEM”).
 - » Joining Materials: Revenue growth over the forecast period is led by the launch of new products within the high voltage diode segment, expansion of high purity alloy casting and alloy insourcing initiatives, and obtaining AS9100 certification to sustain and grow market share within the aerospace industry.
 - » Tubing: Revenue growth over the forecast period is led by the expansion of products into niche transportation, life sciences, energy service, and small emerging growth markets, along with expansion into Asia and the Middle East.
 - » Performance Materials: Revenue growth over the forecast period is led by a focus on expanding the segment’s Solvay product line within the aerospace segment, as well as the development of a thin glass insulation product within its industrial segment.
 - » Kasco: Revenue growth is expected to be driven by an increase in market share in blades and route repair services within the North American retail grocery industry.
 - EBITDA margins for Handy & Harman Ltd. are projected to increase from 12.9% in the period ended December 31, 2016 to 15.3% in FY 2021.
 - » Building Materials: EBITDA margin expansion over the forecast period is expected to be driven by increasing the efficiency of the RhinoBond system in order to accelerate conversion from traditional methods, the creation and launch of new packaging and delivery systems within the adhesives product line, and the introduction of higher margin products within the Edge product line.
 - » Electrical Products: EBITDA margin expansion over the forecast period is led by the improvement of on-time delivery sites, realigning manufacturing operations from lower to higher profitability sites, implementation of EASE (Microsoft DAX), enhancing IP control, and replacing low-margin medical OEMs with customers offering greater profitability.
 - » Joining Materials: EBITDA margin expansion over the forecast period is led by the introduction of higher margin products, implementation of a new enterprise resource planning system that enables more effective data driven decisions, and consolidation of the segment’s manufacturing footprint through the closure and reutilization of the segment’s facilities.
 - » Tubing: EBITDA margin expansion occurs through the reduction of operating costs, optimized production methods, and expansion into higher profile products requiring a high degree of cleanliness and pressure requirements.
 - » Performance Materials: EBITDA margin expansion occurs through cost savings from the Slater, SC facility consolidation, the implementation of energy initiatives, and waste reduction initiatives through the use of leaner, more efficient tools.
 - » Kasco: EBITDA margin expansion over the forecast period is expected to be driven by minimizing the number of daily stops that field service representatives make, converting the segment’s antiquated software system to Microsoft Field One, and implementing the “Remote Route” system that prevents in-person servicing to less profitable clients.

Valuation Analysis

Discounted Cash Flow Analysis – Key Assumptions (cont.)

- Continued summary of the key assumptions used in our discounted cash flow analysis:
 - Capital expenditures are projected to average 2.2% of revenues from FY 2017 to FY 2021 for Handy & Harman Ltd.
 - Working capital for Handy & Harman Ltd. is projected to average 14.8% of revenues from FY 2017 to FY 2021.
 - Corporate income taxes have been projected using a blended federal and state tax rate of 40.0% as provided by Management.
 - The resulting cash flows were discounted at a Weighted Average Cost of Capital (“WACC”) range of 11.00% to 13.00%.
 - The terminal value was estimated using a WACC range of 11.00% to 13.00% and a terminal growth rate of 3.25%.

Valuation Analysis

Discounted Cash Flow Analysis Summary

Discounted Cash Flow Analysis - Handy & Harman Ltd.

(\$ in thousands)

	Management Projections							5-YR	5-YR
	2016PF	2017E	2018P	2019P	2020P	2021P	Terminal	CAGR	Average
Total Net Sales	\$936,966	\$967,334	\$1,047,767	\$1,102,338	\$1,163,610	\$1,223,519	\$1,263,283	5.5%	
Growth	NM	3.2%	8.3%	5.2%	5.6%	5.1%	3.3%		5.5%
Adjusted EBITDA	\$121,143	\$125,730	\$144,535	\$158,883	\$172,864	\$187,596	\$193,693	9.1%	
Adjusted EBITDA Margin	12.9%	13.0%	13.8%	14.4%	14.9%	15.3%	15.3%		14.3%
<u>4/17-12/17</u>									
Earnings Before Interest and Taxes	\$84,002	\$119,952	\$135,462	\$148,385	\$161,490		\$169,691		
Pro Forma Taxes @ 40.0%	(33,601)	(47,981)	(54,185)	(59,354)	(64,596)		(67,876)		
Net Operating Profit After Tax	\$50,401	\$71,971	\$81,277	\$89,031	\$96,894		\$101,814		
Depreciation	\$15,926	\$24,583	\$23,421	\$24,479	\$26,106		\$24,002		
Capital Expenditures	(30,515)	(25,800)	(22,189)	(17,984)	(18,313)		(25,266)		
(Increase) Decrease in Working Capital	(1,775)	(11,893)	(8,071)	(9,060)	(8,859)		(5,877)		
Free Cash Flow	\$34,037	\$58,861	\$74,438	\$86,466	\$95,828		\$94,674		
<u>Enterprise Value</u>		<u>Low</u>	<u>Mid</u>	<u>High</u>					
Terminal Growth Rate		3.25%	3.25%	3.25%					
Weighted Average Cost of Capital		13.00%	12.00%	11.00%					
Enterprise Value	\$803,223	\$898,133	\$1,018,079						
Present Value of Tax Amortization Benefit	25,726	26,765	27,884						
Indicated Enterprise Value Range (Rounded)	\$829,000	\$925,000	\$1,046,000						

Implied Enterprise Value Multiples

LTM PF Adjusted EBITDA	\$120,644	6.9x	7.7x	8.7x
2017E Adjusted EBITDA	125,730	6.6x	7.4x	8.3x
2018P Adjusted EBITDA	144,535	5.7x	6.4x	7.2x
2017E Adjusted EBIT	101,855	8.1x	9.1x	10.3x
2018P Adjusted EBIT	119,952	6.9x	7.7x	8.7x
LTM PF Total Net Sales	955,342	0.9x	1.0x	1.1x

Valuation Analysis

Selected Public Companies / M&A Transactions Analysis

- Duff & Phelps selected publicly traded companies in the industrial manufacturing industry that have operations similar to that of each of the Company's business segments, which are as follows:
 - » Building Materials: The Building Materials segment manufactures and supplies products primarily to the commercial construction and building industries. It manufactures fasteners and fastening systems for the U.S. commercial low-slope roofing industry, which are sold to building and roofing material wholesalers, roofing contractors and private label roofing system manufacturers, and a line of engineered specialty fasteners for the building products industry for fastening applications in the remodeling and construction of homes, decking and landscaping.
 - » Electrical Products: The Electrical Products segment designs, manufactures and markets power electronics, motion control, power protection, power quality electromagnetic equipment, and custom gears and gearboxes used in a variety of medical, commercial and military aerospace, computer, datacom, industrial, architectural and entertainment lighting, and telecom applications.
 - » Joining Materials: The Joining Materials segment primarily fabricates precious metals and their alloys into brazing alloys. Brazing alloys are used to join similar and dissimilar metals, as well as specialty metals and some ceramics, with strong, hermetic joints.
 - » Tubing: The Tubing segment manufactures a wide variety of steel tubing products. The Tubing segment manufactures the world's longest continuous seamless stainless steel tubing coils, in excess of 5,000 feet, serving the petrochemical infrastructure and shipbuilding markets.
 - » Performance Materials: The Performance Materials segment manufactures sheet and mechanically formed glass, quartz, carbon and aramid materials for specialty applications in a wide expanse of markets requiring highly engineered components.
 - » Kasco: The Kasco segment provides blade products, repair services and resale products for the meat and deli departments of supermarkets, restaurants, meat and fish processing plants, and for distributors of electrical saws and cutting equipment, principally in North America and Europe.
- Duff & Phelps analyzed the financial performance of each of the publicly traded companies. Duff & Phelps then analyzed the selected public companies' trading multiples of enterprise value to LTM and projected EBITDA, EBIT, and revenue.
- Duff & Phelps analyzed a number of factors in comparing the Company's segments to the selected public companies, including historical and forecasted growth in revenue, profits, profit margins, and other characteristics that it deemed relevant.
- Duff & Phelps also reviewed M&A transactions involving target companies with businesses that were deemed relevant to its analysis.

None of the companies utilized for comparative purposes in the following analysis are directly comparable to the Company's segments. Duff & Phelps does not have access to nonpublic information related to any of the companies used for comparative purposes. Accordingly, a complete valuation analysis cannot be limited to a quantitative review of the selected companies, and involves complex considerations and judgments concerning differences in financial and operating characteristics of such companies and the Company's segments, as well as other factors that could affect their value relative to that of the Company's segments.

Valuation Analysis

Selected Public Companies Analysis / M&A Transactions Analysis

Selected Public Companies / M&A Transactions Analysis Summary - Handy & Harman Ltd.

(\$ in thousands)

Enterprise Value Multiples						Valuation Summary						
Metric	Public Company Range			Public Company Median	Transaction Median	Selected Multiple Range			Company Performance		Enterprise Value Range	
<u>Building Materials</u>												
2016PF Adjusted EBITDA	9.1x	-	17.2x	13.5x	8.4x	8.0x	-	9.0x	\$41,669	\$333,355	-	\$375,024
2017E Adjusted EBITDA	8.9x	-	14.7x	11.9x	NA	7.5x	-	8.5x	\$42,427	\$318,204	-	\$360,631
Implied Enterprise Value Range - Building Materials									\$326,000	-	\$368,000	
Implied Enterprise Value Multiples - Building Materials												
2016PF Adjusted EBIT									\$35,804	9.1x	-	10.3x
2017E Adjusted EBIT									35,647	9.1x	-	10.3x
2016PF Total Net Sales									281,112	1.16x	-	1.31x
<u>Electrical Products</u>												
2016PF Adjusted EBITDA	5.8x	-	33.8x	10.6x	7.2x	7.0x	-	8.0x	\$31,676	\$221,733	-	\$253,409
2017E Adjusted EBITDA	4.8x	-	16.0x	10.0x	NA	6.0x	-	7.0x	\$36,401	\$218,409	-	\$254,810
Implied Enterprise Value Range - Electrical Products									\$220,000	-	\$254,000	
Implied Enterprise Value Multiples - Electrical Products												
2016PF Adjusted EBIT									\$15,901	13.8x	-	16.0x
2017E Adjusted EBIT									19,879	11.1x	-	12.8x
2016PF Total Net Sales									259,432	0.85x	-	0.98x
<u>Joining Materials</u>												
2016PF Adjusted EBITDA	8.6x	-	16.2x	11.0x	5.8x	6.0x	-	7.0x	\$19,708	\$118,246	-	\$137,953
2017E Adjusted EBITDA	7.4x	-	15.3x	8.8x	NA	6.5x	-	7.5x	\$17,391	\$113,039	-	\$130,429
Implied Enterprise Value Range - Joining Materials									\$115,500	-	\$134,000	
Implied Enterprise Value Multiples - Joining Materials												
2016PF Adjusted EBIT									\$16,716	6.9x	-	8.0x
2017E Adjusted EBIT									13,815	8.4x	-	9.7x
2016PF Total Net Sales									175,134	0.66x	-	0.77x

Valuation Analysis

Selected Public Companies Analysis / M&A Transactions Analysis

Selected Public Companies / M&A Transactions Analysis Summary - Handy & Harman Ltd.

