Cambridge Vacuum Engineering

60kV Electron Beam Welder
TURBOCHARGER MODELS

Passenger car and commercial diesel applications

Manual or robot loading

TW Model

# Equipment, Features and Options

Standard Equipment

› Automatic beam alignment and filament heating
› Beam deflection patterns and function generator
› Ethernet hub for remote diagnostics
› High-quality HDMI camera and vision system
› HMI for recipe storage and data logging
› Industrial PLC with PC-based
› Separately pumped gun column

Advanced Features and Options

› Automatic joint finding option using back scattered electrons
› Directly heated cathode with high-intensity beam for low distortion
› Light guard protection of the loading area
› MES and industry 4.0 compatibility
› Plain tooling housing for self-aligning parts and dual drive tooling housing option for centring
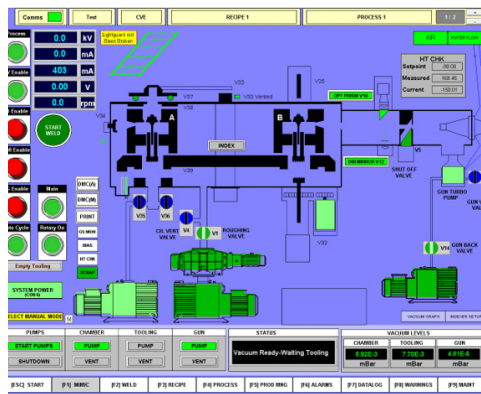› Pneumatic tail-stock
› Quick change tooling

NG Model
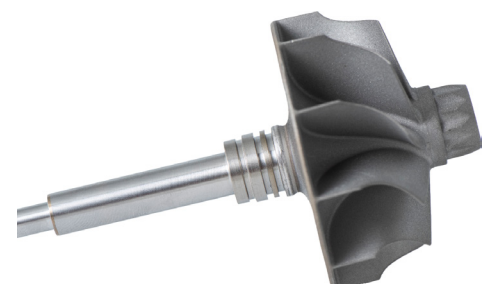
Shaft and wheel

Specification

|	TW Model	NG Model	SP Model
Typical takt time*	30-35s	20-22s	15-18s
Dual drive tooling housing Maximum wheel size	A up to 53mm B 50-82mm C 80-105mm	Up to 53mm	Up to 53mm
Plain tooling housing	Up to 120mm	Up to 65mm	Up to 65mm

*Dependent on weld recipe, shaft diameter and joint finding option
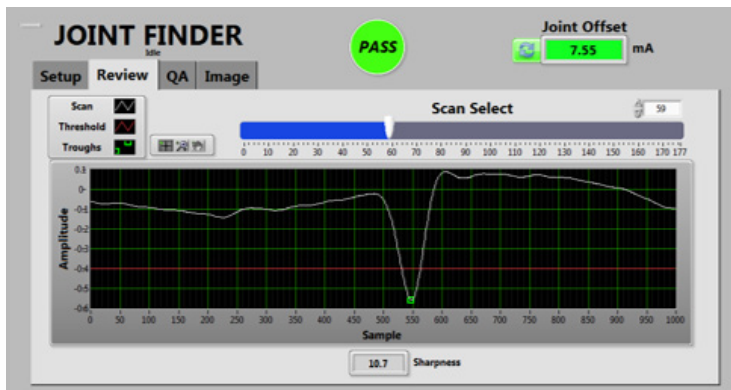

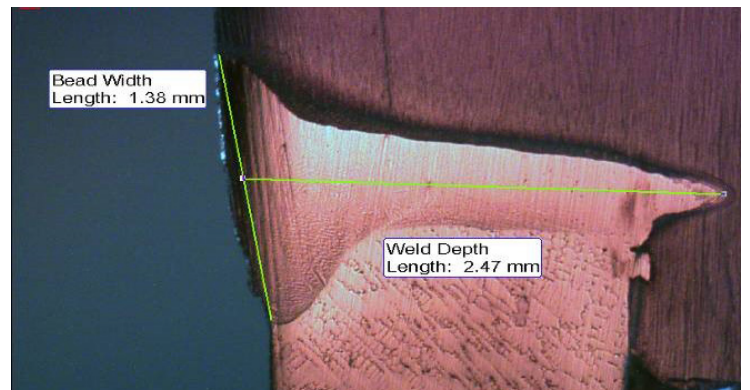PC-based HMI with data log to hard drive and remote diagnostics via ethernet hub

Dual drive tooling housing, shaft adapter and wheel collet
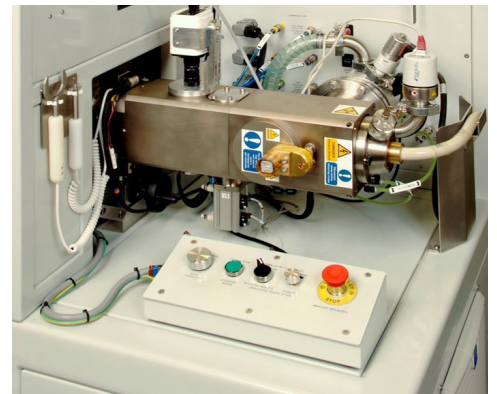
D60LN gun column with filament alignment system and turbo-molecular pump

Automatic joint finder

Weld cross-section