

PGS100 PROFILOMETER

Measuring system for 2D profiles



USB connection



The PGS100 profilometer allows to acquire 2D profiles in an extremely simple and intuitive way, thanks also to its measuring range of 130 mm in length (X) and 50 mm in height (Z).

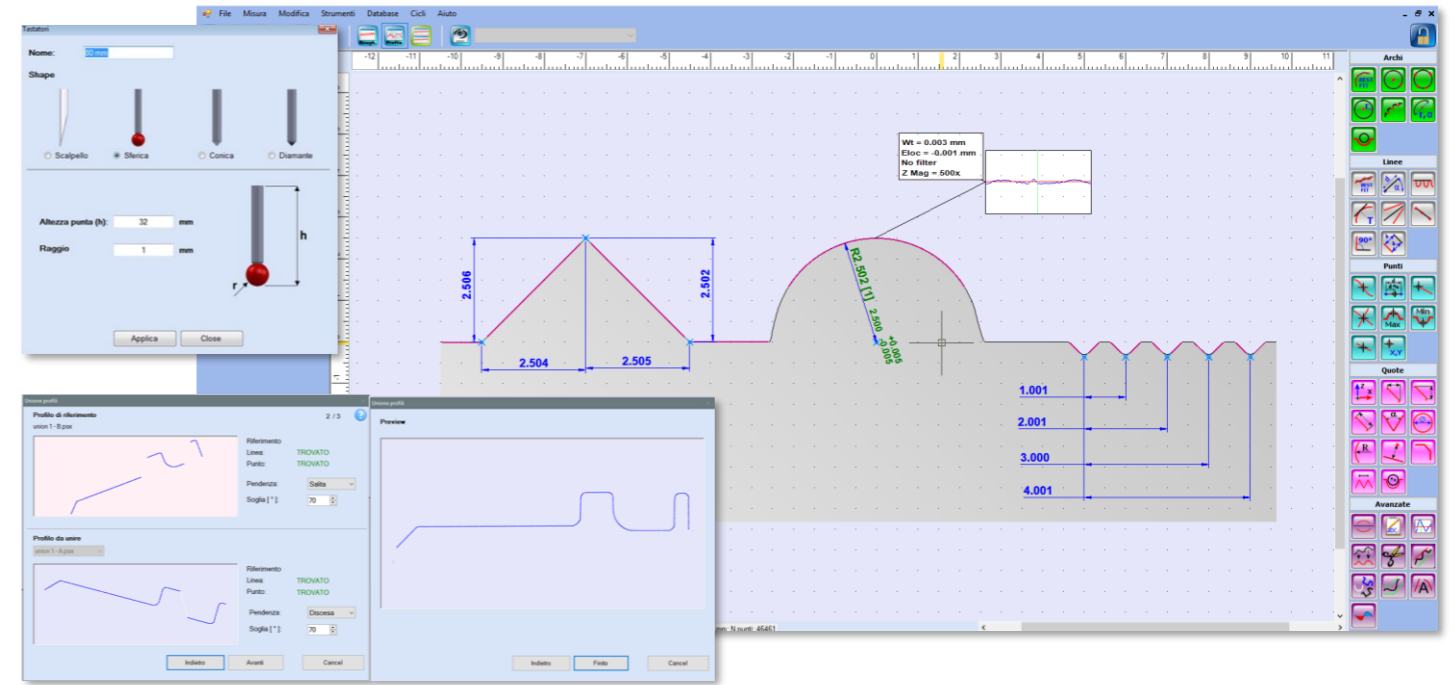
The use of the instrument is very simple and intuitive, all commands can be managed from the graphic interface or from the keyboard.

The Profile Studio analysis program is equipped with all the CAD functions necessary for the dimensioning of your pieces, it also allows you to create programs to automate the characterization of the elements, for example during series measurements.

The standard configuration that includes the work table with "T" slot and the 32 mm chisel measuring probe, can be enriched and completed with various accessories, including the positioner with 3 or 4 degrees of freedom on bearings and the precision vice that it allows to firmly lock the pieces during the measurements.

The calibration, thanks to the dedicated calibration specimen, takes place guided by the software.

