



Sodick



High-Accuracy, Fine Finish CNC Sinker EDM
Rigid Linear Motor Driven

AD35L
AD55L

New Features Enhance Cost-Effective Machining

LN Control Touch Screen

The “LN2” Professional control panel, is capable of high speed, precision, and efficient machining. The increased performance of the power supply is provided by a modern control theory based NC system, with a panel designed for stress-free operation through its Windows operating system.

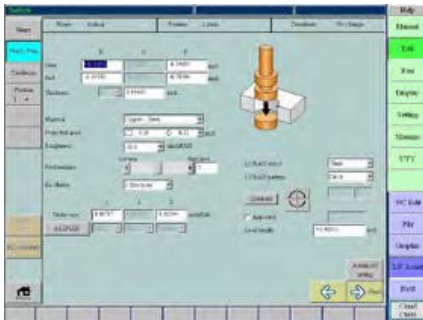


High-Performance Machining

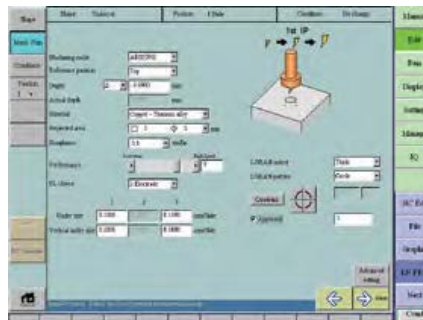
LN Professional is an easy to use graphic interface that allows for the machining of various shapes in numerous types of machining scenarios, it also comes complete with a graphite electrode search screen.



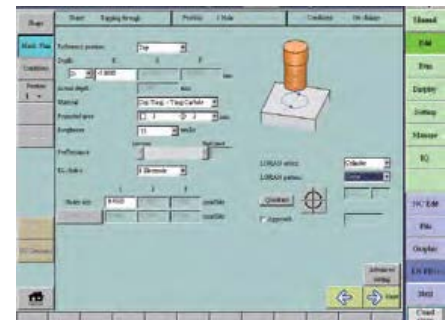
Machining Plan: In the machining plan, various conditions that match the shape can be selected. For example, if a core pin shape is selected, the machining conditions specialized in precision machining and machining operations focusing on corner accuracy will be displayed. Additionally, new machining shapes; such as, “Helical”, “Tapping Through” have been added to the plan, and optimal conditions can be called up immediately.



Machined Shape: Helical



Machined Shape: Undercut



Machined Shape: Tapping Through

“SGF2” Nano Wear Discharge Unit

The power supply unit is equipped with the “SGF2” discharge unit. “SGF2” minimizes graphite electrode wear and maximizes cutting speed offering the highest performance level possible, for “zero-wear” machining. The “SGF2” circuit achieves rough cutting to finishing using a single graphite electrode, eliminating the use of multiple electrodes and reducing manufacturing time.



Complete Machining Solution

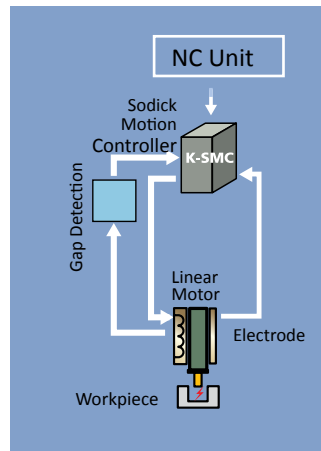
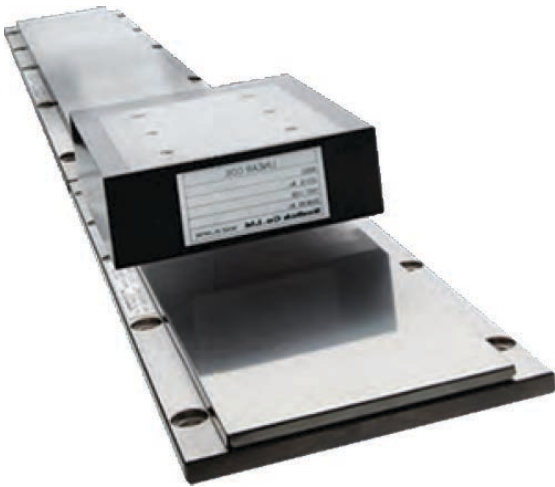
Sodick offers the AD Series as a complete package, enabling a productive machining process ; the External USB and Dielectric Chiller come standard, while the C-Axis and Shuttle ATC can be optionally added to the package.



