

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 11-K

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

(mark one)

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2002

OR

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

Commission file number 1-8002

A. Full title of the plan and address of the plan, if different from that of the issuer named below:

Thermo Electron Corporation Choice Plan

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

Thermo Electron Corporation
81 Wyman Street
Waltham, Massachusetts 02454-9046

Thermo Electron Corporation Choice 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 by the undersigned hereunto duly authorized.

THERMO ELECTRON CORPORATTION CHOICE PLAN

By: Thermo Electron Corporation, Pension Committee

By: /s/ Theo Melas-Kyriazi
Theo Melas-Kyriazi
Chief Financial Officer and Member of the Plan Administrator

Date: June 25, 2003

THERMO ELECTRON CORPORATION CHOICE PLAN
FINANCIAL STATEMENTS
AND
SUPPLEMENTARY INFORMATION
FOR THE YEARS ENDED DECEMBER 31, 2002 AND 2001
WITH
REPORTS OF INDEPENDENT ACCOUNTANTS

Thermo Electron Corporation Choice Plan
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Thermo Electron Corporation Choice Plan
Report of Independent Accountants

To the Participants, Administrator and Pension Committee of
Thermo Electron Corporation Choice Plan

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of Thermo Electron Corporation Choice Plan (the "Plan") at December 31, 2002, and the changes in net assets available for benefits for the year ended December 31, 2002 in conformity with accounting principles generally accepted in the United States of America. 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 audit. We conducted our audit of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit 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, assessing the accounting principles used and significant estimate made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion. The financial statements of the Plan as of December 31, 2001 and for the year then ended were audited by other independent accountants whose report dated June 27, 2002 expressed an unqualified opinion on those statements.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule 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. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audit 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.

PricewaterhouseCoopers LLP

Boston, Massachusetts
June 16, 2003

Thermo Electron Corporation Choice Plan
Report of Independent Accountants

To the Pension Committee of
Thermo Electron Corporation Choice Plan
Waltham, Massachusetts

We have audited the accompanying statement of net assets available for benefits of the **Thermo Electron Corporation Choice Plan** (the Plan) as of December 31, 2001. This financial statement is the responsibility of the Plan's management. Our responsibility is to express an opinion on this financial statement based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit 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 the Plan's management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statement referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2001 in conformity with accounting principles generally accepted in the United States of America.

CARLIN, CHARRON, & ROSEN LLP

Worcester, Massachusetts
June 27, 2002

Thermo Electron Corporation Choice Plan
Statements of Net Assets Available for Benefits
December 31, 2002 and 2001

	<u>2002</u>	<u>2001</u>
Assets		
Cash and cash equivalents	\$ 565,679	\$ 762,879
Investments, at fair value	333,208,996	281,948,235
Employer Security Thermo Electron Corporation	11,861,344	15,216,739
Loans to participants	<u>5,976,961</u>	<u>4,569,758</u>
	<u>351,612,980</u>	<u>302,497,611</u>
Receivables:		
Employer contributions	546,587	674,807
Participant contributions	1,082,122	901,560
Other	<u>5,616</u>	<u>—</u>
	<u>1,634,325</u>	<u>1,576,367</u>
Total assets	<u>353,247,305</u>	<u>304,073,978</u>
Liabilities		
Operating payables	<u>3,469</u>	<u>—</u>
Net assets available for benefits	<u>\$353,243,836</u>	<u>\$304,073,978</u>

See accompanying notes to financial statements.

Thermo Electron Corporation Choice Plan
Statement of Changes in Net Assets Available for Benefits
For the Year Ended December 31, 2002

	<u>2002</u>
Addition to net assets attributed to investment income	
Interest and dividends	\$ <u>7,424,061</u>
Total investment income	<u>7,424,061</u>
Contributions:	
Employers	9,165,350
Participants	<u>19,368,208</u>
	<u>28,533,558</u>
Deductions from net assets attributed to:	
Benefits paid to participants	34,930,220
Administrative expenses	30,128
Net depreciation in fair value of investments	<u>49,911,891</u>
Total deductions	<u>84,872,239</u>
Net decrease before transfer from other plans	<u>48,914,620</u>
Net transfers to this plan	<u>98,084,478</u>
Net increase in net assets available for benefits	49,169,858
Net assets available for benefits:	
Beginning of year	<u>304,073,978</u>
End of year	<u>\$353,243,836</u>

See accompanying notes to financial statements.

