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 2008

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 x Form 40-F o

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 o No x

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/ Ronit Dulberg

Ronit Dulberg, Chief Financial Officer

Dated: April 22, 2008

SIGNATURE 1

Camtek Ltd.
P.O.Box 544, Ramat Gabriel Industrial Park
Migdal Ha'Emek 23150, ISRAEL
Tel: +972 (4) 604-8100 Fax: +972 (4) 644-0523

E-Mail: Info@camtek.co.il Web site: http://www.camtek.co.il

FOR IMMEDIATE DISTRIBUTION
April 22, 2008

CAMTEK INTRODUCES MUSTANG, A NEW AUTOMATED SYSTEM FOR OPTICAL INSPECTION OF FINISHED HIGH DENSITY PCB FOR MOBILE PRODUCTS

Company Launches New Korean Web Site

MIGDAL HAEMEK, Israel April 22, 2008 Camtek Ltd. (NASDAQ: CAMT; TASE: CAMT), announced today the introduction of Mustang Camtek s new line of automated systems for optical inspection of finished high-density PCBs (printed circuit boards) used in the production of mobile consumer products. First systems of Mustang Model 600 have already been installed at customer sites.

Camtek will exhibit the Mustang at the KPCA show in Seoul, Korea, booth N101, from April 23 to 25.

Automated inspection of mobile consumer products is a new, growing potential market segment , said Yuval Agami, marketing manager and newly-appointed VP of Camtek s PCB inspection products. The high density of printed circuit boards in these products increases their sensitivity to defects. At the final manufacturing stages the boards are at their maximum value, and so is the complexity of the defects. Replacing manned microscopes by automated inspection makes sense to more and more manufacturers. We developed the Mustang to answer this need for fast, reliable and consistent defect detection. We expect that t that the warm welcome it has already received from first customers signals Camtek s future success in this emerging market segment .

Camtek also launched today a new website in Korean http://www.camtekorea.co.kr. The new site follows the growth of Camtek s customer base in Korea. It joins the existing sites for China (www.camtek.co. Taiwan (www.camtek.jp). All sites can also be accessed directly from Camtek s main web site www.camtek.co.il, www.camtek.jp). All sites can also be

ABOUT CAMTEK S MUSTANG

Built upon the technology of Camtek s Pegasus IC substrate inspection system, the Mustang combines excellent detection ability with automatic, cassette-to-cassette material handling and sorting capability for a broad range of panel sizes and types.

Dual illumination systems optimize lighting for hard-to-detect defects in metal plating as well as in solder mask layer. Auto defect classification capabilities keeps track of defect occurrences by type while the system inspects both sides and sort panels of advanced cell phones, digital cameras and personal entertainment products. For more information please visit www.camtek.co.il/mustang.

ABOUT CAMTEK LTD.

With headquarters in Migdal Ha Emek Israel, Camtek Ltd., designs, develops, manufactures, and markets automatic optical inspection systems and related products. Camtek s automatic inspection systems are used to enhance both production processes and yield for manufacturers in the printed circuit board industry, the high density interconnect substrate industry and the semiconductor manufacturing and packaging industry. This press release is available at 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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CONTACT INFORMATION

CAMTEK: Ronit Dulberg, CFO Tel: +972-4-604-8308 Fax: +972-4-604 8300

Mobile: +972-54-905-0776 ronitd@camtek.co.il

IR INTERNATIONAL Ehud Helft / Kenny Green GK International Investor Relations

Tel: (US) 1 866 704 6710 kenny.green@gkir.com ehud.helft@gkir.com