



CNC Milling for Tensile Sample Preparation

Description

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The AHP Precision CNC Milling machine (computer-controlled) consists of a base frame with a linear movement milling top. Three axes (X, Y, Z) are available. The working area is suitable for all types of dumbbell-shaped samples, as per standards such as ISO 6259 for pipes.

The milling machine is ideal for preparing plastic pipe samples ('dumbbell' or 'dog bone' specimens) for e.g. tensile tests and other kinds of elongation tests. The CNC miller is supplied with pipe sample template G-codes according to a long list of international test standards as per customer request.

Plug and play

A CNC controller (is part of the delivery and by means of software to be installed on a PC, milling is performed. Further, software for cutting is included.

The CNC miller is supplied with pipe samples templates G-codes according test standards applying for plastic industry. See below list.

A protection cover shields the operator and it is working by compressed air cylinders. The system can be supplied with a vacuum device which removes the soft milling swarf into a storage bag. This can be retro-fitted if so desired.

Standards:

- ISO 6259
- ASTM D256
- ASTM D638
- ASTM D648
- ASTM D1693
- ASTM D1708

- ASTM D1822
- ISO 178
- ISO 179
- ISO 180
- ISO 527
- ISO 8256
- DIN53452
- DIN 53453
- DIN 53504

Sample Grip is Easy by Clamps with Available 3 Positions for Sample with Different Sizes

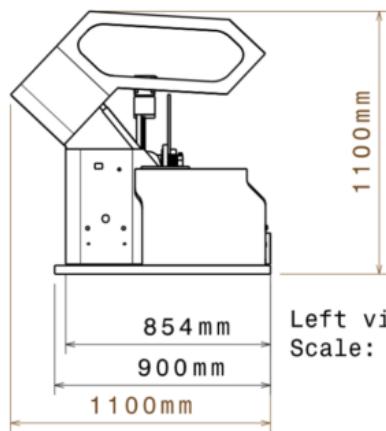
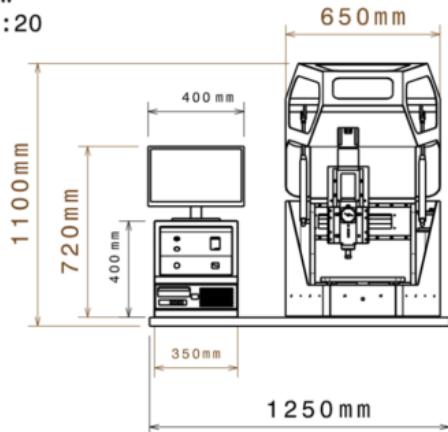
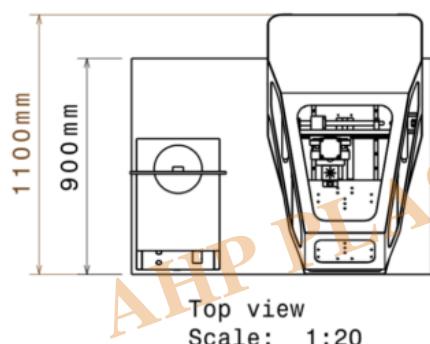


- According to ISO 6259 for pipes
- Machine is standard CNC and can be used for cutting any kind of samples
- G-code for cutting samples will be prepared according to the customer's request
- Suitable for milling of rigid plastics like HDPE, LDPE, PP, PVC
- 3-axis desktop CNC
- Cutting tensile samples from plastics
- Travel 30*40 Cm (X*Y)
- Can cut samples up to a thickness of 150mm (Basic model is up to 40mm)
- Fixture for sample
- Parallel port to PC
- Software included
- 10mm tool diameter
- Ball screw drive for all axes
- 18000 rpm or 24000rpm spindle motor
- Speed control for the spindle
- Computer controlled
- G-codes for samples according to customer request
- Computer is included
- AHP has rights to change the outer design of machine without any prior notice
- Vacuum device for taking ships out of chamber is as option (If you don't order this device, you can open the bottom plate of the machine and put the machine on the table with opening on it, to push the chips from the inside of the chamber to the waste box under the table using an compressed air gun)

VERSION	AHP2-01
Replaceable table	-
MECHANICAL CLAMPING DEVICE	✓
Max. clamping range for small blanks [mm]	thickness length
	30 220
Max. clamping range for big blanks [mm]	thickness length
	40 250
Max. number of test bars	small big
	1 1
WORKBENCH WITH DRAWER	
Rotational speed of spindle	Rpm
	3,000 to 18,000
Hard metal milling cutter Ø 8, 10 (subject to standard)	✓
Diamond milling cutter	+
Chip extraction system	+
Milling program	MACH3
Operation via PC	✓
CE conformity	✓
Permissible ambient temperature	°C
	+5 to +30
Permissible relative humidity	%
	max. 70 non-condensing
Noise emission	dB(A)
	85 during the milling process
Milling table (W x D)	mm
	300 x 500 (will be changed depending on order)
Dimensions (W x D x H)	mm
	650 x 1,100 x 1,100
Weight	kg
	250
Voltage data	
	230 V, 50 Hz *other voltages
✓ included	+ available/optional
O eligible	- not available
	* available upon request

Front view

Scale: 1:20

Left view
Scale: 1:20Top view
Scale: 1:20

product: CNC milling machine

material: overall
dimensioning & locating