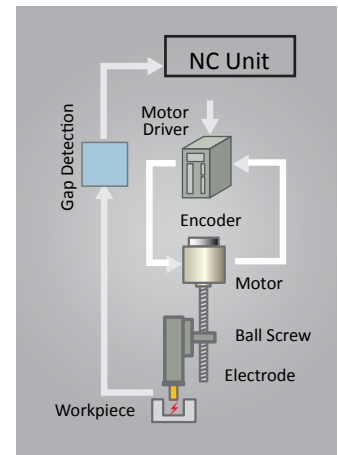
Core Technologies for Outstanding Performance

In-House Developed Rigid Linear Motor Drives

Sodick's patented rigid linear motors offer non-contact axis movement free from friction, wear, and backlash for unrivaled acceleration and position accuracy. The linear motors performance do not diminish over time and remains maintenance free thanks to the Motion Controller (K-SMC), which Sodick has perfected over the years.



Linear Motor Drive



Conventional Ball Screw

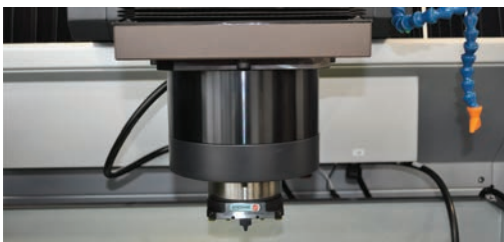
Ceramic Work-Zone

Sodick AD Series Sinker EDM is constructed using ceramic components for the work stand table and critical parts, all of which are built in-house to ensure high precision machining with better electrical insulation, abrasion resistance, and rigidity. Ceramics are ideal for high precision machining due to their very low thermal expansion coefficient (less than one third that of cast iron), high rigidity, and resistance to aging.



C-Axis (SEC-10) - Option

The SEC-10 offers 1/1,000,000 of standard resolution. The C-axis enables high precision indexing with direct-drive and continuous rotation (20 rpm), expanding the machining capabilities.



Shuttle ATC - Option

The shuttle ATC, allows you to perform operations unattended.

AD35L: 4 stations
AD55L: 6 stations

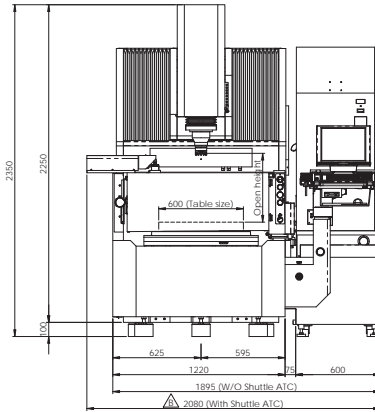


Specifications

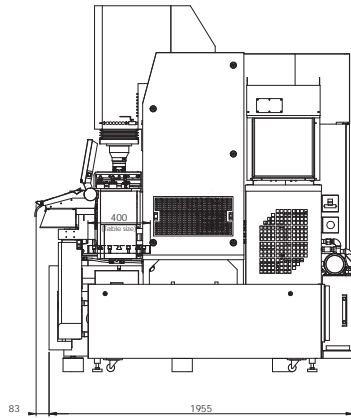
Rigid Linear Motor-Driven Sinker EDM Machine

