
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

Annual Report Pursuant to Section 15(d) of
The Securities Exchange Act of 1934

- ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934 [NO FEE REQUIRED, EFFECTIVE OCTOBER 7, 1996].

For the fiscal year ended December 31, 2004

- TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934 [NO FEE REQUIRED].

For the transition period from to

Commission file number 1-6948

- A. Full title of the plan and the address of the plan, if different from that of the issuer named below: **SPX Corporation Retirement Savings and Stock
Ownership Plan**

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

**SPX Corporation
13515 Ballantyne Corporate Place
Charlotte, North Carolina 28277**

**SPX Corporation
Retirement Savings and
Stock Ownership Plan**

**Financial Report
December 31, 2004**

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**SPX Corporation Retirement Savings and
Stock Ownership Plan**

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Report of Independent Registered Public Accounting Firm

To the Administrative Committee
SPX Corporation Retirement Savings
and Stock Ownership Plan

We have audited the accompanying statement of net assets available for benefits of the SPX Corporation Retirement Savings and Stock Ownership Plan as of December 31, 2004 and 2003 and the related statement of changes in net assets available for benefits for the year ended December 31, 2004. 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 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 SPX Corporation Retirement Savings and Stock Ownership Plan as of December 31, 2004 and 2003 and the changes in net assets available for benefits for the year ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The supplemental schedule of assets held at end of year is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary 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 schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

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/s/ Plante & Moran, PLLC

Southfield, Michigan
June 10, 2005

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SPX Corporation Retirement Savings and Stock Ownership Plan

Statement of Net Assets Available for Benefits

	December	
	2004	2003
Assets		
Participant-directed investments:		
Interest in SPX Corporation Savings Trust (Note 3)	\$ 747,623,873	\$ 763,437,949
Participant loans	17,703,225	17,045,242
Net Assets Available for Benefits	\$ 765,327,098	\$ 780,483,191

See Notes to Financial Statements.

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SPX Corporation Retirement Savings and Stock Ownership Plan

**Statement of Changes in Net Assets Available for Benefits
Year Ended December 31, 2004**

Additions	
Contributions:	
Employer	\$ 21,395,093
Participants	36,159,799
Rollovers	7,130,392
Investment gain from interest in net assets of SPX Corporation Savings Trust (Note 3)	4,020,729
Participant loan interest	1,021,487
Net transfer from other plans (Note 6)	3,520,286
Total additions	73,247,786
Deductions	
Distributions to participants	88,206,899
Administrative expenses	196,980
Total deductions	88,403,879

Net Assets Available for Benefits

Beginning of year	780,483,191
End of year	\$ 765,327,098

See Notes to Financial Statements.

**SPX Corporation Retirement Savings and
Stock Ownership Plan**

**Notes to Financial Statements
December 31, 2004 and 2003**

Note 1 - Description of the Plan

The following description of the SPX Corporation Retirement Savings and Stock Ownership Plan (the "Plan"), as amended and restated effective December 31, 1999, provides only general information. Participants should refer to the plan agreement for a complete description of the Plan's provisions. The Plan became effective January 1, 1952 and is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The Plan operates as a leveraged employee stock ownership plan with a cash or deferred arrangement as described in Internal Revenue Code Section 401(k) and is designed to comply with Section 4975(e)(7) and the regulations thereunder of the Internal Revenue Code (the "Code") of 1986, as amended.

General - The Plan is a defined contribution plan that benefits primarily employees of SPX Corporation (the "Employer" or the "Company") who are not covered by collective bargaining agreements and who have met eligibility requirements.

Contributions - Participants can contribute a portion of their compensation as a pretax contribution to the Plan, up to the maximum allowed under the Plan and the Code.

As outlined in the plan document, Employer contributions are dependent upon the division of SPX Corporation where the participant is employed. In general, the Company makes matching contributions equal to 100 percent of the participant's pretax contributions up to the first 4 percent of compensation deferred, and 50 percent of the participant's pretax contributions in excess of 4 percent of compensation, up to a maximum of 6 percent of compensation. Employer contributions are invested in SPX Corporation common stock and are immediately vested and can be transferred at any time.

Participant Accounts - Each participant's account is credited with the participant's contribution, the Employer's matching and supplemental contributions, if any, and an allocation of plan earnings. Allocation of plan earnings to participant accounts is based on the participant's proportionate share of funds in each of the investment accounts. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

Participants elect to invest their account balance and contributions among various investment options provided by the SPX Corporation Retirement and Welfare Plan Administrative Committee (the "Administrative Committee"), including an option to invest in SPX Corporation stock.

Vesting - Participants are 100 percent vested in both employee and employer contributions.

Payment of Benefits - Upon termination of service, a participant may elect to receive either a lump-sum distribution, or monthly or yearly payments equal to the value of his or her account. A participant who experiences a financial hardship is eligible to receive a distribution from his or her plan account. The Plan also allows participants to withdraw certain portions of their balances attributed to certain benefit plans that have been previously merged into the Plan.

