United States

Securities and Exchange Commission

Washington, D.C. 20549

FORM 11-K

(Mark one)

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

OR

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

For the transition period from ______ to

For the fiscal year ended December 31,2004

Commission file number 1-12981

THE AMETEK RETIREMENT AND SAVINGS PLAN

(Full title of the plan)

AMETEK, Inc.

37 North Valley Road, Building 4, P.O. Box 1764 Paoli, Pennsylvania 19301-0801 (Name of issuer of the securities held pursuant to the plan and the address of its principal executive office)

The AMETEK Retirement and Savings Plan

Financial Statements and Supplemental Schedule

Years ended December 31, 2004 and 2003

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Plan Administrative Committee The AMETEK Retirement and Savings Plan

We have audited the accompanying statements of net assets available for benefits of The AMETEK Retirement and Savings Plan as of December 31, 2004 and 2003, and the related statements of changes in net assets available for benefits for the years then ended. 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits 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 statements, assessing the accounting principles used and significant estimates made by management, and 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 Plan at December 31, 2004 and 2003, and the changes in its net assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at year end) as of December 31, 2004, is presented for purposes of additional analysis and is not a required part of the 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. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania June 17, 2005

The AMETEK Retirement and Savings Plan

Statements of Net Assets Available for Benefits

	Decem 2004	ber 31, 2003
Assets:		
Investments, at fair value	\$236,967,737	\$196,514,051
Total Assets	236,967,737	196,514,051
Liabilities:		
Liability for Insurance Contribution	723	679
Net assets available for benefits	\$236,967,014	\$196,513,372
See accompanying notes.		

The AMETEK Retirement and Savings Plan

Statements of Changes in Net Assets Available for Benefits

	Years ended 2004	December 31, 2003
Additions:		
Contributions:		
Employer	\$ 6,475,909	\$ 5,269,344
Participants	12,565,409	10,481,175
Participant rollovers and transfers from other plans	8,414,021	9,231,392
	27,455,339	24,981,911
Investment income:		
Net appreciation in fair value of investments	21,177,468	27,171,581
Interest and dividend income	5,249,367	4,069,244
	26,426,835	31,240,825
Total additions	53,882,174	56,222,736
Deductions:		
Benefits paid to participants	13,410,136	11,260,446
Insurance premiums and commissions	18,396	18,322
Total deductions	13,428,532	11,278,768
Net increase	40,453,642	44,943,968
Net assets available for benefits:		
Beginning of year	196,513,372	151,569,404
End of year	\$236,967,014	\$196,513,372

See accompanying notes.

1. Description of the Plan

General

The following brief description of The AMETEK Retirement and Savings Plan ("the Plan") provides only summarized information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

The Plan is a tax-deferred 401(k) defined contribution savings plan, with a separate retirement feature described below. The Plan provides eligible employees of AMETEK, Inc. ("AMETEK", or "the Company"), and certain of its subsidiaries, an opportunity to invest a portion of their compensation, as defined by the Plan, in one or a combination of investment programs (see Note 3).

Contributions

Each year, participants have an opportunity to invest up to 50% of their annual compensation, as defined by the Plan, in multiples of one percent, except for certain highly compensated participants who may be subject to certain regulatory limitations. Beginning January 1, 2004, certain groups of participants have an opportunity to invest up to 75% of their compensation, as defined by the Plan. Participants may also contribute amounts representing rollovers from other qualified plans. Also in connection with business acquisitions by AMETEK, account balances from certain other plans may be transferred into the Plan, or into a separate 401(k) Plan for businesses acquired by AMETEK. During 2004, the net assets of the Chandler Engineering Company L.L.C. Investment Plan, in the amount of approximately \$4.7 million, were transferred into the Plan. The Plan provides for Company contributions equal to 33 1/3% of the first 6% of compensation contributed by each participant, to a maximum annual Company contribution of \$1,200 per participant. Matching Company contributions are credited to participants' accounts at the same time their contributed compensation is invested. However, the Company may make its matching contribution payment to the Plan at any time prior to the due date prescribed by law for filing the Company's federal income tax return for that Plan year.

The Plan has a retirement feature for eligible salaried and hourly employees hired by AMETEK after December 31, 1996. AMETEK makes contributions to the Plan on behalf of such employees equal to a specified percentage of their compensation earned based upon each participant's age and years of service, up to predetermined limits. Employee contributions under the retirement feature of the Plan are not permitted. Investment programs and transfer and exchange privileges available under the retirement feature are the same as for the savings feature under the Plan.

Forfeited Company contributions from the retirement feature, which are insignificant in amount, are used to reduce current-year Company contributions.

Participant Accounts

Each participant's account is credited with the participant's contributions and allocations of (a) the Company's contributions and (b) Plan net earnings. Allocations are based on participant earnings and/or account balances, as defined. The benefit to which a participant is entitled is the balance in the participant's vested account.

1. Description of the Plan (continued)

Vesting

Participants are fully vested at all times in both their contributions to the Plan and in Company contributions under the savings provisions of the Plan. Company contributions under the retirement feature of the Plan become fully vested after five years of service.

