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

SCHEDULE 13G

(Amendment No. 2)

Under the Securities Exchange Act of 1934

Senesco Technologies, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

817208408

(CUSIP Number)

December 31, 2003

(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 disclosures provided in a prior cover page.

The information required on 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).

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CUSIP NO.	817208408	SCHEDULE 13G	PAGE 2 OF 8 PAGES
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1. NAME OF REPORTING PERSON/S.S. OR I.R.S. IDENTIFICATION
NO. OF ABOVE PERSON

SENECA CAPITAL, L.P.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (A) ☐
(B) ☒

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

DELAWARE

5. SOLE VOTING POWER

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH:

6. SHARED VOTING POWER

1,319,620

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

1,319,620

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,319,620

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES
CERTAIN SHARES* []

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

9.47%

12. TYPE OF REPORTING PERSON*

PN

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CUSIP NO. 817208408		SCHEDULE 13G	PAGE 3 OF 8 PAGES
1.	NAME OF REPORTING PERSON/S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON SENECA CAPITAL ADVISORS, LLC		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (A) [] (B) [X]		
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5.	SOLE VOTING POWER 0	
	6.	SHARED VOTING POWER 1,319,620	
	7.	SOLE DISPOSITIVE POWER 0	
	8.	SHARED DISPOSITIVE POWER 1,319,620	
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,319,620		
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES []		
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.47%		
12.	TYPE OF REPORTING PERSON 00 - LIMITED LIABILITY COMPANY		

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CUSIP NO. 817208408		SCHEDULE 13G	PAGE 4 OF 8 PAGES
1.	NAME OF REPORTING PERSON/S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON DOUGLAS A. HIRSCH		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (A) [] (B) [X]		
3.	SEC USE ONLY		
4.	CITIZENSHIP OR PLACE OF ORGANIZATION USA		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5.	SOLE VOTING POWER 0	
	6.	SHARED VOTING POWER 1,319,620	
	7.	SOLE DISPOSITIVE POWER 0	
	8.	SHARED DISPOSITIVE POWER 1,319,620	
	9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,319,620	
	10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES []	
	11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.47%	
	12.	TYPE OF REPORTING PERSON IN	

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ITEM 1.

(a) Name of Issuer: Senesco Technologies, Inc.

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

303 George Street, Suite 420, New Brunswick, NJ 08901

ITEM 2.

(a) Name of Persons Filing:

(b) Address or principal business office or, if none, residence:

(c) Citizenship:

Seneca Capital, L.P.
950 Third Avenue, 29th Floor
New York, NY 10022
(Delaware limited partnership)

Seneca Capital Advisors, LLC
950 Third Avenue, 29th Floor
New York, NY 10022
(Delaware limited liability company)

Douglas A. Hirsch
c/o Seneca Capital
950 Third Avenue, 29th Floor
New York, NY 10022
(United States Citizen)

Item 2(d). Title of Class of Securities: Common stock, \$0.01 par value

Item 2(e). CUSIP Number: 817208408

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B), 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) ☐ Investment Adviser registered under section 203 of the Investment Advisers Act or under the laws of any State
- (f) ☐ Employee Benefit Plan, Pension fund which is subject to the provisions of the Employee Retirement Income Security Act of 1974 or Endowment Fund; see Section 240.13d-1(b)(1)(ii)(F)
- (g) ☐ A Parent Holding Company or control person, in accordance with Section 240.13d-1(b)(ii)(G)(Note: See Item 7)
- (h) ☐ A Savings Association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813)

SCHEDULE 13G

CUSIP No. 817208408

Page 6 of 8 Pages

- (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 Section 240.13d-1(b)(1)(ii)(J)

If this statement is filed pursuant to Rule 240.13d-1(c), check this box. ☒ [X]

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.

SENECA CAPITAL, L.P.(1)

- (a) Amount Beneficially Owned: 1,319,620
- (b) Percent of Class: 9.47%
- (c) Number of shares as to which such person has:
- (i) sole power to vote or to direct the vote: 0
- (ii) shared power to vote or to direct the vote: 1,319,620
- (iii) sole power to dispose or to direct the disposition of: 0
- (iv) shared power to dispose or to direct the disposition of: 1,319,620

SENECA CAPITAL ADVISORS, LLC (2)

- (a) Amount Beneficially Owned: 1,319,620
- (b) Percent of Class: 9.47%
- (c) Number of shares as to which such person has:
- (i) sole power to vote or to direct the vote: 0
- (ii) shared power to vote or to direct the vote: 1,319,620
- (iii) sole power to dispose or to direct the disposition of: 0
- (iv) shared power to dispose or to direct the disposition of: 1,319,620

DOUGLAS A. HIRSCH (3)

- (a) Amount Beneficially Owned: 1,319,620
- (b) Percent of Class: 9.47%
- (c) Number of shares as to which such person has:
- (i) sole power to vote or to direct the vote: 0
- (ii) shared power to vote or to direct the vote: 1,319,620
- (iii) sole power to dispose or to direct the disposition of: 0
- (iv) shared power to dispose or to direct the disposition of: 1,319,620

- (1) Includes 897,679 shares of common stock which Seneca Capital, L.P. has a right to acquire upon the exercise of warrants.
- (2) Shares reported for Seneca Capital Advisors, LLC represent shares beneficially owned by Seneca Capital, L.P. Seneca Capital Advisors, LLC is the sole general partner of Seneca Capital, L.P.

SCHEDULE 13G

CUSIP No. 817208408

Page 7 of 8 Pages

- (3) Shares reported for Douglas A. Hirsch represent shares beneficially owned by Seneca Capital, L.P. which may be deemed to be controlled by Mr. Hirsch because he is the Manager of Seneca Capital Advisors, LLC (the sole General Partner of Seneca Capital, L.P.).

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 []. NOT APPLICABLE.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employees benefit plan, pension fund or endowment fund is not required. NOT APPLICABLE.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

If a parent holding company has filed this schedule, pursuant to Rule 13d-1(b)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company has filed this schedule pursuant to Rule 13d-1(c), attach an exhibit stating the identification of the relevant subsidiary. NOT APPLICABLE.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

If a group has filed this schedule pursuant to Rule 13d-1(b)(ii)(J), so indicate under Item 3(h) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to Rule 13d-1(d), attach an exhibit stating the identity of each member of the group. NOT APPLICABLE.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP

Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security report on will be filed, if required, by members of the group, in their individual capacity. 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 and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

CUSIP No. 817208408

Page 8 of 8 Pages

SIGNATURE

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

Date: February 12, 2004

SENECA CAPITAL, L.P.

By Seneca Capital Advisors, LLC, its General Partner

By: /s/ Douglas A. Hirsch

Douglas A. Hirsch, Its Managing Member

SENECA CAPITAL ADVISORS, LLC

By: /s/ Douglas A. Hirsch

Douglas A. Hirsch, Its Managing Member

By: /s/ Douglas A. Hirsch

Douglas A. Hirsch, Individually