

GARNET Mini & COMET Plus

Semi-Automatic Servo Controlled Automatic Profile Feeding

OPERATION SCENARIO



Our COMET PLUS machine, a semi-automatic servo-controlled profile feeder compatible with our GARNET Mini machine, automatically positions the operations located in different areas of the profile. 1 It can automatically feed profiles up to 4000 mm long. 1 The two handwheels on it allow for manual movement of the gripper at the end of the robot to the left-right and up-down. Thanks to its servo-controlled structure, it performs positioning automatically, quickly, and precisely.

After connecting our COMET PLUS machine to our GARNET Mini machine, we first place the profile in our machine. Then, the operator enters the robot's position on the screen and presses the "GO" button, and the robot automatically moves to the position. After positioning is complete, the operator manually adjusts the gripper part of the robot according to the profile's position using the handwheels on the robot. Then, the operator manually pushes the profile towards the gripper opening and activates the sensor that allows the robot to hold the profile by pushing the pin at the gripper's mouth backwards, and the robot holds the profile. At the same time, the pistons near the processing area that are activated automatically close.

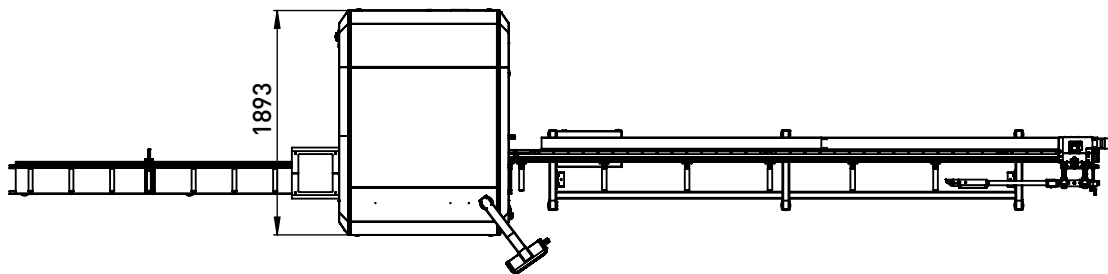
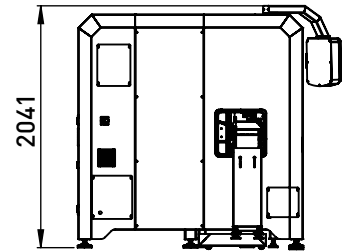
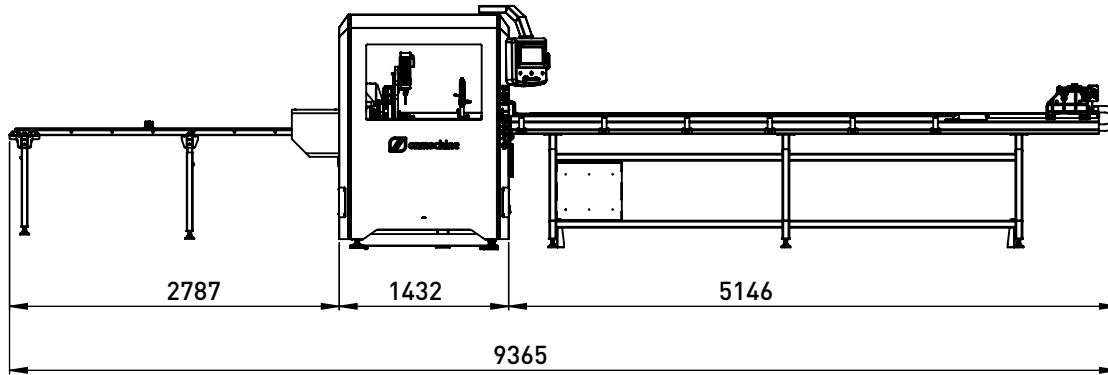
After the operator places the profile, they run the machine by selecting the operation they want to perform from the 5 standard operations in the machine automation on the screen. After the selection, the operations are carried out automatically. After the operations are completed, the profile is taken from the left side of the machine and made ready for the next operation



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LAYOUT



Standard Processing

Key Hole

TOP BACK BOTTOM ID 2002 2000

Description

Profile Type

Profile Name

Y 35.000 mm Depth 2.000 mm Spindle Speed 10000 RPM


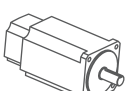






Z 60.000 mm Diameter 25.000 mm Step 0.000 mm

Length 35.000 mm

Width 10.000 mm

Angle 0.00

CCW 0 90 180 270

 (x3)								 (x3)																	
HP kW	n	Hz	I (230 V)	HP kW	n	Hz	I (230 V)	Ø D max.	H	X	Y	Z	Air Pressure	Air Consumption	Net										
4 3	18000 r.p.m	300	7 A	1 0,75	3000 r.p.m	50	4,6 A	13 mm	118 mm	350 mm	150 mm	120 mm	6 - 8 bar	40 L / min	1170 kg										





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MACHINING LENGTHS

X Axis (Longitudinal)	350 mm
Y Axis (Lateral)	150 mm
Z Axis (Vertical)	120 mm
XL Axis	4000 mm

POSITIONING SPEED

X Axis (Longitudinal)	30 m/min
Y Axis (Lateral)	30 m/min
Z Axis (Vertical)	30 m/min
XL Axes(Driver Robot)	40 m/min

AIR

Pressure	6-8 Bar
Consumption	40 L / min

ELECTRICAL

Maximum power	12 kW
Voltage	400V 3P, PE AC
Frequency	50-60 Hz

SPINDLE

Spindle with cooling fan	3
Maximum power	3 kW
Maximum rotation speed	18.000
Tool holder	ER 20

PROFILE TIE-DOWN MEASUREMENTS

Xmin / Xmax (Longitudinal)	800 / 4000 mm
Ymin / Ymax (Lateral)	-/ 150 mm
Zmax/ Zmin (Vertical)	-/ 120 mm

GRIPPER AXIS TRAVEL

XL (Gripper Length) min. / max.	800 / 4000 mm
YL Axis (Lateral) min. / max.	20 mm / 150 mm
ZL Axis (Vertical) min. / max.	20 mm / 120 mm

CONTROL UNIT

Touchscreen	10"
Data transfer via USB	●
Smart CAM post processing	○

OPERATIONAL AREA

Clamps, standard quantity	4
Automatic Tool cooling system	●
Guard cabin for machining area	●
Laser marking	●

● Standard ○ Opsiyonal