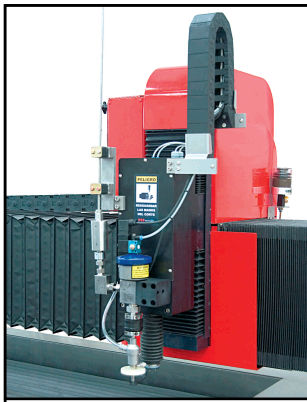


# TCI waterjet

## BP Series



**BP Series**

**Flexible and versatile machine series developed to cut by means of waterjet and abrasive for hard materials (steel, glass, marble, etc...) and with pure water for flexible materials**

As all TCI Waterjet machines:

- ⊙ Protected against vibrations.
- ⊙ Optimum protection for the operator.
- ⊙ Easy Programming.
- ⊙ Modern activation system that reduces maintenance costs.
- ⊙ TCI Waterjet Hot-line service for technical assistance and for spare parts.

### Technology

The "Waterjet" water cutting system developed by TCI unites the experience and the technology with the properties of high pressure water, achieving a unique capacity in a wide variety of materials and thicknesses.

Machining that are impossible to achieve by other methods, are easily cut by means of water projection with speeds that reach approximately three times the speed of sound with a pressure of up to 4.100 bars.

The cutting systems offered by TCI are the result of a detailed and individualized study of all its components, in order to obtain the highest quality for the final product.

### BP Series Main Advantages

- ⊙ Rapid speed for positioning of **60.000 mm/min.**
- ⊙ Intelligent treatment system for two independent cutting head movements that allows a maximum usage in all materials.
- ⊙ Follow up software to check in real time the state of current renewable parts, that allows a preventive maintenance that avoids pauses.
- ⊙ Cleaning system of machine waste totally automated from the numeric control.
- ⊙ CNC, Control cabinet, intensifier and peripherals protected from the working area.
- ⊙ Possibility of charging the materials frontally and laterally.
- ⊙ Cutting machine completely constructed with stainless steel.
- ⊙ In axis X, a gantry motorized system that allows large accelerations and high speeds.
- ⊙ Self-functioning system.
- ⊙ Anti-collision system with digital sensibility regulation.
- ⊙ Specific software for a quick quotation of cutting.
- ⊙ Automatic software for the management and ordering of spare parts including the valuation of all spare parts.
- ⊙ On-line technical assistance by Mechanical Engineers, Industrial Electronic and Automatic Engineers and TCI Industrial design Engineers.
- ⊙ Installation and setting up in 7 days.



### APPLICATION FIELDS

⊙ <b>Aeronautics</b>	Carbon Fibre, Titanium, Alloys, Insulating materials.
⊙ <b>Food Industry</b>	Fish, Cakes, Chocolate, Meat.
⊙ <b>Automobile</b>	Rubber, Steel, Composites, Leather.
⊙ <b>Building</b>	Stoneware, Pottery, Marble, Granite.
⊙ <b>Toys</b>	Polypropylene, Synthetic fibres, Foam Rubber, Polymer.
⊙ <b>Metallurgy</b>	Aluminium, Bronze, Brass, Copper.
⊙ <b>Furniture</b>	Mirrors, Textiles, Glass, Wood.
⊙ <b>Publicity</b>	Methacrylate, PVC, Vinyl, Polyethylene.

### Water cutting compared with other technologies

Cutting Type	Water + abrasive	Laser	Cutting with Oxygen	Plasma
Quality of cutting	Excellent	Excellent	Adequate	Adequate
Material thickness	Excellent	Good	Excellent	Very Good
Flexibility	Excellent	Very Good	Adequate	Good
Residues formation	Very Good	Good	Very Good	Good
Precision	Excellent	Excellent	Adequate	Good
Process time	Good	Very Good	Good	Good
Refinishing Work	Excellent	Very Good	Adequate	Very Good
Universal use	Excellent	Adequate	Good	Very Good
Cutting speed	Good	Excellent	Very Good	Very Good

# TCI waterjet

## BP Series



### Technological Advantages

TCI Waterjet adds to the technology advantages, its experience to obtain:

- ⊙ The most versatile cutting systems on the actual market, covering all the range of material and thickness, including painted surfaces.
- ⊙ Low cutting temperature to avoid thermal alterations and residual tensions.
- ⊙ A clean cut that doesn't generate harmful gases and that doesn't need further additional labour.
- ⊙ The cut surface neither breaks or bends.
- ⊙ Maximum utilization of the primary materials.
- ⊙ Very strict tolerances (jet diameter from 0.1 to 1.1 mm).
- ⊙ Possibility to make different types of cut simultaneously.
- ⊙ The water is the main source of work.