(\$ in thousands)

Enterprise Value Multiples						Valuation Summary						
Metric	Public Company Range			Public Company Median	Transaction Median	Selected Multiple Range			Company Performance	Enterprise Value Range		
Tubing												
2016PF Adjusted EBITDA	7.4x	-	23.6x	9.3x	5.6x	6.0x	-	7.0x	\$13,956	\$83,735	-	\$97,691
2017E Adjusted EBITDA	6.1x	-	63.8x	9.4x	NA	6.0x	-	7.0x	\$13,217	\$79,304	-	\$92,521
Implied Enterprise Value Range - Tubing									\$81,500	-	\$95,000	
Implied Enterprise Value Multiples - Tubing												
						2016PF Adjusted EBIT			\$11,366	7.2x	-	8.4x
						2017E Adjusted EBIT			10,238	8.0x	-	9.3x
						2016PF Total Net Sales			68,163	1.20x	-	1.39x
Performance Materials												
2016PF Adjusted EBITDA	7.3x	-	14.2x	11.1x	8.4x	6.5x	-	7.5x	\$9,649	\$62,719	-	\$72,369
2017E Adjusted EBITDA	6.5x	-	13.0x	8.1x	NA	6.0x	-	7.0x	\$10,471	\$62,828	-	\$73,299
Implied Enterprise Value Range - Performance Materials									\$63,000	-	\$73,000	
Implied Enterprise Value Multiples - Performance Materials												
						2016PF Adjusted EBIT			\$1,597	39.5x	-	45.7x
						2017E Adjusted EBIT			1,979	31.8x	-	36.9x
						2016PF Total Net Sales			93,206	0.68x	-	0.78x
Kasco												
2016PF Adjusted EBITDA	13.5x	-	15.2x	14.3x	10.5x	5.5x	-	6.5x	\$4,485	\$24,668	-	\$29,153
2017E Adjusted EBITDA	11.4x	-	14.2x	13.7x	NA	5.0x	-	6.0x	\$5,823	\$29,114	-	\$34,936
Implied Enterprise Value Range - Kasco									\$27,000	-	\$32,000	
Implied Enterprise Value Multiples - Kasco												
						2016PF Adjusted EBIT			\$2,593	10.4x	-	12.3x
						2017E Adjusted EBIT			3,846	7.0x	-	8.3x
						2016PF Total Net Sales			59,919	0.45x	-	0.53x
Consolidated												
Implied Enterprise Value Range - Consolidated									\$833,000	-	\$956,000	
Implied Enterprise Value Multiples - Consolidated												
						LTM PF Adjusted EBITDA			\$120,644	6.9x	-	7.9x
						2017E Adjusted EBITDA			125,730	6.6x	-	7.6x
						2018P Adjusted EBITDA			144,535	5.8x	-	6.6x
						2017E Adjusted EBIT			101,855	8.2x	-	9.4x
						2018P Adjusted EBIT			119,952	6.9x	-	8.0x
						LTM PF Total Net Sales			955,342	0.87x	-	1.00x

Valuation Analysis

Segment Stand-alone EBITDA Reconciliation

Stand-Alone Segment EBITDA Allocation

(\$ in thousands)

EBITDA	Building Materials	Tubing	Performance Materials	Joining Materials	Electrical Products	Kasco	Total
2016 EBITDA	\$46,501	\$15,574	\$10,768	\$21,993	\$35,349	\$5,005	\$135,190
Handy & Harman Ltd. Top Level Adjustment (1)	-	-	-	-	-	-	-
Handy & Harman Ltd. Corporate Overhead Allocation (1)	(4,832)	(1,618)	(1,119)	(2,285)	(3,673)	(520)	(14,047)
Adjusted 2016 EBITDA	\$41,669	\$13,956	\$9,649	\$19,708	\$31,676	\$4,485	\$121,143
2017 EBITDA	\$52,046	\$16,214	\$12,845	\$21,333	\$44,654	\$7,143	\$154,236
Handy & Harman Ltd. Top Level Adjustment (1)	(4,192)	(1,306)	(1,035)	(1,718)	(3,597)	(575)	(12,424)
Handy & Harman Ltd. Corporate Overhead Allocation (1)	(5,427)	(1,691)	(1,339)	(2,224)	(4,656)	(745)	(16,082)
Adjusted 2017 EBITDA	\$42,427	\$13,217	\$10,471	\$17,391	\$36,401	\$5,823	\$125,730

(1) Provided by Management

Valuation Analysis

Selected Public Companies Financial Performance and Trading Multiples Analysis – Building Materials

Selected Public Companies Analysis - Building Materials

(US\$ in millions, except per share data)

COMPANY INFORMATION		MARKET DATA			ENTERPRISE VALUE AS MULTIPLE OF						
Company Name	Common Stock Price on 06/22/2017	% of 52- Week High	Enterprise Value	LTM EBITDA	2017 EBITDA	2018 EBITDA	LTM EBIT	2017 EBIT	2018 EBIT	LTM Revenue	
Beacon Roofing Supply, Inc.	\$48.51	93.1%	\$4,015	11.0x	10.2x	9.2x	15.9x	14.2x	12.1x	0.96x	
CanWel Building Materials Group Ltd.	5.10	95.1	547	14.5	11.9	11.0	19.4	16.2	14.4	0.72	
Carlisle Companies Incorporated	93.89	80.7	6,577	9.1	8.9	8.3	11.3	11.4	10.4	1.76	
Fastenal Company	42.79	81.1	12,608	13.7	12.9	12.0	15.6	14.6	13.4	3.13	
SFS Group AG	116.29	95.0	4,344	14.8	12.9	12.1	29.5	24.1	21.9	2.94	
Simpson Manufacturing Co., Inc.	43.50	89.9	1,935	11.7	10.9	10.0	14.1	13.8	12.0	2.20	
Trex Company, Inc.	67.89	86.9	2,126	17.2	14.7	13.4	19.5	16.3	14.7	4.31	
Trifast plc	2.84	97.8	349	13.3	11.9	11.5	15.6	12.9	12.5	1.48	
Mean		89.9%	4,063	13.2x	11.8x	10.9x	17.6x	15.4x	13.9x	2.19x	
Median		91.5%	3,071	13.5x	11.9x	11.2x	15.8x	14.4x	12.9x	1.98x	

LTM = Latest Twelve Months

Enterprise Value = (Market Capitalization + Management Equity + Debt + Preferred Stock + Non-Controlling Interest) - (Cash & Equivalents + Net Non-Operating Assets)

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

EBIT = Earnings Before Interest and Taxes

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Selected Public Companies Analysis - Building Materials

COMPANY INFORMATION	REVENUE GROWTH				EBITDA GROWTH				EBITDA MARGIN				RETURNS
	3-YR CAGR	LTM	2017	2018	3-YR CAGR	LTM	2017	2018	3-YR AVG	LTM	2017	2018	LTM ROA ⁽¹⁾
Beacon Roofing Supply, Inc.	NM	-9.3%	7.1%	6.8%	NM	NM	7.8%	10.2%	NM	NM	8.9%	9.1%	8.0%
CanWel Building Materials Group Ltd.	NM	NM	7.1	3.0	NM	NM	22.2	7.9	4.3%	5.2%	5.8	6.1	5.7
Carlisle Companies Incorporated	7.7%	3.1	7.7	4.4	15.3%	4.6%	0.3	7.6	18.1	19.4	18.6	19.1	14.3
Fastenal Company	6.0	3.1	8.5	7.8	5.0	0.2	9.1	7.2	23.1	22.8	22.8	22.7	28.9
SFS Group AG	2.6	4.7	10.3	5.1	5.1	9.2	14.9	6.3	19.4	19.9	20.7	21.0	5.9
Simpson Manufacturing Co., Inc.	6.9	7.8	11.1	7.3	14.6	9.4	5.0	9.1	18.1	18.8	18.5	18.9	13.4
Trex Company, Inc.	11.9	9.1	9.0	8.5	40.6	21.0	22.3	9.8	22.3	25.0	27.7	28.0	33.7
Trifast plc	NM	15.6	2.9	3.2	NM	26.3	11.6	3.4	10.4	11.1	12.1	12.1	10.0
Mean	7.0%	4.9%	8.0%	5.8%	16.1%	11.8%	11.6%	7.7%	16.5%	17.5%	16.9%	17.1%	15.0%
Median	6.9%	4.7%	8.1%	5.9%	14.6%	9.3%	10.3%	7.7%	18.1%	19.4%	18.6%	19.0%	11.7%
Building Materials ⁽²⁾	7.4%	5.3%	3.7%	9.9%	12.9%	8.0%	2.9%	11.6%	NA	14.8%	14.5%	15.0%	19.7%

LTM = Latest Twelve Months

CAGR = Compounded Annual Growth Rate

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

ROA = Return on Assets

⁽¹⁾ ROA is calculated as LTM Adjusted EBIT divided by 2016 Total Assets

⁽²⁾ LTM Metrics as of Fiscal Year Ended December 31, 2016

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Valuation Analysis

Selected Public M&A Transactions Analysis – Building Materials

Selected M&A Transaction Analysis - Building Materials

(\$ in millions)

Announced	Target Name	Target Business Description	Acquirer Name	Enterprise Value	LTM Revenue	LTM EBITDA	EBITDA Margin	EV / Revenue	EV / EBITDA
09/15/2016	Braas Monier Building Group S.A.	Manufactures and supplies pitched roof products and components	Standard Industries Inc.	\$1,574.7	\$1,387.8	\$202.6	14.6%	1.13x	7.8x
08/27/2016	L&W Supply Corporation	Engages in the distribution of gypsum wallboards and building materials including panels, metal, joint treatment, tools, fasteners and other accessories	ABC Supply Co., Inc.	\$670.0	\$1,430.0	NA	NA	0.47x	NA
07/27/2015	Roofing Supply Group, LLC	Distributes roofing and building related products for residential and commercial clients in the United States	Beacon Roofing Supply, Inc.	\$1,142.0	\$1,100.0	NA	NA	1.04x	NA
6/10/2015	California Cascade Industries Inc.	Manufactures and markets building products in the United States	CanWel Building Materials Group Ltd.	\$53.2	\$90.3	NA	NA	0.59x	NA
1/26/2015	Joris Ide NV	Manufactures and supplies flat sheets, insulation panels, fasteners and other products for industrial, agricultural, and residential buildings	Kingspan Group plc	\$355.1	\$524.2	\$40.6	7.7%	0.68x	8.7x
5/6/2014	V.I.C. Viterie Italia Centrale SpA s.u.	Manufactures and supplies screws, fastening systems, fasteners, and C-parts for industrial customers in Italy and internationally	Trifast plc	\$45.3	\$37.7	NA	NA	1.20x	NA
11/18/2013	Novik Inc.	Designs and manufactures polymer exterior covering and roofing products, and various exterior structural and decorative products	Clearview Capital, LLC; Clearview Capital Fund III LP	\$44.4	\$27.5	\$5.5	19.9%	1.62x	8.1x
5/2/2012	Metl-Span LLC	Manufactures and supplies insulated metal wall and roof panels for architectural, commercial, industrial, and cold storage industries in North America	NCI Group, Inc.	\$143.6	\$157.2	\$15.4	9.8%	0.91x	9.3x
Source: Capital IQ and company filings			Mean	\$503.5	\$594.3	\$66.0	13.0%	0.95x	8.5x
			Median	\$249.4	\$340.7	\$28.0	12.2%	0.98x	8.4x

