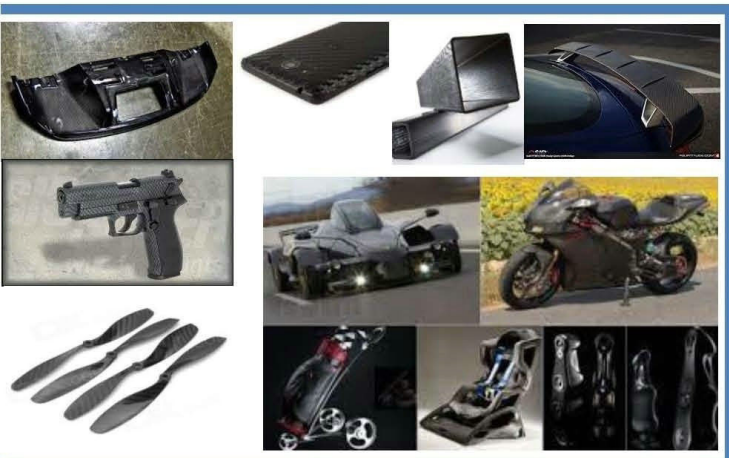
DARDi®

www.dardiwaterjet .com

Product Catalogue

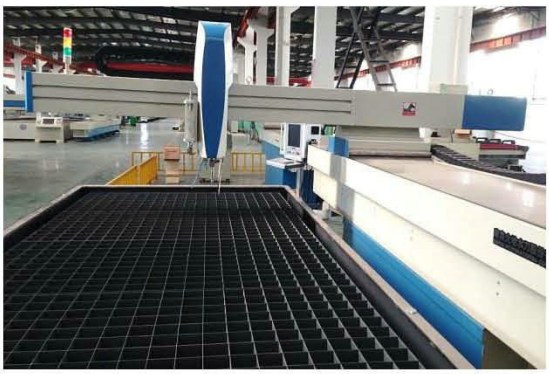


Above are the needs. Inside are your solutions.

Dardi International Corporation
39maoshan road gaochun ecnomical and development zone 211300 PR CHINA

www.dardiwateriet.com

FB - Flying Bridge Models

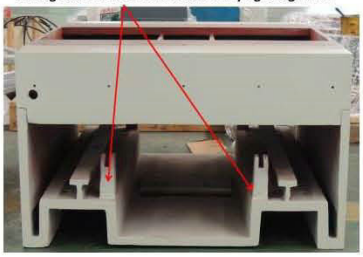


Extremely Stable Caste Iron Bases for all DARDI Flying Bridge Models

The Very Rigid Cast Iron Base, X axis Rail and Y axis Rail guarantee the Stability of the Flying Arm Design.
The Accuracy of +/- 0.1mm (.00393") and Repeatability of +/- 0.5mm(.00196") are easily maintained due to the DARDI Rigid design.

Super high load capacity THK Linear Guide with the four rows of rollers arranged at a contact angle of 45-degrees, the linear guide way has equal load ratings in the radial, reverse radial and lateral directions. The Guide Ways us on the DARDI have a higher load capacity in a smaller size than conventional, ball-type linear guide ways.

Strong Caste Iron Column Base For Flying Bridge Arm



Standard FB Models	Cutting Travels (Meters)	Cutting Travels (Feet)
DWJ1313-FB (3axis & 4axis available)(no 5axis)	1.3 x 1.3 M	4.27 x 4.27 Ft.
DWJ1525-FB (3axis,4axis & 5 axis available)	1.5 x 2.5 M	4.92 x 8.20 Ft.
DWJ1530-FB (3axis,4axis & 5 axis available)	1.5 x 3.0 M	4.92 x 9.84 Ft.
DWJ2030-FB (3axis,4axis & 5 axis available)	2.0 x 3.0 M	6.56 x 9.84 Ft.
DWJ2040-FB (3axis,4axis & 5 axis available)	2.0 x 4.0 M	6.56 x 13.12 Ft.
DWJ2060-FB (3axis,4axis & 5 axis available)	2.0 x 6.0 M	6.56 x 19.69 Ft.
DWJ2080-FB (3axis,4axis & 5 axis available)	2.0 x 8.0 M	6.56 x 26.24 Ft.

