



Advanced technology, the unique solution for saw production...

# **CNC Double Side Erosion Machine**

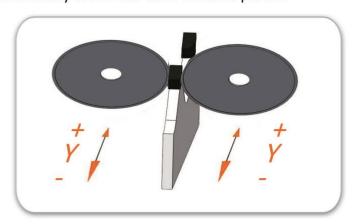
8-axes full CNC control PCD Erosion for circular saw

The flexible, profitable solution

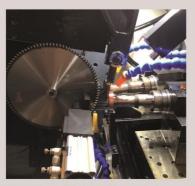
High technology to lead the ever-changing world of tool processing. ABM offers the complete solution: getting the most out of the CNC



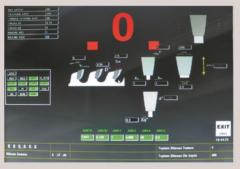
SPARQ-DUO is an ideal machine for PCD circular saws grinding. Thanks to the CNC control, all desired geometry settings can be performed from panel. User-friendly interface and machine's ease of use minimizes the need for qualified operator. It is a high speed and high precisionfull CNC controlled side erosion machine. On the SPARQ-DUO, two horizonal grinding heads are adapted to our classical double side grinding machine, the tangential and radial angles are automatically adjusted easily from the CNC Control panel:



### A versatile response to meet all demands...



Smooth grinding of blades thanks to clamping system. Patented smart finger system provides blade indexing without touching the body and without damaging the blade.



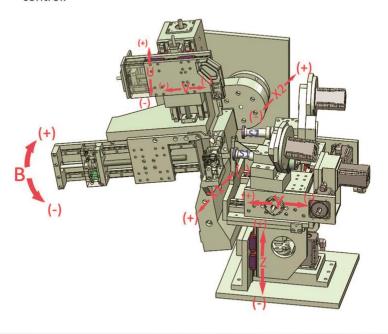
Operating screen for side grinding
Tangential and Radial Angles are controlled
from the CNC operating panel

#### **Features**

- 8-axes fully CNC control.
- Special plating on mechanical components ensure non-corroding and hardening.
- Group tooth and Variable pitch indexing by intelligent finger.
- Unique software for Newly Replaced Teeth and Saw Blade Production. Oscillation program for multiple infeed with rough, finish amounts and finish cycles.
- 17" LCD display and operating interface in any stated language.
- Ready tooth form programs, unlimited memory for saving.
- Grinding of all types in one cycle for wood and metal industries.
- Angular or dimensional parameter input for Radial angles.
- Maximum outside diameter Ø800mm.
- Electronic cam for indexing.
- Automatic tooth pitch calculation and ability manual input.
- Central lubrication system reducing maintenance and increasing machine life.
- Windows® based PC control enables update over internet or by flash drive
- Separate electrical and machine cabins provide noise, dust and heat insulation.
- ABM developed Erosion Generator.
- Operator-friendly machine program.
- Robust base constructed in ergonomic cabin.



Become independent! Optimum use of the fast grinding machine and the most operator-friendly control system. Built-in dressing system ensures automaical wheel compensation. Automatically adjustable infeed and bevel angles by mean of CNC control.



(X1 - X2) Infeed Axis

(B) Hook Angle

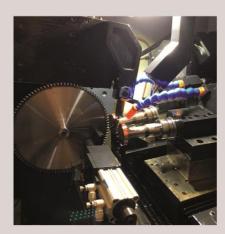
(U - V) Indexing Axis

(Z) Tangential Angle

(Y) Grinding Axis

## The true innovation is the product of experience and dynamics...

Connected load



SPARQ-DUO working area



Fire System

### **Technical Specifications**

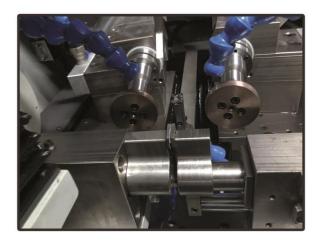
Circular saw outside diameter	Ø100-800 mm
Bore diameter	from Ø12 mm
Blade thickness	Maximum 10 mm
Tooth pitch	Maximum 100 mm
Grinding angle	(-10°) - (+10°)
Bevel angle	±6°
• Grinding wheel outside diameter	Ø60 mm
<ul> <li>Grinding wheel bore diameter</li> </ul>	Ø10 mm
<ul> <li>Coolant motor capacity</li> </ul>	~100 l/min
<ul> <li>Coolant container capacity</li> </ul>	~100
Servo rapid speed	600 r.p.m.

~10,5 kW

### **SPARQ-DUO**



At ABM, we develop our machines, our own electronic systems and application software and manufacture all main mechanical components. Finally, we assemble and test the final product to global machine standards. Whichever ABM machine you choose for your grinding, you will know that it is built to meet all market demands.



**Erosion Discs** 

The ABM CNC-Motion Control difference: productive and always ahead...

### **OPTIONALS**

- Open loop coolant unit for factories with central coolant filtration system
- Oil filtration system FILTRON
- Air filtration system
- Oil coolant system
- Side gauge



Oil Filter



