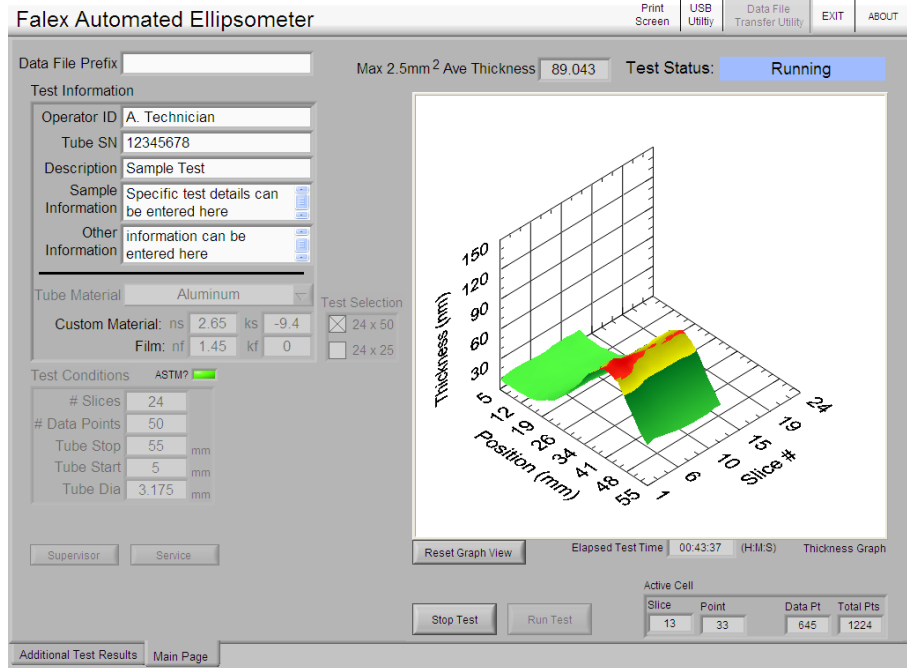




# Ellipsometer

Developed in cooperation with leading manufacturers and consumers of jet fuel, the Falex Ellipsometer offers a consistent, precise, analytical measurement of ASTM D3241 Heater Tube deposits.



## SUITABLE FOR TESTING

- ASTM D3241, Standard Test Method for Thermal Oxidation Stability of Aviation Turbine Fuels (JFTOT Procedure) - Heater Tube Deposit Ratings
- SAE AIR5996, Evaluation of Coking Propensity of Aviation Turbine Lubricants Using the Single Phase Flow Technique - Heater Tube Deposit Ratings

## PASS / FAIL 2.5 mm<sup>2</sup> Average Film Thickness Determination

- D3241 Darkest 2.5 mm<sup>2</sup> Rating Color on Strip
- Ellipsometer Uses Equivalent Area Evaluations
- Software Configured for ASTM D3241 Testing
- 5 mm to 55 mm along heater tube
- Historical Ellipsometer Data 85 nm = VTR Value 3
- Software Determination Max Thickness & Location
- PASS or FAIL Notification (Graphic Color Coded)
- Test Report Data and Test Information

60mm Test Area



2.5mm<sup>2</sup> Examples  
Area as square  
Area as spot  
Area as streak,  
0.8mm wide



