

Linear motor drive Wire-cut EDM

VZ300L & VZ500L

*Pursuit of Linear motor drive Wire-cut EDM technology
from parts machining to mold makings
specially designed for versatile machining needs*

No screw drive system

The no screw drive system, which uses a linear motor and linear scale, is the ideal drive method which maintains high-speed and high response semi-permanently. The initial positioning accuracy can be maintained for years and years; machine operators will everlastingly enjoy the remarkably reliable machining performance.

New power supply unit

The new power supply unit employs "Perfect Active Control" technology. It realizes high-speed processing of discharge control and motion control simultaneously. The "Heart-NC", automatic programming system, is installed standard which allows machining program procedure without experience.

Versatility

The VZ series are equipped with many advantageous functions as standard; such as, the advanced corner control system, automatic float control, high quality machining circuit, and more. Moreover, Sodick's in-house made superior ceramics are adopted standard for precision machining.



VZ300L & VZ500L

S p e c i f i c a t i o n s

Machine tool	VZ300L	VZ500L
Work tank inner dimensions (W x D)	810 x 650 mm	990 x 750 mm
X axis stroke	350 mm	500 mm
Y axis stroke	250 mm	350 mm
Z axis stroke	220 mm	250 mm
U x V axis stroke	80 x 80 mm	80 x 80 mm
Max. taper angle	±15° (thickness: 120 mm)	±15° (thickness: 120 mm)
Max. workpiece size (W x D x H)	780 x 570 x 215 mm (flush) 780 x 570 x 200mm (submerge)	960 x 670 x 245 mm (flush) 960 x 670 x 230 mm (submerge)
Max. weight of workpiece	500 kg (flush) 350 kg (submerge)	850 kg (flush) 700 kg (submerge)
Wire diameter	φ0.10-φ0.3 mm*1	φ0.10-φ0.3 mm*1
Wire tension	3-23 N	3-23 N
Wire feed rate	Max. 420 mm/sec	Max. 420 mm/sec
Distance from floor to table top	900 mm	930 mm
Machine tool dimensions (W x D x H)	1895 x 2180 x 1960 mm	2300 x 2590 x 2040 mm
Machine installation area (W x D)	2600 x 2950 mm	3000 x 3300 mm
Machine tool weight	2400 kg	2950 kg
Total power input	3-phase 50/60 Hz 11 kVA	3-phase 50/60 Hz 11 kVA

*1 φ0.1 mm is option.

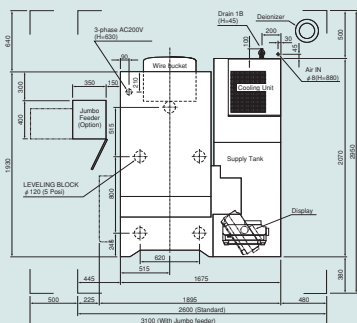
Dielectric tank	VZ300L	VZ500L
External dimensions (W x D x H)	710 x 2070 x 1800 mm	860 x 2400 x 1810 mm
Weight (empty)	370 kg	400 kg
Capacity	550 liters	840 liters
Filtration method	Replaceable paper filter	Replaceable paper filter
Deionizer	Ion-exchange resin (18 liter)	Ion-exchange resin (18 liter)

CNC power supply unit	
Max. machining current	32 A
Power requirement	200/220 V 50/60 Hz
NC unit	Multitasking OS, KSMC-LINK method
User's memory capacity	Editing: 100,000 blocks, Saving: 30 MB
Memory device	CF card, external memory
Input format	External memory, mouse, keyboard, remote controller
Display type	15 inch TFT-LCD
Character set	Alphanumeric and symbols
Keyboard	Standard 101-key, function key
Positioning command	Incremental and absolute
Max. input command	±999999.999/±99999.9999/±9999.99999 (switchable)
Machining conditions storage capacity	1000 conditions (C000 to C999)
Offset settings storage capacity	1000 conditions (H000 to H999)
Program sequence number assignment	N000000000 to N999999999
Number of coordinates	60
Simultaneous control axes	Max. 4 axes
Min. input command	0.1 μm
Min. drive unit	0.1 μm
Max. feed rate	Max. 3 m/min
Position detection	Full closed loop (linear scale)
Drive mechanism	Linear motor
Compensations	Backlash and torque compensation (separated to each axis)
Graphics	XY, YZ, ZX plane, graphics drawing during machining, background graphics drawing

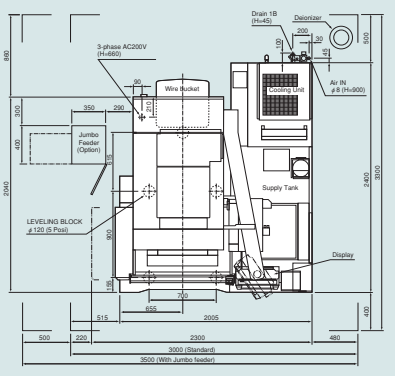
Please consult sales representatives for more details.

Layout

VZ300L



VZ500L



Unit: mm

<http://www.sodick.co.jp>

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- The content of this catalog is current as of October 2009.