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

**POST-EFFECTIVE AMENDMENT NO. 1
TO
FORM F-3
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

Orbotech Ltd.

(Exact Name of Registrant as Specified in its Charter)

Not Applicable

(Translation of Registrant's Name into English)

Israel
(State or other Jurisdiction of
Incorporation or Organization)

None
(I.R.S. Employer Identification No.)

**7 Sanhedrin Boulevard
North Industrial Zone
P.O. Box 215
Yavne 8110101
Israel
Tel: +972-8-9423533**

(Address and telephone number of Registrant's principal executive offices)

**Teri A. Little
Executive Vice President and Chief Legal Officer
KLA-Tencor Corporation
1 Technology Drive
Milpitas, California 95035
(408) 875-3000**

(Name, address and telephone number of agent for service)

Copies to:

**Bradley L. Finkelstein
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**Jeffrey Cannon
Associate General Counsel
KLA-Tencor Corporation
1 Technology Drive
Milpitas, California 95035
Tel: (408) 875-3000
Fax: (408) 678-8324**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement as determined by market conditions.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

**EXPLANATORY NOTE
DEREGISTRATION OF SECURITIES**

This Post-Effective Amendment No. 1 (this “**Post-Effective Amendment**”), filed by Orbotech Ltd. (the “**Company**”), relates to the Registration Statement on Form F-3 (Registration No. 333-211938) filed by the Company with the U.S. Securities and Exchange Commission on June 9, 2016 (the “**Registration Statement**”), pursuant to which the Company registered an indeterminate number of ordinary shares of the Company.

Pursuant to the Agreement and Plan of Merger dated as of March 18, 2018 (as amended on May 11, 2018), by and among the Company, KLA-Tencor Corporation, and Tiburon Merger Sub Technologies Ltd. (the “**Merger Sub**”), the Merger Sub merged with and into the Company, with the Company continuing as the surviving company in the merger and a wholly owned subsidiary of KLA-Tencor Corporation (the “**Merger**”).

In connection with the Merger, the Company is terminating all offers of its securities pursuant to the Registration Statement. The Company, by filing this Post-Effective Amendment, hereby removes from registration any and all securities registered but unsold under the Registration Statement. This filing is made in accordance with an undertaking in the Registration Statement to remove from registration, by means of a post-effective amendment, any securities that were registered for issuance but remain unsold at the termination of the offering.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the undersigned registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-3/A and has duly caused this Post-Effective Amendment to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Milpitas on March 1, 2019.

Orbotech Ltd.

By: /s/ Bren D. Higgins

Name: Bren D. Higgins

Title: Director

No other person is required to sign this Post-Effective Amendment to the Registration Statement in reliance on Rule 478 of the Securities Act of 1933, as amended.