Source: Capital IQ and company filings

Valuation Analysis

Selected Public Companies Financial Performance and Trading Multiples Analysis – Electrical Products

Selected Public Companies Analysis - Electrical Products

(US\$ in millions, except per share data)

COMPANY INFORMATION	MARKET DATA			ENTERPRISE VALUE AS MULTIPLE OF						
Company Name	Common Stock Price on 06/22/2017	% of 52-Week High	Enterprise Value	LTM EBITDA	2017 EBITDA	2018 EBITDA	LTM EBIT	2017 EBIT	2018 EBIT	LTM Revenue
AcBel Polytech Inc.	\$0.75	84.3%	\$277	7.7x	6.7x	NA	13.7x	12.6x	NA	0.44x
Allied Motion Technologies Inc.	26.82	94.3	309	11.2	10.1	9.2x	17.4	16.0	14.3x	1.27
Cosel Co., Ltd.	12.52	88.6	219	5.8	4.8	4.8	7.0	NA	NA	1.09
CyberPower Systems, Inc.	3.17	71.1	266	7.8	7.9	NA	8.3	7.6	NA	1.12
Delta Electronics, Inc.	5.57	94.4	13,171	13.3	12.5	11.2	19.2	17.4	15.5	1.86
Hiconics Eco-energy Technology Co., Ltd.	0.79	59.3	953	33.8	15.4	12.3	55.1	18.4	14.5	4.64
Moog Inc.	69.01	92.6	3,134	10.0	9.9	9.1	14.2	14.2	12.8	1.28
Nidec Corporation	105.76	98.9	31,965	18.1	16.0	14.2	25.3	NA	NA	2.97
Regal Beloit Corporation	79.65	95.2	4,768	9.5	9.7	9.2	13.6	14.0	13.1	1.48
XP Power Limited	31.17	89.5	601	15.5	13.0	12.3	16.9	14.9	14.0	3.66
Mean		86.8%	5,566	13.3x	10.6x	10.3x	19.1x	14.4x	14.0x	1.98x
Median		91.1%	777	10.6x	10.0x	10.2x	15.6x	14.5x	14.2x	1.38x

LTM = Latest Twelve Months

Enterprise Value = (Market Capitalization + Management Equity + Debt + Preferred Stock + Non-Controlling Interest) - (Cash & Equivalents + Net Non-Operating Assets)

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

EBIT = Earnings Before Interest and Taxes

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Selected Public Companies Analysis - Electrical Products

COMPANY INFORMATION		REVENUE GROWTH				EBITDA GROWTH				EBITDA MARGIN				RETURNS
Company Name	3-YR CAGR	LTM	2017	2018	3-YR CAGR	LTM	2017	2018	3-YR AVG	LTM	2017	2018	LTM ROA ⁽¹⁾	
AcBel Polytech Inc.	-7.1%	-5.6%	-0.3%	NA	-10.3%	0.8%	12.5%	NA	5.5%	5.7%	6.4%	NA	4.2%	
Allied Motion Technologies Inc.	3.7	3.0	1.2	5.3%	NM	-3.5	9.1	10.4%	12.1	11.4	12.3	12.8%	9.7	
Cosel Co., Ltd.	2.7	4.1	12.7	3.9	-1.2	34.0	74.0	0.4	17.8	18.8	21.7	21.0	8.4	
CyberPower Systems, Inc.	12.6	8.8	15.2	NA	24.3	27.6	5.0	NA	11.9	14.5	12.6	NA	13.4	
Delta Electronics, Inc.	6.6	3.8	5.5	6.2	2.5	4.2	7.1	11.9	14.7	13.9	14.2	14.9	9.4	
Hiconics Eco-energy Technology Co., Ltd.	28.9	52.2	27.1	26.0	32.1	51.7	118.3	24.9	12.5	13.8	23.5	23.3	2.5	
Moog Inc.	-2.6	0.7	1.5	2.9	-5.3	-4.3	1.0	8.0	13.3	12.8	12.9	13.5	7.5	
Nidec Corporation	11.1	1.8	18.6	6.4	14.4	9.5	12.0	12.9	15.9	16.4	16.3	17.3	8.4	
Regal Beloit Corporation	1.4	-5.7	1.1	3.0	5.0	-3.7	1.3	5.5	14.4	15.5	15.0	15.4	7.9	
XP Power Limited	8.7	18.3	15.6	3.8	7.4	9.8	19.6	5.7	24.9	23.6	24.4	24.8	20.2	
Mean	6.6%	8.1%	9.8%	7.2%	7.6%	12.6%	26.0%	10.0%	14.3%	14.6%	15.9%	17.9%	9.2%	
Median	5.1%	3.4%	9.1%	4.6%	5.0%	6.8%	10.5%	9.2%	13.9%	14.2%	14.6%	16.3%	8.4%	
Electrical Products ⁽²⁾	NA	NA	1.6%	7.8%	NA	NA	16.1%	11.0%	NA	12.2%	13.8%	14.4%	5.2%	

LTM = Latest Twelve Months

CAGR = Compounded Annual Growth Rate

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

ROA = Return on Assets

⁽¹⁾ ROA is calculated as LTM Adjusted EBIT divided by 2016 Total Assets

⁽²⁾ LTM Metrics as of Fiscal Year Ended December 31, 2016

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Valuation Analysis

Selected Public M&A Transactions Analysis – Electrical Products

Selected M&A Transaction Analysis - Electrical Products

(\$ in millions)

Announced	Target Name	Target Business Description	Acquirer Name	Enterprise Value	LTM Revenue	LTM EBITDA	EBITDA Margin	EV / Revenue	EV / EBITDA
9/30/2016	ElectroMagnetic Enterprise ⁽¹⁾	Engages in design, development, manufacture, marketing, service, distribution, repair, and sale of electric motors, starters, and generators	SL Montevideo Technology, Inc. ⁽²⁾	\$70.0	\$65.1	\$11.9	18.3%	1.07x	5.9x
07/30/2016	Motors, Drives and Electric Power Generation Businesses	Manufactures and sell motors, drives, and alternators	Nidec Corporation	\$1,200.0	\$1,674.0	\$175.0	10.5%	0.72x	6.9x
07/12/2015	Remy International, Inc.	Designs, manufactures, remanufactures, markets, and distributes rotating electrical components for automobiles, light trucks, heavy-duty trucks, and other vehicles	BorgWarner Inc.	\$1,195.4	\$1,148.8	\$129.1	11.2%	1.04x	9.3x
6/16/2015	SL Industries Inc. ⁽¹⁾	Offers power electronics, motion control, power protection, power quality electromagnetic equipment, custom gears and gearboxes	Handy & Harman Ltd.	\$168.9	\$202.4	\$24.3	12.0%	0.83x	6.9x
4/1/2014	Professional Power Products, Inc.	Designs, manufactures, and sells custom engineered integrated electrical power generation systems	Power Solutions International, Inc.	\$70.6	\$40.3	\$8.6	21.3%	1.75x	8.2x
4/21/2013	Power-One Inc.	Engages in the design, manufacture, sale, and service of power supply products for the renewable energy ("RE"), servers, storage and networking, telecommunications, industrials, and network power systems industries worldwide	ABB Ltd	\$656.4	\$1,001.4	\$112.6	11.2%	0.66x	5.8x
04/24/2012	Nidec Sankyo Corporation	Engages in the research and development, manufacture, and sale of motors, motor drive units, industrial robots, card readers, plastic molded parts, and musical movements worldwide	Nidec Corporation	\$827.9	\$994.1	\$116.6	11.7%	0.83x	7.1x
01/29/2012	Thomas & Betts Corp.	Engages in the design, manufacture, and marketing of components used to manage the connection, distribution, and transmission of electrical power	ABB Control Inc.	\$3,914.2	\$2,297.5	\$375.6	16.3%	1.70x	10.4x

(1) Denotes acquisitions by Handy & Harman Ltd. and related subsidiaries

(2) Based on information provided by the client

Source: Capital IQ and company filings

Mean	\$1,012.9	\$928.0	\$119.2	14.1%	1.08x	7.6x
Median	\$742.1	\$997.8	\$114.6	11.9%	0.94x	7.0x

Valuation Analysis

Selected Public Companies Financial Performance and Trading Multiples Analysis – Joining Materials

Selected Public Companies Analysis - Joining Materials

(US\$ in millions, except per share data)

COMPANY INFORMATION		MARKET DATA		ENTERPRISE VALUE AS MULTIPLE OF						
Company Name	Common Stock Price on 06/22/2017	% of 52-Week High	Enterprise Value	LTM EBITDA	2017 EBITDA	2018 EBITDA	LTM EBIT	2017 EBIT	2018 EBIT	LTM Revenue
Colfax Corporation	\$36.98	88.1%	\$5,815	12.8x	11.9x	10.9x	17.8x	16.2x	14.1x	1.61x
Global Brass and Copper Holdings, Inc.	30.45	76.4	931	8.6	7.4	7.1	10.0	8.7	8.4	0.66
Lincoln Electric Holdings, Inc.	92.67	94.6	6,510	16.2	15.3	14.0	19.4	18.1	16.4	2.82
Materion Corporation	37.00	89.8	769	11.0	9.3	7.8	27.5	19.6	14.3	0.79
Modine Manufacturing Company	16.20	93.2	1,306	NM	7.6	6.6	NM	13.0	10.5	NM
Taiyo Holdings Co., Ltd.	46.31	99.2	966	9.0	8.2	7.3	11.7	NA	NA	2.25
Mean		90.2%	2,716	11.5x	9.9x	9.0x	17.3x	15.1x	12.7x	1.63x
Median		91.5%	1,136	11.0x	8.8x	7.6x	17.8x	16.2x	14.1x	1.61x

LTM = Latest Twelve Months

Enterprise Value = (Market Capitalization + Management Equity + Debt + Preferred Stock + Non-Controlling Interest) - (Cash & Equivalents + Net Non-Operating Assets)

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

EBIT = Earnings Before Interest and Taxes

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Selected Public Companies Analysis - Joining Materials

