

IX 1505	
IX 1510	
IX 1515	
IX 1518	

Portal Milling Machines IKON



IX Series Structure



Highest performance and productivity

Highlights

The laminated profiles welded in argon gas offer benchmark for highest rigidity

Improved structure concept for X axis offer large clearance of work table.

Rigid Y-axis concept in whole range of travel

FEM-optimized design & construction

Precision in every component and detail





High Speed Machining for aluminium, titanium and stainless steel

Accuracy of positioning in all axes of 10 µm without linear scales.

Thermal compensation ensures stable, precise and high quality production process

Schneeberger - Swiss Made transmission - precision with hardened surface

Sophisticated design and large working area - combined in the IX series

Improved ergonomics for easy handling and loading of heavy work pieces

Huge table up to 1800 x 1500 mm for cutting of parts up to 800 kg

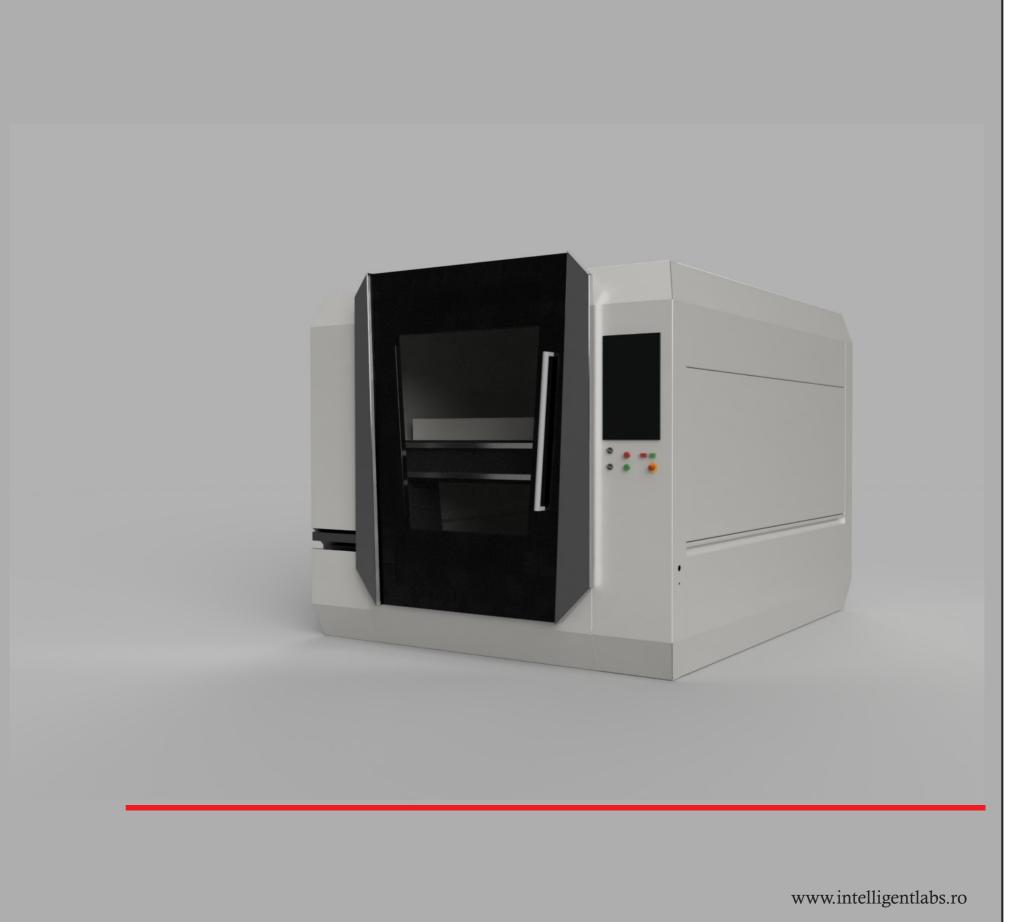
Small foot print of 6.72 sqm for FX1518

IX Series Standard Machine



Model: IX1510

Max. X travels	1000 mm					
Max. Y travels	1500 mm					
Max. Z travels	300 mm					
Table dimensio	ns					
Max. table load	8 00 kg					
Lift length	1,200 mm	1,200 mm				
Table width	1,600 mm					
Spindle cutting						
Spindle Jäger - made i Tool type	n Germany	40,000 rpm HSK E32				
Drive power rating	5.5 kW (10	0%), 8Kw(60%)				
Precision						
Repetability	1 um					
Measurement System	Direct mea	Direct measurement System				
Rapid traverse						
Max. X axis	60 m/min					
Max. Y axis	60 m/min					
	30 m/min					
Max. Z axis						
Max. 2 axis Tool Magazine						

