

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

**FORM 11-K**



(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2017**

**OR**

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

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

**Commission file number 1-15579**

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

**MSA RETIREMENT SAVINGS PLAN**

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

**MSA Safety Incorporated  
1000 Cranberry Woods Drive  
Cranberry Township, PA 16066**

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MSA RETIREMENT SAVINGS PLAN  
FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION

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\* Other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

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## Report of Independent Registered Public Accounting Firm

Plan Administrator and Participants  
MSA Retirement Savings Plan

### Opinion on the Financial Statements

We have audited the accompanying statements of net assets available for benefits of the MSA Retirement Savings Plan (the Plan) as of December 31, 2017 and 2016, and the related statements of changes in net assets available for benefits for the years then ended, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2017 and 2016, and the changes in net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

### Basis for Opinion

These financial statements are the responsibility of the Plan’s management. Our responsibility is to express an opinion on the Plan’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Plan in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

### Supplemental Information

The supplemental Schedule H, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2017 has been subjected to audit procedures performed in conjunction with the audit of the Plan’s financial statements. The supplemental information is the responsibility of the Plan’s management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor’s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ Baker Tilly Virchow Krause, LLP

We have served as the Plan's auditor since 2010

Pittsburgh, Pennsylvania  
June 27, 2018

MSA RETIREMENT SAVINGS PLAN  
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS  
(Dollars in thousands)

	December 31,	
	2017	2016
Investments, at fair value:		
Registered investment companies	\$ 231,652	\$ 208,900
Common collective trust	26,201	34,911
MSA common stock fund	3,469	3,187
Total assets available for benefits	261,322	246,998
Liabilities	—	—
Net assets available for benefits	<u>261,322</u>	<u>246,998</u>

The accompanying notes are an integral part of these financial statements.

MSA RETIREMENT SAVINGS PLAN  
STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
(Dollars in thousands)

	For the year ended December 31,	
	2017	2016
Investment income:		
Net appreciation in fair value of investments	\$ 26,148	\$ 9,779
Interest	438	490
Dividends	12,942	6,760
Net investment income	39,528	17,029
Interest income on notes receivable from participants	—	1
Revenue sharing	126	100
Participants' contributions	10,417	10,452
Participants' contributions – rollovers	436	148
Employer contributions	4,369	4,323
Total Additions	54,876	32,053
Distributions to participants	40,495	17,508
Administrative expense	57	41
Total Deductions	40,552	17,549
Net increase	14,324	14,504
Net assets available for benefits:		
Beginning of year	246,998	232,494
End of year	261,322	246,998

The accompanying notes are an integral part of these financial statements.

MSA RETIREMENT SAVINGS PLAN  
NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016  
(Dollars in thousands)

Note 1 – Description of Plan

The description of the MSA Retirement Savings Plan (“Plan”) provided below is for general information purposes only. More complete information is included in the applicable Plan document.

The Plan is a defined contribution plan maintained by MSA Safety Incorporated (“MSA” or the “Company”) for eligible U.S. employees (“Participants”). The Plan provides for automatic enrollment of new Participants at a Participant contribution rate of 3% of the Participant’s pre-tax earnings. Participants may elect to not contribute or change their contribution rate during a 45-day election period. Participants may elect to contribute from 1% to 25% of their pre-tax earnings (highly compensated Participants are limited to 8%). The Plan allows for matching contributions equal to 100% of the first 1% and 50% of the next 6% of a Participant’s eligible pay. Company matching contributions may not exceed 4% of a Participant’s eligible pay. Participants who have attained age 50 before the end of the plan year are eligible to make catch-up contributions. Participants may also contribute amounts representing distributions from other qualified defined contribution plans (rollovers). The Plan permits deferral of federal income taxes on Participants’ contributions, as provided for under Section 401(k) of the Internal Revenue Code (“IRC”), and the Plan permits after-tax contributions for the remainder of the Plan year after the employee has reached the deferral limit.

The Plan provides a number of investment options in registered investment companies, a common collective trust, and Company common stock. Participants may direct the investment of their account into any combination of the available investment options.