Waterjet Features

- Compliant to CE standard
- Designed with over 20 Patents
- Drive Motors directly coupled to ball screws with crash protection clutch.
- Smooth travel
- All stainless steel covers, resist to rust and extremely durable
- Auto-lubricate system, extremely easy maintenance
- Highly integrated, economic design

Leading design details compared to competitors

- Integrated automatic lubrication system and user friendly design together make the maintenance easily done.
- Strong and durable cable chain, flexible movements.
- Carefully selected electrical cables are very dependable.
- High quality limit sensor system provides reliable soft limit to protect the machine system.

Rigid and reliable overall design

- All stainless steel front panel and ball screw/ drive motor / way covers
- Carefully designed single caste iron frame base and caste iron flying arm, rigid and stable. Waterjet machine occupies minimal space and easy to operate.
- Special waterjet Fagor for 3 axis, or DARDI-ESA-Gv 500/550 CNC controller for 4 & 5 axis ,and servo system provide ideal cutting results.
- Internal parts are all selected from well known, reliable brands (that can be purchased locally) to ensure high quality and stable operation.

Very carefully engineered new design

- Motion guides are double protected.
- Y axis is driven by single motor with worm gear and dual synchronous belts to provide high accuracy.
- Uses very high accuracy ball screw and HSK guide to ensure high cutting accuracy.
- Incorporates very smooth motion ensuring long term durability.

BB - Gantry Bridge Models

Large Table Bridge Machines

Large Dual Bridge Machines

Standard BB Models	Cutting Travels (Meters)	Cutting Travels (Feet)
DWJ2040-BB (3axis,4axis & 5 axis available)	2.0 x 4.0 M	6.56 x 13.12 Ft.
DWJ3020-BB (3axis,4axis & 5 axis available)	3.0 x 2.0 M	9.84 x 6.56 Ft.
DWJ3040-BB (3axis,4axis & 5 axis available)	3.0 x 4.0 M	9.84 x 13.12 Ft.
DWJ3060-BB (3axis,4axis & 5 axis available)	3.0 x 6.0 M	9.84 x 19.69 Ft.
DWJ3080-BB (3axis,4axis & 5 axis available)	3.0 x 8.0 M	9.84 x 26.24 Ft.
DWJ30100-BB (3axis,4axis & 5 axis available)	3.0 x 10.0 M	9.84 x 32.80 Ft.
DWJ30120-BB (3axis,4axis & 5 axis available)	3.0x 12.0 M	9.84 x 39.37 Ft.

Waterjet Features

- Compliant to CE standard
- Drive Motors directly coupled to ball screws with crash protection clutch.
- Designed with over 20 Patents
- Solid caste iron Gantry Bridge design for rigidity.
- Smooth travel
- All stainless steel covers, resist to rust and extremely durable
- Auto-lubricate system, extremely easy maintenance
- Highly integrated, economic design

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Waterjet Heads Available

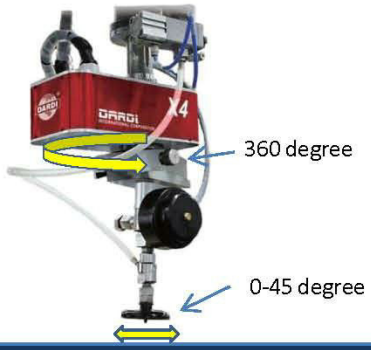
3-Axis Head Selections

Single Z axis head and nozzle with Auto Height Gage

Dual Z axis heads with one nozzles per head

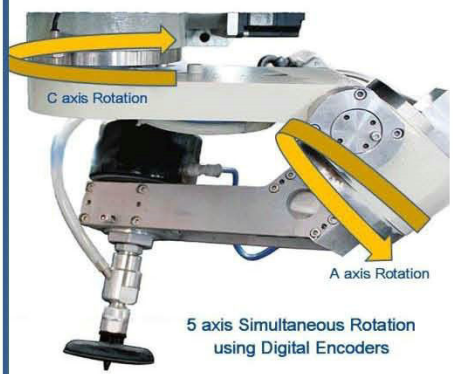
Single Z axis head with 2 nozzles

4-Axis Head Selection



- 4 axis head is designed to eliminate taper especially in stone, marble and metal.
- Easy to control C axis through CNC with manual 0-45 degree capability of head setting.