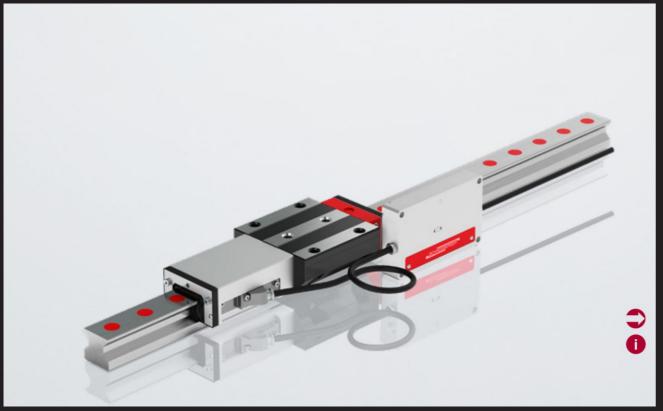


IX Series

Transmission and Controller











CNC Fanuc 0i Plus F

Designed to be extremely user-friendly, FANUC's new iHMI makes operating CNC machines easy and efficient. The new panel is flat, features ergonomically positioned keys, completely redesigned hardware and a brand new user interface.

Conversational automatic programming function with process menu

File display and note function for accessing operating instructions, drawings and texts

User – friendly operator guidance screen with clear machine status display

- * increase transfer speed up to 120 m/min
- * increased accuracy with nano metric technologies

Fanuc alpha - made in Japan

These motors provide excellent acceleration and are ideal for use in high-speed, high-precision machinery such as presses:

maximum speed up to 8,000 rpm αi series high resolution encoder (32,000,000/rev) protection class IP65





IX Series Spindle



Characteristics

Speed sensor Vector control Housing Stainless steel Housing diameter 100 mm Cooling Liquid cooled

Ambient temperature + 10°C ... + 45°C

Tool change Pneumatic taper change

Tool Holder HSK-E 32 + HSK-F 40

Bearings

Hybrid ball bearing (pcs) 4 Lifetime lubricated maintenance free

Motor

Motor technology 3-phase asynchronous drive (no brushes or sensors)

Frequency 1.400 Hz
Motor poles (pairs) 2
Rated rotation speed 42.000 rpm
Acceleration/braking value
Per second 10 000 rpm





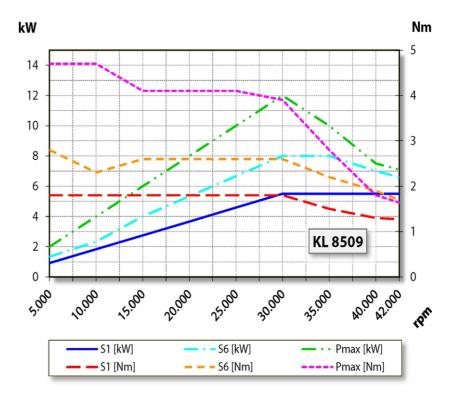
Pneumatic taper change

HF-Spindle for high-speed milling, -grinding, -drilling, -engraving

Power values

Liquid cooled

	Pmax./5s	S6-60%	S1-100%		
Rated power	12	8	5,5 [kW]		
Torque	4,7	2,8	1,8 [Nm]		
Voltage	380	380	380 [V]		
Current	28	19	14,5 [A]		



