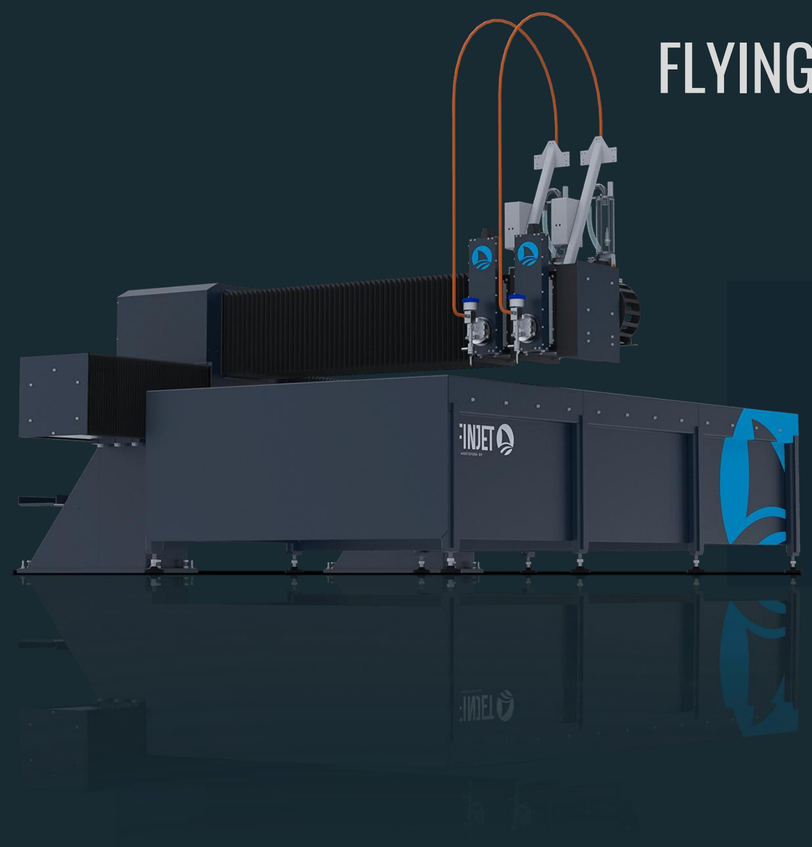
FINJET L

FLYING BRIDGE WATERJET CUTTING MACHINE



Product:	Flying Bridge Waterjet Cutting Machine
Brand Name:	FinJet L
Manufacturer:	Muototerä Ltd.
Country of Origin:	Finland

FinJet L-series is designed for flexible cutting in all environments. Flying bridge design enables the effetive use of the machine from three different sides. No matter if you are running a small job shop or producing demanding parts 24/7, with L-series you will be able to correspond all needs of waterjet cutting.

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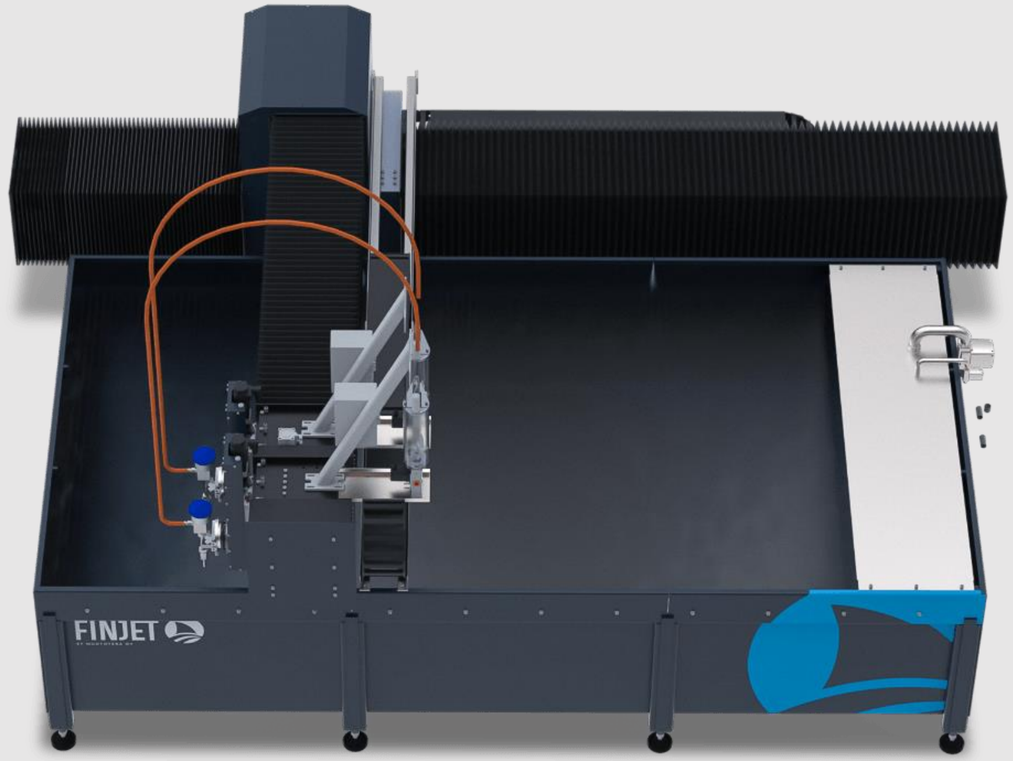
General specification

