

60kV Electron Beam Welder

CW MODEL



Modular, flexible design to enhance production capabilities



Suitable for thermally conductive materials



Ideal for welding medium-sized components



High-efficiency



Equipment, Features and Options

Standard Equipment

- > Air-conditioned electrical cabinet
- > Beam deflection patterns
- > Chamber viewing window
- > Directly heated cathode
- > eWon ethernet hub for remote diagnostics
- > Filament alignment jig
- > Function generator for application of welding patterns
- > High-quality HDMI camera, with adjustable cross hairs and video capability
- > Industrial PLC
- > Manual gun-slide $\pm 32\text{mm}$
- > Mechanical and diffusion pumps for high-vacuum operation
- > PC-based HMI, with recipe storage and data logging
- > Separately pumped gun column (turbo-molecular)

Advanced Features

- > Automatic focus and alignment
- > Automatic joint finder and imaging using back scattered electrons
- > CNC control
- > Dry vacuum pumps
- > Internal rotary tilt carousel
- > Mylar film protector
- > Recirculating water chiller
- > Special beam functions, including beam splitting

Tooling Options

- > Chamber extensions
- > Custom tooling
- > External rotary manipulator
- > Indexing carousel
- > Internal rotary manipulator, tilt, and Z lift
- > Motorised gun-slide
- > Motorised run-out platform
- > Tail-stock
- > XY table



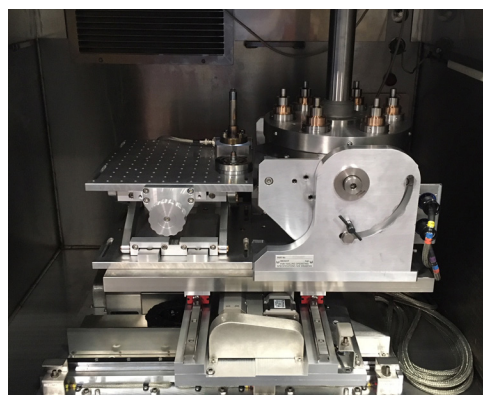
Heavy-duty gun column and HDMI camera



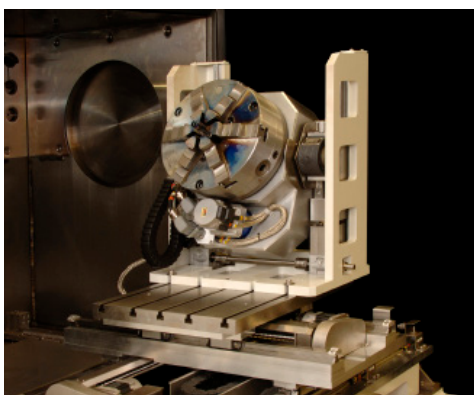
HMI with CNC control

Specification

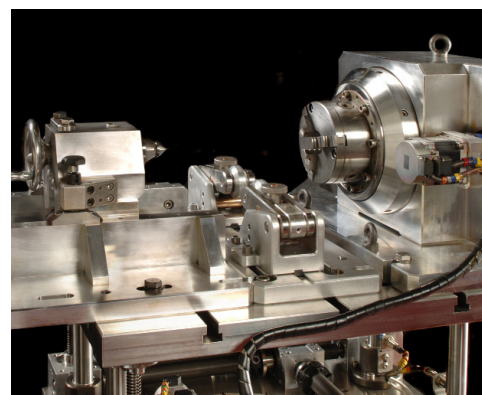
Standard chamber sizes include (Other sizes are available upon request)	450x450x450mm 610x610x610mm 1,000x750x800mm 1,100x1,100x1,100mm 1,400x1,000x1,250mm 2,250x1,250x1,400mm
60kV beam power	Standard up to 6kW (100mA at 60kV) Optional up to 15kW (250mA at 60kV)
Gun vacuum	10 ⁻⁵ mbar range
Chamber vacuum	10 ⁻⁴ mbar range
Chamber pump down time (to 10 ⁻⁴ mbar)	Dependent on chamber volume, pump specification and customer requirements



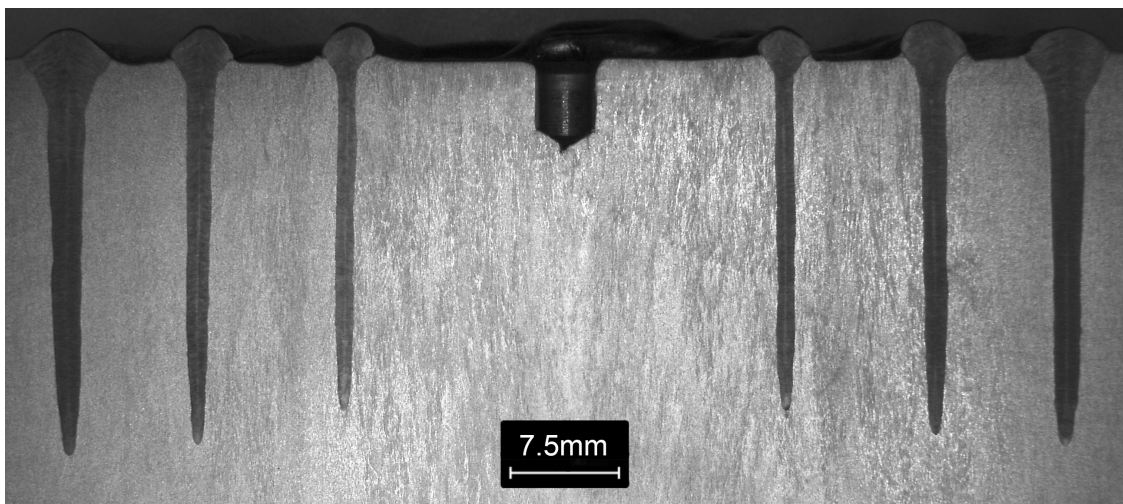
Manual scissor lift, indexing carousel, and beam probe



Rotary tilt with lift function



Custom tooling table with z-lift



60kV welds up to 250mA

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