IX Series Touch Probe





Hardwired touch probe with revolutionary shark360 measuring mechanism

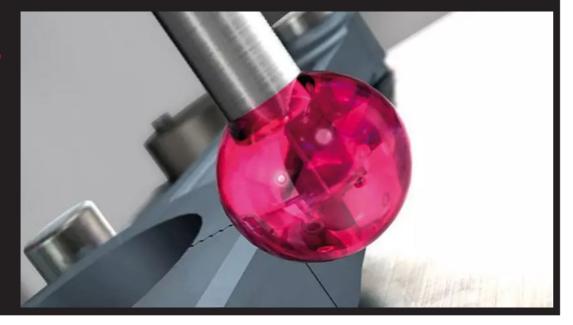
The compact touch probe TC76 is used for a fast and automatic measurement of tools and workpieces in milling centres. Due to a modified face gear and the optoelectronic signal generation, the built-in patented shark360 measuring mechanism sets a new standard with regards to precision and reliability.

- Pulling and torsional measurements with offset stylus
- Tool measurement using stylus with cube
- Excentric measurements
- Compact machines offering limited space
- Customised solutions are easily developed

Your benefit:

- Superior precision due to patented shark360 measuring mechanism
- Extremely high probing speeds
- Constant deflection forces in all probing directions
- Ideally suited for highly productive production
- Reliable measurements, even under the influence of coolant
- No-wear, optoelectronic measuring mechanism
- Proven and robust design
- Enables unmanned manufacturing

Repetability 0.4 um





IX Series Order List





IX Series Optional Vacuum System

Our Solution

High performance vacuum system based on Oerlikon SogeVac vacuum pump with total power of 300 cm/h and a pressure up to 0.8 mBar Abs.

Vacuum table divided in up to 16 area with full electronic control on controller.

Suitable for milling aluminum, stainless steel and titanium.

- Longest oil life time due to coolest pump on the market
- Different 3 phase motors available
- Variants suitable for every application
- Fastest cycle time on the market
- High process resistance thanks to the large oil volume
- Monitoring possibilities
- 15% lower power consumption vs. competition

Design Principle

SOGEVAC pumps are oil sealed rotary vane pumps. Oil injected into the pump chamber for sealing, lubrication and cooling of the pump is recycled from the pump's oil reservoir and filtered, if required, before it is injected. The lubricant system is rated for continuous operation at high intake pressures (max. 1000 mbar abs.) so that the pumps may be used in a versatile manner in most rough vacuum applications (accessories are required for some pumps).

The oil carried with the process gas is roughly separated in the oil box before the discharged gas enters the integrated exhaust filters where the fine oil mist is trapped. The thus filtered oil is collected in the oil box and then supplied back to the pump.

The SOGEVAC vacuum pumps distinguish themselves by their very low power consumption, typically 15% lower compared to competitive pumps.



www.intelligentlabs.ro



Leybold

Technical Data							
SOGEVAC		SV 200		SV 300 B		SV 320 B	
Rotary vane pump		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Nominal pumping speed 1)	m³/h	180.0	220.0	280.0	340.0	330.0	385.0
Pumping speed 1)	m³/h	170.5	200.0	240.0	290.0	284.0	330.0
Ultimate total pressure							
without gas ballast 1)	mbar	≤ 0.08		≤ 0.08		≤ 0.08	
with gas ballast 1)	mbar	≤ 0.7		≤ 0.7		≤ 0.7	
Water vapor tolerance 1)	mbar	30	40	10	12	10	12
Oil filling	1	5.0 - 9.0		8.5 - 11.5		8.5 - 11.5	
Noise level	dB (A)	69	73	72	76	72	73
Motor power (1~ + 3~), max.	kW	4.5	4.6	5.5	6.3	7.5	7.5
Nominal speed	rpm	1450	1750	1500	1800	1500	1800
Weight (with oil filling)	kg	150	160	223	225	211	
Connections, intake and exhaust side		G or NPT 2"					
Dimensions (L x W x H)	mm	1070 x 535 x 425		1115 x 555 x 450		1120 x 565 x 450	





Designed for ultimate usability

The new FANUC PANELH Pro with widescreen LCD supports both portrait and landscape orientation. Hardware keyboard and control panel can be eliminated, reducing the number of parts. The FANUC PANEL H Pro is equipped with a precise capacitive touch screen, which provides excellent usability and allows smartphone-like intuitive operation.

Discover more about FANUC CNC control series fanuc.co/cnc-control-series

IX Series