COMPANY INFORMATION	REVENUE GROWTH				EBITDA GROWTH				EBITDA MARGIN				RETURNS LTM ROA ⁽¹⁾
	3-YR CAGR	LTM	2017	2018	3-YR CAGR	LTM	2017	2018	3-YR AVG	LTM	2017	2018	
Colfax Corporation	-4.7%	-8.1%	0.1%	4.3%	-6.2%	-14.4%	7.7%	9.0%	12.9%	12.6%	13.4%	14.0%	5.1%
Global Brass and Copper Holdings, Inc.	-8.7	-2.2	16.7	1.3	12.4	0.5	10.3	4.1	7.0	7.8	8.0	8.2	14.9
Lincoln Electric Holdings, Inc.	-7.3	-5.1	4.8	5.3	-7.0	-7.0	5.3	8.7	18.1	17.4	17.9	18.5	16.4
Materion Corporation	-6.0	0.4	3.8	2.7	-0.2	-0.9	11.6	19.9	7.4	7.2	8.2	9.6	3.6
Modine Manufacturing Company	NM	NM	NM	4.8	NM	NM	NM	14.0	NM	NM	9.2	10.1	4.6
Taiyo Holdings Co., Ltd.	2.7	-4.0	4.6	3.7	10.2	-9.1	9.0	11.6	24.6	25.0	26.5	28.5	10.0
Mean	-4.8%	-3.8%	6.0%	3.7%	1.8%	-6.2%	8.8%	11.2%	14.0%	14.0%	13.9%	14.8%	9.1%
Median	-6.0%	-4.0%	4.6%	4.0%	-0.2%	-7.0%	9.0%	10.3%	12.9%	12.6%	11.3%	12.0%	7.5%
Joining Materials ⁽²⁾	-3.5%	-4.1%	6.6%	5.9%	4.6%	-2.9%	-10.8%	18.7%	NA	11.3%	9.3%	10.6%	15.6%

LTM = Latest Twelve Months

CAGR = Compounded Annual Growth Rate

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

ROA = Return on Assets

⁽¹⁾ ROA is calculated as LTM Adjusted EBIT divided by 2016 Total Assets

⁽²⁾ LTM Metrics as of Fiscal Year Ended December 31, 2016

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Valuation Analysis

Selected Public M&A Transactions Analysis – Joining Materials

Selected M&A Transaction Analysis - Joining Materials

(\$ in millions)

Announced	Target Name	Target Business Description	Acquirer Name	Enterprise Value	LTM Revenue	LTM EBITDA	EBITDA Margin	EV / Revenue	EV / EBITDA
9/6/2016	Luvata Heat Transfer Solutions Business	Luvata Heat Transfer Solutions Business comprises coils, coolers, and coatings to the heating, ventilation, and air conditioning (HVAC&R) industries.	Modine Manufacturing Company	\$422.0	\$530.0	\$59.0	11.1%	0.80x	7.2x
06/30/2016	Vulcan Steel Products Inc.	Vulcan Steel Products Inc. manufactures and supplies threaded products. The company also offers low carbon threaded rods, stainless steel threaded rods, brass rods, double arming bolts, heat treating bars, and cold finished products.	Steel Dynamics, Inc.	\$114.0	NA	\$22.80	NA	NA	5.0x
12/23/2015	Interplex Holdings Ltd.	Interplex Holdings Ltd. provides mechanical and electro-mechanical component solutions worldwide. The company provides other services, such as contact welding, heat treating, and tape and reel packaging services. Further, it is involved in the trading of precision plastic injection molded parts and toolings.	Baring Private Equity	\$544.3	\$978.8	\$107.3	11.0%	0.56x	5.1x
4/8/2015	Hyundai Hysco Co. Ltd.	Hyundai Hysco Co., Ltd. manufactures and sells automotive steel products including automobile weight reduction products comprising tailor welded blanks that are used in door inner panels, rear wheel houses, wheeler reinforcing panels, and side member panes.	Hyundai Steel Company	\$1,911.4	\$3,763.2	\$341.3	9.1%	0.51x	5.6x
12/15/2014	Dynacast International Inc.	Dynacast International Inc. offers fasteners that include wing nuts, cap nuts, electrical components, concrete anchors, panel nuts, wood inserts, thumb nuts, and others; Injected Metal Assembly systems; and multiple-slide die casting systems for precision components in zinc and lead alloys.	Kenner & Company, Inc.; Partners Group; Morgan Joseph TriArtisan	\$1,100.0	\$616.7	\$113.0	18.3%	1.78x	9.7x
2/11/2013	Höganäs AB (publ)	Höganäs AB (publ) engages in the production and sale of iron and metal powders. Its Consumables segment is sells iron powders and high-alloy metal powders used in industrial processes, such as surface coating, welding, and brazing, in chemical and metallurgical process industries.	Lindénggruppen AB; Foundation Asset Management AB	\$1,804.8	\$1,030.8	\$191.4	18.6%	1.75x	9.4x
10/15/2012	Carolina Commercial Heat Treating, Inc.	Carolina Commercial Heat Treating, Inc. is a commercial heat treating firm, its processes include aluminium heat treating, austempering, nitriding, black oxidizing, brazing, carbon restoration, stress relieving, hydrogen brazing, vacuum brazing, malcomizing, vibratory tumbling, and martempering.	Bodycote plc	\$67.4	\$34.9	\$11.7	33.5%	1.93x	5.8x
Source: Capital IQ and company filings			Mean	\$852.0	\$1,159.1	\$120.9	16.9%	1.22x	6.8x
			Median	\$544.3	\$797.8	\$107.3	14.7%	1.27x	5.8x

Source: Capital IQ and company filings

Valuation Analysis

Selected Public Companies Financial Performance and Trading Multiples Analysis - Tubing

Selected Public Companies Analysis - Tubing

(US\$ in millions, except per share data)

COMPANY INFORMATION		MARKET DATA		ENTERPRISE VALUE AS MULTIPLE OF						
Company Name	Common Stock Price on 06/22/2017	% of 52-Week High	Enterprise Value	LTM EBITDA	2017 EBITDA	2018 EBITDA	LTM EBIT	2017 EBIT	2018 EBIT	LTM Revenue
Borusan Mannesmann Boru Sanayi ve Ticaret Anonim Sirketi	\$2.41	77.9%	\$641	7.9x	NA	NA	11.5x	NA	NA	1.12x
Daido Steel Co., Ltd.	5.49	95.3	3,572	8.2	7.6x	7.3x	15.6	NA	NA	0.89
Dril-Quip, Inc.	48.80	70.3	1,432	14.2	33.3	19.9	21.4	NM	38.1x	2.91
Iron Force Industrial Co., Ltd.	4.96	57.6	340	10.4	9.4	7.8	12.1	11.2x	8.9	2.29
Jindal Saw Limited	1.34	93.7	1,229	19.4	NA	NA	19.4	NA	NA	1.12
Nexteer Automotive Group Limited	1.51	89.0	3,895	7.6	6.1	5.4	9.2	8.3	7.3	1.01
Northwest Pipe Company	15.84	81.0	134	NM	63.8	8.1	NM	NM	21.6	0.88
PAO TMK	1.22	85.8	4,152	7.4	6.4	5.7	13.5	10.7	9.5	1.18
Tenaris S.A.	15.02	77.2	16,032	23.6	16.1	10.6	NM	NM	20.4	3.78
Tesco Corporation	3.95	40.9	99	NM	NM	9.4	NM	NM	NM	0.73
Mean		76.9%	3,153	12.3x	20.4x	9.3x	14.7x	10.1x	17.6x	1.59x
Median		79.5%	1,331	9.3x	9.4x	8.0x	13.5x	10.7x	15.0x	1.12x

LTM = Latest Twelve Months

Enterprise Value = (Market Capitalization + Management Equity + Debt + Preferred Stock + Non-Controlling Interest) - (Cash & Equivalents + Net Non-Operating Assets)

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

EBIT = Earnings Before Interest and Taxes

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Selected Public Companies Analysis - Tubing

COMPANY INFORMATION	REVENUE GROWTH				EBITDA GROWTH				EBITDA MARGIN				RETURNS LTM ROA ⁽¹⁾
	3-YR CAGR	LTM	2017	2018	3-YR CAGR	LTM	2017	2018	3-YR AVG	LTM	2017	2018	
Borusan Mannesmann Boru Sanayi ve Ticaret Anonim Sirketi	18.0%	-2.2%	NA	NA	51.6%	31.0%	NA	NA	10.3%	14.2%	NA	NA	5.2%
Daido Steel Co., Ltd.	-0.9	-3.4	7.2%	2.3%	7.7	4.1	6.8%	5.0%	10.0	11.0	10.9%	11.2%	4.4
Dril-Quip, Inc.	-14.8	-37.4	-15.2	9.4	-16.2	-60.4	-71.2	67.5	31.3	20.5	9.4	14.4	4.6
Iron Force Industrial Co., Ltd.	13.9	10.3	11.3	19.0	27.7	9.2	8.7	19.7	21.0	22.0	22.3	22.4	17.5
Jindal Saw Limited	2.2	-22.3	NA	NA	-15.8	-36.8	NA	NA	8.4	5.8	NA	NA	3.1
Nexteer Automotive Group Limited	17.2	14.3	11.7	11.9	30.1	23.3	23.5	13.5	12.2	13.4	14.8	15.0	15.6
Northwest Pipe Company	-24.2	-18.1	-5.5	21.9	NM	NM	NM	688.1	NM	NM	1.4	9.2	NM
PAO TMK	-19.6	-6.2	18.7	6.9	-18.4	14.0	28.5	11.5	14.1	15.9	16.4	17.1	5.8
Tenaris S.A.	-26.0	-27.6	23.6	24.7	-37.8	-36.1	48.1	52.5	20.8	16.0	18.7	22.9	0.1
Tesco Corporation	-36.4	-39.1	25.3	35.1	NM	NM	NM	NM	NM	NM	NA	4.6	NM
Mean	-7.1%	-13.2%	9.6%	16.4%	3.6%	-6.5%	7.4%	122.5%	16.0%	14.8%	13.4%	14.6%	7.1%
Median	-7.9%	-12.2%	11.5%	15.5%	-4.0%	6.6%	16.1%	19.7%	13.1%	15.0%	14.8%	14.7%	4.9%
Tubing ⁽²⁾	-8.7%	1.2%	3.4%	9.9%	-4.6%	13.0%	-4.3%	12.8%	NA	20.5%	18.8%	19.5%	34.5%

LTM = Latest Twelve Months

CAGR = Compounded Annual Growth Rate

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

ROA = Return on Assets

⁽¹⁾ ROA is calculated as LTM Adjusted EBIT divided by 2016 Total Assets

⁽²⁾ LTM Metrics as of Fiscal Year Ended December 31, 2016

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Valuation Analysis

Selected Public M&A Transactions Analysis – Tubing

Selected M&A Transaction Analysis - Tubing

(\$ in millions)

