

## MWJT TOOL (MICROWATERJET TOOL)

# SOFTWARE

FOR WATERJET CUTTING.



Besides the self-developed AWJmm<sup>®</sup> technology (Abrasive Waterjet micromachining) Microwaterjet furthermore uses the Microwaterjet Tool. This tool covers the high requirements of water jet cutting and the producers' demands in the best possible way.

Its operation is innovative and easy at the same time, thanks to its clear management system; the tool has a live monitoring function for all processes due to the AVOR System. Remote management is possible by means of a smart phone app, which makes the optimized control including live monitoring of the device even more flexible. Further advantages are the program optimization and the application of a barcode scanner. Therefore, the complete production process is optimized according to the latest technical knowledge, as single processing steps are logged.

Both technologies, the MWJT Tool (MicroWaterJet Tool) and the AWJmm<sup>®</sup> technology, include 25 years of knowledge and expertise in water jet cutting and water jet technologies. The Microwaterjet tool has been developed in close collaboration with experienced practitioners and scientists of technology departments of universities.

**Two versions of the  
Microwaterjet Tool MWJT  
are available, a basis  
version and an  
advanced version.**

### **BASIS VERSION**

MWJT Tool (Microwaterjet Tool) The basis version of MWJT Microwaterjet Tool has basic equipment, including the material and technology database, and the possibility to enrich the CNC code via tool with all cutting information.

### **ADVANCED VERSION**

MWJT Tool (Microwaterjet Tool)  
This version has, in addition to the material and technology data bases for the creation of the CNC code, the option of six different modules. Each of these modules or parts thereof is individually licensed.

### **MODULE 1 INTERFACE TO DRILL AXIS, ROTATION AXIS AND ENGRAVING MODULE**

An integrated hardware/software module expanding the tool by axis technologies and an engraving module.

### **MODULE 2 AVOR VERSION**

This module serves for the preparation of the settings of the machine. Cutting plans can optionally be loaded by means of a scanner, increasing the traceability of the processes and ensuring the observation of certain requirements.

### **MODULE 3 REMOTE CONTROL**

The module for live monitoring of the machine, from status to condition, and from malfunctions to utilization. Option of smart phone APP

### **MODULE 4 INTELLIGENT PUMP CONTROL**

A management module for the interaction between several pumps and machines to maximize the performance and save power costs at the same time.

### **MODULE 5 SWIVEL HEAD**

A precision swivel head with patented electronics and mechanics.

### **MODULE 6 QDST VERSION (QUALITY DRIVEN SHAPE AND TAPER)**

This patented procedure enables the definition of geometry and quality of cuttings at each spot.

WATERjet Robotics uses both modules for processing turbine blades. The CNC process centers BAZ, developed by micro machining AG, prove themselves in daily use. All cutting systems are exclusively delivered to licensees of micro machining AG.