Profile Studio Basic Software



Technical data and dimensions

Product code:	PGS100 (code: 3.102)
Unit of measure:	Millimeters and inches
Exploration stroke (X):	130 mm (5,12 in)
Measuring range (Z):	50 mm (1,97 in)
Column travel (Y):	320 mm (12,6 in) manual
Sampling interval (X):	0,5 µm (0,02 µin)
Z axis resolution:	0,2 µm (0,008 µin)
Positioning speeds:	0-10 mm/s (0-7 in/s)
Measurement speed:	From 0,2 mm/s to 2 mm/s (from 0,008 in/s to 0,08 in/s)
Tip radius:	20 µm (0,8 µin)
CNC cycles:	Automatic CNC measuring and positioning cycles with self-comparison of the measured profiles
Connection:	USB interface to Windows PC (©)
Languages:	Italian, French, English, German, Spanish, Portuguese and Slovenian
Dimensions:	1013 x 400 x 679 mm (L x P x H)
Total weight:	34 kg (75 lbs)
Supply voltages:	110-240 V ; 50-60 Hz
Working temperatures:	15 - 25°C (59 - 77°F)
Software:	Profile Studio Basic

Vice - code: 3.403



The ground vice for clamping the pieces has a useful opening of 48mm and is the perfect accessory to complete the 3 or 4 axis positioner essential for a precise and reliable measurement.

Positioning systems



Various other accessories are available, including the magnetic chuck (code 3.409), tiltable from 0° to 90° or the "V" supports (code 3.408) for shafts, with fixed guide height of 125mm and movable guide height adjustable from 120mm up at 155mm.

3-axis positioner - code: 3.400



The 3-axis positioner, equipped with sliding on bearings and coupling with "T" slot, allows rapid positioning of the pieces to be measured and thanks to the positioning micrometers, finding the MAX or MIN point of your parts will be very simple thanks to the guided function via software.

Measuring arms



The PGS100 is able to satisfy any measurement need thanks to the carbon measuring arms, standard (code: 3.305), special (eccentric code: 3.308) and for small holes (code 3.304).

4 axis positioner - code: 3.401

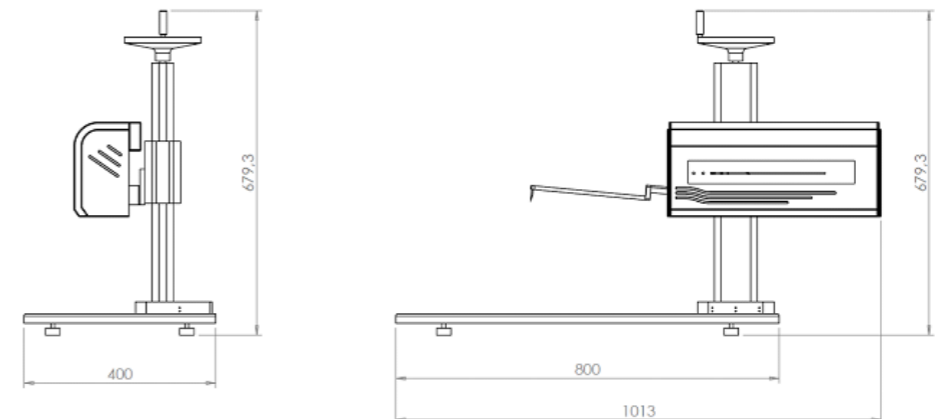


The 4-axis positioner, in addition to all the features of the 3-axis, offers the possibility of tilting the work surface by +/- 30°, making it possible to measure grooves or o-ring seats through the dedicated function of joining the profiles.

Chisel, ball and miniature probes



The measuring probes are available in different types and in different heights, in metal, ceramic or ruby. The standard is chisel and on request it is possible to supply ball, conical or miniaturized probes with a diameter of 1mm. Available heights: 6,8,12,21,31,41,51mm.



PGS200 PROFILOMETER

Measuring system for 2D profiles



USB connection



The PGS200 profilometer is a new concept instrument able, with a few simple operations, to characterize the profile even of more complex details and thanks to the modern "all in one" philosophy, it is immediately operational to carry out the measurements.