Announced	Target Name	Target Business Description	Acquirer Name	Enterprise Value	LTM Revenue	LTM EBITDA	EBITDA Margin	EV / Revenue	EV / EBITDA
01/29/2016	Anhui Tianda Oil Pipe Company Limited	Anhui Tianda Oil Pipe Company Limited, together with its subsidiaries, designs, manufactures, and sells specialized seamless pipes for the oil and natural gas industry in Mainland China and internationally.	Vallourec Tubes S.A.S.	\$122.3	\$313.0	\$13.4	4.3%	0.39x	9.1x
12/6/2015	Mendelson Infrastructures & Industries Ltd.	Mendelson Infrastructures & Industries Ltd. products include stainless steel, copper, polyethylene, and casting steel pipes; and pipes for conveyance of fluids, such as water, sewage, gas, fuel, oil, steam, chemicals.	Emilia Development (O.F.G) Ltd.	\$72.9	\$169.8	\$8.1	4.8%	0.43x	9.0x
4/8/2015	Hyundai Hysco Co. Ltd.	Hyundai Hysco Co., Ltd. manufactures and sells automotive steel products in South Korea. The company offers steel pipes, such as common piping, large-scale oil pipelines, and boiler pipes for industrial use. It also provides fuel cell products for home and building, and back-up and mobile power applications.	Hyundai Steel Company	\$1,911.4	\$3,763.2	\$341.3	9.1%	0.51x	5.6x
8/14/2014	SeAH Changwon Integrated Special Steel Corporation	SeAH Changwon Integrated Special Steel Corporation manufactures stainless steel, tool steel, and special alloy steel products. Its products include seamless pipes and tubes, tool steel/die steel, and carbon alloy wire.	SeAH Besteel Corporation	\$823.8	\$1,279.9	\$85.5	6.7%	0.64x	9.6x
9/25/2013	Edgen Group Inc.	Edgen Group Inc. distributes specialty steel products to companies that operate in the oil and natural gas industry, civil construction, and mining operations. It offers steel pipes, high yield heavy plates, and related components; seamless and welded pipes; specialty oil country tubular goods, OCTG, and piping materials for hydraulic fracturing, horizontal drilling, and others.	Sumitomo Corporation of America (nka:Sumitomo Corporation of Americas)	\$806.6	\$1,894.4	\$119.2	6.3%	0.43x	6.8x
02/07/2013	Sumikin Bussan Corp.	Sumikin Bussan Corp. processes and sells steel pipes and tubes, welded pipes and tubes, large-diameter pipes, fittings, and others; steel sheets, including hot and cold-rolled coils, and coated steel sheets.	Nippon Steel & Sumikin Bussan Corporation	\$1,446.6	\$9,188.7	\$204.4	2.2%	0.16x	7.1x
2/6/2013	Metals USA Holdings Corp.	Metals USA Holdings Corp., together with its subsidiaries, provides processed carbon steel, stainless steel, aluminum, red metals, manufactured metal components, and inventory management services in the United States and Canada.	Reliance Steel & Aluminum Co.	\$1,216.5	\$1,983.6	\$143.3	7.2%	0.61x	8.5x
9/1/2012	JSW ISPAT Steel Limited	JSW ISPAT Steel Limited engages in the manufacture and sale of iron and steel products primarily in India. It provides sponge iron, hot and cold rolled coils, galvanized sheets/coils, color coated sheets, and galvalume metallic-coated steel products, as well as pipes and tubes.	JSW Steel Limited	\$1,745.8	\$1,996.2	\$210.7	10.6%	0.87x	8.3x
7/27/2012	Fives Société Anonyme	The company designs and manufactures industrial equipment for the energy sector primarily in industrial combustion systems; tube and production finishing equipment; This segment also undertakes maintenance contracts, as well as new construction projects for the nuclear piping market.	Ardian	\$1,434.9	\$1,647.7	\$123.8	7.5%	0.87x	11.6x
Source: Capital IQ and company filings			Mean	\$1,064.5	\$2,470.7	\$138.8	6.5%	0.55x	8.4x
			Median	\$1,216.5	\$1,894.4	\$123.8	6.7%	0.51x	8.5x

Source: Capital IQ and company filings

Valuation Analysis

Selected Public Companies Financial Performance and Trading Multiples Analysis – Performance Materials

Selected Public Companies Analysis - Performance Materials

(US\$ in millions, except per share data)

COMPANY INFORMATION		MARKET DATA		ENTERPRISE VALUE AS MULTIPLE OF						
Company Name	Common Stock Price on 06/22/2017	% of 52-Week High	Enterprise Value	LTM EBITDA	2017 EBITDA	2018 EBITDA	LTM EBIT	2017 EBIT	2018 EBIT	LTM Revenue
Baotek Industrial Materials Ltd.	\$0.24	76.0%	\$53	11.3x	NA	NA	NM	NA	NA	1.23x
FMS Enterprises Migun Ltd.	42.76	96.2	358	12.8	NA	NA	13.4x	NA	NA	4.48
Hexcel Corporation	51.31	91.8	5,443	12.1	11.2x	10.1x	15.3	14.7x	12.8x	2.74
Jiangsu Changhai Composite Materials Co., Ltd	4.58	68.9	980	10.9	13.0	10.7	16.3	17.5	14.2	3.75
Nitto Boseki Co., Ltd.	4.93	89.7	1,046	7.6	NA	NA	10.5	NA	NA	1.40
Park Electrochemical Corp.	18.14	89.6	190	14.2	8.1	NA	18.5	13.9	10.7	1.66
Teijin Limited	19.50	88.0	6,253	7.3	6.5	6.2	12.3	NA	NA	0.94
Toray Industries, Inc.	8.36	90.6	19,165	8.7	8.0	7.5	14.5	NA	NA	1.05
Mean		86.4%	4,186	10.6x	9.4x	8.6x	14.4x	15.4x	12.6x	2.16x
Median		89.7%	1,013	11.1x	8.1x	8.8x	14.5x	14.7x	12.8x	1.53x

LTM = Latest Twelve Months

Enterprise Value = (Market Capitalization + Management Equity + Debt + Preferred Stock + Non-Controlling Interest) - (Cash & Equivalents + Net Non-Operating Assets)

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

EBIT = Earnings Before Interest and Taxes

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Selected Public Companies Analysis - Performance Materials

COMPANY INFORMATION		REVENUE GROWTH				EBITDA GROWTH				EBITDA MARGIN				RETURNS
Company Name	3-YR CAGR	LTM	2017	2018	3-YR CAGR	LTM	2017	2018	3-YR AVG	LTM	2017	2018	LTM ROA ⁽¹⁾	
Baotek Industrial Materials Ltd.	0.6%	34.1%	NA	NA	NM	NM	NA	NA	0.6%	10.9%	NA	NA	NA	
FMS Enterprises Migun Ltd.	13.7	11.2	NA	NA	15.1%	14.8%	NA	NA	34.7	35.0	NA	NA	36.7%	
Hexcel Corporation	6.1	5.2	1.8%	10.1%	11.2	8.8	6.9%	11.5%	21.8	22.7	23.8%	24.1%	13.8	
Jiangsu Changhai Composite Materials Co., Ltd	24.3	7.7	24.4	21.8	46.8	64.1	-0.8	21.7	24.4	34.4	23.4	23.4	13.4	
Nitto Boseki Co., Ltd.	-0.7	-3.3	NA	NA	10.9	-1.4	NA	NA	17.1	18.3	NA	NA	8.0	
Park Electrochemical Corp.	-11.6	-21.4	5.2	20.7	-20.5	-46.2	75.5	NA	15.4	11.7	19.5	0.0	3.3	
Teijin Limited	-1.9	-6.3	14.4	1.3	14.6	-9.6	12.4	4.9	12.3	12.9	12.7	13.1	5.9	
Toray Industries, Inc.	3.3	-3.7	7.6	4.4	9.2	-4.0	9.4	6.9	11.6	12.1	12.3	12.6	6.1	
Mean	4.2%	2.9%	10.7%	11.7%	12.5%	3.8%	20.7%	11.2%	17.2%	19.8%	18.3%	14.6%	12.5%	
Median	2.0%	0.9%	7.6%	10.1%	11.2%	-1.4%	9.4%	9.2%	16.3%	15.6%	19.5%	13.1%	8.0%	
Performance Materials ⁽²⁾	NA	NA	-0.9%	8.7%	NA	NA	9.7%	19.3%	NA	10.4%	11.3%	12.6%	1.7%	

LTM = Latest Twelve Months

CAGR = Compounded Annual Growth Rate

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

ROA = Return on Assets

⁽¹⁾ ROA is calculated as LTM Adjusted EBIT divided by 2016 Total Assets

⁽²⁾ LTM Metrics as of Fiscal Year Ended December 31, 2016

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Valuation Analysis

Selected Public M&A Transactions Analysis – Performance Materials

Selected M&A Transaction Analysis - Performance Materials

(\$ in millions)

Announced	Target Name	Target Business Description	Acquirer Name	Enterprise Value	LTM Revenue	LTM EBITDA	EBITDA Margin	EV / Revenue	EV / EBITDA
10/24/2016	International Textile Group, Inc.	Operates as a diversified textile manufacturing company offering fabrics for industrial and commercial end markets	Platinum Equity, LLC	\$480.8	\$606.6	\$62.7	10.3%	0.79x	7.7x
08/21/2015	Taishan Fiberglass Inc.	Manufactures and sells fiberglass products and other composite materials in China	Sinoma Science & Technology Co., Ltd.	\$1,640.4	\$520.2	\$165.1	31.7%	3.15x	9.9x
7/30/2015	AVINTIV Inc.	Designs and manufactures specialty materials and synthetic fabrics for use in infection prevention, high-performance solutions, and personal care applications	Berry Plastics Group, Inc.	\$2,450.0	\$1,898.6	\$226.0	11.9%	1.29x	10.8x
07/20/2015	Koninklijke Ten Cate nv	Develops, produces, and sells functional materials, including fabrics and composites in industrial, aerospace and automotive end markets	Parcom Capital; Gilde Buyout Fund IV; Gilde Buy Out Partners BV	\$960.6	\$1,242.6	\$104.7	8.4%	0.77x	9.2x
5/31/2015	JPS Industries, Inc. (1)	JPS Industries, Inc. manufactures sheet and mechanically formed glass and aramid substrate materials. Its products are used in printed electronic circuit boards; advanced composite materials; and civilian and military aerospace components.	Handy & Harman Group Ltd.	\$114.3	\$162.7	\$16.9	10.4%	0.70x	6.8x
8/20/2013	Fiberweb plc	Develops, manufactures, and supplies nonwoven fabrics in the United States and Internationally	Polymer Group, Inc.	\$258.5	\$441.5	\$42.7	9.7%	0.59x	6.1x
4/12/2012	UMECO plc	Provides advanced composite materials primarily to the aerospace and defense, wind energy, recreation, and automotive industries	Cytec UK Holdings Limited	\$411.3	\$356.6	\$41.1	11.5%	1.15x	10.0x
4/11/2012	Guilford Mills, Inc.	Manufactures and supplies fabrics and composites for OEMs worldwide	Lear Corporation	\$257.0	\$448.9	\$45.3	10.1%	0.57x	5.7x
(1) Denotes acquisitions by Handy & Harman Ltd. and related subsidiaries Source: Capital IQ and company filings			Mean	\$821.6	\$709.7	\$88.1	13.0%	1.13x	8.3x
			Median	\$446.0	\$484.5	\$54.0	10.4%	0.78x	8.4x

