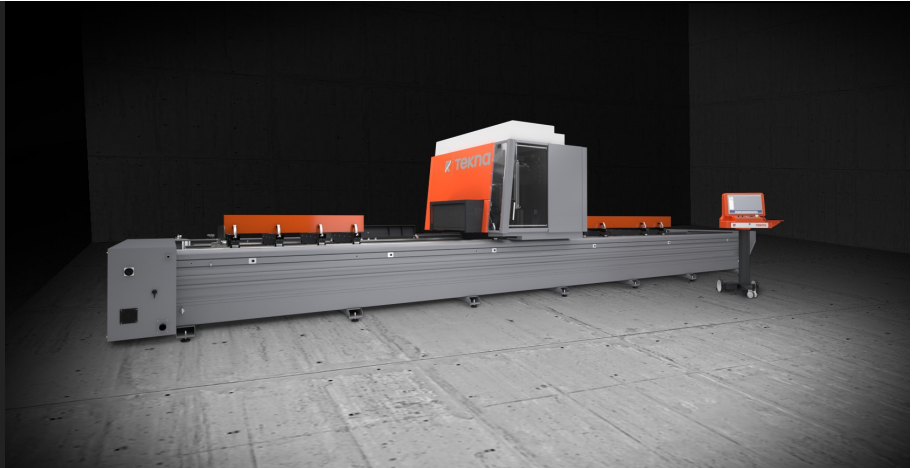




TKE 985

Machining Centres

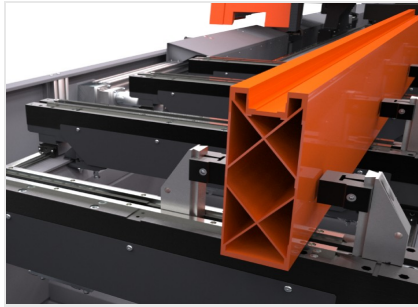


5-axis CNC machining centre with moving gantry structure. Designed for milling, drilling, thread cutting and cutting on bars or large workpieces of aluminium, light alloys in general and steel. The moving part of the machine consists of a gantry with precision rack and pinion drive. The high power (10 kW in S1) electrically-driven spindle with HSK-63F tool holder allows machining operations, including heavy-duty work, with optimum results in terms of speed and accuracy. A fixed 14-place tool magazine is installed on board the machine. It can be supported with a further fixed 14-place magazine on the other side of the machine, or replaced by a 14-place motorised tool magazine that can move and approach the moving gantry structure in both the working areas, reducing the tools and toolholders quantity requirement and optimising the software programming considerably. The machine can be used in double mode so as to minimize machine downtime, as it is possible to change the workpiece (load/unload) in "concealed" time. It is also possible to machine different workpieces between the two work areas. The gantry is provided with a guard which, besides protecting the operator, also reduces the noise impact on the environment.



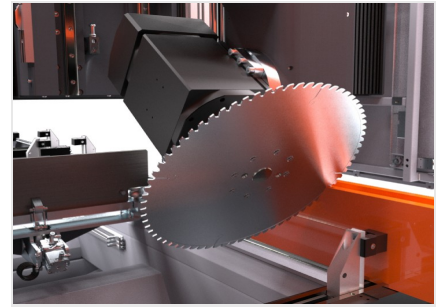
Tool magazine

A spacious tool magazine with 14 places is installed on the side of the machine. The housing with automatic cover offers optimum protection for the toolholder cones from swarf and accidental knocks. To work in double operation mode, a second 14-place magazine can be added to the other side of the machine, managing an independent set of tools in each work area.



Vices

The vice unit can ensure the correct and safe clamping of large aluminium, steel and light alloy profiles. The vice size and the long Y stroke of the electrospindle allow machining large profiles for all kinds of civil and industrial applications. Each unit slides on linear guides on machine surface. The positioning is managed by the X axis.



Cutting unit

The Ø 350 mm blade supplied is housed in a dedicated magazine and has an independent lubrication system. It is equipped with HSK63F toolholder and can work by exploiting the 5 interpolated axes of the electric head to section the workpiece. This versatile tool allows compound cuts, straight cuts, end milling and trimming operations to be carried out with maximum speed, safety and precision.



Profile positioning

A retractable reference stop is installed on the left-hand side of each of the two work areas. In this configuration, up to two workpieces can be machined in multi-piece or double operation mode. The right stop can be simply moved to the end of the machine for machining extra-long workpieces. With similar operations and using up to 4 additional optional stops, the machine demonstrates all its working versatility.



