

CAMTEK LTD  
Form 6-K  
April 15, 2010

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

FORM 6-K

Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16  
under the Securities Exchange Act of 1934

For the Month of April 2010

CAMTEK LTD.  
(Translation of Registrant's Name into English)

Ramat Gavriel Industrial Zone  
P.O. Box 544  
Migdal Haemek 23150  
ISRAEL  
(Address of Principal Corporate Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities and Exchange Act of 1934.

Yes  No

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CAMTEK LTD.  
(Registrant)

By: /s/ Mira Rosenzweig

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Mira Rosenzweig,  
Chief Financial Officer

Dated: April 15, 2010

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FOR IMMEDIATE RELEASE

CAMTEK SELECTED AS ADVANCED STEM/TEM SAMPLE  
PREPARATION SOLUTION PROVIDER

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Camtek's Xact System Selected by a Leading Equipment Supplier  
For Advanced STEM/TEM Analysis Applications

MIGDAL HAEMEK, Israel – April 15, 2010 – Camtek Ltd. (NASDAQ and TASE: CAMT) (“Camtek” or the “Company”), announced today that a leading Semiconductor Equipment Supplier has selected the Xact, Camtek's Advanced STEM/TEM (Scanning Transmission Electron Microscope) sample preparation solution, enabling material analysis and verification. The Xact system will be installed in the second quarter of 2010.

Shrinking feature dimensions and advances in material complexity require a scale of analysis only supplied by STEM and TEM. Sample preparation for front end of the line (FEOL) process monitoring and offline failure analysis has become a bottleneck. Existing sample preparation solutions are falling short of meeting the evolving requirements of high resolution and high contrast imaging and analysis. Camtek's Xact overcomes these limitations by applying the ground-breaking Adaptive Ion Milling (AIM™) technology, and offers negligible artifacts and improved throughput for customers.

The Xact was developed by SELA - Semiconductor Engineering Laboratories Ltd. (“SELA”), who was acquired by Camtek in November 2009.

Mr. Roy Porat, Camtek's General Manager commented: “We are very pleased to announce this first order by us within only a few months from the completion of the acquisition of SELA. This is an achievement that justifies our belief in the viability of the Sela acquisition and business potential. Based on our strong technological advantage, we believe this order of the Xact is a first step towards a successful penetration to a very significant potential market estimated by us today at \$150 million with potential for a substantial growth in coming years”

ABOUT CAMTEK LTD.

Camtek Ltd provides automated solutions dedicated for enhancing production processes and yield, enabling our customers new technologies in two industries; Semiconductors, Printed Circuit Board (PCB) & IC Substrates.

Camtek addresses the specific needs of these industries with dedicated solutions based on a wide and advanced platform of technologies including intelligent imaging, image processing, ion milling and digital material deposition. Camtek's solutions range from micro-to-nano by applying its technologies to the industry-specific requirements.

This press release is available at [www.camtek.co.il](http://www.camtek.co.il).

This press release may contain projections or other forward-looking statements regarding future events or the future performance of the Company. These statements are only predictions and may change as time passes. We do not assume any obligation to update that information. Actual events or results may differ materially from those projected, including as a result of changing industry and market trends, reduced demand for our products, the timely development of our new products and their adoption by the market, increased competition in the industry, price reductions as well as due to risks identified in the documents filed by the Company with the SEC.

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