Valuation Analysis

Selected Public Companies Financial Performance and Trading Multiples Analysis – Kasco

Selected Public Companies Analysis - Kasco

(US\$ in millions, except per share data)

COMPANY INFORMATION		MARKET DATA		ENTERPRISE VALUE AS MULTIPLE OF						
Company Name	Common Stock Price on 06/22/2017	% of 52-Week High	Enterprise Value	LTM EBITDA	2017 EBITDA	2018 EBITDA	LTM EBIT	2017 EBIT	2018 EBIT	LTM Revenue
NKT A/S	\$80.98	93.6%	\$2,905	13.6x	13.7x	8.0x	17.0x	19.4x	11.5x	1.24x
Standex International Corporation	90.50	89.4	1,281	13.5	11.4	NA	16.7	14.3	NA	1.75
Tennant Company	73.10	95.2	1,344	15.2	12.8	11.0	19.3	17.5	14.3	1.64
The Middleby Corporation	122.03	80.9	7,673	NM	13.8	12.6	NM	15.4	13.7	3.96
Welbilt, Inc.	18.88	89.4	3,920	14.9	14.2	12.9	18.3	17.2	15.3	2.69
Mean		89.7%	3,425	14.3x	13.2x	11.1x	17.8x	16.8x	13.7x	2.25x
Median		89.4%	2,905	14.3x	13.7x	11.8x	17.6x	17.2x	14.0x	1.75x

LTM = Latest Twelve Months

Enterprise Value = (Market Capitalization + Management Equity + Debt + Preferred Stock + Non-Controlling Interest) - (Cash & Equivalents + Net Non-Operating Assets)

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

EBIT = Earnings Before Interest and Taxes

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Selected Public Companies Analysis - Kasco

COMPANY INFORMATION	REVENUE GROWTH				EBITDA GROWTH				EBITDA MARGIN				RETURNS LTM ROA ⁽¹⁾
	3-YR CAGR	LTM	2017	2018	3-YR CAGR	LTM	2017	2018	3-YR AVG	LTM	2017	2018	
NKT A/S	-0.2%	-5.4%	-4.9%	10.5%	9.5%	9.1%	-0.4%	71.7%	8.3%	9.1%	9.5%	14.8%	5.7%
Standex International Corporation	3.7	-3.4	5.2	6.3	7.7	-6.4	19.4	NA	12.9	13.0	14.8	NA	9.0
Tennant Company	2.4	1.7	21.2	8.0	0.5	4.3	21.1	16.4	10.9	10.8	10.7	11.6	14.9
The Middleby Corporation	11.1	-27.4	0.9	6.2	NM	NM	8.2	9.1	NM	NM	23.7	24.3	16.1
Welbilt, Inc.	-1.9	-5.9	-0.1	3.4	2.8	4.9	6.0	10.3	15.7	18.0	18.9	20.2	11.7
Mean	3.0%	-8.1%	4.5%	6.9%	5.1%	3.0%	10.9%	26.9%	11.9%	12.7%	15.5%	17.7%	11.5%
Median	2.4%	-5.4%	0.9%	6.3%	5.3%	4.6%	8.2%	13.3%	11.9%	11.9%	14.8%	17.5%	11.7%
Kasco ⁽²⁾	1.0%	-1.5%	4.2%	7.8%	-8.6%	-21.5%	31.2%	12.8%	NA	7.5%	9.3%	9.9%	11.9%

LTM = Latest Twelve Months

CAGR = Compounded Annual Growth Rate

EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

ROA = Return on Assets

⁽¹⁾ ROA is calculated as LTM Adjusted EBIT divided by 2016 Total Assets

⁽²⁾ LTM Metrics as of Fiscal Year Ended December 31, 2016

Source: S&P Capital IQ, SEC Filings, Annual and Interim Reports.

Valuation Analysis

Selected Public M&A Transactions Analysis – Kasco

Selected M&A Transaction Analysis - Kasco

(\$ in millions)

Announced	Target Name	Target Business Description	Acquirer Name	Enterprise Value	LTM Revenue	LTM EBITDA	EBITDA Margin	EV / Revenue	EV / EBITDA	
02/22/2017	IP Cleaning S.p.A.	Produces cleaning machines and equipment	Tennant Company	\$350.0	\$203.0	\$29.6	14.6%	1.72x	11.8x	
1/14/2015	DMG Mori Seiki AG (nka:DMG Mori Aktiengesellschaft)	Produces and sells cutting machine tools worldwide	DMG MORI GmbH	\$2,391.8	\$2,717.6	\$259.5	9.6%	0.88x	9.2x	
				Mean	\$1,370.9	\$1,460.3	\$144.6	12.1%	1.30x	10.5x
				Median	\$1,370.9	\$1,460.3	\$144.6	12.1%	1.30x	10.5x

Source: Capital IQ and company filings

3.

SPLP Preferred Analysis

SPLP Preferred

Summary of Terms & Conditions

Summary of Terms and Conditions

Issuer	Steel Partners Holdings L.P.
Ranking	The SPLP Preferred will rank senior to SPLP's common units.
Liquidation Preference	The SPLP Preferred will have a liquidation preference of \$25.00 per unit.
Dividend	Dividends will accrue at a rate of 6.0% per annum, payable in cash or in kind (or a combination of cash and in kind) at the option of SPLP.
Redemption	SPLP may redeem the SPLP Preferred at its option, in whole or in part, at any time or from time to time after the original issuance date, and shall be required to redeem the SPLP Preferred in full on the maturity date of February 7, 2026. SPLP will offer to repurchase or redeem, for cash on a pro rata basis, on or prior to February 7, 2020, 20.0% of the SPLP Preferred to be issued in the Proposed Transaction
Redemption Price	The redemption price of the SPLP Preferred will be payable, at SPLP's option, in cash, SPLP's common units or a combination of cash and units. If all or part of the redemption payment is made in SPLP's common units, the number of units comprising such payment will be determined by reference to the VWAP of the SPLP's common units for the 60 consecutive trading day period immediately preceding the applicable redemption date.
Voting Rights	The SPLP Preferred would not have voting rights, except to the extent required by applicable law or NYSE regulations.
Covenants	SPLP shall use its commercially reasonable efforts to maintain the listing of the SPLP Preferred on the NYSE or other securities exchange or quotation system on which the SPLP Preferred is listed or quoted. In addition, payment of the redemption price of the SPLP Preferred in SPLP's common units would be subject to the registration of such common units under the Securities Act of 1933, as amended.
Registration/Listing	The SPLP Preferred will be registered with the Securities and Exchange Commission and will be listed on the NYSE.

SPLP Preferred Analysis

Yield Buildup Analysis

- Duff & Phelps selected a credit spread for the SPLP Preferred based on an analysis of SPLP's credit profile which resulted in a synthetic credit rating of BB, as well as indicative pricing SPLP has recently received from a third party financial institution for a senior secured revolving credit facility which will be used to refinance the company's existing indebtedness.
- In its determination of the market yield, Duff & Phelps also incorporated certain adjustments to account for the differences between the SPLP Preferred and the benchmarks.

Spreads

As of June 22, 2017	Yield						Spread					
	3Y	4Y	5Y	7Y	8Y	9Y	3Y	4Y	5Y	7Y	8Y	9Y
U.S. Treasury	1.48%	1.66%	1.76%	1.98%	2.06%	2.12%	NA	NA	NA	NA	NA	NA
US Industrial BB+	2.96%	3.29%	3.59%	4.13%	4.33%	4.50%	1.48%	1.63%	1.83%	2.15%	2.27%	2.38%
US Industrial BB	3.02%	3.37%	3.68%	4.24%	4.45%	4.63%	1.54%	1.71%	1.93%	2.26%	2.39%	2.51%
US Industrial BB-	3.22%	3.62%	3.99%	4.56%	4.78%	4.96%	1.74%	1.96%	2.23%	2.58%	2.72%	2.84%
US Industrial B+	3.55%	3.94%	4.30%	4.92%	5.17%	5.37%	2.07%	2.28%	2.54%	2.94%	3.11%	3.25%
US Industrial B	3.81%	4.21%	4.57%	5.13%	5.35%	5.54%	2.33%	2.55%	2.81%	3.15%	3.30%	3.41%
US Industrial B-	4.26%	4.68%	5.05%	5.64%	5.87%	6.06%	2.78%	3.02%	3.29%	3.66%	3.81%	3.94%

SPLP Third Party Indicative Term Sheet - Senior Secured Credit Facility

Floating Rate	Fixed Rate Equivalent	Spread
Libor + 2.50%	4.08%	2.32%
Maturity: 5-Years		
Prepayment Penalty: None		

Yield Build-Up Analysis

	February 2020			February 2026		
	Low	-	High	Low	-	High
U.S. Treasury Rate	1.48%	-	1.48%	2.12%	-	2.12%
Selected Credit Spread	2.25%	-	3.25%	2.25%	-	3.25%
Subordination Premium	0.50%	-	1.00%	0.50%	-	1.00%
PIK Premium	0.25%	-	0.75%	0.25%	-	0.75%
Lack of Call Protection Premium	0.75%	-	1.25%	0.75%	-	1.25%
Total Market Yield (Rounded)	5.20%	-	7.70%	5.75%	-	8.25%
Selected Yield	6.50%			7.25%		

SPLP Preferred Analysis

Valuation Analysis

Discounted Cash Flow Analysis of the SPLP Preferred

(\$)

	Redemption on February 7, 2020		
	2017	2018	2019
	6/7-12/15	3/15-12/15	3/15-2/7/2020
Dividend Cash Payment at 6.00%	\$0.76	\$1.50	\$1.72
Present Value of Dividend Cash Interest Payment 6.50%	\$0.75	\$1.40	\$1.50
Present Value of SPLP Preferred Principal 6.50%			21.18
Total Value of SPLP Preferred			\$24.82
Discount Rate Range		6.50%	
Per Unit Value	\$24.82		

	Redemption at Maturity on February 7, 2026								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	6/7-12/15	3/15-12/15	3/15-12/15	3/15-12/15	3/15-12/15	3/15-12/15	3/15-12/15	3/15-12/15	3/15-2/7/2026
Dividend Cash Payment at 6.00%	\$0.76	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.72
Present Value of Dividend Cash Interest Payment 7.25%	0.74	1.39	1.29	1.21	1.12	1.05	0.98	0.91	0.97
Present Value of SPLP Preferred Principal 7.25%									13.7
Total Value of SPLP Preferred									\$23.32
Discount Rate Range		7.25%							
Per Unit Value	\$23.32								

Weighted Average Per Unit Value (1) **\$23.62**

(1) SPLP will offer to repurchase or redeem, for cash on a pro rata basis, on or prior to February 7, 2020, 20% of the SPLP Preferred to be issued in the Proposed Transaction. As such, a 20% weighting was applied to the per unit value based on a redemption on February 7, 2020, and an 80% weighting was applied to the per unit value based on a redemption at maturity on February 7, 2026.