## FALEX ELLIPSOMETRIC APPARATUS FOR RATING HEATER TUBE DEPOSITS

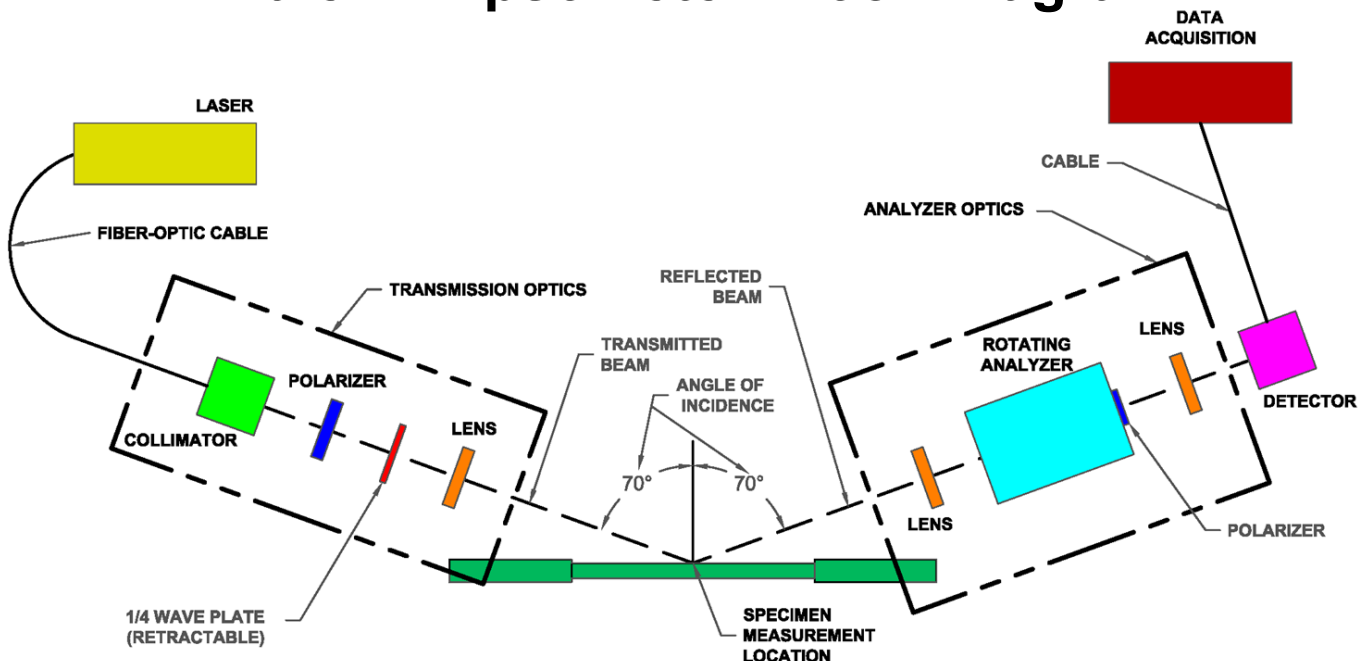
Part Number 430-001-001

100 – 240 VAC, 50/60 Hz, 15 amps max.

Fully Automated, laser light source, optical detection system for measuring the film thickness of ASTM D3241 Heater Tube. User selected Express, Detailed, or Custom measurement programs for precise, simple analysis with minimal operator time and interface.



### Falex Ellipsometer Block Diagram





# Safety Features of the Falex Ellipsometer

Part Number 430-001-001

100 – 240 VAC, 50/60 Hz, 15 amps max.

- The laser and all laser paths are fully enclosed in a protective housing designed to prevent human body exposure from the laser path or collateral radiation by beam or reflection exposure.
- The access door is interlocked with redundant safety limit switches to prevent exposure to laser emissions.
- Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50.

 **FALEX CORPORATION**   
1020 Airpark Drive  
Sugar Grove, IL 60554 USA  
www.falex.com

THIS PRODUCT COMPLIES WITH  
21 CFR PART 1040.10, 1040.11

MADE IN USA

MANUFACTURED:

SERIAL NUMBER:

  
**DANGER**  
LASER RADIATION  
AVOID DIRECT EXPOSURE TO BEAM

 **Maximum Power: 5mW**  
**Wavelength: 1550nm**  
**CLASS 3B LASER PRODUCT**

  
**CAUTION**  
CLASS 3B INVISIBLE LASER RADIATION  
WHEN OPEN AND INTERLOCKS DEFEATED  
AVOID EXPOSURE TO BEAM