

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 5)*

TriMas Corporation

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

896215209

(CUSIP Number)

Daniel P. Tredwell
Heartland Industrial Associates L.L.C.
177 Broad Street, 10th Floor
Stamford, Connecticut 06901
(203) 327-1202

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

Copies to:

Brian J. Fahrney
Sidley Austin LLP
One South Dearborn
Chicago, Illinois
(312) 853-7000

November 4, 2010

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box o.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1 Name of Reporting Persons
Heartland Industrial Associates L.L.C.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
11,904,972 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
11,904,972 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
11,904,972 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
34.0%

14 Type of Reporting Person
OO

2

1 Name of Reporting Persons
Heartland Industrial Partners, L.P.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
11,064,763 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
11,064,763 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
11,064,763 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
31.6%

14 Type of Reporting Person
PN

3

1 Name of Reporting Persons
TriMas Investment Fund I, L.L.C.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
8,820,936 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
8,820,936 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
8,820,936 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
25.2%

14 Type of Reporting Person
OO

1 Name of Reporting Persons
Metaldyne Investment Fund I, L.L.C.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of Shares Beneficially Owned by Each Reporting Person With

8 Shared Voting Power
2,243,827 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
2,243,827 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
2,243,827 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
6.4%

14 Type of Reporting Person
OO

1 Name of Reporting Persons
HIP Side-by-Side Partners, L.P.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
673,065 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
673,065 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
673,065 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
1.9%

14 Type of Reporting Person
PN

6

1 Name of Reporting Persons
TriMas Investment Fund II, L.L.C.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
134,192 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
134,192 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
134,192 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
0.4%

14 Type of Reporting Person
OO

7

1 Name of Reporting Persons
Metaldyne Investment Fund II, L.L.C.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
32,952 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
32,952 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
32,952 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
0.1%

14 Type of Reporting Person
OO

1 Name of Reporting Persons
HIP Side-by-Side I-A, L.L.C.

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
0 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
0 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
0 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
0.0%

14 Type of Reporting Person
OO

1 Name of Reporting Persons
HIP Investment Holdings I, LLC

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check if Disclosure of Legal Proceedings Is Required Pursuant to Item 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
0 Shares of Common Stock

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8 Shared Voting Power
0 Shares of Common Stock

9 Sole Dispositive Power
0 Shares of Common Stock

10 Shared Dispositive Power
0 Shares of Common Stock

11 Aggregate Amount Beneficially Owned by Each Reporting Person
0 Shares of Common Stock

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
0.0%

14 Type of Reporting Person
OO

Amendment No. 5 to Statement on Schedule 13D

This Amendment (the "Amendment") No. 5 to Statement on Schedule 13D (as heretofore amended, the "Statement") relates to the beneficial ownership of common stock, par value \$0.01 per share (the "Common Stock"), of TriMas Corporation, a Delaware corporation (the "Issuer"). This Amendment is being filed on behalf of the Reporting Persons (as defined below).

The Reporting Persons are filing this Amendment to amend the statements on Schedule 13D with respect to the Common Stock filed with the Securities and Exchange Commission on March 20, 2009 pursuant to Rule 13d-1(d).

This Amendment is being filed by the Reporting Persons to update the disclosure in Items 4 and 5 in connection with the sale of shares of Common Stock.

Item 4. Purpose of the Transaction

A description of transactions taken with respect to the Common Stock is included below in Item 5(c). The purpose of these transactions was to provide liquidity to Heartland Industrial Associates, L.L.C.'s ("Heartland") funds. The transactions are not an indication of Heartland's view of the business prospects of the Issuer.

Currently the Reporting Persons have no specific plan or proposal to acquire or dispose of Common Stock or other securities of the Issuer. However, consistent with their investment purpose, the Reporting Persons, at any time and from time to time, may acquire additional Common Stock or dispose of any or all of their Common Stock or other securities of the Issuer depending upon an ongoing evaluation of the investment in the Common Stock, prevailing market conditions, other investment opportunities, liquidity requirements of the Reporting Persons, and/or other investment considerations. In addition, in accordance with their investment purpose, the Reporting Persons may, at any time and from time to time, make a shelf filing or other registration with the U.S. Securities and Exchange Commission.

Also, consistent with the investment purpose, the Reporting Persons may engage in communications with one or more shareholders of the Issuer, one or more officers or employees of the Issuer, one or more members of the board of directors of the Issuer and/or one or more representatives of the Issuer regarding the Issuer, including but not limited to its operations, business, results, plans, prospects, ownership structure and management. The Reporting Persons may discuss ideas that, if effected, may result in acquisitions by persons of additional securities of the Issuer, an extraordinary corporate transaction involving the Issuer, changes in the Issuer's capitalization and/or changes in the board of directors or management of the Issuer.

