

CAMTEK INTRODUCES A NEW SEMICONDUCTOR INSPECTION SYSTEM FOR THE LED MARKET

MIGDAL HAEMEK, Israel – January 25, 2010 – Camtek Ltd. (NASDAQ and TASE: CAMT) (“Camtek” or the “Company”), today announced the introduction of a new Semiconductor Inspection tool focused on the special requirements of the LED Market.

Camtek’s Condor 5LED is a new AOI (Automated Optical Inspection) system designed to provide solutions to a variety of requirements that are unique to LED Semiconductor Manufacturers.

The LED Market’s special inspection requirements are characterized by 3-6 inch wafers, each of which may contain between 100 to over 200 thousand LED devices per wafer. Typically the wafer is made of a translucent compound semiconductor such as Gallium Arsenide, Gallium Phosphide and/or Indium Phosphide. The customers’ defect specifications and unique inspection process raise a significant challenge for AOI suppliers to solve.

Camtek has already been addressing the special needs of this market for over two years and has designed solutions on a per customer basis, built into existing platforms. Camtek has installed 6 such systems in three countries in this time. The new Condor 5LED incorporates all Camtek’s experience in this space, into a singular and focused designated solution, targeted at the LED Market.

Mr. Roy Porat, Camtek’s General Manager commented: “The Condor 5LED will further entrench our leading position in this market segment. Throughout the past year, we have been benchmarked a number of times against competitors, and we have been chosen as the “tool of choice” several times. The Condor 5LED will strengthen our position in this market, and will allow us to maintain and build on our technological leadership.”

Mr. Porat concluded: “We are optimistic with regard to this segment in 2010. Given indications for significant growth from our customers in the LED Market, we aim to grow our business with the Condor 5LED in the coming quarters and years.”

ABOUT CAMTEK LTD.

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

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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