

Rigid Linear Motor Driven Die-Sinker EDM

# AD55L

## Large Capacity, Cost-Friendly, 3-Axis Rigid Linear Motor Driven Die-Sinker EDM

### Rigid Linear Motor Drive System

Sodick's rigid linear motor drive system is the ideal mechanism that semi-permanently sustains high speed axes-movements and instantaneous response. There is no mechanical contact within the linear motor drive system, resulting in stable machining accuracy, reliability and maintainability that can be sustained for years.

Combined with the Motion Controller (K-SMC) developed by Sodick, the advantage of the rigid linear motor drive system is multiplied, achieving supreme machining performance.

### New NC Unit with "TMM3" Discharge Power Supply

The AD55L features Sodick's latest LN NC unit equipped with the new "TMM3" discharge power supply, capable of high-speed, high-precision and high-efficiency machining. It is equipped with LN Professional, automatic programming functions.

### Arc-less & High Quality Surface Finish

The new Arc-less electrical discharge system features further improvements in machining performance and ensures a great reduction in machining time. Equipped with the SVC circuit, high-quality surface finishing circuit, satin and mirror surfaces can be easily achieved.

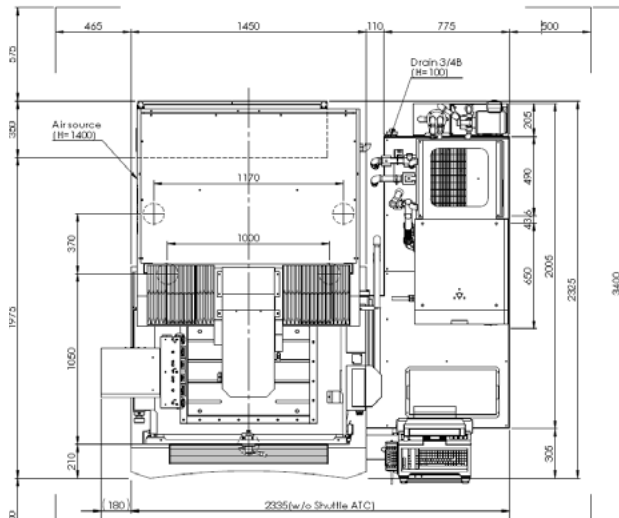


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## Specifications

Machine	Specifications
Worktable Size (W x D)	29.53" x 21.65" (750 x 550 mm)
Worktank Size (W x D x H)	47.25" x 31.50" x 19.69" (1,200 x 800 x 500 mm)
Fluid Level (min ~ max)	6.69" ~ 17.72" (170 ~ 450 mm)
X-Axis Travel	23.62" (600 mm)
Y-Axis Travel	15.75" (400 mm)
Z-Axis Travel	15.75" (400 mm)
Maximum Workpiece Weight	2,204 lbs (1,000 kg)
Work Tank Capacity	124 gallons (470 liters)
Distance From Floor to Table Top	35.43" (900 mm)
Machine External Dimensions	91.93" x 91.54" x 107.09" (2,335 x 2,325 x 2,720 mm)
Machine Unit Weight w/Power Unit	10,140 lbs (4,600 kg)
Power Supply Requirement	3-phase 200/220V 50/60 Hz
Total Power Consumption	10 kVa
Maximum Peak Amps	40 AMP
Air Pressure	.65 MPa (If .65 cannot be obtained, please install a pressures boosting valve (optional))
Air Flow	100 NL/min

## Layout



Control: LN2	
Display	15.1" TFT-LCD (SVGA)
NC Unit	Multi-Tasking OS, SI-Link (Perfect Active Control)
EDM Power Supply	Optimum Pulse Control TMM3 Power Supply (Contains Arc-less, SVC Circuit and ACS Circuit)
Maximum Increment Command	99999.9999"
Jog Feed Rate	118.11"/min (3 m/min)
Axis Positioning Movement	Up to 4 Simultaneous
Axis Linear Interpolation Movement	Up to 4 Simultaneous
Axis Circular Interpolation Movement	Up to 3 Simultaneous
Plane Specifications	X-Y, X-Z, Y-Z
Subprogram Loop	9,999 times
Subprogram Nesting Levels	50 Levels
Q Command Nesting Levels	7 Levels
Number of Coordinates	60
Discharge Condition Codes	1,000 (C000 ~ C999)
Offset Settings Storage Capacity	1,000 (H000 ~ H999)
User's Memory Capacity	Editing: 100,000 blocks / Saving: 30MB
Memory Device	CF Card, External Memory
Input Format	External Memory, Touch Panel, Keyboard
Character Set	Alphanumeric and Symbols
Keyboard	Standard 101-Key, Function Key
Positioning Command	Incremental and Absolute
Drive Mechanism	Full Closed Loop (Linear Scales)
Editing	Editing During Machining, Multi-Editing of Two Files on One Screen, Background Editing
Graphics	XY, YZ, ZX, Plane, 3D, Graphics Drawing During Machining, Background Graphics Drawing, etc...

Dielectric System	
Capacity	211 gallons (800 liters)
Filter Type	Replaceable Paper Filter
Tank External Dimensions	41.34" x 78.94" x 84.25" (1,050 x 2,005 x 2,140 mm)
Dielectric Fluid Type	Oil

Accessories			
Rigid Linear Motor (X, Y, Z)	•	Glass Scale Feedback (X, Y, Z)	•
Chiller Unit	•	SVC Circuit (Fine Finish Circuit)	•
SGF2 Circuit (Zero Wear)	•	SEC 10 (C Axis)	Δ
Shuttle ATC	Δ	Fire Extinguisher	•
LAN	•	USB Memory Port	•

• Standard Δ Option

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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 September 2014.

# Sodick

1605 N. Penny Lane.  
Schaumburg, IL 60173  
phone: 847-310-9000  
toll free: 888-639-2325

[www.sodick.com](http://www.sodick.com)