



WATER POWER

Water erosion force, of many millennia, tight in a moment, cuts every material

Is a system for cutting material with water.

Advantages of INOJET:

- Favourable price of cut.
- Rational utilization rate of material.
- Simple handling.
- No tool changing.
- Cutting does not cause dust, smoke or gas: PVC, CrNi steel, ceramics, stone gypsum boards.
- No heat affected zones, no deformations, changes of material structure/properties.
- The width of cut is very small and little material is wasted. The kerf leaves a satin smooth finish, thus reducing further operations (such as finish sanding and grinding).
- High cutting efficiency.
- Enables direct break-through of drilling at any position.
- Minimal pressure is forced on the parts, mounting is not necessary.
- Environmental friendly cutting up to a thickness of 150 mm and more.



Range of application:



- Steel: tool steel, stainless, alloyed, hardened steel, thin plate.
- Non-ferrous material: copper, aluminum alloys, titanium.
- Stone and ceramics, intarsias, bordures, staircases.
- Glass: normal and hardened.
- PVC: Polyurethane, duroplast, thermoplastics, reinforced and bonded material.
- Composite materials (GFK/CFK).
- Thermal insulating material: mineral and stone wool and gypsum boards.
- Rubber, seals, leather and textiles.
- Wood and composite material.
- On heat sensitive materials.
- Carpets, linoleum and coated paper.
- Foods: fresh or frozen.

INOJET offers you the high technology of water cutting, as a complete solution, with all facilities such as manipulators with automatic infeed and excavation of material, unwrapping devices for wrapped material and automatic transport of products and waste.



General:

INOJET is an assembly of modern components which combines mechanics, electronics and hydraulics embodied in a system for design cutting all types of materials with water jet.

INOJET is produced in several different versions in order to achieve the best cutting results for a wide range of materials.

INOJET uses only top quality materials, which guarantee high precision and liability of working and long life.

The cutting unit which is based on linear guideways with recirculation balls is moved and accelerated by two AC servo motors in X and Y direction. The water pressure is up to 4100 bar and is generated with a superb pressure aggregate, which is manufactured by a world leading company of high reputation.

System INOJET is controlled by CNC Computer Sinumerik. In addition to a stationary table, some versions also have mobile flexible tables designed to improve efficiency and increasing the capacity. For producing smaller parts, INOJET is equipped with several cutting units. INOJET is a flexible module system, which offers the optimal solution for demanding tasks.



Technical data

Size of workpiece:	up to 2x6m
Thicknes of workpiece:	up to 200mm
Cutting speed:	up to 40m/min
Diameter water nozzle:	from 0,1 to 0,35mm
Number of cutting units:	1-8
Pressure of cutting water:	600 to 4100 bar
Consumption of cutting water:	1,7 to 7,6 l/min
Consumption of cooling water:	0 to 17 l/min
Electrical connection:	400V 50Hz 11 to 75kW
CNC control :	Sinumerik
Mechanical precision accuracy:	+/- 0,02mm

Additional equipment

- Even distribution system.
- Delivery system.
- Water softener.
- Polymeric mixer.



Activity:

The cutting water jet is generated in the cutting unit. The water speed can reach up to 900 m/s, due to the high pressure of the hydraulic aggregate system.

This energy, like erosion, decomposes material. The cutting is called clean water cut and it is used for cutting thermoplastics, elastomer, stone wool, polyurethane, food etc.

If abrasive is added to the water jet (special sand), one can decompose hard solid materials such as steel, stone, ceramics, glass etc. This type of cutting is called abrasive cutting.

INOJET offers systems for clean water cut or abrasive cutting.

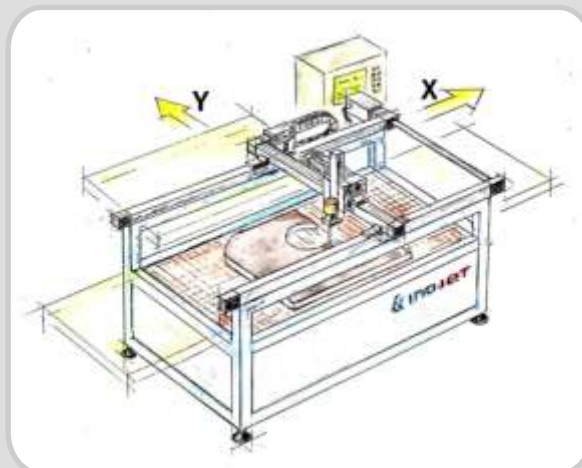


INOTEH offers an optimal solution for each area of cutting for a wide range of tasks, implementations and capacity.



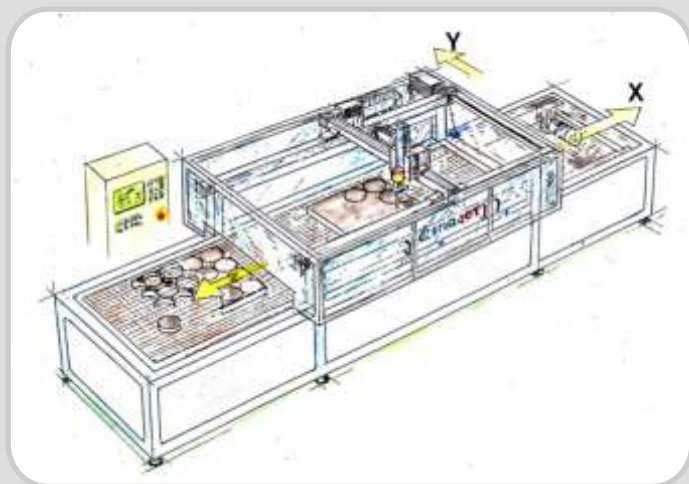
Type 100
Open version with stationary table

Material can be loaded manually or with a lift.
Suitable for heavy or large products.



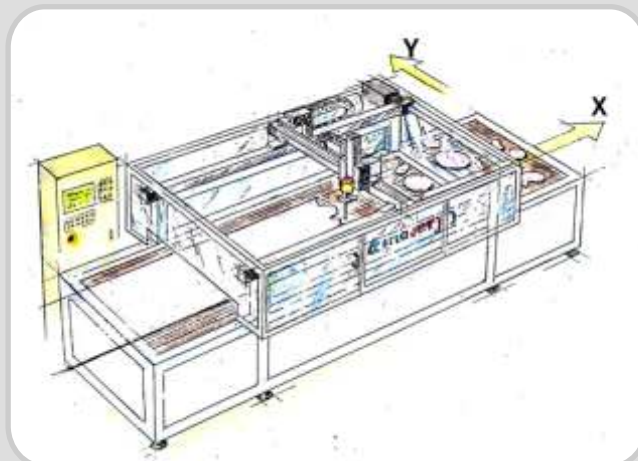
Type 200
Portal version with stationary table or moveable table

Manual or automatic loading on various sides of the machine.
Suitable for medium-size products.



Type 300
Portal version with moveable table

While the machine cuts on one side, finished cut products are taken away or new components for cutting are loaded on the other side. Suitable for continuous production.



Type 400
Portal version with running tables

Material runs from one side into the machine, while the product and waste are taken away on the other side.
Suitable for long plates or coiled material.