

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

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

SPX Corporation

(Name of Issuer)

Common Stock

(Title of Class of Securities)

784635104

(CUSIP Number)

Alexander J. Roepers  
Atlantic Investment Management, Inc.  
666 Fifth Avenue  
New York, New York 10103  
(212) 484-5050

with a copy to:  
Allen B. Levithan  
LOWENSTEIN SANDLER PC  
65 Livingston Avenue  
Roseland, New Jersey 07068  
(973) 597-2500

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

August 2, 2004

(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 which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), (f) or (g), check the following box [ ].

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7(b) 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 ("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).

CUSIP NO. 784635104

1) Names of Reporting Persons. I.R.S. Identification Nos. of Above Persons (entities only):

Atlantic Investment Management, Inc.

2) Check the Appropriate Box if a Member of a Group (See Instructions):

(a) \_\_\_\_\_ (b) \_\_\_\_\_

3) SEC Use Only

4) Source of Funds (See Instructions): AF, 00

5) Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e):

Not Applicable

6) Citizenship or Place of Organization: Delaware

|                     |                               |            |
|---------------------|-------------------------------|------------|
| Number of           | 7) Sole Voting Power:         | 4,584,400* |
| Shares Beneficially | 8) Shared Voting Power:       | 0          |
| Owned by            |                               |            |
| Each Reporting      | 9) Sole Dispositive Power:    | 4,584,400* |
| Person With:        | 10) Shared Dispositive Power: | 0          |

11) Aggregate Amount Beneficially Owned by Each Reporting Person:  
4,584,400\*

12) Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions):  
Not Applicable

13) Percent of Class Represented by Amount in Row (11): 6.02%\*

14) Type of Reporting Person (See Instructions): IA

\*Includes: (i) 891,650 shares (1.2%) of the Issuer's common stock, par value \$10.00 per share ("Shares"), beneficially owned by AJR International (BVI), Inc., a British Virgin Islands company, (ii) 470,850 Shares (0.6%) beneficially owned by Quest Capital Partners, L.P., a Delaware limited partnership, (iii) 1,306,000 Shares (1.7%) beneficially owned by Cambrian Fund (BVI), Ltd., a British Virgin Islands company, (iv) 567,300 Shares (0.7%) beneficially owned by Cambrian Partners, L.P., a Delaware limited partnership, (v) 1,342,600 Shares (1.8%) held in several Managed Accounts ("Managed Accounts") and (vi) 2,400 Shares (0.003%) beneficially owned by Atlantic Investment Management's 401k/Profit Sharing Plan. In addition, the sole shareholder of the Reporting Person, Mr. Alexander J. Roepers, beneficially owns 3,600 Shares (0.005%). The Reporting Person, serving as the investment advisor of the foregoing parties and the Managed Accounts, has sole voting and dispositive power over all Shares beneficially owned by such parties or held in the Managed Accounts. See Items 2 and 5 for additional details.

Item 1. Security and Issuer  
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This statement relates to the common stock, par value \$10.00 per share (the "Shares"), of SPX Corporation (the "Issuer"). The Issuer has principal executive offices located at 13515 Ballantyne Corporate Place, Charlotte, North Carolina 28277.

Item 2. Identity and Background  
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(a) This statement is filed by Atlantic Investment Management, Inc., a Delaware corporation (the "Reporting Person"), with respect to 4,584,400 Shares over which the Reporting Person has sole dispositive and voting power by reason of serving as the investment advisor to (i) AJR International (BVI) Inc., a British Virgin Islands company ("AJR"), (ii) Quest Capital Partners, L.P., a Delaware limited partnership ("Quest"), (iii) Cambrian Fund (BVI), Ltd., a British Virgin Islands company ("Cambrian Fund"), (iv) Cambrian Partners, L.P., a Delaware limited partnership ("Cambrian Partners"), (v) several managed accounts (the "Managed Accounts"), (vi) Atlantic Investment Management's 401k/Profit Sharing Plan (the "Plan") and (vii) Alexander J. Roepers, the president and sole shareholder of the Reporting Person. Mr. Roepers also serves as the general partner of Quest and Cambrian Partners.

(b) The business address of the Reporting Person and Mr. Roepers is 666 Fifth Avenue, 34th Floor, New York, New York 10103.

(c) The principal business of the Reporting Person is that of an investment advisor engaging in the purchase and sale of securities for investment with the objective of capital appreciation on behalf of AJR, Quest, Cambrian Fund, Cambrian Partners, the Managed Accounts, the Plan and Mr. Roepers. The principal occupation of Mr. Roepers is serving as the president and managing officer of the Reporting Person.

(d) Neither the Reporting Person nor Mr. Roepers has, during the past five (5) years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) Neither the Reporting Person nor Mr. Roepers has, during the past five (5) years, been a party to any civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is now subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Mr. Roepers is a citizen of The Netherlands.

Item 3. Source and Amount of Funds or Other Consideration  
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The Shares purchased by the Reporting Person on behalf of AJR, Quest, Cambrian Fund, Cambrian Partners, the Managed Accounts and the Plan were purchased with the investment capital of such entities and accounts. The Shares purchased individually by Mr. Roepers were purchased with the personal funds of Mr. Roepers. The aggregate amount of funds used in making the purchases reported on this Schedule 13D was \$29,276,642.

