

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, 2016

OR

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

For the transition period from _____ to _____
Commission File Number 0-22462

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

GIBRALTAR 401(k) PLAN

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

GIBRALTAR INDUSTRIES, INC.

3556 Lake Shore Road
P.O. Box 2028
Buffalo, New York 14219-0228

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

GIBRALTAR 401(k) PLAN
(Name of Plan)

Date: June 13, 2017

/s/ Jeffrey J. Watorek

Jeffrey J. Watorek

Member, Gibraltar 401(k) Retirement Plan Committee

Gibraltar 401(k) Plan

Gibraltar 401(k) Plan

Financial Statements and Supplemental Schedule

December 31, 2016 and 2015

**Gibraltar 401(k) Plan
Index**

	Page(s)
Report of Independent Registered Public Accounting Firm	1
Financial Statements	
Statements of Net Assets Available for Benefits	2
Statements of Changes in Net Assets Available for Benefits	3
Notes to Financial Statements	4-10
Supplemental Schedule	
Schedule H, Line 4i – Schedule of Assets (Held at End of Year)	11
Exhibit	
Exhibit 23.1 – Consent of Independent Registered Public Accounting Firm	12

Report of Independent Registered Public Accounting Firm

To the Participants and Plan Administrator of the Gibraltar 401(k) Plan

We have audited the accompanying statements of net assets available for benefits of the Gibraltar 401(k) Plan (the Plan) as of December 31, 2016 and 2015, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2016 and 2015, 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.

The supplemental information in the accompanying Schedule H, Line 4i - Schedule of Assets (Held at End of Year) as of December 31, 2016 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is presented for the purpose of additional analysis and is not a required part of the financial statements but includes supplemental information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. 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 in the accompanying schedule, 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/ FREED MAXICK, CPAs, P.C.

Buffalo, New York

June 13, 2017

Gibraltar 401(k) Plan
Statements of Net Assets Available for Benefits
December 31, 2016 and 2015

	December 31,	
	2016	2015
Assets		
Investments at fair value:		
Shares of registered investment companies	\$ 101,504,157	\$ 98,149,470
Common collective trust	3,809,323	2,770,490
Employer securities	3,505,866	2,399,676
Cash equivalents	5,477,094	5,880,779
Self-directed brokerage	2,077,636	2,122,853
	<u>116,374,076</u>	<u>111,323,268</u>
Receivables:		
Notes receivable from participants	2,955,517	3,276,715
Employer contributions receivable	347,724	332,570
	<u>3,303,241</u>	<u>3,609,285</u>
 Net assets available for benefits	 <u>\$ 119,677,317</u>	 <u>\$ 114,932,553</u>

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

Gibraltar 401(k) Plan
Statements of Changes in Net Assets Available for Benefits
For the Years Ended December 31, 2016 and 2015

	Year Ended December 31,	
	2016	2015
Additions:		
Participant contributions	\$ 5,519,216	\$ 4,828,406
Participant rollover contributions	495,065	424,752
Employer contributions	3,207,042	2,925,171
Net appreciation in fair value of investments	5,401,687	—
Interest and dividends	4,320,804	5,403,414
Total additions	18,943,814	13,581,743
Deductions:		
Benefits paid to participants	(14,166,255)	(10,274,820)
Net depreciation in fair value of investments	—	(4,666,116)
Plan expenses	(32,795)	(37,986)
Total deductions	(14,199,050)	(14,978,922)
Increase (decrease) in net assets available for benefits, prior to merger	4,744,764	(1,397,179)
Transfer of net assets available for benefits from merger	—	6,123,496
Net increase in net assets available for benefits	4,744,764	4,726,317
Net assets available for benefits:		
Beginning of year	114,932,553	110,206,236
End of year	\$ 119,677,317	\$ 114,932,553

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

Gibraltar 401(k) Plan

Notes to Financial Statements

1. DESCRIPTION OF PLAN

The following is a brief description of the Gibraltar 401(k) Plan (the Plan) and is provided for general information purposes only. Participants should refer to the Plan Document and Summary Plan Description for more complete information.

General

The Plan is a defined contribution plan as permitted under Section 401(k) of the Internal Revenue Code. The Plan is sponsored by Gibraltar Steel Corporation of New York (the Company), a subsidiary of Gibraltar Industries, Inc., for the benefit of eligible employees of the Company and its affiliates. The Company is the Plan Administrator, through the Gibraltar 401(k) Retirement Plan Committee. The Plan is subject to the Employee Retirement Income Security Act of 1974, as amended. The 401(k) Retirement Plan Committee is responsible for oversight of the Plan and determines the appropriateness of the Plan's investment offerings, monitors investment performance and reports to the Company's Board of Directors.

