

XP 9000 - 5 AXIS CNC PROFILE MACHINING CENTER



Description:

Servo motor 5 Axis CNC controlled profile machining centre with X-Y-Z-A-C Axis.

Bridge system supports perfect alignment of the spindle moving on the profile and 0,1mm./1m. Accuracy.

Double servo motor system on both sides of the bridge makes the machine work smoothly without any vibration. 18,0 kW high speed spindle works up to 24.000 rpm and is able to work on very thick profiles from the 5 sides of the profile. The spindle is a multi-axis head.

The alloys that can be processed on the machine: Aluminium up to 20 mm wall thickness – steel up to 8 mm wall thickness, Stainless Steel up to 4 mm Wall thickness, light alloys such as PVC and etc.

The XP 9000 has 8 profile clamps that are manually automatically by the bridge. All clamps have rigid connection pieces and move on linear guides with bearings.

500 mm X 350 mm Profile processing from the top and 350 mm. X 350 mm. Profile processing from 5 sides of the profile, which is a giant size, compared to the competitors.

Thanks to 10 positions tool magazine, it is possible to carry any tool b/w 1 mm – 30 mm tool diameter and 350 mm of disc cutter. There is a special place for the sawblade positioning for 5 axis notching operations.

Waste pieces are isolated by the machine cover and extracted by the CE norm waste piece extraction conveyor belt. In this way all the waste pieces are kept in one place and there are no waste pieces stuck around the machine.

CAD-CAM Uni_Link Embedded with all 5 axis Operations included.

The TWIN working mentality makes the operator to load and offload the profiles without losing time and it increases the capacity of the machine no less than 50%.



Axis information:

X axis net processing length: 7.500mm. Vmax: 90 m./min. – 2 Stations

Y axis net processing width: 500 mm. Vmax: 65 m./min.

Z axis net processing depth: 350 mm. Vmax: 25 m./min.

A Axis processing: +/- 185 degrees

C Axis processing: +/- 320 degrees

The body:

Vibration free steel chasis, processed with the highest accuracy before mounting the linear accessories.

Spindle Head:

18,0 kw 1.000 -24.000 rpm spindle with one inverter adjusted for any rotation speed to work from the 5 sides of the profile.

Axis technical information:

C Type X axis is working on crackmil and pinion with brushless servo motors and guided by linear guides from the both endings of the column with **100 mt./min.** speed. The X axis is driven by a servo motor of 5 kW and 19 Nm.

Y axis is working on screw mill with brushless servo motors and guided by linear guides with **65 mt./min speed.** 1.6 kW 4 Nm 4.000 rpm. with 1/3 geared 120 mm body + 20 mm diameter 20 pitch screw mill

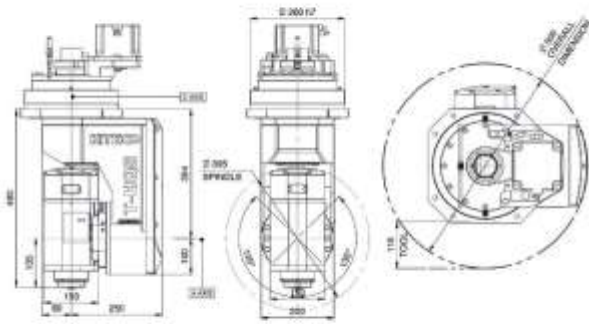
Z axis works with a screw mill and brushless brake type servo motor with a speed of **25 mt./min.**

1.6 kW – 4 Nm – 4.000 rpm. – with 20 mm diameter 20 pitch screw mill and 1/10 reduction.

A axis inside the bi-rotary head working with 1 Nm brushless servo motor with 5.000 rpm and harmonic reducer of 1/120 ratio.

C axis inside the bi-rotary head working with 1 Nm brushless servo motor with 5.000 rpm and harmonic reducer of 1/120 ratio.

TILT H



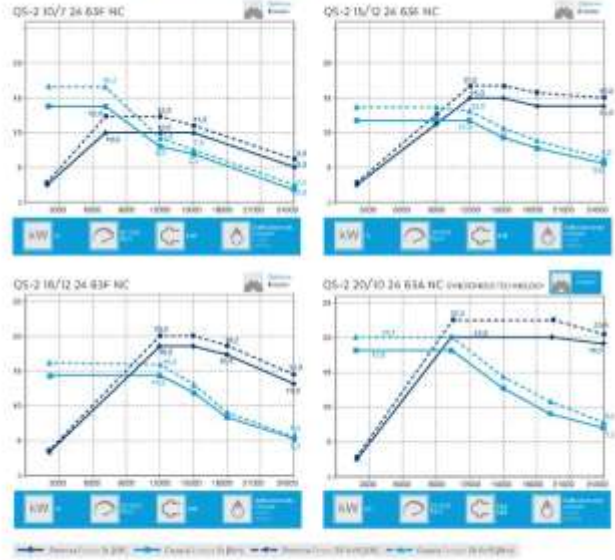
SPECIFICHE TECNICHE / TECHNICAL SPECIFICATIONS