Participants are vested immediately in their contributions plus actual earnings thereon. Company matching contributions vest after two years of continuous service with the Company. Each Participant’s account is credited with the Participant’s contributions and allocations of (a) the Company’s matching contributions and (b) Plan earnings, and charged with an allocation of administrative expenses. Allocations are based on Participant earnings or account balances, as defined. The benefit to which a Participant is entitled is the benefit that can be provided from the Participant’s vested account. Participants or their beneficiaries are entitled to the current value of their accounts in the Plan upon death or upon termination of their employment with the Company after attainment of the vesting period.

On termination of service due to death, disability, retirement, or other reasons, Participants may elect to receive a distribution of their vested account balance as a single sum or in monthly installments, request a direct rollover of their vested account balance into an eligible retirement plan, or maintain their account balance in the Plan, subject to certain restrictions. The Plan generally does not permit hardship withdrawals, with the exception of certain predecessor plan balances.

Participant loans are not permitted by the Plan. As a result of Plan mergers, the Plan will occasionally hold existing participant loans through the settlement period. No such residual Participant loans were held as of December 2017 and 2016.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”).

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan at any time according to the provisions of ERISA. In the event of Plan termination, Participants will become fully vested in their accounts and will receive a lump sum cash payment, or some other method of payment in accordance with the Plan provisions, equal to their vested account balance.

The Plan is administered by a committee appointed by the Board of Directors of the Company. The committee establishes rules of procedure, interprets the provisions of the Plan, and decides all questions of administration.

Fidelity Management Trust Company is the trustee of the Plan. Fidelity Workplace Services LLC provides recordkeeping services for the Plan.

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Note 2 – Summary of Significant Accounting Policies

*Accounting method* – The financial statements of the Plan are prepared using the accrual basis of accounting.

*Use of estimates* – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

*Investments* – The Plan's investments are reported at fair value and consist of various registered investment companies, a common collective trust (Fidelity Managed Income Portfolio II) and the MSA common stock fund. See Note 4 for discussion of fair value measurements.

The average yield to maturity and crediting interest rate for the insurance contracts held within the common collective trust was 1.8% and 1.6% at December 31, 2017 and 2016, respectively.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation in fair value of investments includes the Plan's gains and losses on investments bought and sold, as well as held, during the year.

*Distributions to Participants* – Distributions to Participants are recorded when paid. At December 31, 2017 and 2016, there were no significant unpaid benefits allocated to accounts of Participants who had elected to withdraw from the Plan.

*Funding* – The Plan is funded by contributions from Participants and the Company. The cost of administering the Plan is borne by the Plan. Investment management fees paid by each fund are deducted directly from investment income.

*Subsequent events* – The Plan has evaluated subsequent events and has concluded that all events that would require recognition or disclosure are appropriately reflected in these financial statements.

Note 3 – Related Party and Party-In-Interest Transactions

Certain Plan investments are shares of registered investment companies and a common collective trust managed by Fidelity Management Trust Company. Fidelity Management Trust Company is the trustee of the Plan and, therefore, these transactions are considered to be party-in-interest transactions. Fees paid by the Plan to Fidelity Management Trust Company for administrative services were \$57 and \$41 for the years ended December 31, 2017 and 2016, respectively.

Certain Plan investments are publicly traded common stock of the Company. During 2017, the Plan purchased 5,570 shares of Company stock at an aggregate cost of \$401 and sold 7,075 shares of Company stock for total proceeds of \$514. During 2016, the Plan purchased 6,820 shares of Company stock at an aggregate cost of \$341 and sold 10,165 shares of Company stock for total proceeds of \$509. The Plan received \$59 and \$60 in dividends on Company stock during 2017 and 2016, respectively.

The Company performs administrative functions on behalf of the Plan, for which no fees are charged.

Note 4 – Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are:

Level 1—Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3—Unobservable inputs for the asset or liability.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for Plan assets measured at fair value. There have been no changes in the methodologies used at December 31, 2017 and 2016.

