

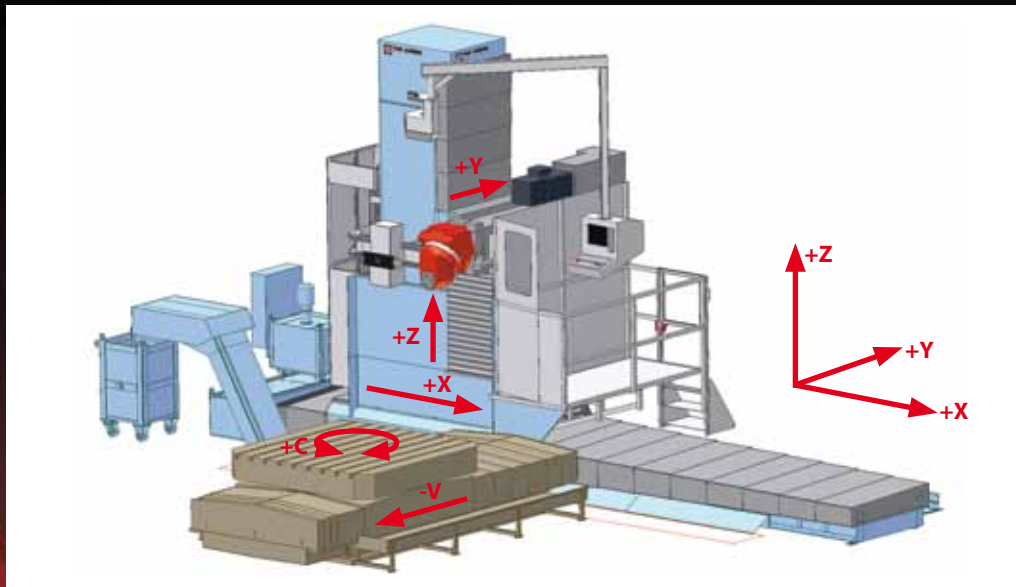
**FU** **EFEKTIV**  
FIVE-AXIS **MACHINING CENTRE**



**TOS KUŘIM**  
ALTA GROUP

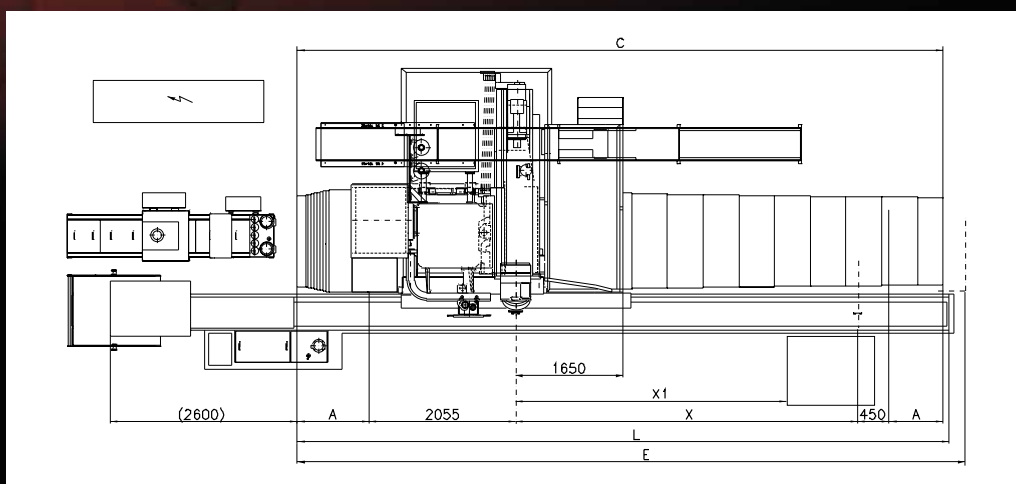
**NEW** SHIFT-OUT QUILL TYPE  $W = 800$  mm

