



Application– Magnetic microscopes for semiconductor failure analysis

Problem– Breakage with sapphire windows, causing the scope to shut-down and damage to the magnetic sensor

Solution– Diamond window 2mm diameter by .025 thick

Finding- The diamond has proven to be much more durable than sapphire and could be made thin enough enabling the window to be close to the sample

The price of the diamond was less than 20% higher than sapphire, enabling the customer to switch products and make a significant improvement in performance