

FINJET S

COMPACT & CAPSULATED WATERJET CUTTING MACHINE

Product: Compact and capsulated Waterjet Cutting Machine

Brand Name: FinJet S

Manufacturer: Muototerä Ltd.

Country of Origin: Finland

FinJet S is a plug-and-play waterjet cutting machine for quick installation and commissioning. Despite its small size, it is a machine for demanding cutting applications, based on the FinJet H series. If space is limited, but waterjet cutting is required on a regular basis, FinJet S offers the optimum solution. It is very safe thanks to its enclosed structure and proved the same cutting quality as larger FinJet water cutting machines.



General specification

Cutting area:	1030 x 1030 mm
Machine dimension without high pressure pump:	width 1950mm, depth 2500mm, height 2400mm
Z-axis height:	200 mm
Positioning accuracy:	± 0,025 mm/m
Repeatability:	± 0,015 mm
X and Y axis max speed:	15 m/min
Cutting heads:	1





MOVEMENT

In FinJet S models, the movement is executed with \emptyset 30 mm precision ball screws, which achieve a movement speed of 15m / min. High-quality 2kW B&R (ABB) servomotors are equipped with absolute measurement, which allows the machine to be started without the need for extra reference run. The bearings of the sleds are always mounted on precision guides with four bearings and at sufficient distances to eliminate vibration. The machine's mechanics are designed for durability and longevity in all conditions.

PROTECTION

Since abrasive waterjet cutting machines are always exposed to at least abrasive and water, protection must be designed accordingly. In FinJet S models, the X-axis is always protected by a tight round bellows. The Y-movement is protected by a tight rubber lip and the machine frame is covered to withstand extreme conditions.

The machine frame is designed so that it can be walked on, if needed, for easy operation and maintenance.

ELECTRICITY & AUTOMATION

Electrical and automation design on all FinJet waterjet cutting machines are planned and executed by Muototerä's own personnel. This allows optimum compatibility between mechanical and automation components. A good waterjet cutting machine is made from quality components, but it is not enough on its own. All parts must work together seamlessly. The objective of Muototerä is always to make the waterjet cutting machines to perform better than the sum of their parts. In practice, this means collaborative design. In other words, mechanical and automation design are executed simultaneously for best results.

Electric cabinets on FinJet S models are equipped with effective cooling, which makes the electrical and automation components more durable and the waterjet cutting machine less prone to failures. The machine is controlled by Muototerä's own interface for waterjet cutting. The HMI (Human Machine Interface) is a 21.5 "Full HD touchscreen with a powerful 1.91GHz processor. The user interface has been designed based on the user experience so that it is simple yet powerful, offering all the features needed for effective waterjet cutting.





HIGH PRESSURE COMPONENTS

High pressure components play a critical role in waterjet cutting. As it is a high pressure device (3800 – 6200 bar), the high pressure components are subjected to extremely heavy stress. In addition to the self-made components, Muototerä uses components from KMT Waterjet. High-quality components guarantee the reliability of the machine at all pressure levels.

All FinJet waterjet cutting machines can be connected to any high-pressure pump, including old ones already at the client's site. Muototerä is an official distributor of KMT High Pressure Pumps and a Premium OEM Partner.

Standard options

STANDARD MACHINE FEATURES

- Fully enclosed waterjet cutting machine with LED lightning inside
- Water level adjustment to allow underwater cutting
- Central lubrication point in one place
- Integrated electrical cabinet
- Integrated 50kg cutting abrasive container
- Provision for external waste disposal system
- Operator panel integrated on the machine

CUTTING HEAD FEATURES

- KMT IDE (integrated diamond) waterjet cutting orifice
- Height Sensor
- Infinitely adjustable abrasive feed rate of 0-600 g / min
- Sapphire crystal protected laser pointer for zero point setting



