



# TPD Workstation

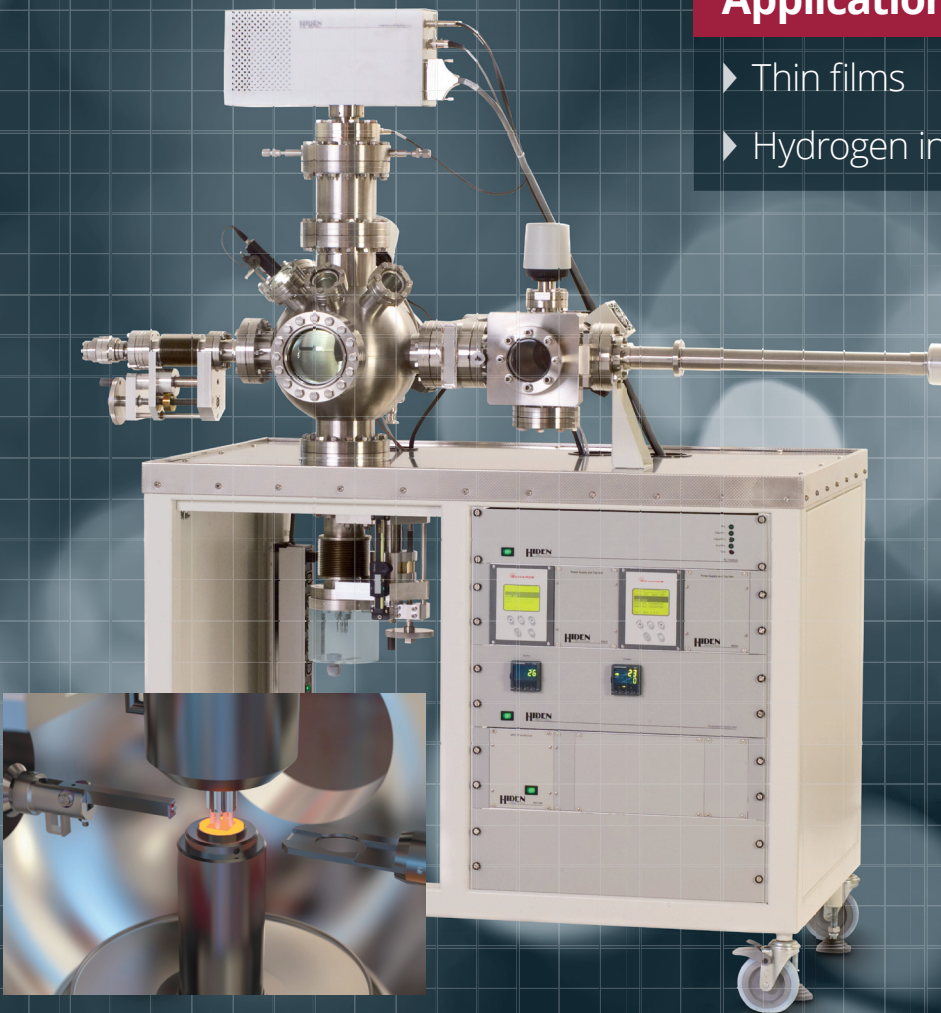
## ANALYSIS OF THERMAL DESORPTION PRODUCTS BY UHV TPD/TDS

### Applications

- ▶ Thin films
- ▶ Photovoltaics
- ▶ Hydrogen in metals
- ▶ Semiconductors

### Key Features

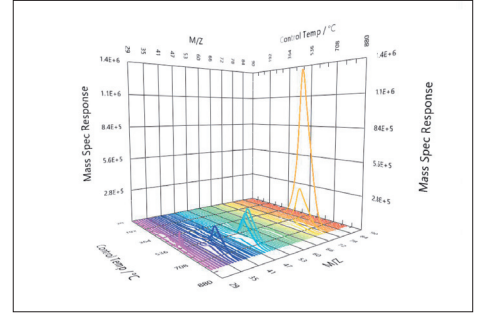
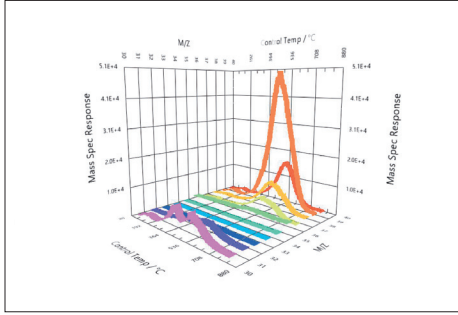
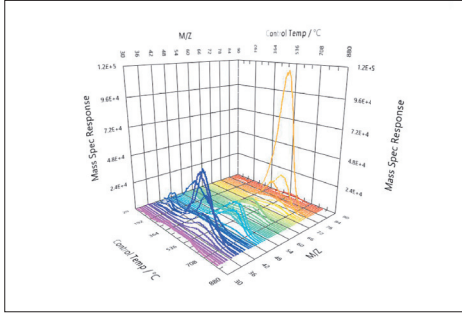
- ▶ 1000°C sample stage with PID control module
- ▶ High Precision Triple Filter Quadrupole Mass Spectrometer with Digital Pulse Ion Counting Detector
- ▶ Multiport UHV chamber
- ▶ Water cooled heater shroud for minimum outgassing and fast cool down times
- ▶ Linear sample transfer mechanism and loadlock, including gate valve and viewports
- ▶ Z-drive for optimum sample/detector positioning
- ▶ Mass filter shroud to maximise sensitivity while minimising background species
- ▶ TPDsoft experimental control and analysis software
- ▶ Bakeout Jacket (200°C max)



