



WEGU-DEVICE, INC.

INDUSTRIAL SENSORS & PROCESS AUTOMATION

# ATF6 information short version



光技術をサポートする  
**株式会社オプトサイエンス**

<http://www.optoscience.com>

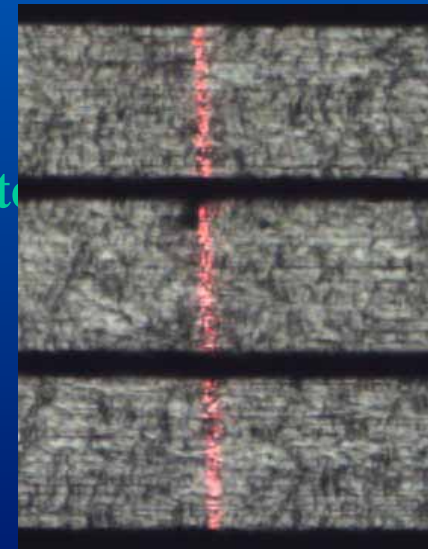
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# *ATF-6* General Functionality

- *ATF-6* is a latest member of the ATF sensors family
- Designed to function accurately on very busy patterns down to diffusing surfaces such as patterned silicon wafers
- One-to-one compatible with ATF-5 and ATF-4
- Main features:
  - Operates at 1 kHz update rate (3 fold faster than ATF-5)
  - Surface recognition
  - C/M mode
  - Profilometer
  - Significantly reduced laser intensity

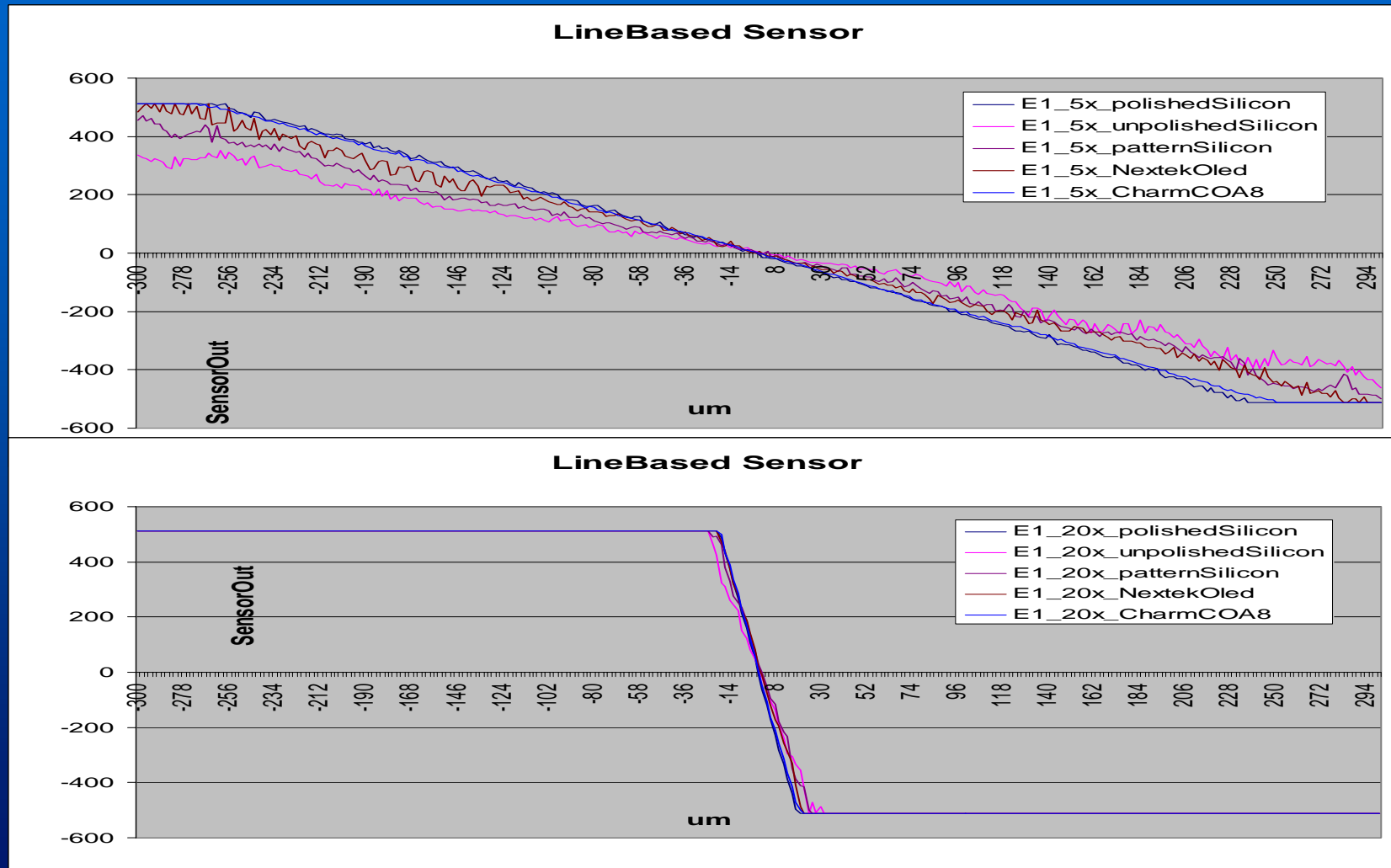
# ATF-6 Principle of Operation

- Operates on the principle of *Monocular Triangulation*<sup>TM</sup>
- Features redesigned optics:
  - Instead of array of dots (ATF-5), ATF-6 projects a line segment
- High accuracy is assured by means of DIP:
  - The “sparse” bad spots are eliminated from the layers and only good segments are integrated into the measurement
  - On diffusing or semi diffusing surfaces sensor focusing position
  - Can be offset by S/W to focus above or below



Stainless lithography mask

# ATF-6 Performance



# *ATF-6* Domains of Application

- *ATF-6* sensor is primarily designed for AOI equipment operating on:
  - Patterned silicon wafer
  - Photo-lithography masks (semi-con type)
  - OLEDs
- *ATF-6* sensor may replace ATF-5 for TFT applications, if the TFT patterns will continue to grow in their complexity