Competence creates Confidence.

Model no. 1812

CNC TEST BAR MILLING MACHINE

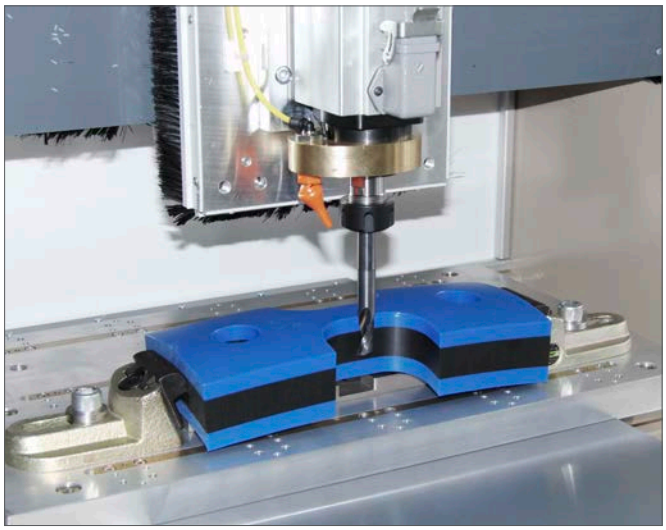
- ISO 179/180
- ISO 527
- ISO 6259
- ISO 16770
- ASTM D 638
- ASTM D 1822

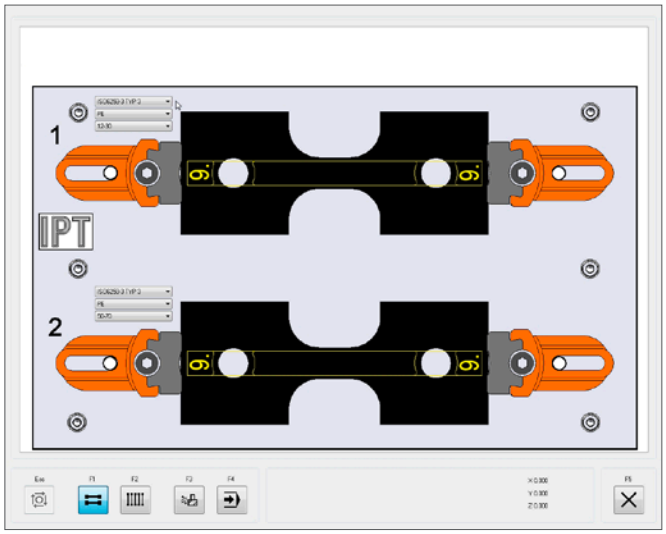
Safe, precise and fast

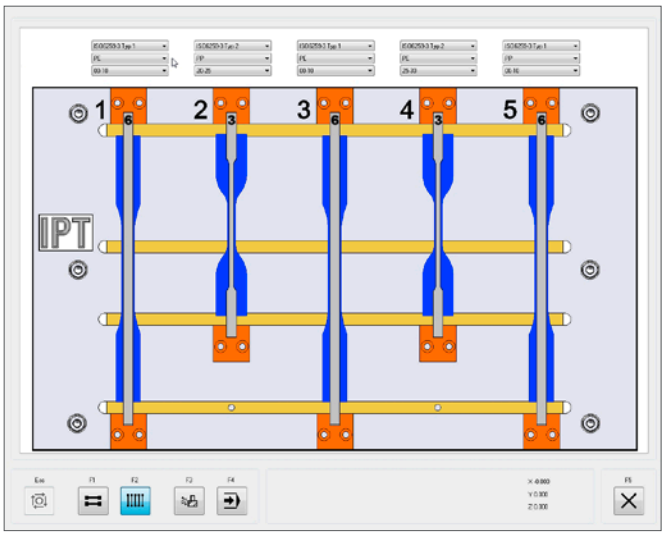
The CNC test bar milling machine enables bar-shaped plastic samples to be produced for tension, pressure, bending and flexural impact tests in accordance with a wide range of standards. The CNC milling machine is a table-top unit with electrically locking protective doors. Pre-configured machining programs for all common bar shapes and visualisation via Windows make it very easy to operate the milling machine. Up to five test bars can be produced in one milling process. The all-round enclosure ensures safety at the workstation during the milling process. A swarf extraction system and the optional ionisation unit ensure the workstation remains clean.

Precise and fast milling

- The IPT CNC-controlled system has been specially developed to meet the requirements of plastic pipe manufacturers and is able to accommodate even the largest test bars required for PE pipes (70 and 120 mm).
- The basic machine: It is used together with the optionally available milling programs according to ISO, ASTM or all national or international standards with the additionally required clamping devices. The mounting plate of the milling machine has space for up to 5 clamping devices.
- Simplicity of operation: Laboratory staff are not required to have any experience in programming CNC-controlled machines, as IPT always supplies the device with pre-installed programs for the templates required by the end user.
- Additional programs can be added at a later date if required and delivered and installed remotely. The milling programs at IPT are optimised so that they run with optimal machine parameters to deliver the best results with the many different plastics. We have taken special care to design the sample clamping devices so that they can also accommodate samples taken from pipes.
- Spindle speed: Our CNC milling machine can be operated in theory at speeds of up to 24,000 rpm. However, based on many years of experience, IPT has adapted the spindle speed and the feed rate to the corresponding materials to be milled in order to achieve optimum surface quality.
- For wall thicknesses up to max. 120 mm: The IPT test bar milling machine has a servo motor and permanent monitoring of the axis positions.
- Safety: The machining area is completely enclosed and electrically locked during operation. In emergencies, the milling process can be stopped using an emergency stop button.
- The robustness, accuracy, speed and reliability are significantly higher compared to other devices on the market. Customised test specimens according to various standards such as EN, ISO, ASTM, etc. are available on request.







Standard features

- For test bars up to 70 mm thick
- Operation via PC
- Pre-programmed milling programmes according to EN, ISO, ASTM etc. selectable
- Protective doors with safety lock
- Clean workstation due to device enclosure
- CNC-controlled positioning of the axes
- Machined surfaces cooled with compressed air
- CE conformity

Options

- For test bars up to 120 mm thick
- Replaceable milling table
- Diamond milling cutter
- Ionisation unit with integrated extraction system
- Workbench
- Pneumatic clamping devices

Version CNC TEST BAR MILLING MACHINE		V1812-0001	V1812-0002	V1812-0003	V1812-0004
Milling table for mechanical clamping device					
Max. clamping range for small blanks [mm]	Thick-ness Length	30 220	30 220	-	-
Max. clamping range for large blanks [mm]	Thick-ness Length	70 250	120 250	70 250	120 250
Max. number of test bars	Small Large	5 2	5 2	2	2
Milling table for pneumatic clamping device		-	-	√	√
Max. clamping range for blanks [mm]	Thick-ness Length	-	-	24 165	24 165
Max. number of test bars		-	-	5	5
Workbench with drawer		+			
Rotational speed of spindle	rpm	3,000 to 18,000 (24,000)			
Carbide milling cutter		Ø 5, 8, 10, 12 mm (depending on standard)			
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 width x depth	mm	500 x 300			
Width x Depth x Height	mm	900 x 1,100 x 1,100			
Weight	kg	320			
Voltage data		230 V, 50 Hz *special voltage			

Accessories CNC TEST BAR MILLING MACHI

Product	Description	Model no.
	Tensile tester	H3016
	Tensile creep tester for tests in fluids (FNCT)	1598 1719 1727
	Pendulum impact tester	H3018