



FX 2010

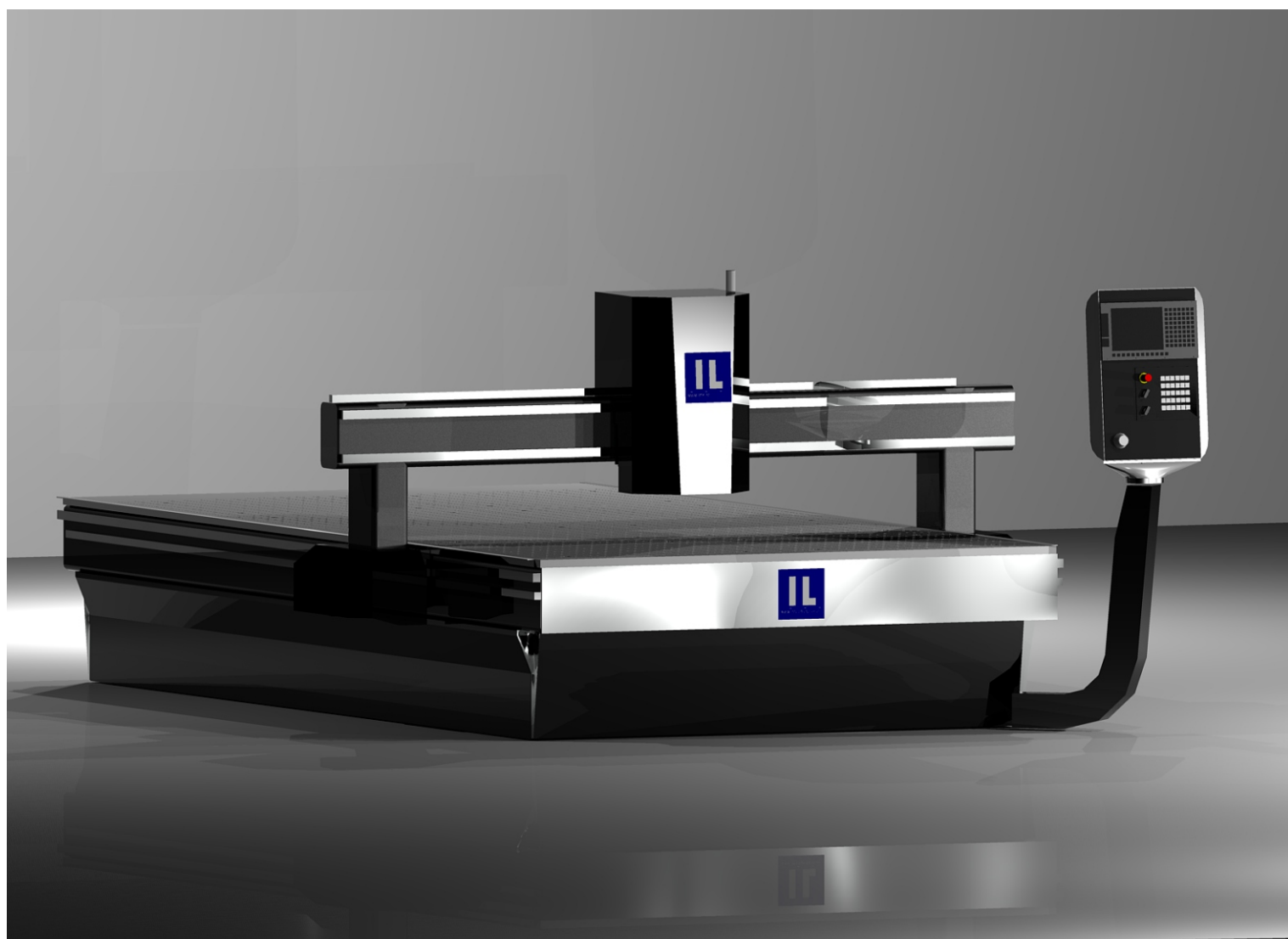
FX 2512

FX 3020

FX 4520

FX 6020

# Portal Milling Machines FX Series



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# FX Series

## Structure

# High performance and productivity

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

Thick 30 mm aluminum table

Vacuum system - Leybold rotary vane vacuum pump

Computerized vacuum field switching

Accuracy of positioning in all axes of 20  $\mu\text{m}$  without linear scales.