SPLP Preferred PIK Spread Analysis

PIK Versus Cash Coupon Premium

- The table below summarizes the difference in yield spread of debt securities with an accruing payment-in-kind ("PIK") feature relative to those with cash payment requirements.

PIK Spread Analysis

(\$ in millions)

Company	Security Description	Debt Rating at Issuance	Original Issue Amount	Issue Date	Maturity	Cash Coupon	PIK Coupon	PIK vs. Cash Coupon Difference (bps)	Cash Coupon Difference (1) (bps)
Affinion International Holdings Ltd	13.500% Sr Subordinate	Caa3	\$360	7/26/2011	8/15/2018	13.500%			(600)
	7.5% Priv Placement PIK	B-	\$110	11/2/2015	7/30/2018	7.500%	7.500%	0	
Avanti Communications Group PLC	10.0% 1st Lien Priv Placement	Ca	\$125	9/26/2013	10/1/2019	10.000%			200
	12.0% Priv Placement PIK	NA	\$685	1/26/2017	10/1/2023	12.000%	17.500%	550	
BI-LO LLC / BI-LO Finance Corp	1st Lien Priv Placement	B-	\$425	1/27/2011	2/15/2019	9.250%			(63)
	Priv Placement Toggle	CCC	\$475	9/17/2013	9/15/2018	8.625%	9.375%	75	
Bumble Bee Holdco SCA	1st Lien Priv Placement	B-	\$605	12/6/2010	12/15/2017	9.000%			63
	Priv Placement Toggle	CCC-	\$150	3/7/2011	3/15/2018	9.625%	10.375%	75	
DFC Finance Corp	1st Lien Priv Placement	CCC-	\$800	6/6/2014	6/15/2020	10.500%			(50)
	Priv Placement PIK	CCC-	\$759	6/27/2016	6/16/2020	10.000%	12.000%	200	
DynCorp International Inc	Sr. Unsecured	CCC-	\$455	6/21/2011	7/1/2017	10.375%			0
	2nd Lien PIK	CCC	\$371	5/2/2016	11/30/2020	10.375%	11.875%	150	
Everi Payments Inc	Sr Unsecured	CCC+	\$350	11/4/2015	1/15/2022	10.000%			(275)
	1st Lien PIK	NA	\$335	4/15/2015	4/15/2021	7.250%	7.250%	0	
Gol LuxCo SA	Sr. Unsecured Priv Placement	CCC	\$325	9/18/2014	1/24/2022	8.875%			(37)
	Euro-Dollar PIK	NA	\$15	7/1/2016	12/20/2018	8.500%	9.500%	100	
Gold Reserve Inc	Sr Subordinate Convertible	NA	\$104	5/15/2007	6/15/2022	5.500%			550
	Priv Placement PIK	NA	\$44	11/30/2015	12/31/2018	11.000%	11.000%	0	
HIG BBC Intermediate Holdings LLC / HIG BBC Holdings	Priv Placement	B-	\$230	3/8/2013	3/15/2018	9.375%			113
	Priv Placement Toggle	NA	\$78	3/18/2014	9/15/2018	10.500%	10.500%	0	
HT Intermediate Holdings Corp	Priv Placement 1st Lien	B-	\$355	6/6/2013	6/15/2021	9.250%			275
	Priv Placement Toggle	CCC+	\$110	11/25/2013	5/15/2019	12.000%	12.750%	75	
Hub Holdings LLC / Hub Holdings Finance Inc	2nd Lien Priv Placement	CCC+	\$300	1/27/2016	2/15/2021	9.250%			(113)
	Priv Placement Toggle	CCC+	\$380	7/1/2014	7/15/2019	8.125%	8.875%	75	
iHeartCommunications	11.25% Sr Secured	CCC+	\$575	7/8/2013	3/1/2021	11.250%			275
	14.00% Sr Unsecured PIK	CCC-	\$1,823	6/21/2013	2/1/2021	14.000%	14.000%	0	
Infor Software Parent LLC / Infor Software Parent Inc	1st Lien Priv Placement	B	\$500	8/11/2015	8/15/2020	5.750%			138
	Priv Placement Toggle	CCC	\$750	4/3/2014	5/1/2021	7.125%	7.875%	75	

SPLP Preferred PIK Spread Analysis

PIK Versus Cash Coupon Premium (Cont.)

PIK Spread Analysis (continued)

(\$ in millions)

Company	Security Description	Debt Rating at Issuance	Original Issue Amount	Issue Date	Maturity	Cash Coupon	PIK Coupon	PIK vs. Cash Coupon Difference (bps)	Cash Coupon Difference (1) (bps)
Jack Cooper Enterprises Inc	1st Lien	C	\$375	5/12/2016	6/1/2020	9.250%			125
	Priv Placement Toggle	D	\$150	6/5/2014	3/15/2019	10.500%	11.250%	75	
Jo-Ann Stores Holdings Inc	Sr Unsecured Private Placement	CCC+	\$450	3/3/2011	3/15/2019	8.125%			163
	Priv Placement Toggle	CCC+	\$325	10/9/2012	10/15/2019	9.750%	10.500%	75	
LBI Media Inc	1st Lien Priv Placement	CCC	\$220	3/11/2011	4/15/2019	9.250%			225
	2nd Lien Priv Placement	CC	\$119	11/15/2012	4/15/2020	11.500%	13.500%	200	
Neiman Marcus Group	8.00% Sr Unsecured	CCC+	\$960	10/21/2013	10/15/2021	8.000%			75
	8.75% - 9.50% Sr PIK Toggle	CCC+	\$600	10/21/2013	10/15/2021	8.750%	9.500%	75	
Nuverra Environmental Solutions Inc	Sr Unsecured	NR	\$400	7/17/2012	4/15/2018	9.875%			13
	2nd Lien PIK	NR	\$327	3/16/2016	4/15/2021	10.000%	12.500%	250	
Wave Holdco LLC / Wave Holdco Corp	Sr Unsecured	CCC+	\$400	8/9/2012	9/1/2020	8.125%			13
	Sr Unsecured PIK	CCC+	\$175	6/18/2014	7/15/2019	8.250%	9.000%	75	
ZIM Integrated Shipping Services Ltd	Sr Unsecured	NR	\$367	7/16/2014	6/20/2023	3.000%			0
	Sr Unsecured PIK	NR	\$95	7/16/2014	6/21/2023	3.000%	5.000%	200	

Mean	10.554%	111	52
Median	10.500%	75	63

(1) Reflects the difference in coupon for interest paid in kind for PIK notes vs. pari passu cash pay notes of the same issuer

Source: Capital IQ, Bloomberg, and SEC Filings

Screening Criteria: Searched Bloomberg and Capital IQ for PIK note issuances within the last several years that also issued pari passu cash pay notes at the same time. Search excludes financial firms

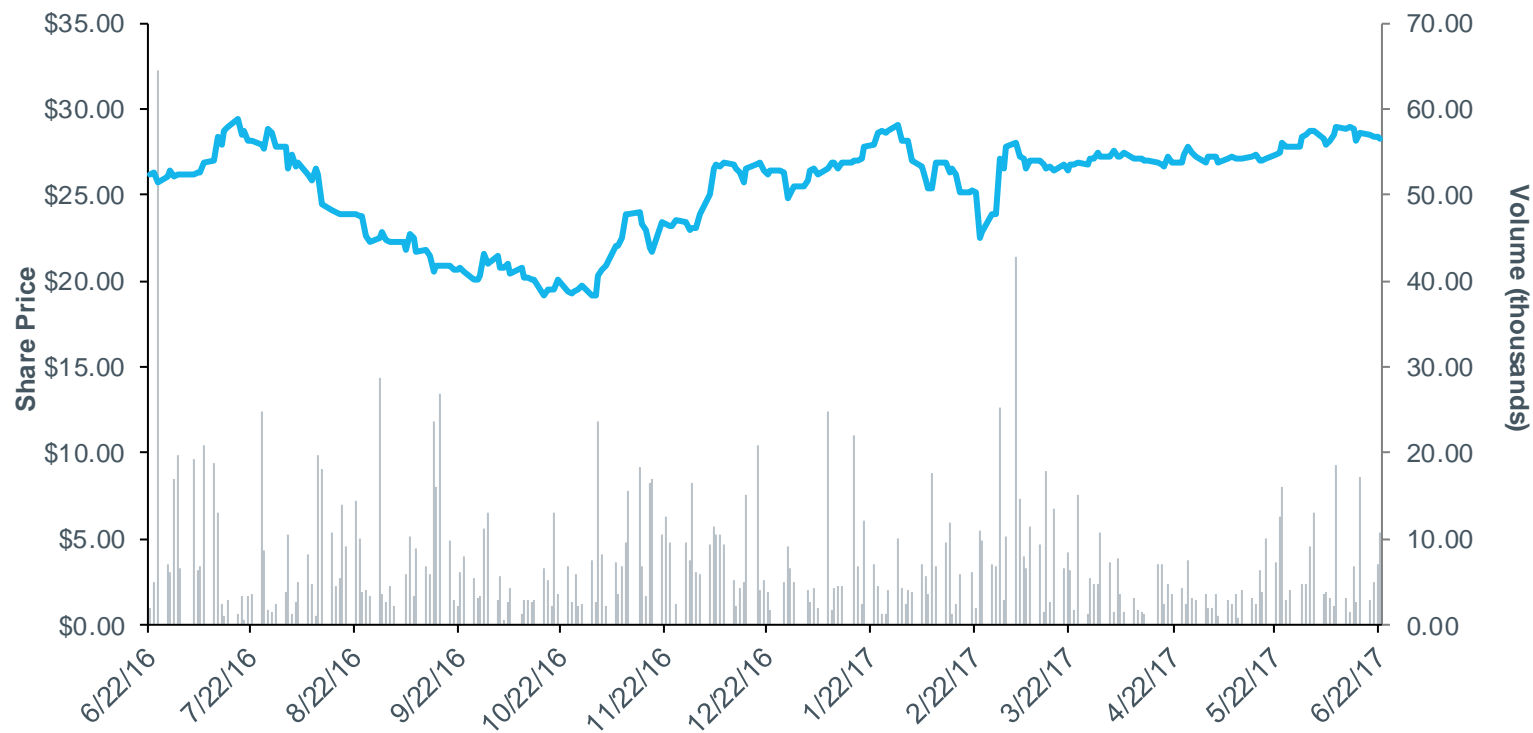
Appendices

Appendix 1

Handy & Harman Ltd. Trading Analysis

Handy & Harman Ltd. Trading Analysis

1-Year Trading History



Handy & Harman Ltd. Trading Analysis

Trading Summary

Handy & Harman Ltd. - Historical Daily Trading Volume (In Thousands)