5-Axis Head Selection



- 5 simultaneous axis head for bevels and taper control and most complex requirement

DARDI®

Material/Cut Speeds Chart

MATERIAL	ORIFICE DIA. / THICKNESS	.011 Maximum Cut Speed ipm	.016 Maximum Cut Speed ipm	Dual .011 Maximum Cut Rate ipm
Aluminum	0.5"(13mm)	55.08	76.38	110.16
	1.0"(25mm)	21.14	29.26	42.28
	2.0"(51mm)	7.87	10.86	15.74
Stainless Steel	0.5"(13mm)	17.82	24.71	35.64
	1.0"(25mm)	6.84	9.47	13.68
	2.0"(51mm)	2.55	3.51	5.1
Titanium	0.5"(13mm)	24.84	34.44	49.68
	1.0"(25mm)	9.53	13.20	19.07
	2.0"(51mm)	3.55	4.90	7.1
Granite	0.5"(13mm)	62.16	53.72	124.32
	1.0"(25mm)	23.81	20.41	47.62
	2.0"(51mm)	8.83	7.43	17.66
Abrasive Flow Rate Lbs./Min.		1.1	1.7	1.1 per head

Neo 40i-40Hp

Streamline-SL-V-E50-50Hp

KMT Intensifiers

THE SOURCE OF PRESSURE. No other system incorporates the features of the KMT STREAMLINE PRO2® to deliver the simplest, easiest-to-operate, most reliable system. The KMT intensifier can be disassembled one side at a time and features quick, one-step seal replacement.

Streamline-Pro2 60Hp

Streamline-Pro2 125Hp

System Information	Neo-40i	SL-V E-50	SL- Pro2 60Hp	SL- Pro2 125Hp
Nominal Power Rate	40hp (29kW)	50hp (37kW)	60hp (45kW)	125hp (93kW)
Maxium Continuous Pressure	55,000psi (3,800 bar)	55,000psi (3,800 bar)	90,000psi (6,200 bar)	90,000psi (6,200 bar)
Maxium Water Flow Rate @ Maximum Pressure	.72 gpm (2.73 lpm)	1.0 gpm (3.8 lpm)	.73 gpm (2.8 lpm)	1.43 gpm (5.4 lpm)
Maximum Single Orifice Diameter (at full pressure)	.012 in. (0.30)	.014" (0.36 mm)	.011" (0.279 mm)	0.016" (0.406 mm)
Number of Language Options on Display	5	5	5	5
Control Voltage & Power Supply	24V DC; 5 Amp DC	24V DC; 5 Amp DC	24V DC; 10 Amps DC	24V DC; 5 Amps DC
Maximum Noise Level	75 dB (A)	75 dB (A)	72.5 dB (A)	64 dB (A)
Ambient Operating Temperature	Min:40 deg.F (5deg.C)	Min:40 deg.F (5deg.C)	Min:40 deg.F (5deg.C)	Min:40 deg.F (5deg.C)
	Max 104deg.F (40 deg.C)	Max 104deg.F (40 deg.C)	Max 104deg.F (40 deg.C)	Max 104deg.F (40 deg.C)
Air Supply Volume (for Dump Valve)	1 cfm (28.3 lpm)	1 cfm (28.3 lpm)	1 cfm (28.3 lpm)	1 cfm (28.3 lpm)
Air Supply Pressure (for Dump Valve)	85 psi (5.9 bar)	85 psi (5.9 bar)	85 psi (5.9 bar)	85 psi (5.9 bar)
Length	56.53"(143.59 cm)	68"(1,727 mm)	78"(1,981 mm)	88"(2,230mm)
Width	42.31" (107.47 cm)	36"(914 mm)	36"(914 mm)	59.09"(1,500 mm)
Height	39.55"(100.46 cm)	49.2"(1,250 mm)	57"(1,453 mm)	61.12"(1,552 mm)
Weight	2,150lbs. (975 kg)	2,615 lbs. (1,186 Kg.)	3450 lbs. (1,565 kg)	6,850 lbs. (3,107)
Cutting Water				
Minimum Inlet Cutting Water Pressure	50 Psi (3.4 bar)	50 Psi (3.4 bar)	35 Psi (2.4 bar)	35 Psi (2.4 bar)
Plunger Diameter	.0875"(22,2mm)	.0875"(22,2mm)	.0875"(22,2mm)	.0875"(22,2mm)
Maximum Nominal Strokes /Min. (at 55,000 psi / 3,800 bar)	54	54	45	45 Per Intensifier
Accumulator Volume	0.26 gal (1 L)	0.26 gal (1 L)	0.42 gal (1.6 L)	0.42 gal (1.6 L)
Hydraulic System				
Maximum Hydraulic Pressure (operating at Max. Water Pressure	2,750 psi (190 bar)	2,750 psi (190 bar)	2,750 psi (190 bar)	2,400 psi (165 bar)
Hydarulic Reservoir Capacity	40 gal (154 L)	40 gal (154 L)	40 gal (154 L)	110 gal (416 L)
Cooling System				
Cooling Water Consumtion @ 75 deg. F (24 deg. C) Water Temp	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	4 gpm (15.0 lpm)	6.5 gpm (24.6lpm)
Minimum Cooling Water Pressure	30 psi (2 bar)	30 psi (2 bar)	35 psi (2.4 bar)	35 psi (2.4 bar)