Additional vices (Optional)

If necessary, it is possible to install additional vices beyond the standard machine equipment. In this way, it is possible to ensure perfect clamping of bars or bar sections even in complex cases in terms of number, size or types of profiles to be machined. Moreover, the additional vices allow greater versatility in vice position depending on the length of the workpieces and the machining to be performed.



Dimensional profile measurer (Optional)

The machine can be optionally equipped with an electronic device that automatically corrects workpiece dimensional errors in length, width and height. In this way, the accuracy of the machine is not influenced by the differences between theoretic and actual workpiece dimensions during machining.



TKE 985 / MACHINING CENTRES

AXIS STROKES

X AXIS (longitudinal) (mm)	10.200 ; 8.200
Y AXIS (transversal) (mm)	1.380
Z AXIS (vertical) (mm)	620
B AXIS (vertical axis rotation of the head)	0° ÷ 360°
C AXIS (vertical-horizontal rotation of the head)	-90° ÷ +90°
B and C axis positioning increments	0,01°

ELECTROSPINDLE

Maximum power in S1 (kW)	10
Maximum speed (rpm)	22.000
Maximum torque (Nm)	12,7
Toolholder cone	HSK - 63F
Air cooling with electric fan	●

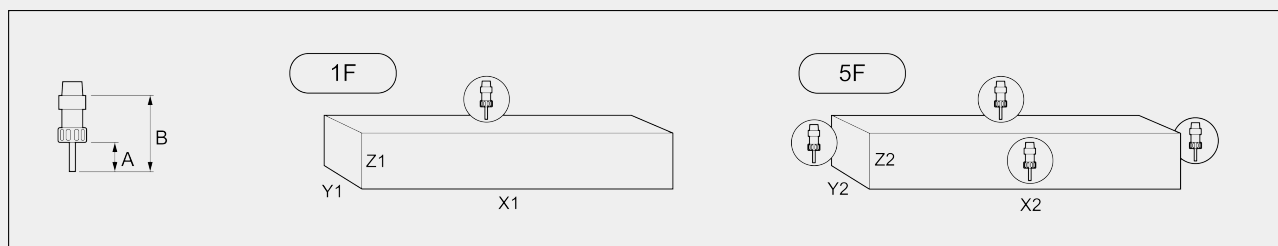
WORKABLE SIDES

With direct tool (upper face, side faces, heads)	5
With blade tool (upper face, side faces, heads)	1 + 2 + 2

WORK AREA

1F = 1 face machining

5F = 5 faces machining



		A	B	X1	Y1	Z1	X2	Y2	Z2
TKE 985-8	single mode	65	122	8.200	725	300	7.900	725	300
	double mode	65	122	3.700	725	300	3.200	725	300
TKE 985-10	single mode	65	122	10.200	725	300	9.900	725	300
	double mode	65	122	4.600	725	300	4.300	725	300

Dimensions in mm

**AUTOMATIC TOOL MAGAZINE**

Standard fixed left 14-place tool magazine	<input type="radio"/>
Standard RH fixed 14-place tool magazine	<input type="radio"/>
Maximum dimension of tools that can be loaded into the fixed magazine (mm)	Ø = 160 - L = 200
Maximum diameter of the blade that can be loaded into the magazine (mm)	450

MACHINING CAPACITY

Drilling on solid aluminium AL99 - Ø max. (mm)	Ø 20
Drilling on solid steel FE370 D FF - Ø max. (mm)	Ø 14
Straight milling on solid aluminium AL99 - max. thickness (mm)	15
Straight milling on solid steel FE370 D FF - max. thickness (mm)	5
Tapping on solid aluminium AL99	M12
Tapping on solid steel FE370 D FF	M8

PROFILE POSITIONING

Workpiece reference stops with pneumatic movement	2
Additional workpiece reference stop with pneumatic movement	<input type="radio"/>
Maximum number of reference pneumatic stops	4

WORKPIECE LOCKING

Standard number of pneumatic vices	8
Maximum number of pneumatic vices	16
Automatic vice positioning through X axis	<input checked="" type="radio"/>
Double horizontal hold-down devices on pneumatic vices for the machining of two parallel profiles	<input checked="" type="radio"/>

Included ● Available ○