



HIGH PRESSURE WATERJET TECHNOLOGY X5 PRO 5-AXIS CUTTING SYSTEM

PRECISION CUTTING /BEVEL CUTTING/3D CUTTING

X5 PRO is based on DARDI patented technology and self-developed high-end smart 5 axis water cutting system, and can do more quickly precision cutting on all kinds of metal and composite material. It also can be used to cut bevel and 3D part production. X5 PRO is suitable for the aerospace, automotive, precision manufacturing and other fields.

Main Feature

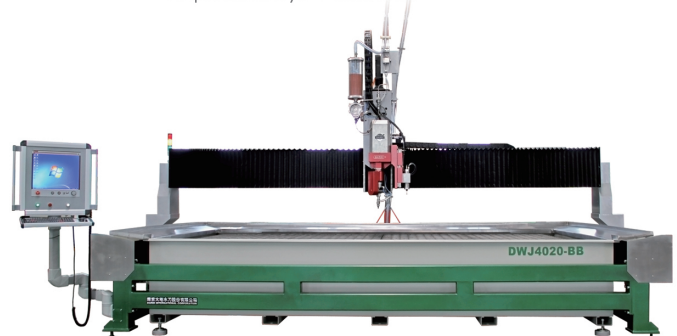
- ◆ Gantry separate structure
- ◆ High accuracy linear guides and ball screw transmission system
- ◆ Y axis dual drive system
- ◆ ESA PC control system with 19" true color touch screen and AC Servo Motor
- ◆ Automatic lubrication system
- ◆ Stainless steel work table and protection
- ◆ Postposition type double high pressure pipe conveying device
- ◆ Movable automatic abrasive adjustable feeding device
- ◆ Support protection system for ball screw

Optional System

- ◆ DHCS Automatic Height Control System
- ◆ X5 PRO 5-Axis Cutting System
- ◆ TAGLIO 5-Axis Software System
- ◆ DWLCS Waterlevel Automatic Control System
- ◆ XTRACTOR Abrasive Automatic Removal System

Technical Data

Cutting area (X×Y) : 4m×2-4m
 Travel(Z axis) : 0-500mm
 Max. positioning speed: 20m/min
 Cutting accuracy: ±0.10mm
 Repeatability: ±0.02mm



X5 PRO 5-Axis Cutting System

Compared with the ordinary waterjet machine, X5 PRO increased rotation (C axis) and swing (A axis) two control axes automatically tilts your waterjet cutting head in any direction to eliminate stream lag and kerf taper errors. It also can be used to cut bevel and 3D part production.

Technical Data

| Model of cutting head | X5 PRO-I | X5 PRO-II |
|-----------------------|----------|-----------|
| Rotation (C axis) | ± 360 ° | ± 360 ° |
| Swing(A axis) | ± 50° | ± 90° |
| Cutting Accuracy | ±0.10mm | ±0.10mm |



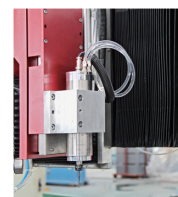
X5-I



X5-II

Spindle Drilling Device

This spindle drilling device can be used for special machining purpose for various materials(metal and composite materials,such as glass fiber and carbon fiber),working with convenience , high efficiency and flexibility. It can do vertical drilling and waterjet cutting alternatelyby programs controlling. Max. rotate speed is 20000rpm. It starts working by fast moving 200mm to work position. The center distance between spindle andwaterjet cutting head is 200mm. Diameter of drilling head is 1~7mm.



DHCS Automatic Height Control System

The probe can automatically touch the plate periodically and adjusting the height accordingly. The frequency can be set by the operator in the CNC.



XTRACTOR Abrasive Automatic Removal System

Xtractor abrasive automatic removal system, can easily remove the abrasive from the tank, collect used abrasive and save labors.

Technical Data(XR-2500SHD)

Volume of the storage tank: 410L

Diaphragm pump displacement: 190L/min

Abrasive discharging rate: 38 kg/min

Independent unit design, small occupied space

Circulating use of water from the water tank, saving water consumption

Configure the bottom of the hydraulic unloading mechanism, simple operation



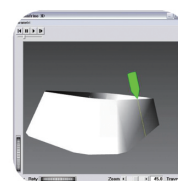
Taglio-Magic Tool 5-Axis Cutting Software

Magic Tool provides user-friendly programming interface that fully exploits the potential of the most common cutting processes.

Tool-paths are optimized and it is possible to edit working movements. Automatic common cuts speed up the execution steps. It supports the automatic management of multi-head machine. Pieces to cut can be imported from our CAD software called Logotag or from 3rd party file formats (i.e. DXF, DWG, EPS,PLT).

Whether the parts to be cut are positioned in automatic, manual or combined modes, the sheet is filled quickly and precisely, and any overlapping is controlled.

Simulation previews and detailed printouts are available on cutting planes.



Taglio-worknc 5-Axis 3D Cutting Software

- ◆ Multi format import
- ◆ Auto search the outline
- ◆ Loop, accelerate and decelerate in corner
- ◆ Auto calculate trajectory
- ◆ Interference check
- ◆ programming of TCP/RTCP
- ◆ Auto tool compensation
- ◆ 3D simulation
- ◆ Database(including material and thickness)
- ◆ Bevel cutting

