

Competence creates Confidence.



Model no. 1843

## 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 ensures the workstation remains clean.



### **Precise and fast milling**

- The IPT CNC-controlled system was developed specifically for the requirements of plastic pipe manufacturers and is capable of producing test rods up to 50 mm thick.
- The basic machine: It is supplied together with the optionally available milling programmes in accordance with 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.
- Ease of operation: Laboratory personnel do not need any experience in programming CNC-controlled machines, as IPT always supplies the device with pre-installed programmes for the templates required by the end user.
- Additional programmes can be added at a later date if required and delivered and installed via remote maintenance. The milling programmes are optimised at IPT to run with optimum machine parameters in order to deliver the best results for the wide variety of plastics. We have taken special care to design the sample clamping devices so that they can also accommodate samples taken from tubes.
- Spindle speed: Our CNC milling machine can theoretically be operated at speeds of up to 18,000 rpm. However, based on many years of experience, IPT has adjusted the spindle speed and feed rate to suit the materials being milled in order to achieve optimum surface quality.
- 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 than other devices on the market. Customised test specimens according to various standards such as EN, ISO, ASTM, etc. are available on request.



### Standard features

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|--|--|
| ● For test bars up to 50 mm thick  | ● Operation via touch screen             |
| ● Pre-programmed milling programmes in accordance with EN, ISO, ASTM, etc. can be selected | ● Protective door with safety lock       |
| ● Cleanliness in the workplace thanks to the enclosure of the device                       | ● CNC-controlled positioning of the axes |
| ● Cooling of the cut surfaces with compressed air  | ● CE conformity                          |

### Options

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|------------------|-------------|
| ● Diamond cutter | ● Workbench |
|------------------|-------------|

**Design of  
CNC TEST BAR MILLING MACHINE**

1843-0001

**Milling table for mechanical  
clamping device**

Max. clamping range Small blank [mm]	Thickness Length	25 165
Max. clamping range, large blank [mm]	Thickness Length	50 250
Maximum number of test rods	small large	5 2
Spindle speed	rpm	3.000 to 18.000
Carbide milling cutter		Ø 5, 8, 10 mm (depending on standard)
Permissible ambient temperature	°C	+5 to +30
Permissible relative humidity	%	max. 70, non-condensing
Noise emission	dB(A)	85 during milling operation
Milling table width x depth	mm	390 x 284
Width x depth x height	mm	890 x 875 x 1075
Weight	kg	360
Voltage		230 V, 50 Hz, special voltage on request

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**Accessories CNC TEST BAR MILLING MACHINE**

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Product	Description	Model
	Tensile testing machine	H3016
	Tensile creep testing machine (FNCT)	1598 1719 1727
	Pendulum impact tester	H3018