

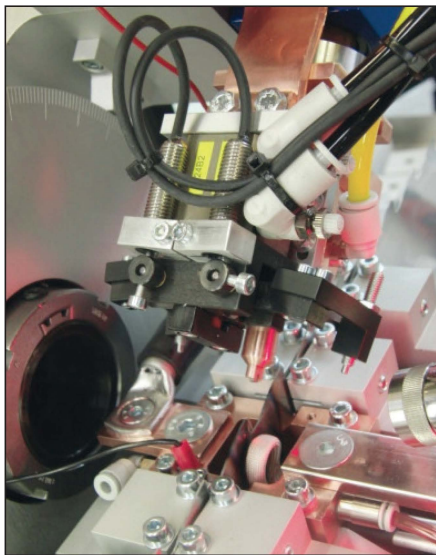


Series 2000

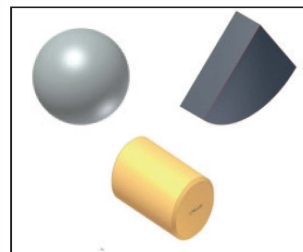
High Precision Saw Blade Welding System

DESCRIPTION

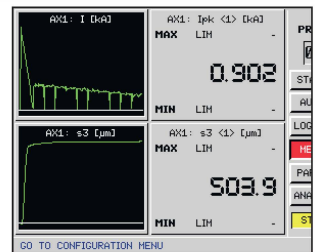
The 2000 series High Precision Saw Blade welding system is a versatile and very accurate welding system to weld hard metal parts onto a band saw. The welding system combines the AWS3 welding system with a very accurate transport system that positions the band saw backing material with the help of a vision system. Thanks to its modular set up the welding system can be upgraded to a variety of hard metal tips. Choosing smart solutions also results in a very ergonomic system for easy loading and unloading and allows for efficient maintenance.



APPLICATIONS



Hard Metal Tips Welding



AWS3 Weld Monitoring



Band Saw

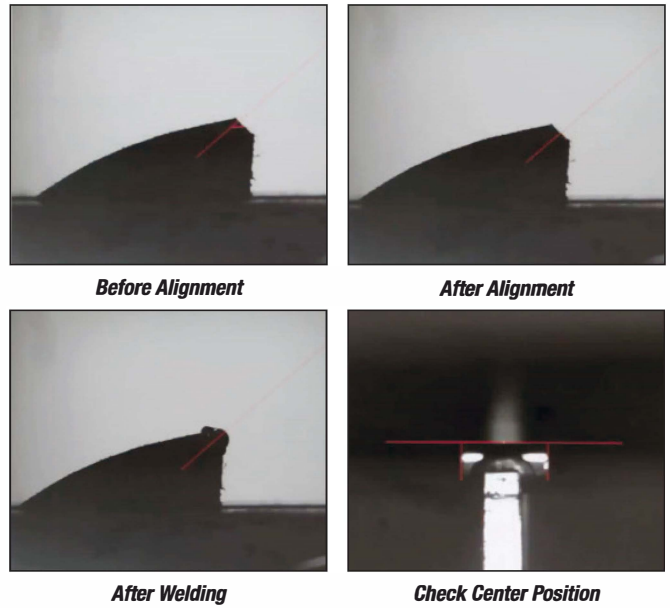
KEY FEATURES

- New vision based system for accurate placement of each individual hard metal tip.
- Modular setup enables a variety of hard metal tip (Tungsten Carbide) shapes.
- Upgradable to other hard metal tip shapes
- AWS3 Integrated Resistance Welding System with process control and monitoring enable an optimum quality control.
- Easy accessibility for easy maintenance and loading of parts.
- Compact design for a minimum footprint.
- Heavy-duty steel welded frame for maximum stability.

OPTIONAL LASER MARKING SYSTEM

While the saw blade is already positioned for the welding process, a fast, reliable and flexible laser marking can be done. Mark your brand, a product name, production parameters and serial number of the product on well-defined place on the saw blade. One-stop-shopping: customers evaluate and purchase one solution from one supplier for welding and for identifying the welded products, supporting your production and taking responsibility. A wide range of proven, industrial markers with a power range from 7 to 50W are available. A recommendation can be given after performing application tests. Two output wavelengths of 1064nm for general applications and 532nm green (SHG) for improved absorption and several laser technologies including YVO4 and Fiber markers are available. A wide range of optional beam expanders and lens combinations are possible.

VISION SYSTEM



TECHNICAL SPECIFICATIONS

Welding System	AWS3 Advanced
MFP Motorized Weld Head	50-200N
ISQ20-6 inverter power supply	Max. 6kAmp
Displacement measurement	± 0.01mm
Weld Speed	2-5 seconds per tip: depending on hard metal tip and weld schedule
Backing Material	Width 0,7-2 mm; Height 20-100 mm
Band transport system	Servo controlled, Pitch 6-35mm depending on design
Hard metal tips type	Ball; Cylinder; Cylinder segment
Part feed	Vibratory bowl feeder
Cover Gas	Supply unit integrated in clamp electrode
Positioning hard metal parts	Vision system PC based with separate monitor
Transport system	CNC positioning , double clamp blade indexer
System Control	Siemens PL , Touchscreen HMI
Annealing station (optional)	Magnetic induction heater with temperature sensor
Power requirements	Three Phase 400V 50/60Hz
System dimensions	Approx. 1400 x 900 x 2400 mm (LxWxH)