## SECURITIES EXCHANGE COMMISSION

Washington, DC 20549

Under the Securities Exchange Act of 1934 (Amendment No. 4)

EMCORE CORPORATION
 (Name of Issuer)

Common (Title of Class of Securities)

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

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

[ ] Rule 13d-1(b) [X] Rule 13d-1(c)

[ ] Rule 13d-1(d)

290846104 (CUSIP NUMBER)

1) Name of Reporting Pioneer Global Asset Person Management S.p.A.

IRS Identification 98-0362802 No. of Above

- 2) Check the Appropriate Box (a) of A Member of Group (See Instructions) (b)
- 3) SEC Use Only
- 4) Citizenship of Place of Organization Italy

Number of (5)Sole Voting
Shares Power 5,905,956
Beneficially Owned (6)Shared Voting
by Each Reporting Power 0
Person With (7)Sole Disposi-

tive Power 5,905,956 (8)Shared Dispositive Power 0

- 9) Aggregate Amount Beneficially 5,905,956 Owned by Each
  - Reporting Person
- 10) Check if the aggregate Amount in Row (9) Exclude Certain Shares (See Instructions)
- 11) Percent of Class Represented
  By Amount in Row 9. 11.19%
- 12) Type of Reporting
  Person (See Instructions) HC
- Item 1(a) Name of Issuer.

EMCORE CORPORATION

Item 1(b) Address of Issuer's Principal Executive Offices:

Mr. Thomas G. Werthan Chief Financial Officer Emcore Corporation 145 Belmont Drive Somerset, NJ 08873

Item 2(a) Name of Person Filing:

Pioneer Global Asset Management S.p.A.

Item 2(b) Address of Principal Business Office:

Galleria San Carlo 6, 20122 Milan, Italy

Item 2(c) Citizenship:

Italy

Item 2(d) Title of Class of Securities:

Common Stock

290846104

Item 3 The person filing this statement pursuant to Rule 13d-1(b)

or 13d-2(b) is:

(Inapplicable)

Item 4. Ownership.

(a) Amount Beneficially Owned: 5,905,956

(b) Percent of Class: 11.19%

(c) Number of shares as to which such person has

- (i) sole power to vote or to direct the vote 5,905,956
- (ii) shared power to vote or to direct vote 0
- (iii) sole power to dispose or to direct disposition of 5,905,956
- (iv) shared power to dispose or to direct disposition 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 here:

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Inapplicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported On By the Parent Holding Company.

Inapplicable.

Item 8. Identification and Classification of Members of the Group.

Inapplicable.

Item 9. Notice of Dissolution of the Group.

Inapplicable.

Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transactions having such purposes or effect.

After reasonable inquiry and to the best of my knowledge and believe, I certify that the information set forth in this statement is true, complete and correct.

/s/Dario Frigerio Name: Dario Frigerio Title: Chief Executive Officer