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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

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

For the fiscal year ended December 31, 2010

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

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

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SPX Corporation
Retirement Savings and
Stock Ownership Plan

Financial Report

December 31, 2010

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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 (the "Plan") as of December 31, 2010 and 2009 and the related statement of changes in net assets available for benefits for the year ended December 31, 2010. 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. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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 of the SPX Corporation Retirement Savings and Stock Ownership Plan as of December 31, 2010 and 2009 and the changes in net assets for the year ended December 31, 2010, 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 basic financial statements taken as a whole. The supplemental schedule of assets held at end of year as of December 31, 2010 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is 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 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.

/s/ Plante & Moran, PLLC
Southfield, Michigan
June 23, 2011

Statement of Net Assets Available for Benefits

	December 31 2010	December 31 2009
Assets		
Participant-directed investments:		
Interest in SPX Corporation Savings Trust, at fair value (Note 3)	$ —	$ 680,773,519
Money market fund	4,616,055	—
Common collective trust fund	145,339,361	—
Mutual funds	461,545,363	—
Employer securities	179,376,402	—
Total participant-directed investments	790,877,181	680,773,519
Participant notes receivable (Note 1)	19,688,873	16,519,284
Contribution receivable:		
Employer	28,405	28,808
Employee	55,792	46,935
Total contribution receivable	84,197	75,743
Adjustment from fair value to contract value relating to fully benefit-responsive investment contracts	(1,435,128)	1,833,765
Net Assets Available for Benefits	**$ 809,215,123**	**$ 699,202,311**

See Notes to Financial Statements.

Statement of Changes in Net Assets Available for Benefits
Year Ended December 31, 2010

Additions	
Net appreciation in fair value of investments:	
Mutual funds	$ 68,842,574
Employer securities	46,884,963
Net appreciation of fair value of investments	115,727,537

Investment loss from interest in net assets of SPX Corporations Savings Trust (Note 3)	(17,422,212)
Interest and dividends	10,054,142
Participant notes receivable interest	1,034,374
Contributions:	
Employer	16,830,596
Participants	29,761,805
Rollovers	4,957,774
Total contributions	51,550,175
Total additions	160,944,016
Deductions	
Distributions to participants	69,768,418
Administrative expenses	272,743
Total deductions	70,041,161
Net Increase Before Other Changes	90,902,855
Net transfer from other plans (Note 1)	19,109,957
Net Increase	110,012,812
Net Assets Available for Benefits	
Beginning of year	699,202,311
End of year	**$ 809,215,123**

See Notes to Financial Statements.

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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 October 1, 2010, 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").

Effective July 1, 2010, the SPX Corporation Savings Plan merged with and into the Plan. Effective September 30, 2010, the Weil McLain Hourly Employee Savings Plan merged with and into the Plan. Participants and beneficiaries of both the SPX Corporation Savings Plan and the Weil McLain Hourly Employee Savings Plan (the "Merged Plans") shall participate in the Plan under the terms and conditions of the Merged Plans as in effect immediately prior to the merger (and as may be subsequently amended).

General - The Plan is a defined contribution plan that benefits primarily employees of SPX Corporation (the "Employer" or the "Company") who have met eligibility requirements.

Contributions - Participants can elect to defer 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 the Company where the participant is employed. In general, for participants other than those in the Merged Plans, 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 deferred up to a maximum of 6 percent of compensation deferred. Employer contributions are invested in SPX Corporation common stock and are immediately vested and can be transferred at any time, subject to certain trading restrictions.

Employer contributions for participants of the Merged Plans are determined based on the collective bargaining agreements.

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Note 1 - Description of the Plan (Continued)

Participant Accounts - Each participant's account is credited with the participant's contributions, the Employer's matching 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 balances and contributions among various investment options provided by the SPX Corporation Retirement and Welfare Plan Administrative Committee (the "Committee"), including an option to invest in SPX Corporation common stock.