	Asse A	Asse Z
Servomotore / Servomotor	"Yaskawa"	"Yaskawa"
Potenza servomotore / Servomotor power	0,40 kW	0,75 kW
Excitatore servomotore / Servomotor exciter	Assistito / Assisted 22 0V	Assistito / Assisted 22 0V
Washline / Washline	Yaskawa Drive	Yaskawa Drive
Coppia max. certificato / Max certified torque	380 Nm	480 Nm
Coppia di prova / Proof torque	370 Nm	460 Nm
Max rotazione / Max rotation speed	1 200 r/min	1 200 r/min
Velocità di avanzamento / Max feed rate	6 000 f/min	6 000 f/min
Velocità di avanzamento / Max cutting speed	3 200 f/min	3 600 f/min
Reazione di posizionamento / Positioning	1 sec/100 mm	1 sec/100 mm
Peso / Weight		100 kg

TILT H



MANDRINI DISPONIBILI / ELECTROSPINDLES AVAILABLE



Routing heads:

High speed spindle with ceramic bearings.

Liquid cooling system.

Spindle -1- 18,0 kW 24.000 rpm

HSK F-63 Tool Holders - Optional

5-6-8-10-12-14-20 mm Collet Set - Optional

Cutter set - Optional

Disc cutter: from 80 mm to 500 mm in different sizes.

Servo Frequency Inverter for Spindle Speed

The latest technology for driving the spindle via servo motor driver for perfect control of the spindle speed. This driver is mounted beside the power supply of the CNC controller and the power supply is also upgraded to control the frequency peaks up to 18 kW.





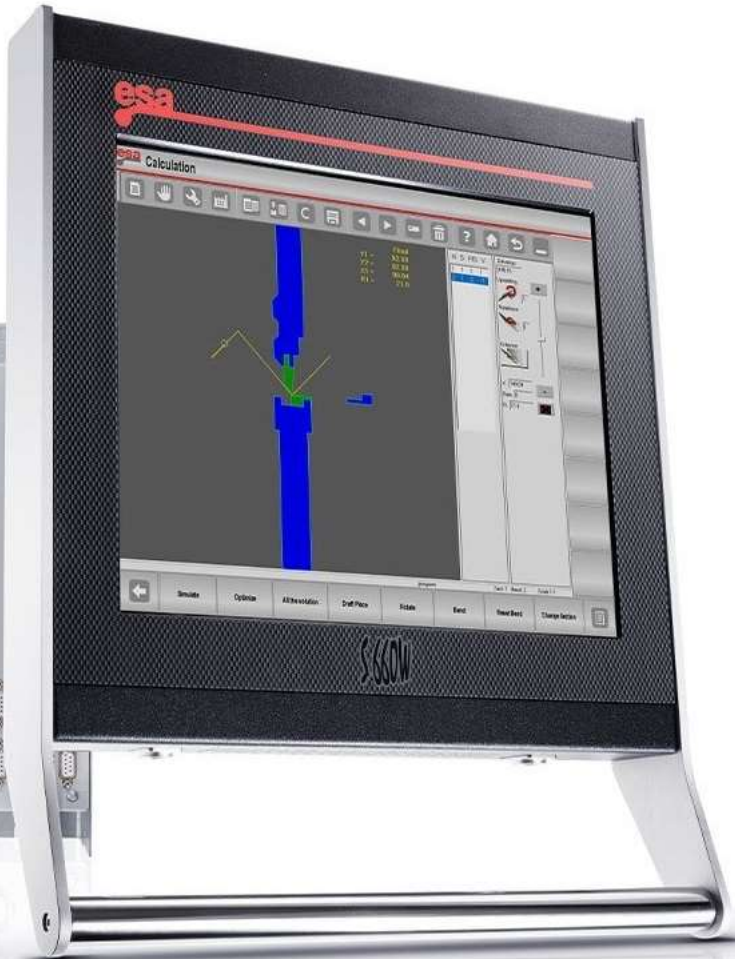
Pneumatic Profile Clamps:

500 mm. X 350 mm. large clamping section.

Each clamp's reference point and the piston can be removed and adjusted according to the customers' choice.

Any kind of mould or fixture equipment can be connected easily.

Automatically positioned.