*Registered investment companies* – These investments are public investment vehicles valued using the Net Asset Value (“NAV”) provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The NAV is a quoted price in an active market and is classified within Level 1 of the valuation hierarchy.

*Common collective trust* – This investment is a public investment vehicle valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The NAV, as provided by the trustee, is used as a practical expedient to estimate fair value. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV. The fund's investment objective is to seek the preservation of capital and to provide a competitive level of income over time that is consistent with the preservation of capital. To achieve its investment objective, the fund invests in assets (typically fixed-income securities or bond funds) and enters into “wrapper” contracts issued by third-parties and invests in cash equivalents represented by shares in a money market fund. The Plan's investment in the fund is not subject to any withdrawal restrictions and distributions may be taken at any time. The Plan has no unfunded commitments relating to the fund at December, 2017 or 2016.

*MSA common stock fund* – This investment is valued at the closing price of MSA common stock reported on the New York Stock Exchange, plus cash and accrued interest, and is classified within Level 1 of the valuation hierarchy.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.



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The Plan's investments measured at fair value on a recurring basis by fair value hierarchy level were as follows:

	December 31, 2017			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Registered investment Companies	\$ 231,652	\$ —	\$ —	\$ 231,652
MSA common stock fund	3,469	—	—	3,469
Total assets in the fair value hierarchy	235,121	—	—	235,121
Investments measured at net asset value (a)	—	—	—	26,201
Investments at fair value	235,121	—	—	261,322

	December 31, 2016			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Registered investment Companies	\$ 208,900	\$ —	\$ —	\$ 208,900
MSA common stock fund	3,187	—	—	3,187
Total assets in the fair value hierarchy	212,087	—	—	212,087
Investments measured at net asset value (a)	—	—	—	34,911
Investments at fair value	212,087	—	—	246,998

(a) Certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the Statement of Net Assets Available for Benefits.

The Plan did not hold any Level 3 investments as of or during the years ended December 31, 2017 or 2016.

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Note 5 – Tax Status of the Plan

The Internal Revenue Service informed the Company by letter dated December 28, 2017, that the Plan, and the 2015 cumulative list of changes in Plan qualification requirements, was in compliance with the applicable requirements of the IRC. The following amendment dates apply to the favorable determination letter: January 25, 2017, December 21, 2016, January 26, 2016, December 22, 2015, December 3, 2015, December 10, 2013 and March 7, 2012.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the organization has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The Plan is subject to routine audits by taxing jurisdictions, however, there are currently no audits for any tax periods in progress.

Note 6 – Forfeited Accounts

At December 31, 2017 and 2016, forfeited non-vested accounts were not significant. These balances are included in the common collective trust. Forfeited account balances are used first to reinstate previously forfeited amounts for Participants who are re-employed by the Company within five years, then to pay Plan expenses and then to reduce future Company matching contributions. During the years ended December 31, 2017 and 2016, forfeited non-vested accounts were used to pay Plan administrative expenses totaling \$0 and \$3, and to reduce Company matching contributions by \$32 and \$25, respectively.

Note 7 – Risks and Uncertainties

The Plan provides investment options in registered investment companies, a common collective trust, and a Company common stock fund. Investments are exposed to various risks, such as interest rate, market, and credit risks. Due to the level of risk associated with certain investments and the level of uncertainty related to changes in the value of investments, it is at least reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect Participants' account balances and the amounts reported in the statements of net assets available for benefits.

As of December 31, 2017 and 2016, the Plan had investments of \$55,741 and \$59,791, respectively, that were concentrated in two funds.