# FLOOR TYPE MACHINING CENTRE



## General technical parameters

Longitudinal travel	X axis	2,000; 3,000; 4,000; 5,000; 6,000; 8,000; 10,000; 15,000; 20,000	mm
Vertical travel	Z axis	2,000 / 2,500	mm
Cross travel	Y axis	1,250	mm
Axis force	X axis	20,000	N
Axis force	Y axis	25,000	N
Axis force	Z axis	25,000	N
Programmed feed rates	X axis	1–20,000	mm/min
Programmed feed rates	Y axis	1–10,000	mm/min
Programmed feed rates	Z axis	1–10,000	mm/min
Total input		50	kVA
Machine weight (without tool magazine)		c. 25,000–52,000	kg



## Technical parameters

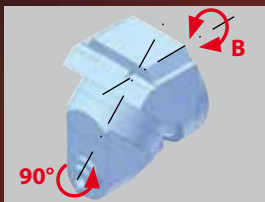
Travel length X	2,000	3,000	4,000	5,000	6,000	8,000	10,000	15,000	20,000	mm
X1 *)	1,000	2,000	3,000	4,000	5,000	7,000	9,000	14,000	19,000	mm
A	680	730	770	890	1,000	1,150	1,220	1,370	1,670	mm
C	6,010	7,110	8,190	9,430	10,650	12,950	15,090	20,390	25,990	mm
L	6,416	7,516	8,596	9,840	11,056	13,356	15,496	20,796	26,396	mm
E>L	6,850	7,940	9,100	-	-	-	-	-	-	mm

X1 \*) - with using stationary tool magazine – PICK UP

# MILLING HEADS

## Universal indexing head type O

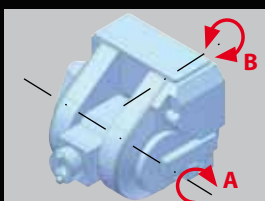
automatically turnable in two positions



Technical parameters	
Adjusting of spindle to H/V position	90°
Swiveling range around B axis by 2,5°	+177,5 to -180°
Spindle taper	ISO 50
Spindle speed range (continuously)	18–2,500; 4,000; 5,000 rpm
Output of main motor	28 kW
Max. spindle torque	1,200; 750; 630 Nm
Swiveling speed around cross axis	1,600°/min

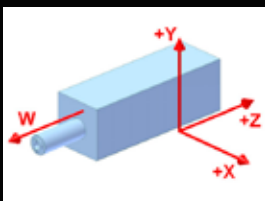
## Two axis milling head type K

automatically continuously controlled in two axes



Technical parameters	
Swiveling range around B axis (continuously controlled), axis torque 2,500 Nm	± 90°
Swiveling range around A axis (continuously controlled), axis torque 1,800 Nm	+30 to -180°
Spindle taper	ISO 50
Spindle speed range (continuously)	16–3,500 rpm
Output of main motor	28 kW
Max. spindle torque	900 Nm

## Horizontal spindle headstock execution W



Technical parameters of shift-out quill	
Quill and headstock travel (in axis W + Z)	400 + 1,250 mm
Quill diameter	170 mm
Ram cross section	500×500 mm
Spindle taper	ISO 50
Spindle speed range (continuously)	3,200 rpm
Output of main motor	28 kW
Max. spindle torque	1,200 Nm

Technical parameters of shift-out working spindle	
Working spindle and spindle headstock travel (in axis W+Z)	800 + 1,250 mm
Working spindle diameter	130 mm
Ram cross section	500×500 mm
Spindle taper	ISO 50
Spindle speed range (continuously)	2,500/3,000 rpm
Output of main motor	28 kW
Max. spindle torque	2,000 Nm

# OPTIONS

## Rotary table movable in linear axis - type CES, rotary table type CEP

(optional)

Technical parameters							
Size of table	1,500×1,500	1,750×1,750	2,000×2,000	2,000×2,500	2,000×3,000	2,500×2,500	mm
T-clamping slots	number × pitch	7×200	9×200			11×200	mm
	central slot width	28H8					mm
	other slots width	28H11					mm
	cross slot width	22H8					mm
Centering hole diameter	100H7					mm	
Linear axis travel (only for type CES)	1,250	1,250/2,250			mm		
Working feeds in linear axis (only for type CES)	1 – 12,000					mm.min <sup>-1</sup>	
Rapid feed (only for type CES)	12,000					mm.min <sup>-1</sup>	
Feed range	1 – 720					°.min <sup>-1</sup>	
Maximum feed (programmable value)	720					°.min <sup>-1</sup>	
Maximum centric loads	15,000	25,000			kg		
Maximum axis torque	during rotation	15,000	20,000			Nm	
	at hydraulic clamp	10,000	25,000			Nm	
Total table weight (type CES)	7,600	8,300	11,640	13,460	14,600	14,850	kg
Total table weight (type CEP)	5,200	6,500	9,600	11,400	12,600	12,800	kg



