



BCD
microtechnique SA



Optimes PR50

Accuracy and
reliability for the
measurement of
turned parts.

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The PR50 measuring instrument

The Optimes PR50 offers a fast and accurate solution to automatically measure all the external dimensions of revolving parts. After having simply placed the part on the 2 V-shaped supports, there is nothing else to do but start the measurement. In a few tens of seconds the software moves the part under the optical measurement axis and takes readings of all the predefined dimensions.

The equipment is designed to guarantee a very high insensitivity to external disturbances (vibrations, temperature, light, etc.). This advantage offers the possibility to use the measuring instrument within the proximity of production machines as well as in a control laboratory.

Particularly well adapted to micromechanical requirements, Optimes PR50 can be perfectly integrated in your quality control process thanks to the precision and repeatability of its measurements. Fast and easy measurements guarantee a substantial time saving.



The PR50 software

Optimes PR50 is entirely driven by a software offering a wide range of functions for rating, item management, graphical analysis and statistics, as well as creating measurement reports.

The various user access levels guarantee a security and user friendliness for each person having to work with the instrument.

The PR50 software interfaces with many commercially available quality management software (SPC).

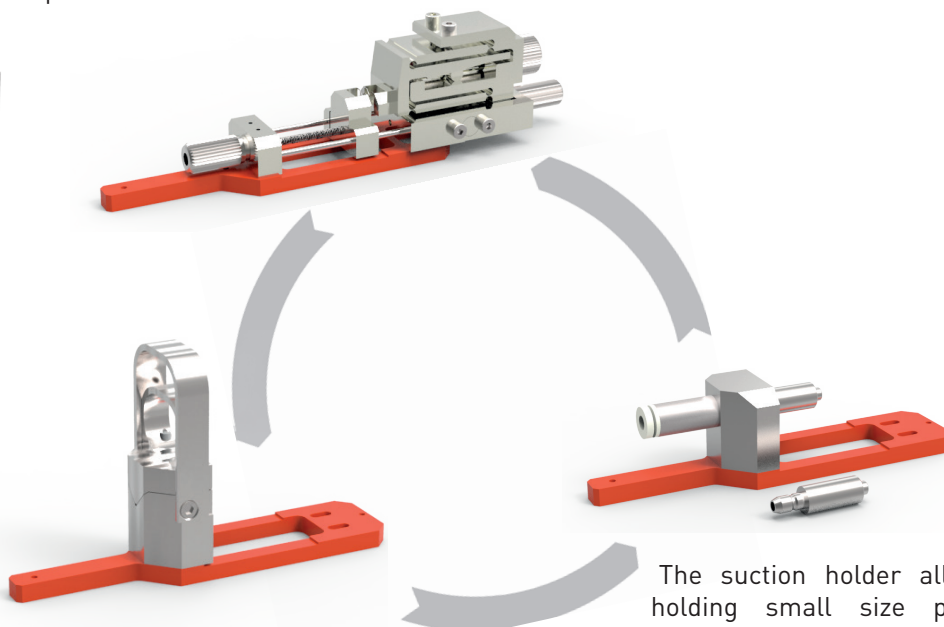
PR50: The measuring instrument adapted to the quality control of watchmaking components