Eligibility

All employees of the Company, those affiliates of the Company which have adopted the Gibraltar 401(k) Plan, and employees subject to a collective bargaining agreement that provides for coverage under the Plan, are eligible to participate in the Plan following the completion of six months of participation service.

Participant Contributions

Participants may contribute up to 100% of their annual compensation, not to exceed the ceiling imposed by the Internal Revenue Service of \$18,000 for 2016 and 2015, as prescribed by the Plan Agreement. If a participant is age 50 or over, the ceiling increased to \$24,000 for 2016 and 2015. The Plan provides an Automatic Enrollment feature for employees hired on or after January 1, 2016, who do not affirmatively make an elective deferral to the Plan, to automatically have three percent (3%) withheld each pay period and contributed to the Plan's Qualified Default Investment Alternative (QDIA) as a pre-tax deferral after the plan's six (6) month waiting period.

The Plan accepts participant-directed Roth Elective Deferrals, Roth Rollovers, Roth In-Plan Conversions, Pre-Tax Deferrals and Pre-Tax Rollovers.

Employer Contribution

The Company matches contributions to the Plan equal to 100% of the first 3% of the participants' elective deferrals and 50% of the following 2% of the participants' elective deferrals at the time of salary reduction. The Company match for employees subject to a collective bargaining agreement follows the terms of their respective agreement.

Plan Merger

There were no plan mergers in 2016. On January 1, 2016, the Plan was restated to allow employees of Rough Brothers, Inc.; Delta T Solutions Inc.; Rough Brothers Manufacturing; RBI Solar Inc.; and Renusol America Inc., (collectively known as "RBI") to participate in the Plan. RBI was acquired by the Company in 2015. As a result of this restatement, the RBI Plan was merged into the Plan and net assets with a fair value of \$6,123,496 were transferred on December 31, 2015.

Gibraltar 401(k) Plan

Notes to Financial Statements

Administration

Fidelity Management Trust Company is the Plan Trustee, record keeper, and served as the custodian of the Plan's assets for the years ended December 31, 2016 and 2015. The Administrator of the Plan may specify whether the investments of the Trust Fund shall be managed in whole or in part by the Trustee, one or more investment managers, the Administrator, or the participants as provided for by the Trust Agreement.

Plan Termination

Although it has not expressed any intent to do so, the Company has the right to terminate, amend, or modify the Plan at any time subject to the provisions of ERISA.

Participant Accounts

Separate accounts are maintained for each plan participant. Each participant's account is credited with the participant's contribution and an allocation of the Company's contribution and 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.

Vesting and Forfeitures

Salary reduction contributions and the earnings thereon are at all times fully vested and non-forfeitable. All active participants are 100% vested in employer contributions.

Benefit Payments

Upon retirement, termination of employment, death or disability, participants or their beneficiaries may elect to receive their account balances in a single sum or in equal annual, or more frequent installments over a period certain not to exceed the life expectancy of the participant or the joint life expectancy of the participant and his beneficiary.

Notes Receivable from Participants

Participants may borrow against their vested account balance subject to the provisions specified in the Plan agreement. Notes receivable shall not exceed five years, except for a maximum of ten years for the purchase of a primary residence. The notes receivable are secured by the vested balance in the participant's account and bear interest at the prime rate plus 1%. Principal and interest are required to be repaid in equal installments over the term of the receivable. Notes receivable from participants are valued at their unpaid principal balance plus any accrued but unpaid interest at December 31, 2016 and 2015. Related fees are recorded as administrative expenses and are expensed when they are incurred. Delinquent participant loans are reclassified as distributions based upon the terms of the Plan Document.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the Plan are prepared on the accrual basis of accounting.

Gibraltar 401(k) Plan

Notes to Financial Statements

Risks and Uncertainties

The Plan provides for various investment options. Investment securities are exposed to various risks, such as interest, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities 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.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

Participants direct the investment of their contributions into various investment options offered by the Plan. Participants may change their investment allocation on a daily basis. The Plan's investments are reported at fair value. Fair value is 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 Plan's 401(k) Retirement Plan Committee determines the Plan's valuation policies utilizing information provided by the investment advisors and custodian. See Note 3 for discussion of the fair value measurements used to value the Plan's investments. Purchases and sales of securities 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 (depreciation) included the Plan's gains and losses on investments bought and sold as well as held during the year.

Benefits

Benefits are recorded when paid.

Plan Expenses

All of the costs of administration of the Plan and Trust are paid by the Company or the Participants. Brokerage commissions and similar costs of acquiring or selling securities (if any) that are incurred by the investment funds are borne by the participant. Origination fees for each loan are also borne by the participant. Investment related expenses are included in net appreciation (depreciation) of fair value of investments.