Vesting — Participants in the Plan are at all times 100 percent vested in their contributions and earnings thereon. Vesting in employer contributions is dependent upon the business unit or division of the Company where the participant is employed. In general, participants are 100 percent vested in employer contributions. However, there are certain employer contributions that vest over a five to six year period. Any forfeitures reduce the employer contributions in the year the forfeitures occur or future years. Total forfeitures outstanding at December 31, 2010 and 2009 were $487,153 and $291,783, respectively.

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. Terminated participants with account balances in excess of $1,000 can also elect to wait until retirement age to receive benefits. 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. All withdrawal payments are made by Fidelity Management Trust Company (the "Trustee").

Employer Securities - 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 participants' accounts by reason of matching contributions as discussed above can be redirected to other investment options, subject to certain trading restrictions.

Participant Notes Receivable - 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. The term of the participant note receivable may not exceed five years unless

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Note 1 - Description of the Plan (Continued)

the participant note receivable is used in the purchase of a primary residence, in which case the term may be for up to 15 years.

Participant notes receivable are collateralized by the balance in the participant's account and bear interest at market rates as outlined in the plan document. Principal and interest are paid ratably through payroll deductions. Other participant note receivable provisions 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. 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.

Administration - The Company is the sponsor of the Plan. The Committee, as provided in the plan agreement, is the plan administrator and has responsibility for the administration of the Plan. The Trustee also functions as the investment manager.

Investment management fees and trustee fees are paid by the Plan in accordance with the plan agreement.

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 2 - Summary of Significant Accounting Policies

New Accounting Pronouncements - During 2010, the Plan adopted the provisions of a new accounting standard which requires that defined contribution plans classify participant loans as participant notes receivable rather than as investments as was previously required. This standard was adopted retroactively and, as a result, the December 31, 2009 participant loans have been reclassified from investments to participant notes receivable and the 2009 interest income has been reclassified from investment income to interest from participant notes receivable. The adoption of this standard had no impact on the Plan's net assets or changes in net assets.

Participant Notes Receivable - Participant notes receivable are recorded at their unpaid principal balances plus any accrued interest. Participant notes receivable are written off when deemed uncollectible.

Investment in the Master trust - The Plan participated in the SPX Corporation Savings Trust ("Master Trust") through June 30, 2010. In connection with the merger of the SPX Corporation Savings Plan, the investments of the Plan were no longer commingled in the Master Trust.

Investments - The Plan's investments are stated at fair value, except for its common collective trust fund investment, which is valued at contract value. Contract value represents investments at cost plus accrued interest income less amounts withdrawn to pay benefits. The fair value of the common collective trust fund is based on discounting the related cash flows of the underlying guaranteed investment contracts based on current yields of similar instruments with comparable durations. All other investments are valued based on quoted market prices. Dividend income is accrued on the ex-dividend date.

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Note 2 - Summary of Significant Accounting Policies (Continued)

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

Benefit Payments — Distributions to participants are recorded when paid.

Income Tax Status - The Plan constitutes a qualified plan under Sections 401(a) and 401(k) of the Code and the related trust is exempt from federal income tax under Section 501(a) of the Code. The Plan obtained its determination letter dated December 4, 2003, in which the Internal Revenue Service stated that the Plan, as designed, was in compliance with the applicable requirements of the 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.

Risks and Uncertainties - The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, 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

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Note 2 - Summary of Significant Accounting Policies (Continued)

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.

Reclassification - Certain prior year amounts have been reclassified to conform to the current year presentation.