Highlighted Accessories

Dardi Auto Height Adjusting Plunger

- The Auto Height Adjuster sets the save from avoidable nozzle crashes by determining the work surface plane.
- The simple plunger drops down and retracts once the work surface has been determined and the work surface automatically shared with CNC control.

Dardi Auto Abrasive Delivery System (AADS)

- The Automatic Garnet Feed cell holds 550 lbs.
- Cell is pressurized for free flow of garnet to mixer tube.

XR-2500HD Extractor Garnet Removal Tank

- Xtractor is convenient and easy to use for more than one waterjet
- Does not require complete drain of your catch tank.
- Easy disposal of dry garnet from bottom into dumpster.

Intensifier Pump Chiller

KOOLANT KOOLERS
By Dimplex Thermal Solutions

Model	SVI-2000-M
Tonnage	2
BTU	24,000
Electrical	230V/1 Phase/60 Hz
Port Size	1 1/4"
Tank (Gallons)	8
Dimensions (L*W*H)	29" x 31" x50"
Coolant Meduim	Water/ Water-Glycol Mix

New-Cam Nesting Software Standard with 3 and 4 axis head Waterjets

NEW-CAM is specifically customized for DARDI WATERJET System. The main functions are as follows:

- Auto- transform.DXF files into CNC code;
- Auto-cutting in/out control;
- Auto generate the cutting track
- Auto-nesting
- Cutting track auto-simulation function.
- An open database(include material,thickness,surface quality and cutting speed etc.)
- Auto calculate the length,operation time and cost
- 3/4-Axis (option)

Lantek 5 axis Flex 3D Nesting Software Standard with 5 axis head Waterjets

LANTEK Flex3D software is especially designed for 5-Axis DARDI WATERJET System.

- Compatible to mainstream design software, supporting input and output various file formats
- Software interface is similar to other products, easy operation
- SAT, IGES, VDA solid / surface 3D graphic input
- Sharing the same tools and material database with LANTEK Expert
- Advanced functions for detection of geometric profile, cutting contour line and solid thickness;
- Simulation program run, processing function of emergency such as collision, etc.

ESA CNC System Control Standard on 4 and 5 axis Waterjets

ESA System(PC) specifically customized for DARDI WATERJET by ESA(ITALY) adopts modularizationdesign with high stability and antijamming capability.

- 17 "LCD color LCD screen
- 4/8 axis control system
- Lead high quality no fan embedded industrial PC can install various software
- Convenient transmission with USB interface and RJ45 communication interface
- Visualmulti-workpieceorigin setting is particularly convenient for small batch and multi-variety cutting
- Docked shaft function,maintain in the machining process outages
- Arbitrary section processing function can be realized by clicking graphics

FAGOR CNC System Control Standard on 3 axis Waterjets

It integrates FAGOR control technology on waterjet cutting with convenient programming, operation and maintenance.

