

Waveline W612

Modular measuring system for precise measurement of roughness and contour



Waveline W612 measuring station with Digiscan probe system for contour measurement and accessories

System features

- Easy-to-use measuring system
- High measurement quality thanks to stable mechanics
- Unique traverse unit concept for optimum access to measuring positions
- Quick-change adapter QCA enables quick probe system changeover with minimum retooling time due to automatic probe recognition
- Subsequent expansion of the measuring system

Probe systems for roughness and contour

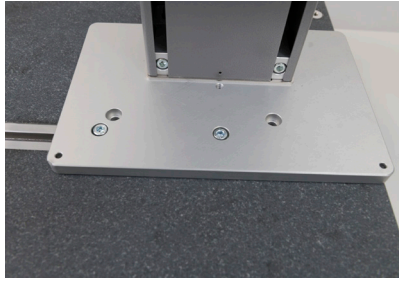
- Modern, high-resolution probe system
- Sophisticated probe arm technology
- Probe arms with magnetic coupling for fast and easy probe arm changeover
- All contour probe arms equipped with an RFID chip for simple calibration and automatic configuration
- Measuring points freely accessible thanks to innovative traverse unit

Waveline W612

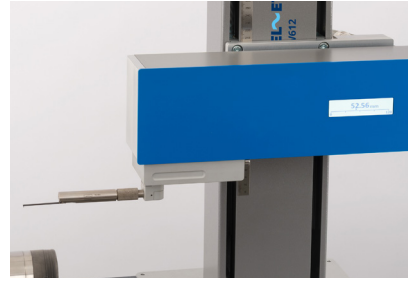
Modular roughness and contour measurement



Manual height adjustment for precise probe positioning



Wide range of mounting options: optional base plate for mounting on granite plate with T-slot



TKU400 roughness probe system with quick-change adapter for fast changeover

Probe systems

Probe system	TKU400	Digiscan
Measurement of	roughness	contour
Measuring range/resolution (Standard probe arm length)	$\pm 400 \mu\text{m}/1 \text{ nm}^1$	$60 \text{ mm}/10 \text{ nm}^1$
Measuring range/resolution (1.5x probe arm length)	$\pm 600 \mu\text{m}/1.5 \text{ nm}^1$	$90 \text{ mm}/15 \text{ nm}^1$
Measuring range/resolution (2x probe arm length)	$\pm 800 \mu\text{m}/2 \text{ nm}^1$	-
Accuracy		
Rz min. tolerance cg/cgk $\geq 1,33$	$1.2 \mu\text{m}$	-
Radius measurement R = 15 mm	-	$\pm 7 \mu\text{m}$
Radius form deviation	-	$5 \mu\text{m}$
Top/bottom measurement	no	optional
Measuring principle	analog	digital
Probe identification	yes	yes
Probe force setting	fixed	electronic
Probe arm identification	no	yes
Probe arm interface	magnetic	magnetic

Measuring system

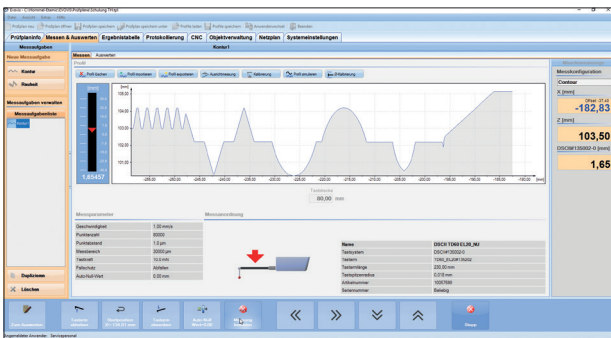
Model	W612
Traverse unit Xmove 120-8	
Traverse length	120 mm
Straightness	$0.9 \mu\text{m}$
Positioning repeatability	$<50 \mu\text{m}$
X axis scale resolution	$0.1 \mu\text{m}$
Max. positioning speed	20 mm/s
Max. basic disturbance Rz (0.2 mm/s)	$<60 \text{ nm}$
Measuring column Zpos 300M	
Vertical travel	300 mm

1) Resolution across the entire measuring range.

System configurations

System configuration	Description
W612R	roughness measuring station with probe system TKU400
W612C Digiscan	contour measuring station with probe system Digiscan
W612RC Digiscan	roughness and contour measuring station with separate probe systems TKU400 and Digiscan

Measuring and evaluation software Evovis



Evovis offers a standardized user interface with easy-to-understand control logic and extensive support functions for designing individual measurement applications.

- Modern user interface for safe operation with little training needed
- Individual, free design of test plans and reports with automatic archiving
- All common parameters in accordance with ISO 21920, ISO 4287 and other ISO and national standards