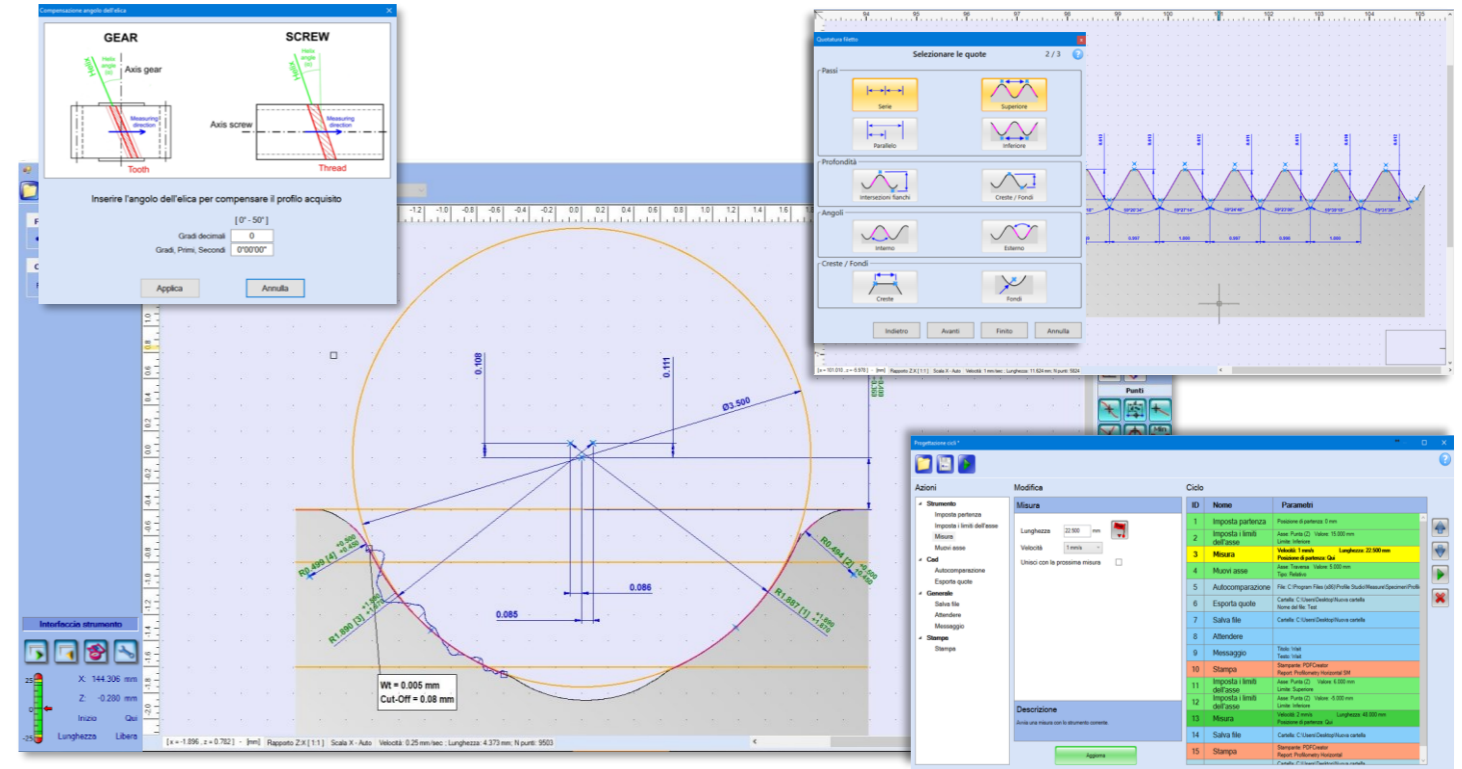
The Profile Studio software, that completes the standard PGS200 kit, is designed to be extremely intuitive and easy to use. The functions necessary for the characterization of the profile are grouped into families (points, lines, arcs and dimensions) and divided by color to facilitate their identification quickly. The CAD is highly advanced, all entities are dynamic and editable after insertion.

The PGS200 allows the analysis of complex objects thanks to the creation of measurement cycles that can automatically overcome obstacles, such as grooves or shoulders, and at the end of the measurement the profile is reconstructed with immediate evidence of the tolerance limits.

The PGS200 profilometer is available in two variants, one with a manual positioning column and one with a CNC column. In this latest version, calibration and measurement cycles are performed fully automatically.

This profilometer can also be customized for the most extreme measurement needs, in fact versions with oversized column of 700 mm, or with sliding column on precision rails are available, for all pieces that are large and cannot be handled.

