

New Product Information

Mass Spectrometer System for UHV Thermal Desorption Studies

The Hiden TPD Workstation provides a versatile platform for precisely controlled thermal desorption studies (TDS) in the UHV pressure regime through a temperature range from 50°C to 1000°C. Common applications include desorption studies of silicon wafers and thin-film coatings, quantification of hydrogen evolution from metals.

The sample stage, with temperature ramp fully programmable at rates to 40°C per minute, is shrouded by a heatshield incorporating water-cooling to minimise outgassing and between-sample cooldown rate. Fast sample loading and extraction is enabled via the UHV load lock and sample transfer mechanism, maintaining optimum primary vacuum quality. Samples, typically in wafer form of near 1 cm. square, are positively located on the sample stage to ensure efficient thermal contact with the heater surface.



TPD Workstation

The quadrupole mass spectrometer, also with water-cooled jacket, is mounted with the acceptance aperture close to the sample surface for optimum capture of evolved gases, the 300 amu Hiden 3F PIC system featuring a fast digital detection system with 7-decade dynamic range for optimum quantification of evolved peak profiles. Sample temperature is merged directly with the TPDsoft control and acquisition program for combined presentation of multiple evolved species with temperature.

For further information on this or any other Hiden Analytical products contact Hiden Analytical at info@hidden.co.uk or visit the main website at www.HiddenAnalytical.com.

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