Surface Profilometer

The XP2 Stylus-based Surface Profilometer is a computerized, high-sensitivity surface profiler that measures roughness, waviness, and step height in a variety of applications. It features the ability to measure precision step heights from under 10 nanometer to as large as 400 microns, the XP2 profiler provides more than five orders of magnitude of precision step height measurement. The profiler incorporates an optical deflection height measurement mechanism and magneto static force control system which results in a low force (loads as small as .05 mg) and low inertia stylus assembly, making it on of the best bench-top profiler on the market today. These innovations combine to produce a surface profiler capable of measuring soft films and substrates without surface damage.

Specifications:

- **Make and Model:** Ambios XP2
- **Sample Stage Diameter:** 200mm (8")
- **Scan Length Range**: 50mm Maximum
- **X-Y Stage Translation**: 150mm x 178mm
- **Sample Thickness:** 30mm (~1.25 inches)
- **Vertical Resolution**: 1.5Å at 10µm, 15Å at 100µm
- **Vertical Range**: 400um max.
- **Standard Magnification**: 40-160X motorized zoom
- **Stylus Tip Radius**: 2.5 microns
- **Stylus Force Range**: 0.05-10mg (programmable)
- **Stress Measurement**: Yes