Wittenstein transmission - 4  $\mu\text{m}$  class of precision with hardened surface

Speed up to 1.5 m/s, acceleration of 5.000  $\text{mm/s}^2$

Improved ergonomics for easy handling and loading of heavy work-pieces

Huge table with 3100 x 2100 mm for cutting of large parts

## Highlights

**Maximum stiffness with  
welded laminated profiles**

**Precision and stability**

**Powerful drive system  
from Fanuc**

# FX Series

## Order List



### FX2010

Max. X travels	2,050 mm
Max. Y travels	1,050 mm

### FX 2512

Max. X travels	2,550 mm
Max. Y travels	1,250 mm

### FX 3020

Max. X travels	3,100 mm
Max. Y travels	2,050 mm

### FX 4520

Max. X travels	4,600 mm
Max. Y travels	2,050 mm

### FX 6020

Max. X travels	6,100 mm
Max. Y travels	2,050 mm

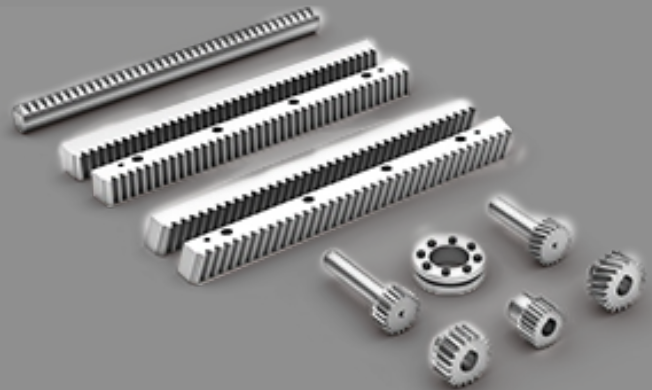
# FX Series

## Function

### Transmission

Precision in all shapes and sizes

Perfect for high-performance drive units



**WITTENSTEIN**

**FANUC**

### Servomotors

Fanuc alpha - made in Japan

High-precision encoder, 28 bits/revolution;  
*67 million ppr*

Max. rotational speed: 5000rpm

Low cogging torque



# Quality

assured by hi-class brands



## Linear

Precise, Reliable, Future-proof

20 um precision class

Quality offered by

**Rexroth**  
Bosch Group



## Vacuum system

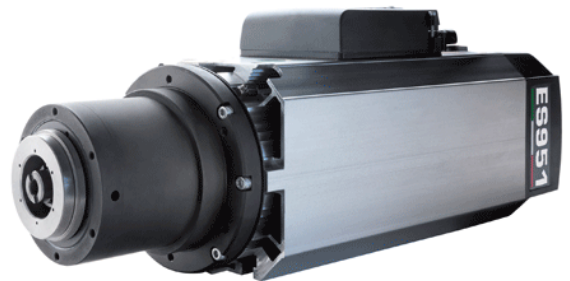
Powerful rotary vane vacuum pumps

Computerized control of the vacuum fields

**oerlikon**  
leybold vacuum



**ES951 e-CORE™**



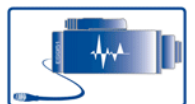
### TOP FEATURES & OPTIONS



Accelerometro



Controllo ridondante  
velocità



Connessione  
Fieldbus



Air Tool



Assemblaggio  
Modulare



Set-up remoto  
sensori



Monitoraggio  
Temperatura  
Cuscinetti



Monitoraggio  
Temperatura  
Motore



Encoder

# FX 3020

## Technical Info - FX 3020

### Work Area

Max. X travels	<b>2100 mm</b>
Max. Y travels	<b>3000 mm</b>
Max. Z travels	<b>300 mm</b>

### Machine dimensions

Machine weight	<b>6000 kg</b>
Machine length	<b>5000 mm</b>
Machine width	<b>2800 mm</b>

### Spindle

Standard HSD Es951 e-core	<b>max. 25 KW</b>
Tools magazine - standard 8 toolholders	
Automatic tool change, min. 24.000 rpm	

### Rapid traverse

Max. X axis	<b>90 m/min</b>
Max. Y axis	<b>90 m/min</b>
Max. Z axis	<b>90 m/min</b>





## Fanuc controller

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

Manual Guide and interactive programming

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

\* increase accuracy with nano metric technologies

# Quality

made in Japan



# FANUC