### TECHNICAL DATA OF THE MODEL

MODEL	BP 2-1530-1	BP 1-2030-2	BP 1-2040-2
WORKING AREA	1500 x 3000 x 200 mm	2000 x 3000 x 200 mm	2000 x 4000 x 200 mm
NUMBER OF CUTTING HEADS	1	2 Independents	2 Independents
MAXIMUM SPEED OF POSITIONING	60.000 mm / min	60.000 mm / min	60.000 mm / min
MACHINE TOLERANCE	±0,1 mm / axis	±0,1 mm / axis	±0,1 mm / axis
REPETITIVENESS	± 0,1 mm	± 0,1 mm	± 0,1 mm
MAXIMUM MACHINE WEIGHT	2.700 kg	3.800 kg	4.200 kg

### Description of qualities

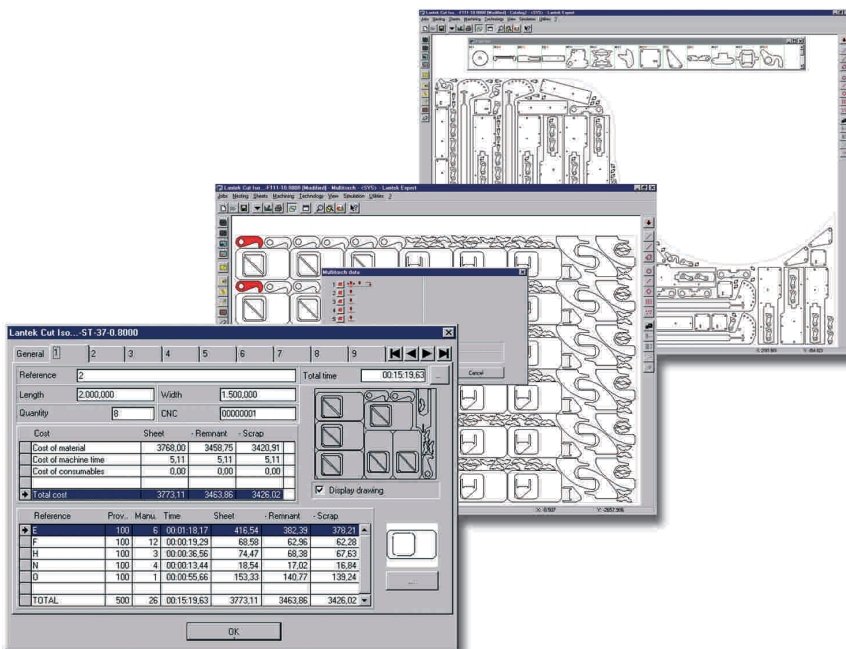
- ⊙ KMT Pressure Pump, world leader in High Pressure.
- ⊙ SOFTWARE CAD/CAM LANTEK EXPERT CUT.
- ⊙ Racks, Pinions, and high precision gears.
- ⊙ CNC, Power of drivers, sources of supplies and SIEMENS control elements and power.
- ⊙ SIEMENS class IV safety system.
- ⊙ Cutting table constructed totally in stainless steel.

### Standard Equipment

- ⊙ Pressure Pump  
STREAMLINE SL-V 50CV.
- ⊙ CAD/CAM LANTEK CUT.
- ⊙ CNC SIEMENS 810/840 D.
- ⊙ Anti-collision system with digital sensibility (TCI COLLISION PROTECTION 2.0).
- ⊙ Waste extraction system (TCI EXTRACTION SYSTEM 2.0).
- ⊙ On line communication system (TCI ON LINE 1.0).
- ⊙ Automatic dosage system for abrasive (TCI ABRASIVE 3.0).
- ⊙ Set up + training.

### Optional Equipment

- ⊙ Pressure Pump  
STREAMLINE SL-V 100CV 4100 bar.
- ⊙ Abrasive Recycling System (TCI RECYCLING 2.0).
- ⊙ Refrigeration System.
- ⊙ Water Treatment System.



TECNOLOGÍA DE CORTE E INGENIERÍA S.L.

Waterjet Cutting Systems

www.tciwaterjet.com

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