3. FAIR VALUE MEASUREMENTS

FASB ASC Topic 820, "Fair Value Measurements," defines fair value and establishes a valuation hierarchy for disclosure of the inputs to valuation used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Plan can access at the measurement date. Level 2 inputs are quoted prices to similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on our own assumptions used to measure assets and liabilities at fair value. A financial asset or liability's classification within the

Gibraltar 401(k) Plan

Notes to Financial Statements

hierarchy is determined based on the lowest level 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. Following is a description of the valuation techniques used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2016 and 2015.

Shares of Registered Investment Companies

These investments are valued at the net asset value of shares held by the registered investment companies at year-end. The investments are measured at fair value using quoted prices for identical assets, which are readily available Level 1 inputs.

Common Collective Trust

This investment is comprised of fully benefit-responsive investment contracts issued by insurance companies and other financial institutions (“Contracts”), fixed income securities, and money market funds. Under the terms of the Contracts, the assets of the fund are invested in fixed income securities (which may include, but are not limited to, U.S. Treasury and agency bonds, corporate bonds, mortgage-backed securities, commercial mortgage-backed securities, asset backed securities, and collective investment vehicles and shares of investment companies that invest primarily in fixed income securities) and shares of money market funds. The net asset value (NAV) is used as a practical expedient to estimate fair value. This practical expedient would not be used if it is determined to be probable that the common collective trust will sell the investment for an amount different from the reported NAV. Participant transactions (purchases and sales) may occur daily.

Employer Securities

These investments consist of a fund composed of employer securities valued at the closing price reported on the active market on which the individual securities are traded. As a result, the value of the investment is based on Level 1 inputs.

Cash Equivalents

These investments are primarily composed of money market funds. Money market funds are public investment vehicles valued using \$1 for the net asset value and are classified within Level 2 of the valuation hierarchy using the income approach.

Self-Directed Brokerage Funds

This investment consists of mutual funds and common stocks valued at readily determinable market prices of the associated investment. As a result, the value of the investment is based on Level 1 inputs.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, 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.

Gibraltar 401(k) Plan
Notes to Financial Statements

The following table provides the assets carried at fair value measured on a recurring basis as of December 31, 2016:

	Level 1	Level 2	Level 3	Total
Shares of registered investment companies	\$ 101,504,157	\$ —	\$ —	\$ 101,504,157
Common collective trust (1)	—	—	—	3,809,323
Employer securities	3,505,866	—	—	3,505,866
Cash equivalents	—	5,477,094	—	5,477,094
Self-directed brokerage	2,077,636	—	—	2,077,636
Total assets at fair value	\$ 107,087,659	\$ 5,477,094	\$ —	\$ 116,374,076

The following table provides the assets carried at fair value measured on a recurring basis as of December 31, 2015:

	Level 1	Level 2	Level 3	Total
Shares of registered investment companies:	\$ 98,149,470	\$ —	\$ —	\$ 98,149,470
Common collective trust (1)	—	—	—	2,770,490
Employer securities	2,399,676	—	—	2,399,676
Cash equivalents	—	5,880,779	—	5,880,779
Self-directed brokerage	2,122,853	—	—	2,122,853
Total assets at fair value	\$ 102,671,999	\$ 5,880,779	\$ —	\$ 111,323,268

NOTE (1): In accordance with FASB ASC 820-10, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient 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 amounts presented in the statements of net assets available for benefits.

The following table summarizes investments measured at fair value based on NAV per share as of December 31, 2016 and 2015, respectively. There are no participant redemption restrictions for these investments; the redemption notice period is applicable only to the Plan.

December 31, 2016	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
Common collective trust	\$ 3,809,323	N/A	Daily	12 months

December 31, 2015	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
Common collective trust	\$ 2,770,490	N/A	Daily	12 months

Gibraltar 401(k) Plan
Notes to Financial Statements

4. TAX STATUS

The Internal Revenue Service (IRS) has determined and informed the Company by a letter dated August 24, 2012 that the Plan and related Trust, are designed in accordance with the Internal Revenue Code (the Code). Although the Plan has been amended since receiving the determination letter, the Plan Administrator and the Plan's tax counsel believe that the Plan is designed, and is currently being operated, in compliance with the applicable requirements of the Code and, therefore, believe that the Plan is qualified and the related Trust is tax-exempt.