S 660 W
19" Color TFT LCD
SXGA - 1280x1024
Multitouch (PCAP)
Intel pentium Silver J5005 1,5 - 2,4GHz
2,4GHz
4GBytes DDR3
Integrated Intel® UHD 605 18EUs
64GB Msata
2 x 10/100/1000Mbit Ethernet
2 x Rs232
1 x DVI I 1 x Display Port V1.2
Yes
4 x USB 2.0
Windows® 10 IOT Enterprise 2016
24Vdd +/- 20% - 70W
466,4 x 391,0 x 71,1
+5/+40
CE



INDUSTRIAL CNC CONTROLLER – ESA AOTOMOTION – www.esautomotion.it

12 Axis RTCP (Rotation Tool Center Point) type of 5 Axis simultaneously interpolating real CNC controller. Italian technology with the software and all the hardware.

19" Touchpanel + the CNC controller + the power supply + servo motors + servo drivers with Can-Open.

Each axis has "Absolute Encoder" for avoiding the problems caused by homing and home sensors. The Machine does not need to go to home position each time the operator turns on the Machine.

All power & encoder cables, driver mounted motor communication cables and all motor sockets are designed by ESA to be complete problem free and for perfect communication of the axis.

Movable CNC controller terminal mounted on the Machine body with the PC + keyboard + Mouse + operator buttons embedded on.

Licensed Windows10

Electric system and the cabinet with the cooling system. A/C is optional.

Easy to get support over teamviewer connection.

AC Inverter for adjusting the speed of the spindle 0-24.000 rpm.

Automatic tool measurement probe

Handwheel

Dry run

Changing the home position

Equipment:**Reference points:**

2 pieces. For using the Machine with 2 processign stations and also for machining profiles longer than the measure. Both endings of the Machine is opened as a standard accessory.

Profile clamps:

8 pieces are standard. The number of the clamps can be increased up to 14 clamps optionally.

CAD-CAM Software:

Uni_Link INO-OnBoard Software – 1 licanse for the Machine + 1 licanse for the office is included.

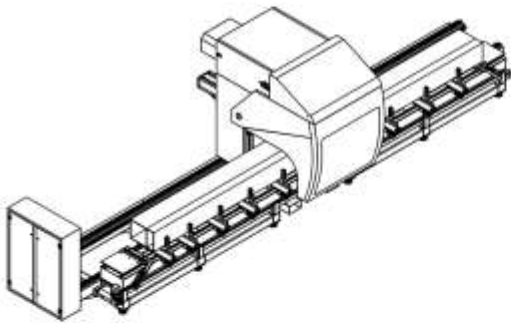
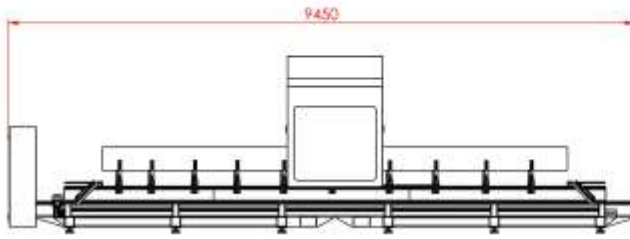
Laser safety barriers functioning automatically according to the TWIN working cycle.

Spray mist cooling system with oil tank mounted on the Z axis.

User manuals.

CE certification.





5500 kg

UNI LINK 3D CAD-CAM:

- Design, R&D and application are carried through the vast experience of ino machinery team and Uni_Link engineers.
- The perfect optimization of economic profile working in 3,4 and 5 Axis.
- Importing of DXF files and converting them to 3D images.
- Generating G-codes over the DXF files.
- Understanding of the operations on the DXf files and auto-tooling
- Also available in Office version with a perfect simulation interface, so that the one working at the Office will also prepare the profile machining programs just like he is beside the machine.
- Incredibly user friendly for the operator and also for the Office responsible who will prepare the machining files in the Office.
- CNC clamp management and collision control.
- Auto positioning of the profiles on the clamps according to the operations on the profiles.
- Macro creation for each operation and placing them on the profile automatically.
- Independent from the size of the profile it is possible to place any operation on the same profile in different length parametricly.
- All the profiles that will be machined, will be listed on the machine HMI and operator will only have to press the start button.
- Ability to work with all Windows and Doors production softwares like Schüco or Orgadata or similar.
- Ability to prepare cut-list optimization for the double mitre saw and import in .csv format. Optionally barcode generation from the cutting machine and reading by the machining center is available.
- This software is the most user friendly software in the market and also the richest one in terms of capabilities.

The screenshot displays the Uni_Link 3D CAD-CAM software interface. At the top, there is a menu bar with options like 'Openen...', 'Opslaan als...', 'Profielen', 'Gereedschap', 'Tool Store', 'F3', 'Edit Parameters', 'Multi-piece', and 'Place-mode'. Below the menu is a table with the following columns: #, Serie, Profile, Color, Length, Id, Left Angle (H), Right Angle (H), Left Angle (W), Left Angle (W), Todo, Done, Tool Status, and Cla... The table contains 7 rows of data for SOHUCO profiles. Below the table is a 3D simulation of a profile being machined, showing four zones (Zone 1 to Zone 4) with corresponding tooling and clamping mechanisms. The simulation shows the profile being cut into four sections, each with specific angles and lengths.

