

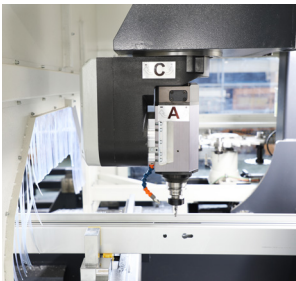
# GARNET 5X

CNC Profile Machining Center (5 Axis)

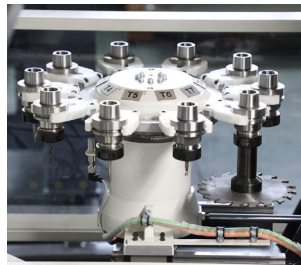
Automation by  
**FANUC**



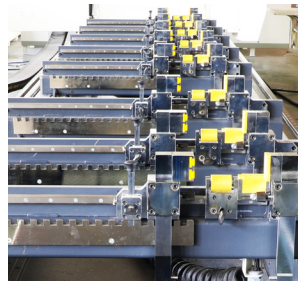
**GARNET 5X**, a 5-axis CNC machining center offers a remedy in wide range of its users by processing aluminium profiles in different measures through spindle which makes process in each aspect between  $0^\circ / 360^\circ$  angles in axis B,  $0^\circ / 180^\circ$  in axis A. It has been developed to make special processes except standards which are on different profiles while making cutter, opening drainage canal, drilling, designation and notching processes of profiles at the same time. While making those processes, its high processing capacity (580 mm x 330 mm) score with its users.



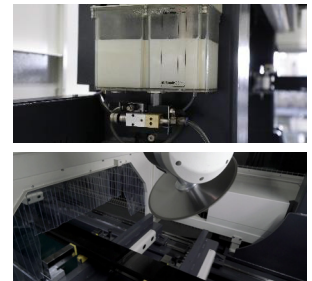
By focusing on providing convenient solutions for customers, and combining power and precision, GARNET 5X lets the processing capacity be only limited by the users imagination, thanks to the 11 kW spindle motor with automatic tool replacement feature.



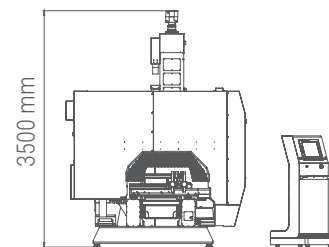
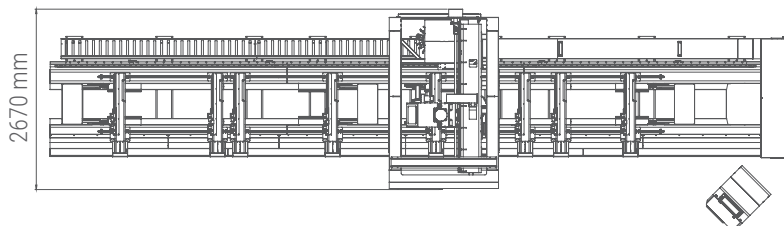
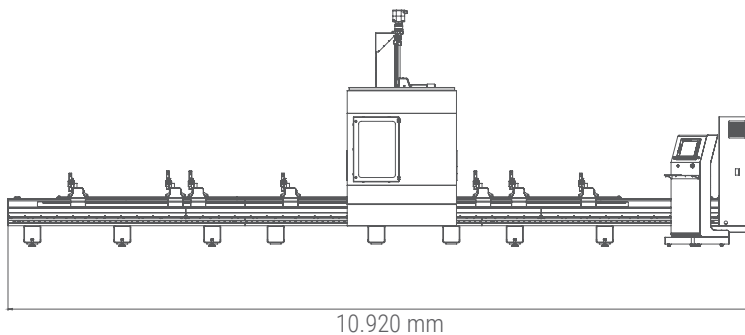
High speed rates on axes and internal automatic tool replacement magazine which moves with gantry for 10+1 tools allow for time savings when running different processes which require tool replacement.



With full automatic clamp positioning, GARNET 5X automates many tasks assuming the work load of the user.



Maintenance of transmission elements is accomplished by the automatic lubrication system which is offered as an optional feature increasing the service life for accuracy in processes. Capacity may be varied for processing of non-standard profiles with on demand optimization of size and number of clamps.



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## MACHINING LENGTHS

X Axis (Longitudinal)	8000 mm
Y Axis (Lateral)	580 mm
Z Axis (Vertical)	330 mm
A Axis (Head processing angles)	-90° / +90°
C Axis (Head rotation movement)	0° / 360°
Optional length on X-axis	○

## POSITIONING SPEED

X Axis (Longitudinal)	84 m/min
Y Axis (Lateral)	75 m/min
Z Axis (Vertical)	40 m/min
A Axis (Rotational Movement)	100° /sec
C Axis (Rotation movement)	100° /sec

## AIR

Pressure	6-8 Bar
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## ELECTRICAL

Max. Power	17 kW
Voltage	400V 3N PE AC
Frequency	50-60 Hz

## SPINDLE

Max. Power	11 kW
Maximum rotation speed	24.000 rpm
Tool holder	HSK F63
Cooling type	Liquid

## TOOL STORAGE

Automatic umbrella typed set magazine system	●
Attributable maximum set number - Umbrella type	10+1
Maximum saw blade diameter in to the storage system	400 mm
Tools Measuring	●

## SCREW-CUTTING CAPACITY

Tapping with adapter	M8
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## PROFILE POSITIONING

Right and left one with pneumatic movement, two alignment bar in the middle	●
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## CONTROL UNIT

Touch Screen	15" HMI
Data transfer over remote network connection, Ethernet and USB	●
Barcode reader	●
Smart CAM post processing	●
Camquix CAM software	●
CadXtract CAM software	○

## OPERATIONAL AREA

Processable steel profile thickness	5 mm
Clamps, standard pcs	8
Clamps, maximum pcs	10
Independent moving clamp	○
Automatic clamp positioning on X-axis	●
Automatic lubrication in processing area	●
Cabinet providing protection in processing zone	●
Safety barrier (sensor)	●
Automatic lubrication system	○
Automatic sawdust discharge unit (8 m)	○
FESTO pneumatic system	○

● Standard    ○ Optional