Holders

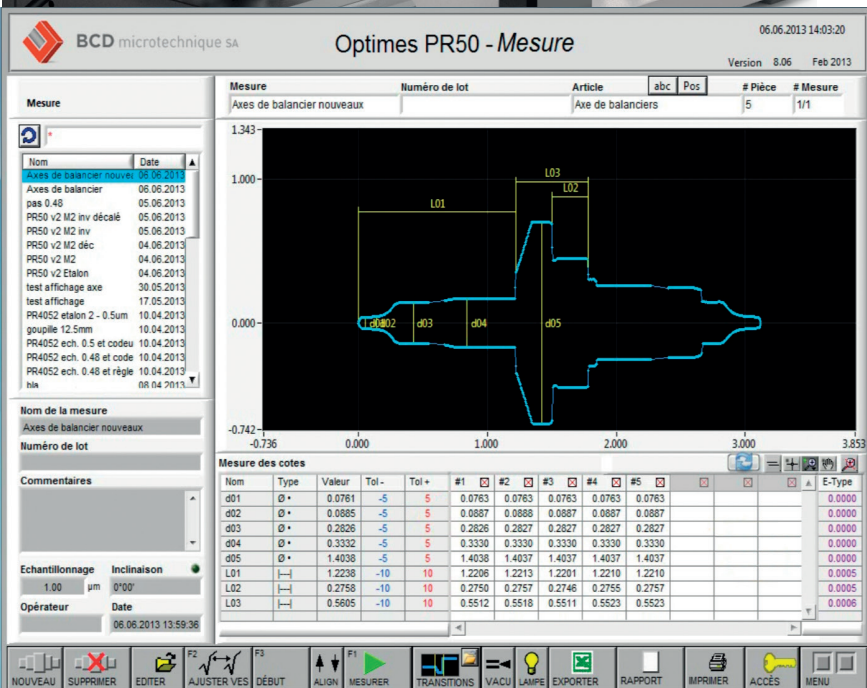
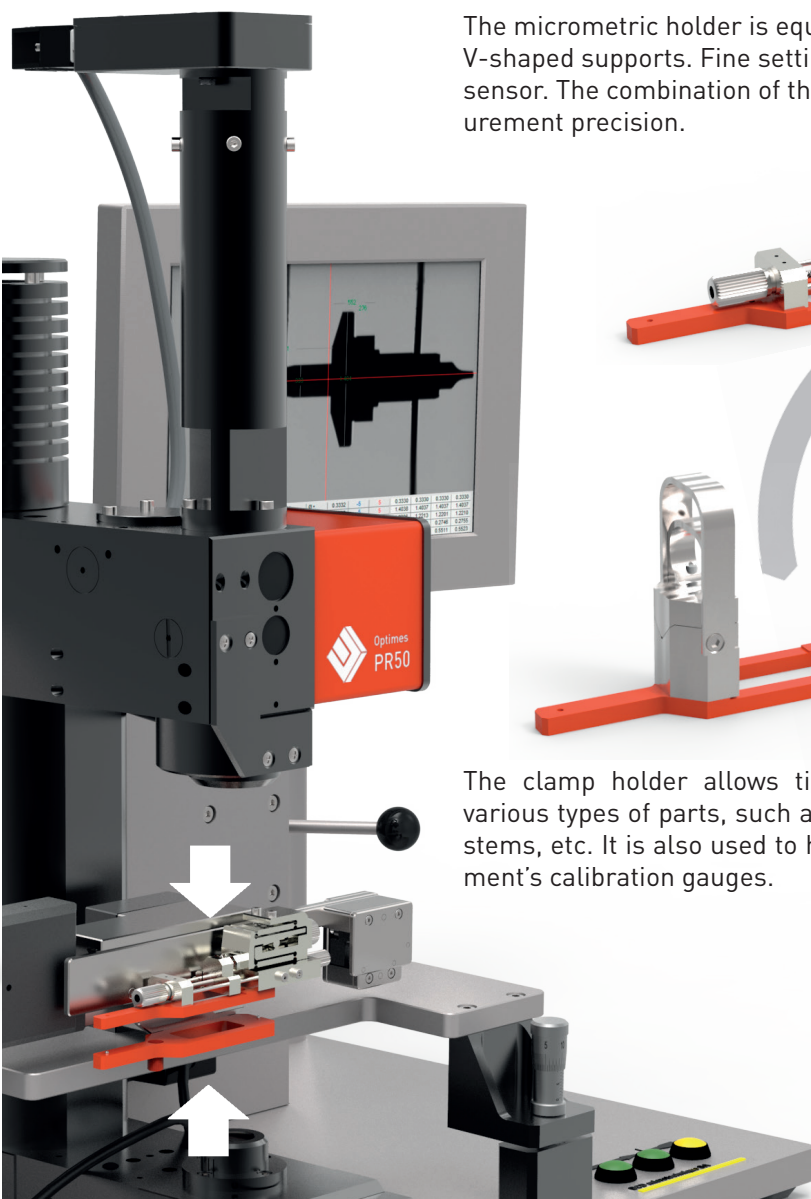
The PR50 holders are interchangeable in a few seconds. The standard holders range allows holding any type of part without affecting the measurement.

The micrometric holder is equipped with two 60 micrometers thick stainless steel V-shaped supports. Fine settings allow a very accurate alignment of the part under the sensor. The combination of the software aid and this holder guarantee an excellent measurement precision.



The clamp holder allows tightening various types of parts, such as pins, gauges, stems, etc. It is also used to hold the instrument's calibration gauges.

The suction holder allows holding small size parts which cannot be placed on the micrometric holder. Interchangeable nozzles of different diameters are provided to correspond to the part to be measured. A micro-pump is installed in the control box rendering the system perfectly autonomous.



Highlights

- Instrument dedicated to the watch-making industry
- Holders for all types of parts
- Calibration with a standard certified by METAS
- Management of the measurements and production orders
- Complete and detailed statistics
- SPC exportation
- Maintenance and remote support
- After-sales service directly by the manufacturer: responsive and competent

Measured magnitude

Type	Value	
Diameter	<3.5 mm	point, min, max, average
Length	<17mm	
Angles and conicity		
Radius		



Equipment and options

Standard	Measuring device	
	Control electronics	
	Video monitor	
	Measuring software	
	Basic training	
Options	Holder	Micrometric
		Suction
		Clamp
	Software	Exportation Quick Control
		Exportation Caligest
		Exportation IQS
	Hardware	PC windows 7 professional
		Customer PC configuration
	Training	Advanced courses

Technical data

Type	Value	
Consumption	In operation	15 W
Weight		18,6 kg
Dimensions		1000 x 600 x 500 mm
Temperature	In operation	10 °C to 40 °C
Relative humidity	In operation	Max 80%
Résolution	Y (diameter)	0.16 µm
Résolution	X (length)	0.1 µm
Precision	Diameter measurement	0.6 µm (2S)
	Length measurement *	1.8 µm (2S)

* With PR50 v2.0 equipped with an optical linear encoder.