Participant Loans

Participants may borrow a minimum of \$1,000 or up to a maximum equal to the lesser of \$50,000 or 50% of their account balance. Participants may have up to two loans outstanding at any time, the sum of which may not exceed the maximum allowable. Repayment terms of the loans are generally limited to no longer than 60 months from inception or for a reasonable period of time in excess of 60 months for the purchase of a principal residence, as fixed by the Plan's Administrative Committee. The loans are secured by the balance in the participant's account, and bear interest at rates established by the Plan's administrative committee, which approximate rates charged by commercial lending institutions for comparable loans. Interest rates on loans outstanding at December 31, 2004 and 2003 ranged between 5.0% and 10.5%. Principal and interest is paid ratably through payroll deductions. Participant loans outstanding at December 31, 2004 and 2003, respectively, totaled \$5,983,269 and \$5,388,264 are included in investments in the accompanying Statements of Net Assets Available for Benefits.

Payment of Benefits

On termination of service, death, disability or retirement, a participant may receive a lump-sum amount equal to his or her vested account or elect to receive payment in installments up to a 15-year period but subject to certain restrictions based on life expectancy. Participants with a vested account value of less than \$5,000 will be paid in a lump sum as soon as practicable after retirement, termination, disability or death of the participant. When a participant attains age 59 1/2 while still an employee, he or she can elect to withdraw a specified portion of his or her vested account balance. Also, in certain cases of financial hardship, a participant may elect to withdraw up to a specified portion of his or her vested account balance, regardless of age.

Plan Termination

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

While the Company has not expressed any intent to terminate the Plan, it is free to do so at any time subject to the provisions of ERISA, and applicable labor agreements. In the event of Plan termination, each participant will receive the value of his or her separate vested account.

2. Summary of Significant Accounting Policies

Basis of financial statements and presentation format

The accompanying financial statements have been prepared on the accrual basis of accounting, except for the non-accrual of a liability for amounts owed to withdrawing participants, which are reflected in plan equity in accordance with U.S. generally accepted accounting principles (see Note 7). The accompanying financial statements have been prepared in accordance with Statement of Position (SOP) 99-3, "Accounting for and Reporting of Certain Defined Contribution Benefit Plan Investments and Other Disclosure Matters."

Use of estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates and assumptions.

Risks and uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market fluctuation 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 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.

Investment valuation and income recognition

The shares of registered investment companies are valued at quoted market prices, which represent the net asset values of shares held by the Plan at year-end. The fair value of the participation units in the common/collective trust is based on quoted redemption values on the last business day of the plan year. Money market and short-term investments are carried at the fair value established by the issuer and/or the trustee. Life Insurance Contracts are carried at the cash surrender value of such policies at year-end. The participant loans are valued at their outstanding book values, which approximates fair value.

Purchases and sales of investments are reflected on trade dates. Realized gains and losses on sales of investments are based on the average cost of such investments. Interest income is recorded on the accrual basis. Dividend income is recorded on the ex-dividend date. Income from other investments is recorded as earned.

The net appreciation or depreciation of investments represents the sum of the change in the difference between year-end market value and cost of investments, and the difference between the proceeds received and the cost of investments sold during the year.



3. Investment Programs

At December 31, 2004 and 2003, the Vanguard Fiduciary Trust Company was the Trustee and party-in-interest of the Plan.

A participant may direct contributions (up to certain specified limits) in any of the following investment options:

- AMETEK Stock Fund
- Vanguard Retirement Savings Master Trust
- Registered investment companies:
 - Vanguard Prime Money Market Fund
 - Vanguard Total Bond Market Index Fund
 - Vanguard LifeStrategy Funds
 - Vanguard Wellington Fund
 - Vanguard Windsor II Fund
 - Vanguard PRIMECAP Fund
 - Vanguard International Growth Fund
 - Vanguard Small-Cap Index Fund
 - Vanguard 500 Index Fund
 - Fidelity Magellan Fund
 - BlackRock Small Cap. Fund

Participants may change their investment options or transfer existing account balances to other investment options daily.

The fair value of individual investments that represent 5% or more of the Plan's assets at year-end are as follows:

	Decem	December 31,	
	2004	2003	
Vanguard Retirement Savings Master Trust	\$47,644,448	\$45,080,545	
Vanguard PRIMECAP Fund	27,428,099	21,023,849	
Vanguard Windsor II Fund	25,103,020	20,513,651	
AMETEK Stock Fund	23,019,609	14,410,104	
Fidelity Magellan Fund	18,885,358	17,566,596	
Vanguard Wellington Fund	18,012,531	14,960,583	
Vanguard 500 Index Fund	13,737,084	12,043,216	
BlackRock Small Cap. Fund	12,310,855	10,968,418	

3. Investment Programs (continued)

During 2004 and 2003, the Plan's investments (including gains on investments bought, sold, as well as, held during the year) appreciated in value, as follows:

	Decen	December 31,	
	2004	2003	
Common Stock	\$ 7,172,489	\$ 2,910,363	
Registered investment companies	14,004,979	24,261,218	
	\$21,177,468	\$27,171,581	

4. Insurance Contracts

Some employee contributions are presently used to maintain previously purchased life insurance policies underwritten by First Colony Life Insurance Company of Lynchburg, Virginia. Commissions paid on Insurance Contracts are charged directly against the participants' insurance accounts. This fund continues to be closed to new participants.

5. Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service dated September 26, 2003, stating that the Plan qualified under Section 401(a) of the Internal Revenue Code (the "Code") and, therefore, the related trust is exempt from taxation. Subsequent to issuance of the above determination letter, the Plan was amended and restated. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan Administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes that the Plan, as amended and restated, continues to be qualified and the related trust is tax exempt.

6. Administrative Expenses

The expenses of administering the Plan are payable from the trust funds, unless the Company elects to pay such expenses. From inception of the Plan to the present, the Company elected to pay such expenses directly.

7. Differences Between Financial Statements and Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Plan's Form 5500:

Decem	December 31,	
2004	2003	
\$236,967,014	\$196,513,372	
—	(339,831)	
\$236,967,014	\$196,173,541	
	2004 \$236,967,014 	

The following is a reconciliation of benefits paid to participants for the year ended December 31, 2004 per the financial statements to the Form 5500:

	Year Ended December 31, 2004
Benefits paid to participants per the financial statements	\$13,410,136
Add: Amounts allocated to withdrawing participants at December 31, 2004	—
Less: Amounts allocated to withdrawing participants at December 31, 2003	(339,831)
Benefits paid to participants per Form 5500	\$13,070,305

Amounts allocated to withdrawing participants are recorded on the Plan's Form 5500 for benefit claims that have been processed and approved for payment prior to December 31 but not yet paid as of that date.

8. Plan Amendments

Effective January 1, 2004, the Plan was amended to designate Chandler Instruments Company L.L.C., and Petrolab, L.L.C. as participating employers in the Plan. Effective September 3, 2004, AMETEK, Thermal Instruments, Inc. (Salaried Employees Only) was also designated as a participating employer in the Plan.

The AMETEK Retirement and Savings Plan Form 5500, Schedule H, Line 4i— Schedule of Assets (Held at End of Year) December 31, 2004

	Description of investment, including maturity date, rate of interest, collateral, par, or	
Identity of issue, borrower, lessor, or similar party	maturity value	Current value
AMETEK Stock Fund*	Common Stock Fund	\$ 23,019,609
Vanguard Retirement Savings Master Trust*	Common/Collective Trust	47,644,448
Vanguard Prime Money Market Fund*	Registered Investment Company	8,652,753
Vanguard Total Bond Market Index Fund*	Registered Investment Company	7,623,806
Vanguard LifeStrategy Conservative Growth Fund*	Registered Investment Company	2,906,495
Vanguard LifeStrategy Growth Fund*	Registered Investment Company	5,048,988
Vanguard LifeStrategy Moderate Growth Fund*	Registered Investment Company	7,293,978
Vanguard Wellington Fund*	Registered Investment Company	18,012,531
Vanguard Windsor II Fund*	Registered Investment Company	25,103,020
Vanguard PRIMECAP Fund*	Registered Investment Company	27,428,099
Vanguard International Growth Fund*	Registered Investment Company	7,570,456
Vanguard Small-Cap Index Fund*	Registered Investment Company	5,372,085
Vanguard 500 Index Fund*	Registered Investment Company	13,737,084
Fidelity Magellan Fund	Registered Investment Company	18,885,358
BlackRock Small Cap. Fund	Registered Investment Company	12,310,855
First Colony Life Insurance Company	Life Insurance Policies	374,903
Participant Loans*	Interest rates ranging from 5.0% to 10.5%	5,983,269
		\$ 236,967,737

* Indicates party-in-interest to the Plan

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Members of the Administrative Committee have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

The AMETEK Retirement and Savings Plan (Name of Plan)

Dated: June 22, 2005

By: /s/ John J. Molinelli

John J. Molinelli, Member, Administrative Committee

THE AMETEK RETIREMENT AND SAVINGS PLAN

EXHIBIT INDEX

Exhibit Number 23 Description Consent of Independent Registered Public Accounting Firm Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-34789, 333-80449, 333-97969, 333-87491, and 333-91507) pertaining to the 1997 Stock Incentive Plan of AMETEK, Inc., the 1999 Stock Incentive Plan of AMETEK, Inc., the 2002 Stock Incentive Plan of AMETEK, Inc., the AMETEK Retirement and Savings Plan and the AMETEK 401(K) Plan for Acquired Businesses, and the AMETEK Inc. Deferred Compensation Plan, respectively, and to the incorporation by reference in the Registration Statement on Form S-3 (File No. 333-75892), and in the related Prospectuses, of our report dated June 17, 2005, with respect to the financial statements and schedule of the AMETEK Retirement and Savings Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2004.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania June 17, 2005