Except as set forth in this Statement, the Reporting Persons have no plans or proposals which relate to, or could result in, any of the matters referred to in paragraphs (a) through (j), inclusive, of the instructions to Item 4 of Schedule 13D. The Reporting Persons may, at any time and from time to time, review or reconsider their position and/or change their purpose and/or formulate plans or proposals with respect thereto.

Item 5. Interest in Securities of the Issuer

(a) Please see Item 13 of each cover sheet for each Reporting Person. The approximate percentages of shares of Common Stock reported as beneficially owned by the Reporting Persons are based on there being 34,067,856 shares of Common Stock outstanding as of October 28, 2010, plus 948,182 shares of Common Stock deemed to be outstanding with respect to individual stockholders pursuant to Rule 13d-3(d)(1) under the Exchange Act, as reported to the Reporting Persons by the Issuer.

As of the date hereof:

- 11,904,972 shares of Common Stock are beneficially owned by Heartland;
- 11,064,763 shares of Common Stock are beneficially owned by Heartland Industrial Partners, L.P. ("HIP");
- 8,820,936 shares of Common Stock are owned directly by TriMas Investment Fund I, L.L.C. ("TIF I");
- 2,243,827 shares of Common Stock are owned directly by Metaldyne Investment Fund I, L.L.C. ("MIF I");
- 673,065 shares of Common Stock are owned directly by HIP Side-by-Side Partners, L.P. ("HIP Side-by-Side");
- 134,192 shares of Common Stock are owned directly by TriMas Investment Fund II, L.L.C. ("TIF II");
- 32,952 shares of Common Stock are owned directly by Metaldyne Investment Fund II, L.L.C. ("MIF II");
- no shares of Common Stock are owned directly by HIP Side-by-Side I-A, L.L.C. ("HIP Side-by-Side I-A"); and
- no shares of Common Stock are owned directly by HIP Investment Holdings I, LLC, ("Holdings" and TIF I, MIF I, HIP Side-by-Side, TIF II, MIF II, HIP Side-by-Side I-A, and Holdings, collectively, the "Direct Holders").

11

HIP, as the managing member of TIF I and MIF I, is an indirect beneficial owner of shares held by TIF I and MIF I. Heartland, as the managing member of TIF II, MIF II and HIP Side-by-Side I-A, and the general partner of HIP and HIP Side-by-Side, is an indirect beneficial owner of the shares held by the Direct Holders. HIP, as the sole member of Holdings, is an indirect beneficial owner of shares held by Holdings.

(b) Please see Items 7, 8, 9, 10, 11, and 13 for each cover sheet for each Reporting Person. Neither the present filing nor anything contained in this item 5 shall be construed as an admission that any combination of Reporting Persons constitutes a "group" for any purpose, and each Reporting Person disclaims beneficial ownership of securities held by each other Reporting Person.

(c) On November 4, 2010, Heartland sold 3,000,000 shares of Common Stock at a price of \$14.75 per share, for net proceeds of approximately \$44,250,000. Heartland held the shares of Common Stock through two of its funds, TIF I and Holdings. TIF I and Holdings sold 1,133,024 shares and 1,866,976 shares, respectively, as holders of record of such shares.

On November 5, 2010, HIP Side-by-Side transferred 169,610 shares of Common Stock to TIF I, and TIF II transferred 42,120 shares of Common Stock to TIF I. These transfers were accomplished pursuant to that certain Share Transfer Agreement, dated November 5, 2010, by and between TIF I, HIP Side-by-Side and TIF II.

(d) Except as set forth in this Item 5, no person other than each respective record owner referred to herein of securities is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities.

(e) Not applicable.

12

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

HEARTLAND INDUSTRIAL ASSOCIATES L.L.C.

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

HEARTLAND INDUSTRIAL PARTNERS, L.P.

By: Heartland Industrial Associates L.L.C., its General Partner

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

TRIMAS INVESTMENT FUND I, L.L.C.

By: Heartland Industrial Associates L.L.C., the General Partner of Heartland Industrial Partners, L.P., its Managing Member

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

METALDYNE INVESTMENT FUND I, L.L.C.

By: Heartland Industrial Associates L.L.C., the General Partner of Heartland Industrial Partners, L.P., its Managing Member

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

HIP SIDE-BY-SIDE PARTNERS, L.P.

By: Heartland Industrial Associates L.L.C., its General Partner

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

TRIMAS INVESTMENT FUND II, L.L.C.

By: Heartland Industrial Associates L.L.C., its Managing Member

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

METALDYNE INVESTMENT FUND II, L.L.C.

By: Heartland Industrial Associates L.L.C., its Managing Member

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

HIP SIDE-BY-SIDE I-A, L.L.C.

By: Heartland Industrial Associates L.L.C., its Managing Member

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member

By: Heartland Industrial Associates L.L.C., the General Partner of Heartland Industrial Partners, L.P., its Member

By: /s/ Daniel P. Tredwell
Name: Daniel P. Tredwell
Title: Managing Member