#	Serie	Profile	Color	Length	Id	Left Angle (H)	Right Angle (H)	Left Angle (W)	Left Angle (W)	Todo	Done	Tool Status	Cla...
1	SOHUCO	372220	rienwit structuur/zijdegrijs structuur	2385	1	90	90	90	45	1	0	011/012 OK	1
2	SOHUCO	372220	rienwit structuur/zijdegrijs structuur	2385	2	90	90	45	90	1	0	013/014 OK	2
3	SOHUCO	372220	rienwit structuur/zijdegrijs structuur	1030	3	90	90	45	45	1	0	004/004 OK	1
4	SOHUCO	395530	rienwit structuur/zijdegrijs structuur	2318	4	90	90	45	45	1	0	009/010 OK	1
5	SOHUCO	395530	rienwit structuur/zijdegrijs structuur	2318	5	90	90	45	45	1	0	025/026 OK	2
6	SOHUCO	395530	rienwit structuur/zijdegrijs structuur	932	6	90	90	45	45	1	0	004/004 OK	1
7	SOHUCO	395530	rienwit structuur/zijdegrijs structuur	932	7	90	90	45	45	1	0	004/004 OK	1

C:\Uni_Link\Macros\VB\Macro1.mcr

Macro List Utils ?

Select machining

Hole ← Vector
 Slot | XVec
 Rectangle + = Copy To...
 Cylinder + = LxR
 Blade

FLM Figure

Profile:	PSerial = 18	PProfile = 02002465	PLength = 600	PWidth = 63.01	PHeight = 97.54	PRAngle = 90	PRAngle = 90	PRAngle = 90	PRAngle = 90										
VL	V1Width = W	V1Height = H-47	V1Angle = 0	V1DepthFrom = 2	V1DepthTo = -20	V1DepthStep = 2													
V2	V2Width = B	V2Height = H-16	V2Angle = 90	V2DepthFrom = 2	V2DepthTo = -12	V2DepthStep = 1													
V3	V3Width = 0	V3Height = H-47	V3Angle = 180	V3DepthFrom = 2	V3DepthTo = -34	V3DepthStep = 2													
MH1	MTool = FX	KLCentR = 0	V1	MHoleDiam = 34						MH1	MEmpty = 0	MGroup = 0	MPriority = 0	MH1	V1CarrW = 0				
MC1	MTool = FX	KLCentR = 92	V1	MCVMaxDiam = 17.5	MCVMinDiam = 10.5	MCVLength = 34	MCVRotation = 180	MC1	MEmpty = 0	MGroup = 0	MPriority = 0	MC1	V1CarrW = 0						

C:\Uni_Link\Lists\140226.lst

Macro List Utils ?

Preview

```

SEHUCO | 173270 | r1newst structuur/afgedr1js structuur | 130113 | 02-A-0.2 | | |
  > + 1500 | 1 | 90 | 50 | 90 | 45 | 1 | 130113 | 02-A-0.2 | KD 2 | |
  > + 2300 | 1 | 90 | 50 | 90 | 45 | 2 | 130113 | 02-A-0.2 | KD 4 | |
  > + 2300 | 1 | 90 | 50 | 90 | 45 | 2 | 130113 | 02-A-0.2 | KD 4 | |
  > + 1500 | 1 | 90 | 50 | 90 | 45 | 2 | 130113 | 02-A-0.2 | KD 3 | |
  > + 1030 | 1 | 90 | 50 | 45 | 45 | 2 | 130113 | 02-A-0.2 | KD 3 | |
SEHUCO | 190510 | r1newst structuur/afgedr1js structuur | 130113 | 02-A-0.3 | | |
  > + 1500 | 1 | 90 | 50 | 90 | 45 | 4 | 130113 | 02-A-0.2 | KD 1-4 | |
  > + 2318 | 1 | 90 | 90 | 45 | 45 | 5 | 130113 | 02-A-0.2 | KD 1-2 | |
  > + 2318 | 1 | 90 | 90 | 45 | 45 | 5 | 130113 | 02-A-0.2 | KD 1-2 | |
  > + 1500 | 1 | 90 | 50 | 90 | 45 | 7 | 130113 | 02-A-0.2 | KD 1-3 | |
  > + 931 | 1 | 90 | 90 | 45 | 45 | 6 | 130113 | 02-A-0.2 | KD 1-1 | |
  > + 932 | 1 | 90 | 90 | 45 | 45 | 7 | 130113 | 02-A-0.2 | KD 1-3 | |
    
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X=103373