Rotary table movable in linear axis - type CES

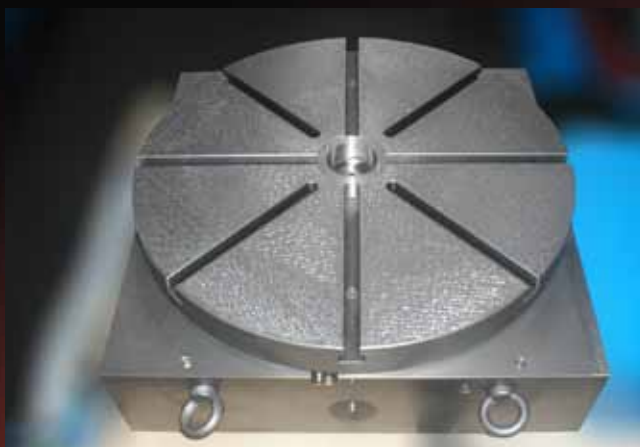


Clamping table

## Clamping table

Technical parameters									
Clamping width	1,500	2,000	2,500	3,000	3,500	4,000	4,500	mm	
Clamping length	from 4,000 to 20,000 per 2,000						mm		
Clamping height	400						mm		
T-clamping slots	number × pitch	7×200	9×200	11×200	15×200	17×200	19×200	22×200	mm
	central slot width	28H7						mm	
	other slot width	28H11						mm	
Load capacity per 1m <sup>2</sup>	6,000						kg		

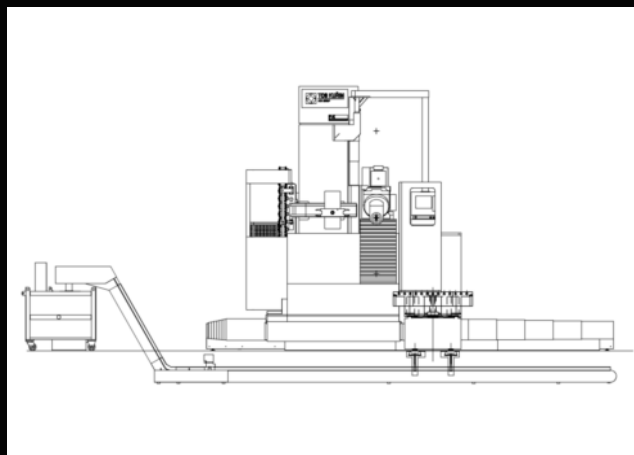
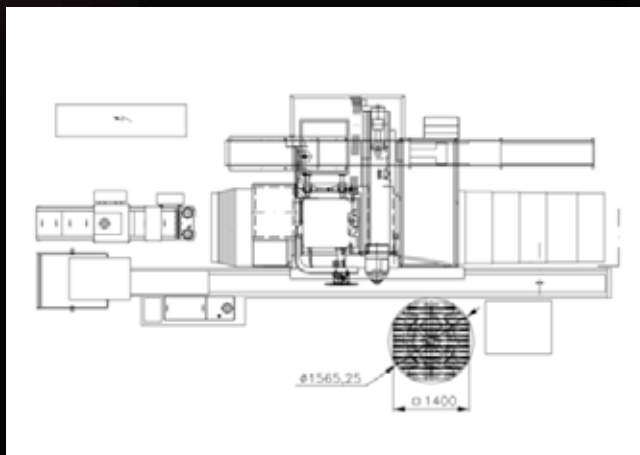
## Rotary table type ISN



### Technical parameters

Table clamping area diameter		[mm]	800	1 000
Workpiece maximum weight	Clamping area horizontally	[kg]	3 500	
	Clamping area vertically	[kg]	1 500	

## Rotary table type CEP special execution



### Technical parameters

Table clamping area dimensions	[mm]	1 400 × 1 400
Maximum load bearing capacity of rotary table	[kg]	6 000



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