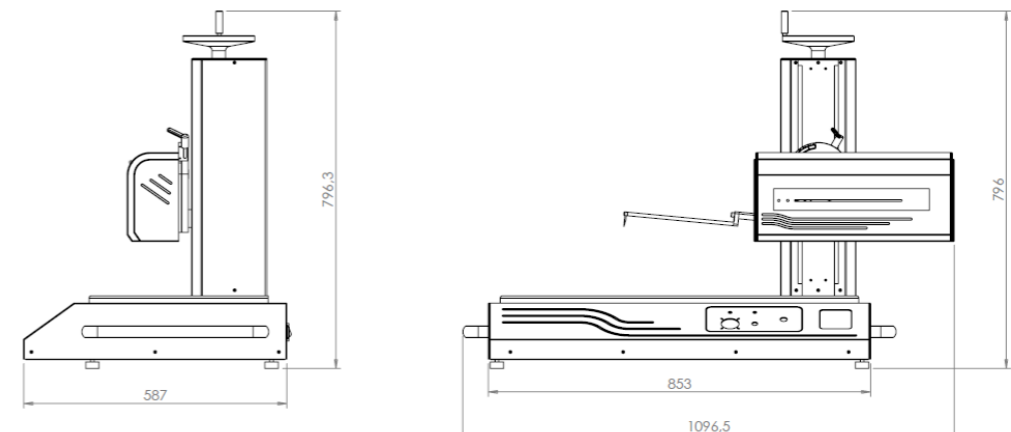
Profile Studio Software



Technical data and dimensions

Product code:	PGS200 (code: 3.100 with manual column and code: 3.101 with CNC motorized column)
Measuring range X axis:	220 mm (8.66 in)
Measuring range Z axis:	50 mm (1.97 in)
Resolution on the X axis:	0,5 μ m (0.02 μ in)
Resolution on the Z axis:	0,1 μ m (0.008 μ in)
Positioning speed:	0 - 10 mm/s (0 - 0.4 in/s)
Measurement speed:	0,2 - 0,5 - 1 - 2 mm/s (0,008 - 0,02 - 0,04 - 0,08 in/s)
Column travel:	320 mm (12.6 in) or 520 mm (20.5 in) manual or motorized CNC positioning column
Measuring tip:	Tip radius 20 μ m (0.8 μ in) and front camber
CNC cycles:	Automatic CNC measuring and positioning cycles with self-comparison of the measured profiles
Connection:	USB interface to Windows PC ©
Languages:	Italian, French, English, German, Spanish, Portuguese and Slovenian
Dimensions:	1096 x 587 x 796 mm (L x P x H version with 500mm manual column)
Power supply:	110-240 V ; 50-60 Hz
Total weight:	42 kg (92 lbs)
Software:	Profile Studio

* version with 500mm manual column



Vice - code: 3.403



The ground vice for clamping the pieces has a useful opening of 48mm and is the perfect accessory to complete the 3 or 4 axis positioner essential for a precise and reliable measurement.

3-axis positioner - code: 3.400



The 3-axis positioner, equipped with sliding on bearings and coupling with "T" slot, allows rapid positioning of the pieces to be measured and thanks to the positioning micrometers, finding the MAX or MIN point of your parts will be very simple thanks to the guided function via software.

4 axis positioner - code: 3.401



The 4-axis positioner, in addition to all the features of the 3-axis, offers the possibility of tilting the work surface by +/- 30°, making it possible to measure grooves or o-ring seats through the dedicated function of joining the profiles.

Measuring arms and probes



The PGS200 is able to satisfy any measurement requirement thanks to the standard and special measuring arms for small holes. In addition, the probes can be chisel, ball and conical and of different heights to be chosen from 6,8,12,21,31,41,51mm.

Head orientator - code: 3.402



The orientator allows you to tilt the measuring head by +/- 20° in order to correctly reach even the most difficult measuring areas when it is not possible to move or tilt the piece on the measuring plane.

Mobile column on rails - code: 3.404



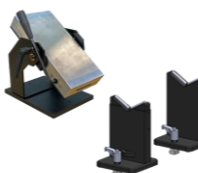
When the pieces to be measured cannot be easily handled or are large in size, the instrument must be able to move and move to the measurement area, ensuring operator safety. This is possible thanks to the sliding columns on precision guides.

PGS200 with manual column - code: 3.100



The variant with manual column guarantees the same performance as the CNC version and is perfect especially when complex automatic measuring cycles are not required.

Positioning systems



Various other accessories are available, including the magnetic chuck (code 3.409), tiltable from 0° to 90° or the "V" supports (code 3.408) for shafts, with fixed guide height of 125mm and movable guide height adjustable from 120mm up at 155mm.