

Linear Motor Driven Large Sized Wire-Cut EDM

AQ1200L

High-Performance Linear Motor Driven Wire-Cut EDM

Linear Motor Drive + Energy Saving Design

The AQ1200L features an environmentally-friendly recycle circuit to save on energy costs by recycling unused discharge pulses that were not originally used in the discharge process. The Linear Motor system guarantees machining accuracy, since the linear motors never wear. Sodick offers a 10-year positioning guarantee to ensure that customers can make use of Sodick EDMs with a sense of security.

Newly Developed Power Supply Unit - LN2WH

The newly developed LN2WH power supply unit is featured on the AQ1200L and utilizes "Perfect Active Control" technology. It also uses 1 Gbit/sec serial communication technology featuring high-speed processing of the discharge control and motion control in a simultaneous process.

Improved Operability

Included is a one-sided automated vertical sliding machining tank, a U-shaped workstand along with other features that increase workability during set-up. The control pendant is on an adjustable mounting enabling all the work to be performed from the front of the machine.



AQ1200L

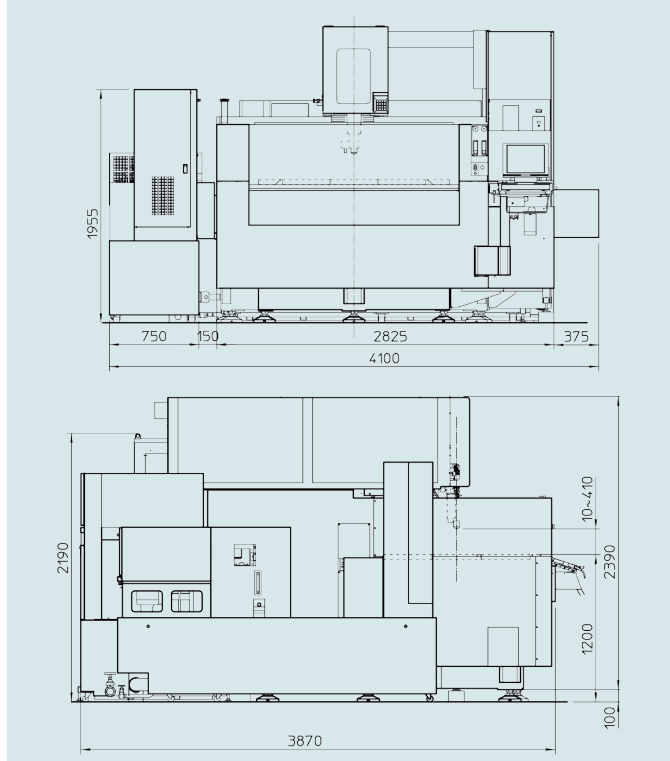
Specifications

Machine	
X Axis Travel	47.24" (1,200 mm)
Y Axis Travel	31.50" (800 mm)
Z Axis Travel	15.75" (400 mm)
U x V Axis Travel	47.24" x 32.28" (1,220 x 820 mm)
Max. Taper Angle	±30° (thickness: 5.90" (150 mm))
Max. Weight of Workpiece	8,818 lbs (4,000 kg)
Wire Diameter	φ.006"-.012" (φ0.15-0.33 mm)
Wire Tension	200~2,800g (3~23 N)
Wire Feed Rate	Max. 16.54"/sec (420 mm/sec)
Distance from Floor to Table Top	47.24" (1,200 mm)
Machine Tool Dimensions (W x D x H)	161.42" x 152.36" x 98.03" (4,100 x 3,870 x 2,490 mm)
Machine Tool Weight	24,251 lbs (11,000 kg) (includes power supply unit)
Total Power Input	3-phase 50/60 Hz 15 kVA

Power Supply LN2WH	
CNC	Compact Flash, Windows XP
User Memory	Editing: 100,000 blocks, Saving: 30 MB
Storage Media	CF Card, External Memory
Keyboard	Alphanumeric & Function Keys
Display	15" LCD Color Monitor
Input Format	External Memory, Touch Panel, Keyboard
Keyboard Type	Standard 101 - Function Keyboard
Positioning Command	Incremental and Absolute
Inch/Metric Operation	NC Codes, MDI
Number of Coordinates	60
Minimum Increment Input Command	0.1 μm
Minimum Drive Unit	0.1 μm
Maximum Increment Input Command	+/-999999.999" (+/-99999.9999 mm)
Machining Conditions Storage Cap.	1,000 Conditions (C000 ~ C999)
Offset Settings Storage Capacity	1,000 Conditions (H000 ~ H999)
Prog. Sequence Number Assignment	N000000000 ~ N999999999
Wire Diameter Compensation Range	0.00001" to 9999.9999"
Feedback System	Fully-Closed System (Linear Scale with Linear Motor)
Drive Mechanism	Linear Motors
Graphics	XY, YZ, ZX Plane, Machining Graphics/Background Graphics
Max. Average Machining Current	60 AMP
Servo Control	CNC Digital Servo System
Pulse Circuit	TM*

* The TM Pulse will adapt to optimally control the discharge pulse current, which results in eliminating ineffective discharge pulses and increases the discharge frequency. This consequently has increased cutting speeds.

Layout



Dielectric Tank	
Dielectric Fluid	Pure Water
Weight (empty)	Main: 1,874 lbs (850 kg) + Sub: 1,212 lbs (550 kg)
Dielectric Tank Capacity	(792.5 gallons) 3,000 liters
Dielectric Fluid Filtration Method	4 replaceable paper filters (Internal-pressure type)
Deionizer	Ion-Exchange Resin 4.8 Gallons (18-lit. type)

Standard	
High Speed Electrolysis Free Circuit	Advanced Corner Control
Taper Cut Unit	Built-in Voltage Stabilizer
10-Year Positioning Guarantee	FT II (Fine Pick-Up Function)
Energy Saving Circuit	Transformer
Dielectric Cooling Unit	Linear Scale (X, Y, U, V Axes)
Super Jet AWT (High-Speed Automatic Wire Threader)	Wire Tip Disposal Unit & L-Cut Wire

Please consult sales representative for more details.

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Due to ongoing research, specifications are subject to change without prior notice.

The content of this catalog is current as of December 2010.

Sodick

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