- Convenient transmission with various communication mode including USB, RS232, RJ45 etc.;
- Advanced DNC online processing function can realize directly remote processing;
- Unique plate correction, breakpoint memory and feeding shaft cross-compensation function.

FAGOR8035 system: 128M storage, 7.5 "LCD color screen, 3 axis control system.
FAGOR8055 system: 512M storage,10.4" LCD color screen, 4/8 axis control system.

DRW Series
ROBOTIC WATERJET

Robot System: ABB/FANUC/YASKAWA (optional)
Mounting Method: Floor/Ceiling (optional)
Working Radius: 3180mm
Work Envelope Size: 2600mm x 1700mm x 200mm
Max. Cutting Speed: 300mm/S
Layout Size: 7000mm x 6500mm
Total Power: 60kw (Single Robot) /75kw (Double Robots)

Classic case —— Auto interior Application

Compared to abrasive waterjet cutting, the speed of pure waterjet is faster .Pure waterjet can be used to cut building board, foam, rubber and other soft materials. The application in cutting inner ornament of automobile plays to the excellent advantages of the system. It is now the best solution for auto parts manufactures.

DRW Robot cutting system is combined by robot system, UHP pump, cutting system, workpiece position system, vacuum adsorption system, safety system and other auxiliary systems. It uses the high accuracy six-axes arm robot system as the executive mechanism, UHP pump as the cutting energy source and die set for work-piece orientation. The robot system is mainly used to cut irregular space curve with smooth cutting margin. The system is automatic and efficient, intelligent flexible controlled with good applicability. The type of workpiece can be changed only by changing the die set. It owns advantages of energy-saving, environmental-protection, economical, reliable and convenient maintenance and so on. DRW Robot Waterjet is specially developed to solve the cutting problems of auto interior(for example floor and ceiling etc.)

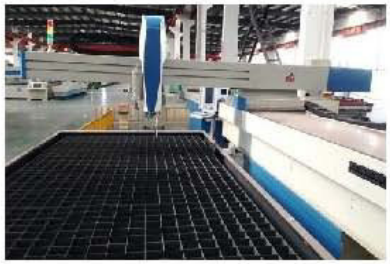
DARDI®

International Corporation

DARDI Water Jet International is the leader in worldwide Water Jets Technology and Innovation. DARDI builds small very simple water jet systems and very complex multi-axis, multi-bridge applications. Table sizes vary from 4 x 4 feet to 20 x 60 feet.

DARDI International Corporation, established in 1996, is the first and now the largest company in China that specializes in researching and applying the advanced ultra-high pressure waterjet technology.

Before DARDI became a player in manufacturing waterjet cutting machines in 1996, it was very expensive to own and operate a waterjet cutting machine. The market in China for waterjet applications was dominated by foreign companies. DARDI brings the costs of owning and operating a waterjet cutting machine down to the level that the waterjet cutting technology is affordable today for nearly all cutting needs.



DARDI has built for branded names that are familiar to the worldwide market. They are now selling their machines in the North American, Central American and South American markets under the DARDI Water Jet brand name.


Air Register


B Pillar Trim


Interior Trim

Automotive

Automotive fabrics

Dardi Waterjet Cuts

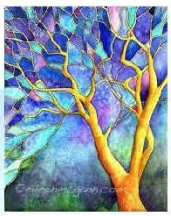
Aluminum	Brass	Carbon Fiber
Cardboard	Carpet	Ceramic
Composites	Copper	Cork
Foam	Glass	Glass Reinforced Composites
Glass Reinforced Polyurethane	Granite	Graphite
Marble	Nylon	Paper
Plastic	Plastic Films	Plexiglas
Polycarbonate	Polyurethane	Rubber
Soft Gasket Material	Soft Polyurethane	Stainless Steel thru 316
Steel	Stone	Thin Foils
Thin Wax	Titanium	Wood

Miscellaneous

Also cuts:

Industrial Tape, Ceramic housings for lasers, Foam and Urethane

Glass



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