



Industrial Microwave +
Plasma Systems

MUEGGE

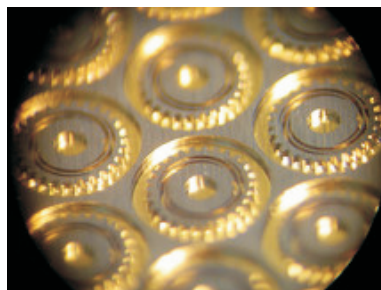
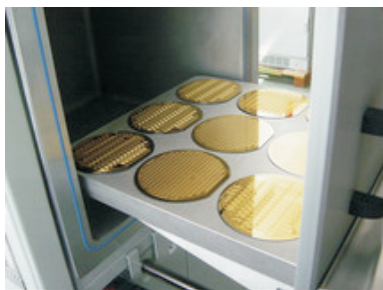
Plasma Stripping Tool (3 kW / 2450 MHz)

Microwave Plasma System MA3000D-161BB

Features:

- Optimized for the removal of thick photo resist layers like SU-8
- Can also be used for isotropic etching of materials like Si, SiO₂, SiN, SiOxNy, W, Mo, etc.
- Pure chemical etching with no attack onto the etching sample by ions
- Integrated remote plasma source
- Water cooled plasma zone
- Very low thermal load for substrates
- High etch rates possible (more than 200 µm/h on large areas)
- Substrate size up to 460 mm x 460 mm
- No attack to metals like Ni, Ni/Fe, Au, Cu etc.
- Only very slight attack to Si and Si compounds as SiO₂ or Si₃N₄
- High environmental compliance

Examples:



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MW-Plasma System MA3000D-161BB

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Specifications:

INPUT VOLTAGE:	400 V AC, 3 ph, 50 Hz, 3 x 35 A	EXTERNAL DIMENSIONS:	W = 800 mm, L = 800 mm, H = 1950 mm
HF-POWER:	Max. 3 kW cw, 2450 MHz	DIMENSIONS PLASMA CHAMBER:	W = 500 mm, L = 500 mm, H = 400 mm (e.g. 9 x 6" wafers)
COMPRESSED AIR:	Quality: Oil-free, dry, 5 µm filtered Pressure: 6 bar - 9 bar	CONDITIONS:	Ambient-Temp.: 5 °C - 45 °C non- condensing, T max. = 45 °C < 3 h/d, Humidity: 80 % @ 30 °C, subsequently linearly reduced to 50 % @ 45 °C
INPUT GASES; PROCESS PRESSURE:	Oxygen (O ₂), Nitrogen (N ₂), Tetrafluoromethane (CF ₄); 0.4 mbar - 2.4 mbar	COOLING:	Internally air-cooled and water-cooled 4.5 bar - 6 bar, Water inlet temperature 20 °C - 25 °C
WORKING PLATE:	Temperature: 20 °C - 120 °C Heating/Cooling Fluid: Oil	CONNECTIONS:	CEE-Connector plug 63 A (MAINS), CEE-Connector-female (VACUUM PUMP), USB / COM / Ethernet (INTERFACE), ½" lock coupling Rectus Series 87 (COOLING WATER), ¼" torque clutch (COMPRESSED AIR), 6 mm Swagelok (INPUT GASES), ISO-K63 (OUTPUT TO VACUUM PUMP), Stud M6 (PE),
ASSEMBLY:	Fully enclosed aluminum housing, Solid encapsulated assembly	WEIGHT:	Approx. 440 kg

Recommended system components:

- Vacuum pump (dry pump min. 300 m³/h)
- Gas cleaning system (CS CLEAN dry absorber)