Item 4. Purpose of Transaction  
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The Reporting Person acquired, on behalf of AJR, Quest, Cambrian Fund, Cambrian Partners, the Managed Accounts, the Plan and Mr. Roepers, and continues to hold, the Shares reported herein for investment purposes. The Reporting Person intends to evaluate the performance of the Shares as an investment in the ordinary course of business. The Reporting Person pursues an investment objective that seeks capital appreciation. In pursuing this investment objective, the Reporting Person analyzes the operations, capital structure and markets of companies in which the Reporting Person's clients invest, including the Issuer, on a continuous basis through analysis of documentation and discussions with knowledgeable industry and market observers and with representatives of such companies.

The Reporting Person will continuously assess the Issuer's business, financial condition, results of operations and prospects, general economic conditions, the securities markets in general and those for the Shares in particular, other developments and other investment opportunities. Depending on such assessments, the Reporting Person may acquire additional Shares or may determine to sell or otherwise dispose of all or some of the Shares presently held by AJR, Quest, Cambrian Fund, Cambrian Partners, the Managed Accounts, the Plan and Mr. Roepers in the open market or in private transactions. Such actions will depend upon a variety of factors, including, without limitation, current and anticipated future trading prices for the Shares, the financial condition, results of operations and prospects of the Issuer, alternative investment opportunities, general economic, financial market and industry conditions and other factors that the Reporting Person may deem material to its investment decision.

The Reporting Person will continue its active discussions with the Issuer's management and other third parties with respect to actions, which might be taken by the management of the Issuer to maximize shareholder value of the Issuer.

Specifically, in response to the Issuer's 2004 Proxy Statements as filed on March 20, 2004 and the Issuer's February 26, 2004 earnings release, the Reporting Person has written to the Issuer's Chairman, CEO and President, Mr. John Blystone, with recommendations to improve on the Issuers' investor relations, corporate governance and executive compensation practices. Among the recommendations, the Reporting Person believes that the Issuer would be better served by an enlarged Board of Directors and suggested adding at least two additional qualified independent directors. The Reporting Person also proposes that director compensation be brought in line with that of comparable companies and become detached from the Issuer's EVA compensation plan. Further, the Reporting Person urged the Issuer to alter its executive compensation plans in order to bring the Issuers' executive compensation in line with peer companies and shareholders interests.

In response to the Issuer's June 23, 2004 announcement that the Issuer's Board of Directors has commenced a review of the Issuer's stock compensation plan, the Reporting Person wrote to Mr. David Williams, Chairman of the Compensation Committee of the Issuer's Board of Directors, to urge him and the Board of Directors to widen his review to encompass all matters related to the Issuer's executive and director compensation practices, including executive employment agreements, the EVA compensation plan, the RSU program and relocation loans in order to bring the Issuer's executive compensation in line with peer companies and shareholders interests.

Except as set forth above, the Reporting Person has no present plans or proposals which relate to or would result in any of the transactions required to be described in Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer  
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(a) Based upon the information contained in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 2, 2004, there were issued and outstanding 76,112,978 Shares as of July 29, 2004.

(b) The Reporting Person does not directly own any Shares. The Reporting Person has entered into an investment advisory agreement with each of AJR, Quest, Cambrian Fund, Cambrian Partners, the Managed Accounts and the Plan, pursuant to which the Reporting Person has investment authority with respect to the securities held by such entities or in such accounts. Such power includes

the power to dispose of and the power to vote the Shares. By reason of the provisions of Rule 13d-3 of the Securities Exchange Act of 1934, as amended, the Reporting Person is deemed to be the beneficial owner of the Shares held by such entities and accounts. In addition, the Reporting Person has sole dispositive and voting power over the 3,600 Shares beneficially owned by Mr. Roepers. Accordingly, the Reporting Person is deemed the beneficial owner of 4,584,400 Shares, or 6.02% of the outstanding Shares.

(c) The following table details the transactions by the Reporting Person, on behalf of AJR, Quest, Cambrian Fund, Cambrian Partners, the Managed Accounts and the Plan, as well as transactions by Mr. Roepers, in the Shares during the past sixty (60) days:

| Date<br>---- | Quantity<br>----- | Price<br>----- | Type of Transaction<br>----- |
|--------------|-------------------|----------------|------------------------------|
| 08/02/04     | 300,000           | \$37.8300      | Open Market Purchase         |
| 08/03/04     | 169,800           | \$36.9906      | Open Market Purchase         |
| 08/04/04     | 170,500           | \$36.0055      | Open Market Purchase         |
| 08/04/04     | 150,000           | \$36.7180      | Open Market Purchase         |

Except for the transactions listed above, neither the Reporting Person, any entity for which the Reporting Person serves as investment advisor, nor any person or entity controlled by the Reporting Person, nor Mr. Roepers has traded Shares during the past sixty (60) days.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer  
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Not Applicable

Item 7. Material to be filed as exhibits  
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Not Applicable

SIGNATURE

After reasonable inquiry and to the best of the undersigned's knowledge and belief, the undersigned hereby certifies that the information set forth in this statement is true, complete and correct.

August 5, 2004

ATLANTIC INVESTMENT MANAGEMENT, INC.

By: /s/ Alexander J. Roepers

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Alexander J. Roepers, President

ATTENTION: INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACT CONSTITUTE  
FEDERAL CRIMINAL VIOLATIONS (SEE 18 U.S.C. 1001).