Thermo Electron Corporation Choice Plan
Notes to Financial Statements
For the Years Ended December 31, 2002 and 2001

1. Plan Description

The following description of the Thermo Electron Corporation Choice Plan (the Plan) provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

General

The Thermo Electron Corporation Choice Plan (the Plan) is a defined contribution plan. The Plan covers eligible full-time and part-time employees of Thermo Electron Corporation and subsidiaries (the Company) who have completed two months of service. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Contributions

Each year participants may contribute up to 50 percent of pre-tax annual compensation or \$11,000, as defined in the Plan. Participants may also contribute amounts representing distributions from other qualified defined benefit or defined contribution plans. Beginning on the first day of the calendar quarter following completion of one year of service, the Company makes non-discretionary matching contributions equal to 200 percent of the first 2 percent and 25 percent of the next 2 percent of base compensation that a participant contributes to the Plan. Participants direct the investment of their contributions and the Company match into various investment options offered by the Plan. The Plan currently offers the Company's common stock and eighteen investment funds as investment options for participants. Contributions are subject to certain limitations.

Participant Accounts

Each participant's account is credited with the participant's contributions and allocations of the Company's contribution and plan earnings, and charged with an allocation of administrative expenses. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting

Participants are immediately vested in their voluntary contributions plus actual earnings thereon. Vesting in the Company matching contributions plus actual earnings thereon is based on years of service. A participant is 100 percent vested after three years of credited service.

A participant is automatically 100 percent vested in all contributions upon the attainment of age 65, upon becoming permanently disabled, or upon death while still an active participant.

Due to the number of divestitures in 2002 and 2001, the Company may have experienced partial terminations. As a result, the Company has accelerated the vesting of all contributions for all participants involved in the divestitures.

Participant Loans

Participants may only borrow from their employee portion of fund accounts a minimum of \$1,000 up to a maximum equal to \$50,000 or 50% of the vested account balance, whichever is less. The term of the loan is generally five years except when use of the proceeds is for the purchase of a primary residence, for which the term can be up to 30 years. The loans are secured by the balance in the participant's account and bear interest at a rate commensurate with local prevailing rates as determined by the plan administrator. The interest rates on plan loans range from 5.25% to 7% at December 31, 2002. Principal and interest are repaid through payroll deductions.

Thermo Electron Corporation Choice Plan
Notes to Financial Statements
For the Years Ended December 31, 2002 and 2001

Benefit Payments and Plan Withdrawals

On termination of service due to death, disability or retirement, a participant (or beneficiary) may elect to receive either a lump-sum amount equal to the value of the participant's vested interest in his or her account or periodic instalments. For termination of service due to other reasons, a participant may receive the value of the vested interest in his or her account as a lump-sum distribution. Withdrawals may be made under certain other circumstances in accordance with the Plan document.

Forfeitures

Upon a participant's break in service, as defined, the nonvested portion of the participant's account is forfeited and is used to reduce the Company's future funding requirements. If a participant who has terminated employment is rehired by the Company before the greater of a five-year break in service or the number of the participant's years of service prior to the participant's break in service, the participant shall be reinstated in such forfeited amount. In 2002, employer contributions were reduced by \$240,519 from forfeited nonvested accounts.

Transfer In/Out

In connection with certain reorganization activities at the Company, the assets of certain other plans sponsored by subsidiaries of the Company have been transferred into the Choice Plan in connection with the termination of those plans. Additionally, the reorganization has involved a number of business dispositions. As a result, the plan assets in the accounts of the affected employees have sometimes been transferred to plans sponsored by the acquirers of these businesses disposed. These transfers to and from other plans are captioned "net transfers to this plan" in the financial statements.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of plan assets and liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Investment Valuation

Investments are stated at fair value as determined by Fidelity Management Trust Company (the "Trust Company"), a trust company that is the trustee and custodian of the Plan's investment assets. Common shares are valued based on quoted market prices. Registered investment companies and bank collective investment funds are valued based on net asset value. Participant loans are valued at cost plus accrued interest, which approximates fair value.

Payment of Benefits

Benefits are recorded when paid.

3. Tax Status

The Plan has received a favorable determination letter from the Internal Revenue Service dated May 15, 1995. The Plan has been amended since that date and a revised application for a determination letter is pending approval by the IRS; however, the plan administrator and Plan's tax counsel believe the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code.