Note 8 – Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of the net increase in net assets available for benefits per the financial statements to the Form 5500 for the year ended December 31, 2016:

Net increase in net assets available for benefits per the financial statements	\$	14,504
Change in adjustment from fair value to contract value for fully benefit-responsive investment contracts		<u>(241)</u>
Net increase in net assets available for benefits per Form 5500		<u><u>14,263</u></u>

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MSA Retirement Savings Plan  
 EIN: 25-0668780 Plan number: 002  
 Schedule H, line 4i (Form 5500) – Schedule of Assets (Held at End of Year)  
 As of December 31, 2017  
 (Dollars in thousands)

(a)	(b) Identity of issue, borrower, lessor or similar party	(c) Description of Investment	(d) Cost	(e) Current Value
	Allianz NFJ Small Cap Value I	Registered Investment Company	**	\$ 5,740
	Artisan Mid Cap Val Is	Registered Investment Company	**	7,842
	Baird Mid Cap Inst	Registered Investment Company	**	781
*	Fidelity 500 Index Inst	Registered Investment Company	**	20,525
*	Fidelity Contrafund K	Registered Investment Company	**	29,540
*	Fidelity Diversified International K	Registered Investment Company	**	12,416
*	Fidelity Extended Market Index Pr	Registered Investment Company	**	7,885
*	Fidelity Freedom K 2005	Registered Investment Company	**	25
*	Fidelity Freedom K 2010	Registered Investment Company	**	966
*	Fidelity Freedom K 2015	Registered Investment Company	**	5,418
*	Fidelity Freedom K 2020	Registered Investment Company	**	15,734
*	Fidelity Freedom K 2025	Registered Investment Company	**	11,943
*	Fidelity Freedom K 2030	Registered Investment Company	**	12,327
*	Fidelity Freedom K 2035	Registered Investment Company	**	8,910
*	Fidelity Freedom K 2040	Registered Investment Company	**	10,458
*	Fidelity Freedom K 2045	Registered Investment Company	**	4,925
*	Fidelity Freedom K 2050	Registered Investment Company	**	6,266
*	Fidelity Freedom K 2055	Registered Investment Company	**	2,471
*	Fidelity Freedom K 2060	Registered Investment Company	**	250
*	Fidelity Freedom K Income	Registered Investment Company	**	1,052
*	Fidelity Inflated Price Index Pr	Registered Investment Company	**	453
*	Fidelity Intl Index Pr	Registered Investment Company	**	2,173
*	Fidelity Magellan K	Registered Investment Company	**	9,904
*	Fidelity Puritan K	Registered Investment Company	**	7,121
*	Fidelity Total Bond	Registered Investment Company	**	6,526
*	Fidelity U.S. Bond Index Is	Registered Investment Company	**	9,413
	Hartford Small Cap Growth Y	Registered Investment Company	**	1,725
	J. P. Morgan Intrepid Value R6	Registered Investment Company	**	5,772
	Virtus Ceredex Mid-Cap Value Equity	Registered Investment Company	**	2,846
	T.Rowe Price Dividend Growth Adv	Registered Investment Company	**	19,113
	Wells Fargo Emerging Mkts Equity Is	Registered Investment Company	**	1,132
	<b>Total Registered Investment Companies</b>			<b>231,652</b>
*	Fidelity Managed Income Portfolio II	Common/Collective Trust	**	26,201
*	MSA Common Stock Fund	Employer Securities	**	3,469
	<b>Total</b>			<b>261,322</b>

\* Denotes a party-in-interest, for which a statutory exemption exists.

\*\* Cost omitted for participant directed investments.

SIGNATURE

*The Plan.* Pursuant to the requirements of the Securities Exchange Act of 1934, the Employee Benefits Administrative Committee has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

June 27, 2018

MSA RETIREMENT SAVINGS PLAN

By: /s/ Paul R. Uhler  
Paul R. Uhler  
Chairman of the Employee Benefits Administrative  
Committee

EXHIBIT INDEX

23. [Consent of Independent Registered Public Accounting Firm dated June 27, 2018 is filed herein.](#)

## **Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement No. 333-121196 on Post-Effective Amendment No. 1 to Form S-8 of our report dated June 27, 2018, which appears in this annual report on Form 11-K of the MSA Retirement Savings Plan for the year ended December 31, 2017.

/s/ Baker Tilly Virchow Krause, LLP

Pittsburgh, Pennsylvania  
June 27, 2018