

GANTRY Waterjet cutting machine technical specifications



The GANTRY type machines are the most robust and accurate on the market. Maintain and given precision with dualservo parallel to the axis "Y" and joined our unique system of protection against dust and splashes make this the best machine on the market.

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Model	G-08*06	G-10*10	G-12*12	G-15*15	G-20*10	G-20*15	G-30*15	G-30*20	G-40*15	G-40*20	G-40*40	G-40*80	G-40*120
Cutting Area	0.8 m x 0.6 m	1m x 1m	1.2m x 1.2m	1.5m x 1.5m	2m x 1m	2m x1.5m	3m x1.5m	3m x 2m	4m x1.5m	4m x 2m	4m x 4m	4m x 8m	4m x 12m
Displacement X axis	850mm	1050mm	1250mm	1550mm	2050mm	2050 mm	3050 mm	3050mm	4100 mm	4100mm	4100mm	4100mm	4100 mm
Displacement Y axis	650mm	1050mm	1250mm	1550mm	1050mm	1550mm	1550mm	2050mm	1550mm	2050mm	4100mm	8100mm	12100mm
Displacement Z axis	200 mm												
Machine TYPE	GANTRY												
Avance rápido X / Y / Z (mm/min)	X and Y 0 to 5000 mm/min; Z 0 to 2500 mm/min												
Velocidad de corte (mm/min)	0 to 5000 mm/min												
Carga máx. sobre la mesa (Kgs)	4000 kgs /500 kgs by m ²												
Cabezal biselador estándar	By manual you can tilt the head for beveling on X or Y axis												
Precise and accurate movements	Linear guide and ball srew shaft												
Protección completa de movimientos precisos	Unique system of protection against dust, water splashes make in stainless steel and no more BELLOWS												
Lubricación automatica forzada	Auto for all axis												
Tolerancia de movimientos de los ejes	Axis X & Y ±0 .03 mm												
Precisión de reposicionamiento	± 0.025 mm (±0.001")												

Limit switches Mechanic and soft end limit swith in all axis

1. The Machine came complete, Cutting Table CNC, CNC control, High pressure pump and all piping and wire conection.
2. Linear guide and ball srew shaft are brand "SKF (ABBA)" o "HIWIN"
3. Servo moto on Axis "X"&"Y" Brand "MITSUBISHI", "FUJI", "PANASONIC" o "YASKAWA" and for "Z" axis is servo motor made in Japan
4. All Axis longer than 6000 MM long, will be Tempered toothed rack and pinion so the accuracy will be lower

Technical specifications of the Ultra High Pressure pump 420 MPA

Nominal power of the main engine 37 kW(50 hp)

Nominal current of the main motor 380 V/50 Hz 80 A

Main Engine Brand SIEMENS Engine 37 kW (50 hp)

Main engine Low start SIEMENS Low Start

Pressure control system Dual system pressure auto - control (Low/high range 70~380 MPa)

Maximum Circuit Breaker at 380V/50Hz 160 A Schneider Main swich

H.P Control System / Language PLC SIEMENS PLC Control / English languaje

Inlet Water Pressure range request 0.2~6.0 bar

Inlet water pressure after Booster 6~10 bar

High Pressure Attenuator volume 1.30 Liter maintenance free attenuator

Inlet water Filter assembly 5 µm, 1 µm, 0.1 µm 3 filtros

Request for water treatment According to the requirement of inlet water quality

Maximum high-pressure limit	420 MPa (4000 bar)
Hydraulic High Pressure piping	3 layers steel wired hydraulic piping from Germany
Outlet High Pressure tubing	1/4" High Pressure tubing from USA
High Pressure tubing Inside Pump	3/8" High Pressure tubing from USA
Display information	Inlet water pressure, outlet high pressure, oil pressure, oil temperature
Safety high Pressure protections (In display)	SIEMENS PLC Logo
Safety Hydraulic pressure overflow valve (In display)	SIEMENS PLC Logo
Safety Over stroke protected main Engine (In display)	SIEMENS PLC Logo
Safety Over oil temperature protected (In display)	SIEMENS PLC Logo
Safety Too low inlet water pressure protected (In display)	SIEMENS PLC Logo
Pressurization / intensifier rate	Hidraulic 1:20 (oil : water)
Intensifier Type	50 hp Short type
High Pressure stable	25~380 MPa (3500~55,000 psi)
Hydraulic Tank Capacity	120 Liter
Capacidad del acumulador	1,3 Liter
Potencia Nominal de motor principal	50 HP (37 kW)
Maximum Pressure	420 MPA / 60000 PSI / 4000 bar
Maximum noise level	75 dB (A)

Maximum water flow rate	3,7 liter /min
Temperatura ambiente de operación	mín 5 °C (40 °F) máx 40 °C (104 °F)
oil Pump brand & model	LyYuan-Rexroth Mod: A10V a pistones axiales
Válvula bi direccional	SUNNY(U.S.A)
Oil Type and Brand	Hidráulic Anti-Wear Shell Tellus S2 M 46
Controlled oil temp range	25~50 °C
Maximum Hydraulic Pressure	210 bar
Hidraulic Oil tank capacity	120 Li
Maximum Flow Rate at 1440rpm	156 litros / min
Maximum Input Power	37 kW
Maximum Torque	160 Nm
Maximum Oil Pressure pump	21.5 MPa (3000 psi)
Technical specifications of the CNC control	
Easy and friendly Control	Operator select the material, thickness, Press START and the machine do the rest.
3D cutting	3D cutting available interpolating 3 axes simultaneously
Simulator	standard in all machines
Abrasive flow regulator on line	On line on Screen viable 0 to 100%

Keyboard wireless

standard in all machines

CNC

NC Studio PC Based Win XP English Language

Extension file accepted

dwg. dxf. nce. nc. cnc. eng. plt. G-code etc.

Dinamic speed

Dynamically controlled to speed corners and small radius

NESTING SOFTWARE

One Licence including with the machine BOB CAD CAM V21 English

Dual high and low pressure system on line

you can chose to cut or engrave

Limit switches

By software and by swich to avoid collisions

High Pressure control

Pressure control 0.001mm(μ m control)

engrave

with the same programe the operator can chose low pressure and make engrave

possibility of cutting with water only

Just chose only water cutting

Z automatic safety

Using this to avoid collisions

Optional

Garnet Auto Feeder 120/200 L

water cooler 10-15 °C - Chiller

Laser Point

Automatic water level submerged cutting

Additional cutting head to cut several pieces at once

Dinamic cutting head up to 8° (5 Axis)

Dinamic cutting head up to 65° (5 Axis)

Hydraulic automatic plate loading material



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