

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. ____)*

EMCORE Corporation
(Name of Issuer)

Common Stock
(Title of Class of Securities)

290846104
(CUSIP Number)

December 31, 2006
(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).

SCHEDULE 13G

CUSIP No. 290846104

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).

AMVESCAP PLC
PowerShares Capital Management LLC

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

AMVESCAP PLC: England
PowerShares Capital Management LLC United States

5. Sole Voting Power 4,000,005: Such shares are held by the following entities in the respective amounts listed:

PowerShares Capital Management LLC 4,000,005

Number of
Shares
Beneficially
Owned By
Each
Reporting
Person With

6. Shared Voting Power

-0-

7. Sole Dispositive Power 4,000,005: Such shares are held by the following entities in the respective amounts listed:

PowerShares Capital Management LLC 4,000,005

8. Shared Dispositive Power

-0-

9. Aggregate Amount Beneficially Owned by Each Reporting Person

4,000,005

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)

7.86%

12. Type of Reporting Person (See Instructions)

IA, HC. See Items 2 and 3 of this statement.

SCHEDULE 13G

Item 1(a) Name of Issuer:

EMCORE Corporation

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

145 Belmont Drive
Somerset, NJ 08873

Item 2(a) Name of Person Filing:

AMVESCAP PLC

In accordance with Securities and Exchange Commission Release No. 34-39538 (January 12, 1998), this statement on Schedule 13G or amendment thereto is being filed by AMVESCAP PLC ("AMVESCAP"), a U.K. entity, on behalf of itself and its subsidiaries listed in Item 4 of the cover of this statement. AMVESCAP through such subsidiaries provides investment management services to institutional and individual investors worldwide.

Executive officers and directors of AMVESCAP or its subsidiaries may beneficially own shares of the securities of the issuer to which this statement relates (the "Shares"), and such Shares are not reported in this statement. AMVESCAP and its subsidiaries disclaim beneficial ownership of Shares beneficially owned by any of their executive officers and directors. Each of AMVESCAP's direct and indirect subsidiaries also disclaim beneficial ownership of Shares beneficially owned by AMVESCAP and any other subsidiary.

Item 2(b) Address of Principal Business Office:

30 Finsbury Square
London EC2A 1AG
England

Item 2(c) Citizenship:

See the response to Item 2(a) of this statement.

Item 2(d) Title of Class of Securities:

Common Stock, NO par value per share

Item 2(e) CUSIP Number:

290846104

Item 3 If this statement is filed pursuant to ss240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (e) ☒ An investment adviser in accordance with section 240.13d-1(b)(1)(ii)(E)
- (g) ☒ A parent holding company or control person in accordance with section 240.13d-1(b)(1)(ii)(G)

As noted in Item 2 above, AMVESCAP is making this filing on behalf of its subsidiaries listed herein. Each of these entities is either an investment adviser registered with the United States Securities and Exchange Commission under Section 203 of the Investment Advisers Act of 1940, as amended, or under similar laws of other jurisdictions. AMVESCAP is a holding company.

- Item 4 Ownership:
- Please see responses to Items 5-8 on the cover of this statement, which are incorporated herein by reference.
- 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 []
- Item 6 Ownership of More than Five Percent on Behalf of Another Person:
- N/A
- Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being reported on By the Parent Holding Company:
- Please see Item 3 of this statement, which is incorporated herein by reference.
- Item 8 Identification and Classification of Members of the Group:
- N/A
- Item 9 Notice of Dissolution of a Group:
- N/A
- 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.

02/14/2007
Date

AMVESCAP PLC

By: /s/ Lisa Brinkley

Lisa Brinkley
Chief Compliance Officer

Exhibit Index

Exhibit A Joint Filing Agreement

EXHIBIT A

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree to the joint filing of the attached Schedule 13G, and any and all amendments thereto, and expressly authorize AMVESCAP PLC, as the ultimate parent company of each of its undersigned subsidiaries, to file such Schedule 13G, and any and all amendments thereto, on behalf of each of them.

Dated: February 14, 2007

AMVESCAP PLC

By: /s/ Lisa Brinkley

Name: Lisa Brinkley
Title: SVP/Global Compliance Director

AIM Advisors, Inc.

By: /s/ Todd L. Spillane

Name: Todd L. Spillane
Title: Chief Compliance Officer

AIM Capital Management, Inc.

By: /s/ Todd L. Spillane

Name: Todd L. Spillane
Title: Chief Compliance Officer

AIM Funds Management, Inc.

By: /s/ Wayne Bolton

Name: Wayne Bolton
Title: Vice President, Compliance &
Chief Compliance Officer

AIM Private Asset Management, Inc.

By: /s/ Todd L. Spillane

Name: Todd L. Spillane
Title: Chief Compliance Officer

AMVESCAP National Trust Company

By: /s/ Kevin Lyman

Name: Kevin Lyman
Title: General Counsel

Atlantic Trust Company, N.A.

By: /s/ Kathleen Oldenborg

Name: Kathleen Oldenborg
Title: Chief Compliance Officer

INVESCO Hong Kong Limited

By: /s/ Asha Balachandra

Name: Asha Balachandra
Title: Reg. Head of Legal AP

INVESCO Asset Management Deutschland
GmbH

By: /s/ Stephanie Ehrenfried

Name: Stephanie Ehrenfried
Title: Head of Legal CE

INVESCO Asset Management Limited

By: /s/ Nick Styman

Name: Nick Styman
Title: Director of European Compliance

INVESCO Asset Management S.A.

By: /s/ Patrick Riviere

Name: Patrick Riviere
Title: Managing Director

INVESCO Asset Management Osterreich GmbH

By: /s/ Thomas Kraus

Name: Thomas Kraus
Title: Managing Director

INVESCO Global Asset Management (N.A.),
Inc.

By: /s/ Jeffrey Kupor

Name: Jeffrey Kupor
Title: General Counsel

INVESCO GT Management Company S.A.

By: /s/ Nick Styman

Name: Nick Styman
Title: Director of European Compliance

INVESCO Institutional (N.A.), Inc.

By: /s/ Jeffrey Kupor

Name: Jeffrey Kupor
Title: General Counsel

INVESCO Management S.A.

By: /s/ Alain Gerbaldi

Name: Alain Gerbaldi
Title: Head of Investment Operations

INVESCO Maximum Income Management S.A.

By: /s/ Alain Gerbaldi

Name: Alain Gerbaldi
Title: Head of Investment Operations

INVESCO Private Capital, Inc.

By: /s/ Jeffrey Kupor

Name: Jeffrey Kupor
Title: General Counsel

INVESCO Senior Secured Management, Inc.

By: /s/ Jeffrey Kupor

Name: Jeffrey Kupor
Title: General Counsel

INVESCO Taiwan Limited

By: /s/ Asha Balachandra

Name: Asha Balachandra
Title: Reg. Head of Legal, AP

INVESCO Asset Management (Japan) Limited

By: /s/ Asha Balachandra

Name: Asha Balachandra
Title: Reg. Head of Legal, AP

INVESCO Asset Management Ireland Limited

By: /s/ Alain Gerbaldi

Name: Alain Gerbaldi
Title: Head of Investment Operations

INVESCO Kapitalanlagegesellschaft GmbH

By: /s/ Stephanie Ehrenfried

Name: Stephanie Ehrenfried
Title: Head of Legal CE

PowerShares Capital Management LLC

By: /s/ Kevin Gustafson

Name: Kevin Gustafson
Title: General Counsel & COO

Stein Roe Investment Counsel, Inc.

By: /s/ Greg Campbell

Name: Greg Campbell
Title: General Counsel