5. PARTIES IN INTEREST

At December 31, 2016 and 2015, certain Plan investments are managed by Fidelity Management Trust Company, the Plan's trustee, and therefore these transactions qualify as party-in-interest transactions. The Plan also allows participants to elect to invest in the common stock of Gibraltar Industries, Inc. Transactions in such investments qualify as party-in-interest transactions which are exempt from the prohibited transaction rules. Fees incurred by the Plan for the investment management and recordkeeping services are included in net appreciation (depreciation) in fair value of the investment, as they are paid through revenue sharing, rather than a direct payment. Investment income from parties-in-interest and interest from participant loans amounted to \$6,555,623 and \$2,011,591 for the years ended December 31, 2016 and 2015, respectively. Fees paid by the Plan for loan processing fees amounted to \$32,795 and \$37,986 for the years ended December 31, 2016 and 2015, respectively. The Plan Sponsor pays directly any other fees related to the Plan's operations.

6. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

	December 31,	
	2016	2015
Net assets available for benefits per the financial statements	\$ 119,677,317	\$ 114,932,553
Differences in:		
Investments	2,955,517	3,276,715
Notes receivable from participants	(2,955,517)	(3,276,715)
Net assets available for benefits per the Form 5500	<u>\$ 119,677,317</u>	<u>\$ 114,932,553</u>

Gibraltar 401(k) Plan
Notes to Financial Statements

The following is a reconciliation of the net increase in net assets available for benefits per the financial statements to the Form 5500:

	December 31,	
	2016	2015
Net increase in net assets available		
for benefits per the financial statements	\$ 4,744,764	\$ 4,726,317
Miscellaneous adjustment	—	(36,370)
Net increase in net assets available		
for benefits per the Form 5500	\$ 4,744,764	\$ 4,689,947

7. SUBSEQUENT EVENT

Effective March 1, 2017, certain assets of the Nexus Corporation 401(k) Savings Plan (the “Nexus Plan”) were transferred into the Plan. The total fair market value of the net assets transferred as a result of the merger of the Nexus Plan into the Plan was \$6,688,045.

Gibraltar 401(k) Plan
EIN 16-0991536
Plan #007
Schedule H, Line 4i – Schedule of Assets (Held at End of Year)
December 31, 2016

Identity of Issuer and Description of Investments	Fair Value
American Beacon Small Cap Value Fund Institutional Class	\$ 1,387,416
Fidelity Contrafund K*	14,918,127
Fidelity Freedom Fund K 2005*	67,286
Fidelity Freedom Fund K 2010*	634,321
Fidelity Freedom Fund K 2015*	1,552,252
Fidelity Freedom Fund K 2020*	10,278,582
Fidelity Freedom Fund K 2025*	5,399,371
Fidelity Freedom Fund K 2030*	6,191,630
Fidelity Freedom Fund K 2035*	4,521,549
Fidelity Freedom Fund K 2040*	3,038,180
Fidelity Freedom Fund K 2045*	1,360,976
Fidelity Freedom Fund K 2050*	787,192
Fidelity Freedom Fund K 2055*	440,533
Fidelity Freedom Fund K 2060*	38,478
Fidelity Freedom K Income Fund*	281,591
Fidelity Real Estate Index Fund Premium Class*	1,847,112
Fidelity Retirement Money Market*	5,477,094
Fidelity Spartan 500 Index Fund Advantage Class*	10,593,095
Fidelity Spartan Extended Market Index Fund*	3,207,808
Fidelity Spartan Global XUS Index Fund*	3,386,914
Fidelity Strategic Income Fund*	1,585,515
Fidelity U.S. Bond Index Fund Advantage Class*	581,502
Harbor International Fund	5,297,078
Invesco Diversified Dividend Fund R5 Class	5,733,876
Loomis Sayles Small Cap Value Fund Class I	5,536,492
PNC Small Cap I	1,284,233
Wells Fargo Advantage Emerging Markets Equity Fund	341,703
Western Asset Core Plus Bond Fund	4,905,555
Vanguard Selected Value Fund	2,247,444
Victory Munder Mid-Cap Core Growth Fund Class R6	4,058,346
Registered Investment Companies and Cash Equivalents Total	106,981,251
Common Collective Trust:	
Fidelity Managed Income Portfolio*	3,809,323
Employer Securities:	
Gibraltar Stock*	3,505,866
Self-directed brokerage:	
Fidelity Brokerage Link*	2,077,636
Notes Receivable from Participants:	
Participant Loans (Interest rates are fixed at prime plus 1% and currently range from 3.25% to 11.00%)*	2,955,517
	\$ 119,329,593

* Indicates Parties in Interest to the Plan.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (No. 33-87034) on Form S-8 of Gibraltar Industries, Inc., formerly known as Gibraltar Steel Corporation, of our report dated June 13, 2017, relating to our audit of the financial statements and supplemental schedule of the Gibraltar 401(k) Plan, which appears in this Annual Report on Form 11-K of the Gibraltar 401(k) Plan for the year ended December 31, 2016.

/s/ Freed Maxick, CPAs, PC
Buffalo, New York
June 13, 2017