

SCHEDULE 13G  
Under the Securities Exchange Act of 1934  
(Amendment No. 1)\*

Polyone Corporation  
(Name of Issuer)

Common Stock  
(Title of Class of Securities)

73179P106  
(CUSIP Number)

December 31, 2004  
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is Filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*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 the disclosures provided in a prior cover page.

The information required in 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.  
73179P106

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only)  
Strong Capital Management, Inc. 39-1213042

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

- (a)  
(b)

3. SEC Use Only

4. Citizenship or Place of Organization

United States

Number of Shares Beneficially Owned by Each Reporting Person With:

5. Sole Voting Power

4,129,437

6. Shared Voting Power

0

7. Sole Dispositive Power

4,129,437

8. Shared Dispositive Power

0

9. Aggregate Amount Beneficially Owned by Each Reporting Person

4,129,437

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) N/A

11. Percent of Class Represented by Amount in Row (9)

4.5%

12. Type of Reporting Person (See Instructions)

IA

Item 1.

(a) Name of Issuer

Polyone Corporation

(b) Address of Issuer's Principal Executive Offices  
33587 Walker Road  
Avon Lake, OH 44012

Item 2.

(a) Name of Person Filing  
Strong Capital Management, Inc.

(b) Address of Principal Business Office  
Strong Capital Management, Inc.  
100 Heritage Reserve  
Menomonee Falls, WI 53051

(c) Citizenship  
United States

(d) Title of Class of Securities  
Common Stock

(e) CUSIP Number  
73179P106

Item 3. If this statement is filed pursuant to ss.ss.240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

(a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).

(b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

(c)  Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c)

(d)  Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).

(e)  An investment adviser in accordance with ss.240.13d-1(b)(1)(ii)(E).

(f)  An employee benefit plan or endowment fund in accordance with ss.240.13d-1(b)(1)(ii)(F).

(g)  A parent holding company or control person in accordance with ss.240.13d-1(b)(1)(ii)(G).

(h)  A savings associations as defined in section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).

(i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3).

(j)  Group, in accordance with ss.240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:  
4,129,437

(b) Percent of class:  
4.5%

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote  
4,129,437

(ii) Shared power to vote or to direct the vote  
0

(iii) Sole power to dispose or to direct the disposition of  
4,129,437

(iv) Shared power to dispose or to direct the disposition of  
0

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof

the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [ x ].

Item 6. Ownership of More than Five Percent on Behalf of Another Person. Strong Capital Management, Inc. is a registered investment advisor whose clients have the right to receive or the power to direct the receipt of dividends and the proceeds from the sale of the securities reported on this Schedule. No individual client's holdings represent more than five percent of the class of securities.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company  
Not Applicable

Item 8. Identification and Classification of Members of the Group  
Not Applicable

Item 9. Notice of Dissolution of Group  
Not Applicable

Item 10. Certification  
By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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.

Date: February 11, 2005

Strong Capital Management, Inc.

By: /s/ John W. Widmer  
John W. Widmer, Treasurer