Investment Options - Investment in SPX Corporation stock transferred to participants' accounts by reason of the merger of the SPX Corporation Stock Ownership Plan on January 1, 1994 and stock allocated to a participant's account by reason of matching contributions as discussed above can, at any time, be redirected.

Participant Loans - A participant can borrow from the Plan an amount that does not exceed the lesser of \$50,000 or 50 percent of the participant's vested account balance. Loans are collateralized by the balance in the participant's account and bear interest at market rates. Principal and interest are paid ratably through payroll deductions. Other regulations are outlined in the plan document.

Voting Rights - Each participant is entitled to exercise voting rights attributable to the shares allocated to his or her account. Fidelity Management Trust Company (the "Trustee") is required to vote shares of common stock that have been allocated to participants but for which the Trustee received no voting instructions in the same manner and in the same proportion as the shares for which the Trustee received timely voting instructions.

Note 2 - Summary of Significant Accounting Policies

The accompanying financial statements have been prepared on the accrual basis.

Investments - Investments of the Plan are stated at market value as determined by quoted market prices or estimated fair value. The fair value of the Plan's interest in the SPX Corporation Savings Trust (the "Master Trust") is based on the beginning of the year value of the Plan's interest in the Master Trust plus actual contributions and allocated income less actual distributions (see Note 3). Guaranteed investment contracts included in the Master Trust are valued at contract value (which represents contributions made under the contract, plus interest at the contract rate, less funds used to pay plan benefits), because the contracts are fully benefit responsive. The interest rates for the year ended December 31, 2004 range from 3.4 percent to 8.0 percent. The remaining assets in the Master Trust are stated at fair value. The value of participant loans is the face value, which approximates fair value. Dividend income is accrued on the ex-dividend date.

Income Tax Status - The Plan obtained its determination letter dated December 4, 2003, in which the Internal Revenue Service stated that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

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 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.

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Note 3 - Master Trust Fund

The investments of certain defined contribution plans sponsored by SPX Corporation, including the SPX Corporation Retirement Savings and Stock Ownership Plan, are combined in the Master Trust. Under the terms of a trust agreement between Fidelity Management Trust Company (the "Bank") and the Company, the Bank manages the trust funds of the Master Trust on behalf of the Plan. The Plan's assets in the Master Trust represented 97 and 98 percent of the total assets in the Master Trust as of December 31, 2004 and 2003, respectively. Investment income and administrative expenses related to the Master Trust are allocated to the individual plans based on average monthly balances invested by each plan.

The total assets held in the Master Trust at December 31, 2004 and 2003 are as follows:

	2004	2003
Money market fund	\$ 35,356,866	\$ 36,806,776
Common/Collective trust	265	255
Mutual funds	484,221,263	436,372,176
Insurance company general account	140,618,090	147,795,763
Employer securities	107,637,774	161,011,217
Total Master Trust investments	\$ 767,834,258	\$ 781,986,187

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The investment income for the Master Trust for the year ended December 31, 2004 is as follows:

Net appreciation (depreciation) in fair value of investments:	
Mutual funds	\$ 33,615,679
Employer securities	(50,733,891)
Net depreciation	(17,118,212)
Interest and dividends	22,298,682
Net investment income	\$ 5,180,470

Note 4 - Plan Termination

Although it has not expressed any intent to do so, the Company has the right to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA.

Note 5 - Administration

The Company is the sponsor of the Plan. The Administrative Committee, as provided in the plan agreement, is the plan administrator and has responsibility for the administration of the Plan. Fidelity Management Trust Company functions as trustee and investment manager. Investment management fees and trustee fees are paid by the Plan in accordance with the plan agreement.

Note 6 - Transfers

During 2004, a defined contribution plan sponsored by SPX Corporation merged with the Plan. Accordingly, assets of approximately \$3.5 million were transferred into the Plan in 2004.

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Schedule of Assets Held at End of Year
Form 5500, Schedule H, Item 4i
EIN 38-1016240, Plan 005
December 31, 2004

(a) (b) Identity of Issuer	(c) Description	(d) Cost	(e) Current Value
Participants	Participant loans bearing interest at rates from 4.00% to 11.00%	—	\$ 17,703,225

Note - In compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, investments in Master Trust assets are omitted from this schedule.

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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.

SPX CORPORATION RETIREMENT SAVINGS
AND STOCK OWNERSHIP PLAN

By: The SPX Administrative Committee

Date: June 29, 2005

By: /s/ Ross B. Bricker

Ross B. Bricker
Senior Vice President, Secretary and
General Counsel and Member of the
SPX Administrative Committee

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Exhibit Index

Exhibit No.	Description
23.1	Consent of Plante & Moran, PLLC

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the registration statement (Nos. 333-29843, 333-70245, and 333-69252) on Form S-8 of our report dated June 10, 2005 appearing in the Annual Report on Form 11-K of SPX Corporation Retirement Savings and Stock Ownership Plan for the year ended December 31, 2004.

/s/ Plante & Moran, PLLC

Southfield, Michigan
June 27, 2005