One-Week Average	9	Two-Week Average	8	One-Month Average	7
% of Shares Outstanding	0.1%	% of Shares Outstanding	0.1%	% of Shares Outstanding	0.1%
% of Float	0.3%	% of Float	0.3%	% of Float	0.2%
Two-Month Average	5	Six-Month Average	6	One-Year Average	7
% of Shares Outstanding	0.0%	% of Shares Outstanding	0.1%	% of Shares Outstanding	0.1%
% of Float	0.2%	% of Float	0.2%	% of Float	0.3%
Two-Year Average	12	Three-Year Average	19	Four-Year Average	19
% of Shares Outstanding	0.1%	% of Shares Outstanding	0.2%	% of Shares Outstanding	0.2%
% of Float	0.4%	% of Float	0.6%	% of Float	0.7%
Total Shares Outstanding	12,221				
Public Float Shares	2,918				
Public Float %	23.9%				

Handy & Harman Ltd. - Common Stock Overview

Stock Price as of June 22, 2017	\$28.25
Stock Price as of June 22, 2016	26.20
Stock Price as of June 22, 2015	34.64
30-Day Volume Weighted Average Price ("VWAP")	\$28.46
60-Day VWAP	27.77
90-Day VWAP	27.53
52-Week Average Closing Price	\$25.40
52-Week High Closing Price (7/18/2016)	29.45
52-Week Low Closing Price (10/31/2016)	19.15
104-Week Average Closing Price	\$24.92
104-Week High Closing Price (6/26/2015)	34.77
104-Week Low Closing Price (1/25/2016)	16.07

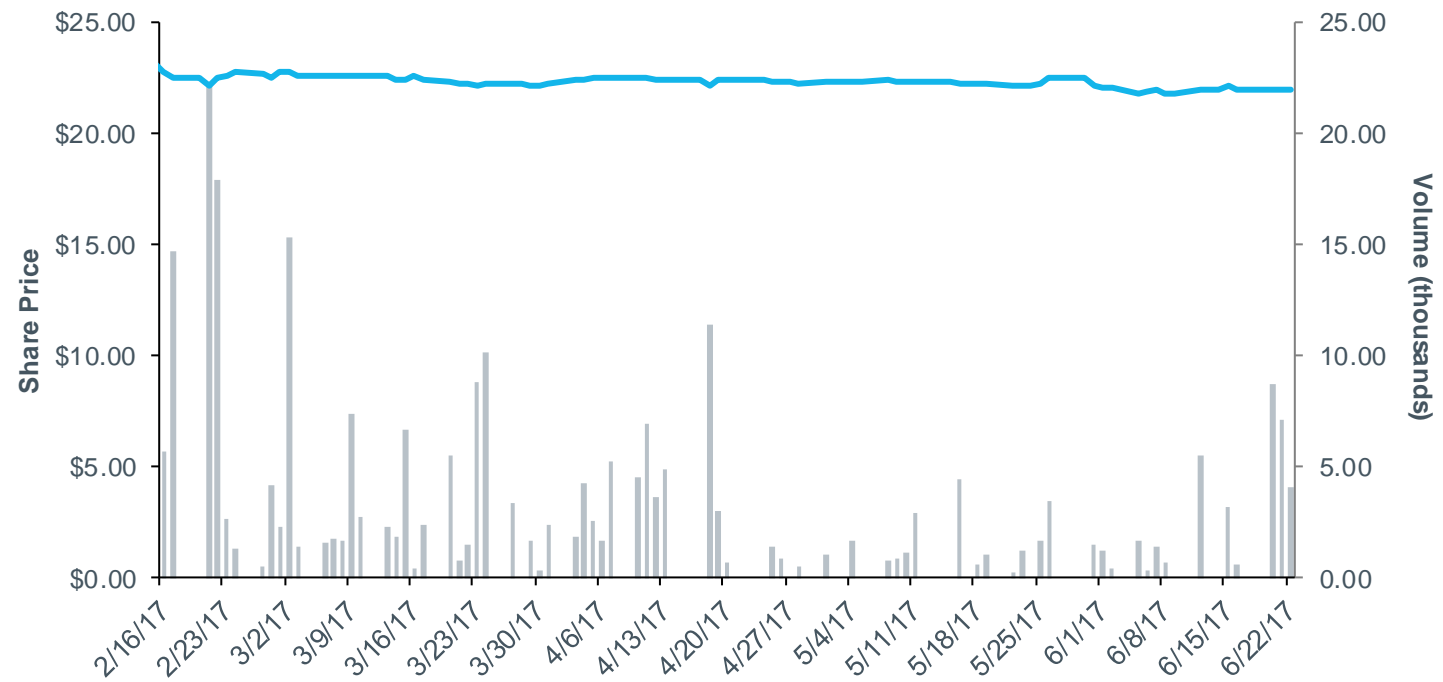
Source: Bloomberg, SEC Filings, and Capital IQ

Appendix 2

SPLP Preferred Trading Analysis

SPLP Preferred Trading Analysis

Trading History



SPLP Preferred - Trading Overview

Stock Price as of June 22, 2017	\$21.96
30-Day VWAP	\$21.99
60-Day VWAP	22.15

Source: Bloomberg, SEC Filings, and Capital IQ

Appendix 3

Assumptions, Qualifications, and Limiting Conditions

Assumptions

If issued, the Opinion letter will include assumptions, qualifications and limiting conditions in the following form.

Assumptions and Reliance – In performing its analyses and rendering the Opinion with respect to the Proposed Transaction, Duff & Phelps, with the Company's consent:

- Relied upon the accuracy, completeness, and fair presentation of all information, data, advice, opinions and representations obtained from public sources or provided to it from private sources, including Company management and Willis Towers Watson, and did not independently verify such information;
- Relied upon the fact that the Special Committee and the Company have been advised by counsel as to all legal matters with respect to the Proposed Transaction, including whether all procedures required by law to be taken in connection with the Proposed Transaction have been duly, validly and timely taken;
- Assumed that any estimates, evaluations, forecasts and projections furnished to Duff & Phelps were reasonably prepared and based upon the best currently available information and good faith judgment of Company management, and Duff & Phelps expresses no opinion with respect to such projections or the underlying assumptions;
- Assumed that information supplied and representations made by Company management are substantially accurate regarding the Company and the Proposed Transaction;
- Assumed that the representations and warranties of the Company made in the Merger Agreement are accurate;
- Assumed that the final versions of all documents reviewed by Duff & Phelps in draft form conform in all material respects to the drafts reviewed;
- Assumed that there has been no material change in the assets, liabilities, financial condition, results of operations, business, or prospects of the Company since the date of the most recent financial statements and other information made available to Duff & Phelps, and that there is no information or facts that would make the information reviewed by Duff & Phelps incomplete or misleading;
- Assumed that there has been no material change in the assets, liabilities, financial condition, results of operations, business, or prospects of the Company or Holdings since the date of the most recent financial statements and other information made available to Duff & Phelps, and that there is no information or facts that would make the information reviewed by Duff & Phelps incomplete or misleading;
- Assumed that all of the conditions required to implement the Proposed Transaction will be satisfied and that the Proposed Transaction will be completed in accordance with the Merger Agreement without any amendments thereto or any waivers of any terms or conditions thereof; and
- Assumed that all governmental, regulatory or other consents and approvals necessary for the consummation of the Proposed Transaction will be obtained without any adverse effect on the Company or the contemplated benefits expected to be derived in the Proposed Transaction.
- To the extent that any of the foregoing assumptions or any of the facts on which the Opinion is based prove to be untrue in any material respect, the Opinion cannot and should not be relied upon. Furthermore, in Duff & Phelps' analysis and in connection with the preparation of the Opinion, Duff & Phelps has made numerous assumptions with respect to industry performance, general business, market and economic conditions and other matters, many of which are beyond the control of any party involved in the Proposed Transaction.

Qualifications

The analysis is qualified by the following:

- Duff & Phelps has prepared the Opinion effective as of the date hereof. The Opinion is necessarily based upon market, economic, financial and other conditions as they exist and can be evaluated as of the date hereof, and Duff & Phelps disclaims any undertaking or obligation to advise any person of any change in any fact or matter affecting the Opinion which may come or be brought to the attention of Duff & Phelps after the date hereof.
- Duff & Phelps did not evaluate the Company's solvency or conduct an independent appraisal or physical inspection of any specific assets or liabilities (contingent or otherwise). Duff & Phelps has not been requested to, and did not, (i) initiate any discussions with, or solicit any indications of interest from, third parties with respect to the Proposed Transaction, the assets, businesses or operations of the Company, or any alternatives to the Proposed Transaction, (ii) negotiate the terms of the Proposed Transaction, and therefore, Duff & Phelps has assumed that such terms are the most beneficial terms, from the Company's perspective, that could, under the circumstances, be negotiated among the parties to the Merger Agreement and the Proposed Transaction, or (iii) advise the Special Committee or any other party with respect to alternatives to the Proposed Transaction.
- Duff & Phelps is not expressing any opinion as to the market price or value of the Company's Common Stock (or anything else) after the announcement or the consummation of the Proposed Transaction. The Opinion should not be construed as a valuation opinion, credit rating, solvency opinion, an analysis of the Company's credit worthiness, as tax advice, or as accounting advice. Duff & Phelps has not made, and assumes no responsibility to make, any representation, or render any opinion, as to any legal, tax or accounting matter.
- In rendering the Opinion, Duff & Phelps is not expressing any opinion with respect to the amount or nature of any compensation to any of the Company's officers, directors, or employees, or any class of such persons, relative to the consideration to be received by the shareholders of Common Stock of the Company in the Proposed Transaction, or with respect to the fairness of any such compensation.

Limiting Conditions

Limiting Conditions – If issued, the Opinion will state:

- The Opinion is furnished solely for the use and benefit of the Special Committee in connection with its consideration of the Proposed Transaction and is not intended to, and does not, confer any rights or remedies upon any other person, and is not intended to be used, and may not be used, by any other person or for any other purpose, without Duff & Phelps' express consent.
- The Opinion (i) does not address the merits of the underlying business decision to enter into the Proposed Transaction versus any alternative strategy or transaction; (ii) does not address any transaction related to the Proposed Transaction; (iii) is not a recommendation as to how the Special Committee or any stockholder should vote or act with respect to any matters relating to the Proposed Transaction, or whether to proceed with the Proposed Transaction or any related transaction, and (iv) does not indicate that the consideration to be received is the best possibly attainable under any circumstances; instead, it merely states whether the consideration to be received in the Proposed Transaction is within a range suggested by certain financial analyses. The decision as to whether to proceed with the Proposed Transaction or any related transaction may depend on an assessment of factors unrelated to the financial analyses on which the Opinion is based. This letter should not be construed as creating any fiduciary duty on the part of Duff & Phelps to any party.
- The Opinion is solely that of Duff & Phelps, and Duff & Phelps' liability in connection with this letter shall be limited in accordance with the terms set forth in the engagement letter between Duff & Phelps and the Company dated March 23, 2017 (the "[Engagement Letter](#)").
- This letter is confidential, and its use and disclosure is strictly limited in accordance with the terms set forth in the Engagement Letter.