Note 3 - Master Trust Fund

Through June 30, 2010, the investments of certain defined contribution plans sponsored by SPX Corporation, including the Plan, were combined in the Master Trust. Due to the mergers discussed in Note 1, the Master Trust ceased to exist and held no assets subsequent to June 30, 2010. Under the terms of a trust agreement between the Trustee and the Company, the Trustee managed the trust funds of the Master Trust on behalf of the Plan. Subsequent to June 30, 2010, the Trustee continued to manage funds on behalf of the Plan. These transactions qualify as party-in-interest transactions as defined under ERISA guidelines. The Plan's assets in the Master Trust represented approximately 98.7 percent of the total assets in the Master Trust as of December 31, 2009. Investment income and administrative expenses related to the Master Trust were 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, 2009 were as follows:

Money market fund	$ 4,120,606
Common collective trust fund	147,827,501
Mutual funds	403,707,567
Insurance company general account	—
Employer securities	134,300,022
Total Master Trust investments, at fair value	689,955,696
Adjustment from fair value to contract value for interest in SPX Corporation Savings Trust relating to fully benefit-responsive investment contracts	1,861,501
Total Master Trust investments	$ 691,817,197

The investment loss for the Master Trust for the period January 1, 2010 through June 30, 2010 was as follows:

Net depreciation in fair value of investments:	
Mutual funds	$ (17,349,683)
Employer securities	(4,522,462)
Net depreciation	(21,872,145)
Interest and dividends	4,126,978
Net investment loss	$ (17,745,167)

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Note 4 - Investments

Investments that exceeded 5 percent of end of the year net assets at December 31, 2010 were as follows:

Employer securities, at fair value:		
SPX Corporation stock	$	179,376,402
Common collective trust fund, at contract value:		
Fidelity Managed Income Portfolio II	$	143,904,233

Note 5 - Reconciliation of Financial Statements to Form 5500 (Annual Return/Report of Employee Benefit Plan)

The net assets on the financial statements differ from the net assets on the Form 5500 due to a common collective trust fund being recorded at contract value on the financial statements and at fair value on Form 5500. The net assets on the financial statements were lower than Form 5500 at December 31, 2010 by $1,435,128 and higher than Form 5500 at December 31, 2009 by $1,833,765. Additionally, the net increase in the net assets available for benefits on the Form 5500 for the year ended December 31, 2010 is higher by $3,268,893.

Note 6 - Fair Value Measurements

Accounting standards require certain assets and liabilities be reported at fair value in the financial statements and provide a framework for establishing that fair value. The framework for determining fair value is based on a hierarchy that prioritizes the inputs and valuation techniques used to measure fair value.

The Plan utilizes market data or assumptions that it believes market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable quoted prices in active markets for identical assets or liabilities (Level 1), significant other observable inputs (Level 2) or significant unobservable inputs (Level 3). The Plan's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability.

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Note 6 - Fair Value Measurements (Continued)

Disclosures concerning assets measured at fair value are as follows:

	Assets Measured at Fair Value at December 31, 2010			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Mutual funds:				
Equity securities	$ 363,409,680	$ 363,409,680	$ —	$ —
Bonds and fixed income investments	60,086,014	60,086,014	—	—
Retirement age-based investments	38,049,669	38,049,669	—	—
Employer securities - SPX Corporation stock	179,376,402	179,376,402	—	—
Common collective trust fund *	145,339,361	—	145,339,361	—
Money market and cash investments	4,616,055	4,616,055	—	—

	Assets Measured at Fair Value at December 31, 2009			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Master Trust Investments:				
Mutual funds:				
Equity securities	$ 324,320,462	$ 324,320,462	$ —	$ —
Bonds and fixed income investments	48,020,088	48,020,088	—	—
Retirement age-based investments	31,367,017	31,367,017	—	—
Employer securities - SPX Corporation stock	134,300,022	134,300,022	—	—
Common collective trust fund *	147,827,501	—	147,827,501	—
Money market and cash investments	4,120,606	4,120,606	—	—

* The common collective trust fund is a stable value fund which invests in investment contracts (wrap contracts) issued by insurance companies and other financial institutions, fixed income securities, and money market funds to provide daily liquidity. Wrap contracts are purchased in conjunction with an investment 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 bond funds.

The fair value of the common collective trust fund is based on discounting the related cash flows of the underlying guaranteed investment contracts based on current yields of similar instruments with comparable durations.

