



# CNC cutting centre **SP Water**

- Accurate water-proof guides in all axes
- Metallic and non-metallic materials
- Special type of high-precise machine



**The SP Water type machine is designed for cutting of metallic and non-metallic materials by the water beam of high pressure. It is a precise technology with the possibility to reach the cutting surface of high quality. At the same time there are extraordinary claims put on protection of individual parts against the erosive effects of water and grinding effects of abrasive.**

- Special type of high-precise machine
- Accurate water-proof guides in all axes
- Possibility to place more heads on one portal
- Protection against the collision of cutting head and cut material
- Fine grates in the table catching small parts
- Flexible control system of high capacity under the WINDOWS operating system
- Trouble-free data transmission to the system through the network
- Comfortable immediate diagnosis through the network supported by the special software
- Colourful touch screen + control panels on both portal sides

#### Machine portal

travels along the path separated from the working table and it ensures the machine accuracy is not influenced by the machine vibration during the loading of material.

#### Working table

is of robust and stable construction. The working area is covered by the grate that ensures the flow of cutting water. Cross grates on cutting table are constructed so that they can be simply taken or replaced by other preparation by the integration to the cutting machine. It has a built-in automatic cleaning system through the chain conveyor. By it the economic operation is ensured.

#### Cutting heads

with focused jet offer the high cutting speed through the continual sharp and joined water/abrasive beam for achieving of optimum cut. The cutting head is equipped by a passive anti-collision system. In the WROTATOR version it enables the fluent change of perpendicular and slope cutting in 3D system.

#### Abrasive system

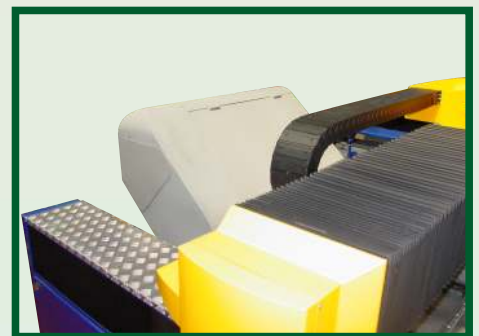
The jet for cutting by the abrasive ensures the effective flow for cutting and eliminates flow irregularity. It improves the cutting performance and decreases the time of manipulation.

The abrasive material doser is suitable for the precise dosing with the simple adjusting of abrasive quantity to the jet.

The transport system of abrasive ensures the transport of abrasive material through the flexible doser directly to the doser tank.

#### High pressure HD-pump

is designed for fulfilment of requirements for the high pressure pumps. By the extensive developing work the high pressure pump with small quantity of parts was reached, with high reliability of used components, with the result of increased system operation for application with the production highest capacity. For the compact size, full integration and readiness for connection with the extraordinary low operational costs, the SL-IV is the right choice to the future in the sphere of cutting equipment for the cutting by clean water and abrasive.



## Technical parameters

working width	1500, 2000 mm
working length	3000, 4500 mm
cutting speed	by the pump type and material thickness
positioning speed	0 - 30 000 mm/min (by version)
lift of Z-axis	to 200 mm
control of jet height	automatic with IHS, with anti-collision sensor
power supply	230V, 50Hz, 16A, air - 6 bar
positioning accuracy	+0,1 mm
equipment accuracy complies with the standards	EN 9013 and DIN 28 206

The control systems MSNC 500 / BRNC 500 ensure all functions necessary for comfortable and reliable control of cutting machines. They are the multiprocessor systems that ensure the continual control of three movement axes with linear and circular interpolation. The programme running is displayed in graphical and technological form.