AD35L

Front View

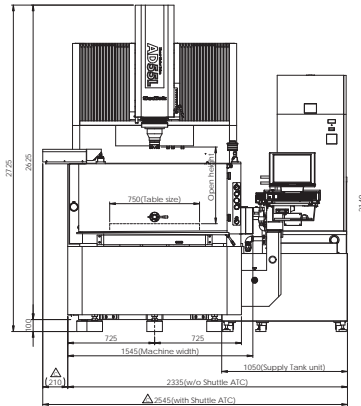


Side View

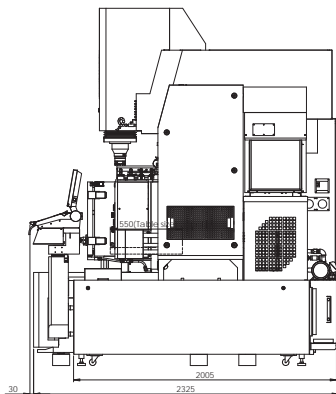


AD55L

Front View



Side View



Machine	AD35L	AD55L
X/Y/Z axis travel	13.78" x 9.84" x 10.63" (350 x 250 x 270 mm)	23.62" x 15.75" x 15.75" (600 x 400 x 400 mm)
Work tank inner dimensions (W x D x H)	38.39" x 21.85" x 13.78" (975 x 555 x 350 mm)	47.24" x 31.50" x 19.69" (1,200 x 800 x 500 mm)
Work tank fluid level (min. to max.)	6.69" ~ 11.81" (170 ~ 300 mm)	6.69" ~ 17.72" (170 ~ 450 mm)
Work tank capacity	47.5 gal (180 L)	124.2 gal (470 L)
Ceramic table size (W x D)	23.62" x 15.75" (600 x 400 mm)	29.53" x 21.65" (750 x 550 mm)
Clamp Chuck Type and Distance from Table to Chuck:		
(Automatic) Erowa Combi ER-020025	8.54" x 19.17" (217 ~ 487 mm)	9.45" x 25.20" (240 ~ 640 mm)
Erowa ITS ER-007521	8.54" x 19.17" (217 ~ 487 mm)	9.45" x 25.20" (240 ~ 640 mm)
3R Combi 3R-460.86-2	7.87" x 18.50" (200 ~ 470 mm)	8.78" x 24.53" (223 ~ 623 mm)
3R Macro 3R-600.86	7.87" x 18.50" (200 ~ 470 mm)	8.78" x 24.53" (223 ~ 623 mm)
(Manual) TP Spec. TPH-11 (Standard)	4.45" x 15.08" (113 ~ 383 mm)	9.45" x 25.20" (240 ~ 640 mm)
Maximum weight of workpiece	1,212.5 lb (550 kg)	2,204.6 lb (1,000 kg)
Maximum weight of electrode	110 lb (50 kg)	110 lb (50 kg)
Distance from floor to table top	31.89" (810 mm)	35.43" (900 mm)
Machine dimensions (W x D x H)	81.89" x 76.97" x 92.52" (2,080 x 1,955 x 2,350 mm)	99.02" x 91.54" x 107.09" (2,515 x 2,325 x 2,720 mm)
Machine installation space (W x D)	110.24" x 114.17" (2,800 x 2,900 mm)	129.92" x 133.86" (3,300 x 3,400 mm)
Machine weight	7,054.8 lb (3,200 kg)	10,141.3 lb (4,600 kg)
Air pressure	0.65 MPa	0.65 MPa
Air flow	100 NL/min	100 NL/min
Total power input	3-phases 50/60Hz, 10 KVA	3-phases 50/60Hz, 10 KVA

Dielectric Tank	AD35L	AD55L
External dimensions (W x D x H)	31.50" x 67.13" x 83.66" (800 x 1,705 x 2,125 mm)	41.34" x 78.94" x 84.25" (1,050 x 2,005 x 2,140 mm)
Weight (empty)	1,851.8 lb (840 kg) (including power supply)	2,645.5 lb (1,200 kg) (including power supply)
Dielectric tank capacity	105.7 gal (400 L)	211.3 gal (800 L)
Dielectric fluid filtration method	2 replaceable paper filters (MF-2400)	2 replaceable paper filters (MF-2400)

Standard Features

10-Year Positioning Accuracy Guarantee	15" TFT touch screen display
LN Professional	Dielectric cooling unit
Linear motor drives	Automatic voltage regulator
Linear scales (X, Y, Z axes)	Paper filters (2)
Remote controller	Fire extinguisher
USB port	Mouse
SGF2 Circuit	LAN connection

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The specifications contained in this catalog are subject to change without notice due to continual improvements.
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