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Note 6 - Fair Value Measurements (Continued)

There were no significant transfers between Levels of the fair value hierarchy during 2010 and 2009. The Plan's policy is to recognize transfers between Levels at the beginning of the fiscal year.

The Plan also holds other assets not measured at fair value on a recurring basis, including contribution receivable and participant notes receivable. The fair value of these assets approximates the carrying amounts in the accompanying financial statements due to either the short maturity of the instruments or the use of interest rates that approximate market rates for instruments of similar maturity.

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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, 2010

(a) (b) Identity of Issuer	(c) Description	(d) Cost	(e) Current Value
	Mutual funds:		
Fidelity	Fidelity Puritan	*	$ 19,576,219
Fidelity	Fidelity Magellan	*	11,983,208
Fidelity	Fidelity Contrafund	*	24,209,300
Fidelity	Fidelity Equity-Income Fund	*	27,136,600
Fidelity	Fidelity Growth Company	*	18,249,921
Fidelity	Fidelity Value Fund	*	14,038,048
Fidelity	Fidelity Real Estate Investment	*	9,140,701
Fidelity	Fidelity International Discovery	*	25,794,095
Fidelity	Fidelity Capital Appreciation	*	20,890,694
Fidelity	Fidelity Utilities Fund	*	3,032,006
Fidelity	Fidelity Export and Multination	*	26,165,357
Fidelity	Fidelity International Small Cap	*	10,547,090
Fidelity	Fidelity Spartan 500 Index Inv	*	39,348,636
Fidelity	Fidelity Balanced K	*	32,369,611
Fidelity	Fidelity Low-Priced Stock Fund	*	36,140,295
Fidelity	Aston/Montag & Caldwell Growth I	*	873,480
Fidelity	Templeton Growth Adv	*	6,035,876
Fidelity	Calamos Growth I	*	7,957,929
Fidelity	Neuberger Berman Partners Inst	*	2,009,917
Fidelity	Neuberger Berman Genesis Instl	*	12,697,695
Fidelity	American Beacon Balanced Inv	*	3,953,165
Fidelity	American Century Large Co Val Inv	*	1,118,308
Fidelity	Baron Growth Instl	*	10,141,528
Fidelity	Fidelity Freedom 2000 Fund	*	928,047
Fidelity	Fidelity Freedom 2010 Fund	*	6,592,299
Fidelity	Fidelity Freedom 2020 Fund	*	16,175,906
Fidelity	Fidelity Freedom 2030 Fund	*	9,755,839
Fidelity	Fidelity Freedom 2040	*	4,597,578
Fidelity	Fidelity Capital & Income	*	10,015,951
Fidelity	Fidelity Freedom Income	*	1,400,672
Fidelity	Fidelity US Bond Index	*	11,648,204
Fidelity	PIMCO Total Return Instl	*	37,021,188
	Employer securities:		
Fidelity	SPX Corporation stock	*	179,376,402
	Common collective trust fund:		
Fidelity	Fidelity Managed Income Portfolio II	*	145,339,361
Fidelity	**Money market fund**	*	4,616,055
Participants	Participant notes receivable bearing interest at rates from 4.00 percent to 10.50 percent	—	19,688,873
	Total net investments		**$ 810,566,054**

* Cost information not required

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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 RETIREMENT SAVINGS AND STOCK OWNERSHIP PLAN

By: The SPX Administrative Committee

Date: June 27, 2011

By: /s/ Kevin L. Lilly
Kevin L. Lilly
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

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statement (Nos. 333-29843, 333-70245, 333-69252, and 333-139351) on Form S-8 of our report dated June 23, 2011 appearing in the annual report on Form 11-K of SPX Corporation Retirement Savings and Stock Ownership Plan as of December 31, 2010 and 2009 and for the year ended December 31, 2010.

/s/ Plante & Moran, PLLC
Southfield, Michigan
June 27, 2011