Cutting area:	1,5 x 3 – 2 x 15 m
Required footprint:	dependent on the machine size
Z-axis:	standard 200 / 300 mm
Positioning accuracy:	± 0,08 mm/m
Repeatability:	± 0,08 mm
X and Y axis max speed:	15 / 40 m/min
Cutting heads:	1 – 4, 2D



MOVEMENT

In FinJet L models, the movement of the waterjet cutting machine is executed on a X-axis with a helical precision rack and pinion and on the Y-axis with Ø 40 mm precision ball screws. High-quality 2kW B&R (ABB) servomotors are equipped with absolute measurement, which allows the machine to be started without the need for extra home 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.

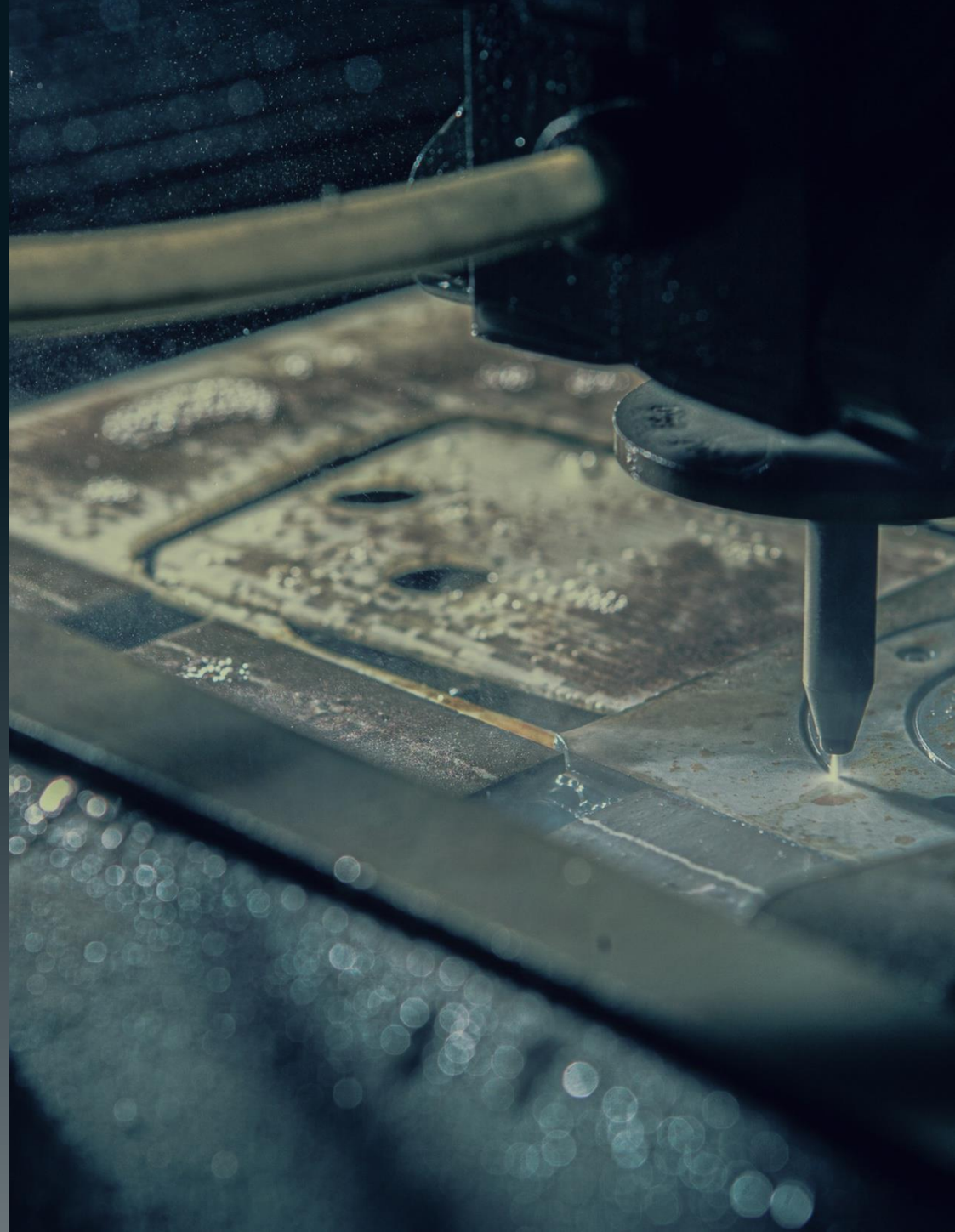
PROTECTION

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

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 purpose of Muototerä is always to make the waterjet cutting machines perform better than the sum of their parts. In practice, this means collaborative design with mechanical and automation design, so they are executed simultaneously for best results.

The electrical cabinets in FinJet L models are always designed with closed circle 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 water 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.

Available options

SAFETY CONTROL & MACHINE

- Safety light barrier
- Isolated cutting area with either fixed walls or mesh fence and sliding door
- Safety dump valve package, allows pressure relief from line without stopping pump
- Operator panel either in a movable rack or fixed on the machine
- Remote control, wireless or with cord
- Mobile alarms to your phone about machine and cutting status