Thermo Electron Corporation Choice Plan
Notes to Financial Statements
For the Years Ended December 31, 2002 and 2001

4. Investments

Investments that represent five percent or more of the Plan's net assets are as follows:

	December 31, <u>2002</u>	December 31, <u>2001</u>
Managed Income Portfolio II: Class II	\$82,028,407	\$ —
Fidelity Equity – Income II Fund	46,954,580	43,815,474
Fidelity Blue Chip Growth Fund	43,974,327	47,921,091
Fidelity Balanced Fund	42,617,193	40,077,454
Fidelity Magellan Fund	24,014,123	—
Fidelity Growth Company Fund	20,369,301	25,193,042
U.S. Equity Index Commingled Pool	18,548,584	17,742,087
PIMCO Total Return Fund: Class ADM	17,699,913	6,389,802
Janus Worldwide Fund	13,749,138	19,271,006
Thermo Electron Corporation	11,861,344	15,216,739
Stable Value Fund	—	61,893,402

Purchases and sales of investments are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on ex-dividend date.

5. Related Party Transactions

Plan investments are managed by the Trust Company, which is a trustee as defined by the Plan. Therefore, these transactions qualify as party-in-interest transactions. There were no fees paid by the Plan for investment management services for the period ended December 31, 2002.

6. Plan Termination

Although it has not expressed an intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants would become 100% vested in their employer contributions.

7. Administrative Expenses

The Company pays for administrative expenses associated with management of and professional services for the Plan. Administrative fees for hardship withdrawals and loan transactions are paid by the participants. The administrative expenses included in the statement of changes in net assets available for benefits represent expenses paid by the participants.

8. Plan Mergers

On May 31, 2002, the Thermo Neslab, Inc. 401(k) Plan was merged into the Plan. The balance of \$14,627,249 for the net assets available for benefits as of May 31, 2002 was transferred into the Plan.

On July 31, 2002, the Thermo Finnigan LLC 401(k) Plan was merged into the Plan. The balance of \$47,453,179 for the net assets available for benefits as of July 31, 2002 was transferred into the Plan.

As of December 31, 2002, the participant accounts and the net assets of the Spectra Physics 401(k) Plan were transferred into the Plan, totalling \$36,004,050. The financial statements reflect the merger as if it occurred at the close of business December 31, 2002.

**Thermo Electron Corporation Choice Plan
Schedule of Assets Held (at End of Year)
December 31, 2002**

Supplemental Schedule

	<u>Units/ Shares</u>	<u>Current Value</u>
Description of Investments (1)		
Mutual Funds:		
Fidelity Balanced Fund	3,206,711	\$ 42,617,193
Fidelity Blue Chip Growth Fund	1,376,779	43,974,327
Fidelity Diversified International Fund	244,593	4,197,209
Fidelity Equity – Income II Fund	2,700,091	46,954,580
Fidelity Growth Company Fund	575,079	20,369,301
Fidelity Magellan Fund	304,130	24,014,123
Fidelity Overseas Fund	50,600	1,113,208
Fidelity 2000 Fund	39,811	438,316
Fidelity 2010 Fund	74,870	856,507
Fidelity 2020 Fund	168,457	1,792,381
Fidelity 2030 Fund	125,117	1,281,195
Fidelity 2040 Fund	21,429	125,572
Freedom Income Fund	59,677	632,575
Janus Worldwide Fund	427,922	13,749,138
PIMCO Total Return Fund: Class ADM	1,658,848	17,699,913
T. Rowe Price Small – Cap Stock Fund, Inc.	596,115	12,816,467
Fidelity Group Trust for Employee Benefit Plans:		
Managed Income Portfolio II: Class II	82,028,407	82,028,407
U.S. Equity Index Commingled Pool	706,075	18,548,584
Employer Security:		
Thermo Electron Corporation	589,530	11,861,344
Loans to participants (for a term not exceeding 30 years, at interest rates of 5.25% to 7% per annum)		<u>5,976,961</u>
		<u><u>\$351,047,301</u></u>

(1) All investments are a party in interest to the Plan.

Thermo Electron Corporation Choice Plan
Exhibit Index

Exhibit Number	Description of Exhibit
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of Carlin, Charron, & Rosen LLP.
99.1	Certification of the Vice President of Human Resources Pursuant to 18 U.S.C. Section 1350.
99.2	Certification of the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350.