Single Point Diamond Turning
SPDT Capability
BAE Systems Australia’s Single Point Diamond Turning (SPDT) Department is located in the Holden Hill facility, South Australia. A Precitech Nanoform 250 Ultra diamond turning machine is housed in its own temperature controlled environment with dedicated metrology capability.

SPDT technology is capable of generating complex optical surfaces on a wide range of infrared and non ferrous materials.

A dedicated group of engineers and technicians are available to support you in specifying your requirements to ensure successful results. Prototype work along with production quantities can be processed.

Current customers include:
- Defence and aerospace industries
- Industrial laser companies
- Medical equipment manufacturers
- Federal government agencies
- Electro-Optic companies
- Government research and private research institutions

Quality Testing
Zygo Mk4 interferometers are available for surface analysis as well as radius of curvature measurements.

A Zygo Maxim-3D non-contact Profilometer is utilised for surface roughness measurements.

A range of spectrophotometers are available to conduct measurements from UV to far infrared (IR).

Specifications
- Diameter
  - Up to 220 mm
- Shapes
  - Plano - Spherical - Aspheric
  - On and Off Axis
  - Conic and Non-Conic
  - Multiple-Profile and Diffractive Optics
- Figure Accuracy
  - Up to λ/10 at 632.8mm
- Surface Finish (Ra)
  - < 1.5nm dependent on substrate

Applications
- Infrared Optics: Ge, ZnS, ZnSe, Si
- Polymer Optics
- Laser Optics
- All Non Ferrous Materials
- Crystalline Materials

Metrology
- Shrike II 10.6 micron Infrared Interferometer
- Zygo Mark GPI Interferometer
- Zygo Maxim-3D Non-contact Profilometer
- Nikon Optiphot Microscope, with up to 1000x magnification
- UltraComp Metrology Probe

FOR MORE INFORMATION CONTACT:

BAE Systems
2-6 Ardmornish Street
Holden Hill  SA  5088
Telephone +61 8266 8232
Fax +61 8 8266 0667
www.baesystems.com/australia

BAE SYSTEMS AUSTRALIA

This document gives only a general description of the product(s) or services except where expressly provided otherwise shall not form part of any contract. From time to time, changes may be made in the products or the conditions of supply.

2009 © Copyright BAE Systems