- Multiple zero-point setting for automatic cutting job que
- Stainless steel frame
- Automatic machine lubrication system
- Tube cutting unit

CUTTING TANK & ABRASIVE HANDLING

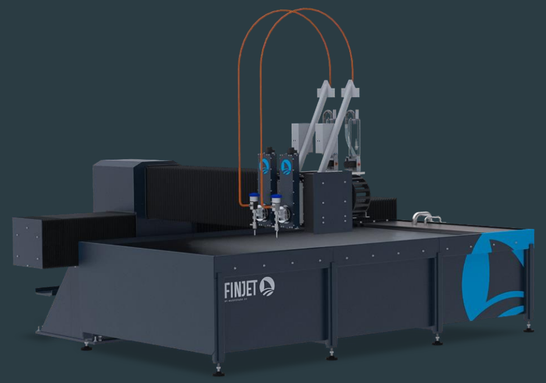
- Water level adjustment to allow underwater cutting
- Automatically rising cover in front of the waterjet machine
- Splash protectors on the back and sides of the machine
- Stainless steel lamellas
- Stainless steel cutting tank and lamellas
- Abrasive removal system for waste abrasive, either fixed or mobile
- Pure water surface for abrasive waterjet cutting machines
- Stainless steel settling tank
- Water and pneumatic hoses and guns connected to the machine
- Own infinitely variable sand feeder for each cutting head, 0-600g/min
- 200kg manual abrasive sieve or 1500kg automatic abrasive bulk silo

CUTTING HEAD

- Multiple cutting heads: 2-4, nozzles with single or common Z axis
- Automatic nozzle gap adjustment for 2-4 nozzles
- Height Sensor
- Drill Unit
- Collision Sensor
- Manual nozzle rotation ± 0… 45 degrees
- Sapphire crystal protected laser pointer for zero-point setting
- Sapphire or diamond waterjet orifice
- Integrated marking device

HIGH PRESSURE PUMP ACCESSORIES

- Oil-air cooler
- Tool kit
- Spare parts kit
- Stroke control, multiple pumps on the same pressure line
- Analog pressure gauge
- Pressure display and / or control directly from the machine control
- Line filter
- Water softener / water treatment
- Water booster pump
- 1000l Boosterline water tank to equalize inlet pressure



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