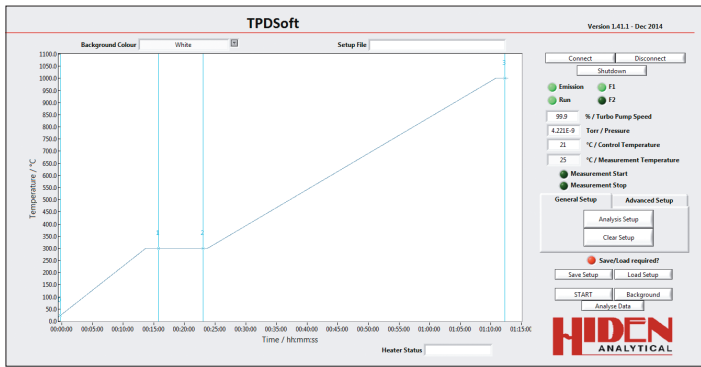
Mass spectrometer available separately with optional PID controllers/power supplies for integration into existing vacuum systems

# Hidden TPDsoft Thermal Analysis Software

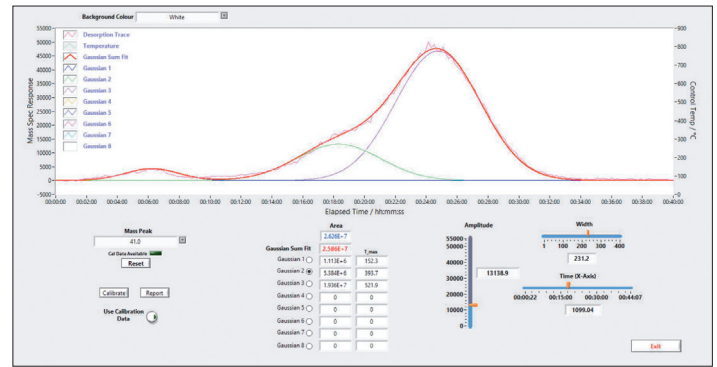
- ▶ Automatic sample temperature and analyser control
- ▶ Real-time 3D bar view for easy identification of unknown desorption products
- ▶ Display desorption data versus time or temperature
- ▶ TPD analysis routines for peak integration and deconvolution
- ▶ Built-in mass spectral library
- ▶ NIST export function for identification of desorption species



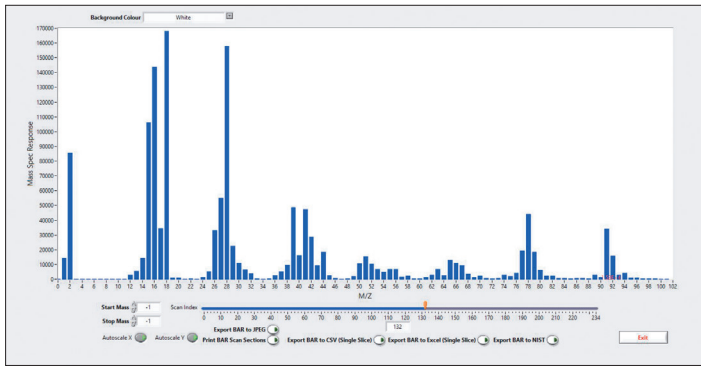
▶ Bar data is presented in an interactive 3D view



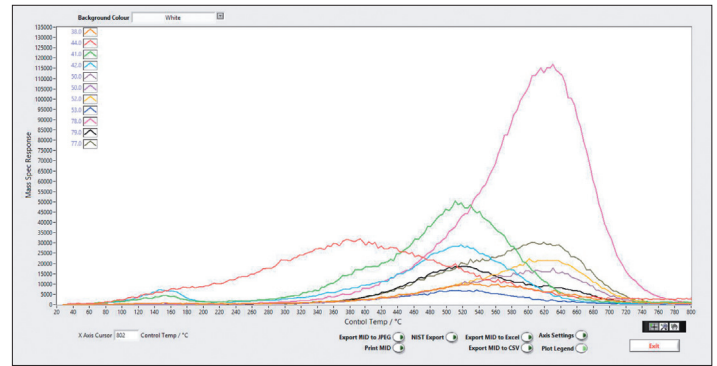
▶ Full control of temperature parameters and MS acquisition



▶ Peak integration and deconvolution functions



▶ 2D bar view with NIST export



▶ Plot desorption trends versus time or temperature

- ▶ Windows 7/8/10 compatible with Ethernet, USB and serial connections
- ▶ System Dimensions: 1590 mm wide x 725 mm deep x 1610 mm high
- ▶ Power Requirements: 110/220/240 V, 50/60 Hz