






Mitutoyo Benelux




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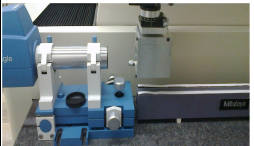




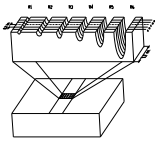
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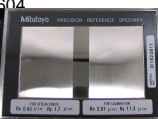
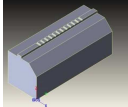

Gauge blocks >100-1500mm	€ 150		U(k = 2)	Steel/Ceramic: $0,10 \mu\text{m} + 0,34 \cdot 10^{-6} \cdot l$ Zero glass: $0,10 \mu\text{m} + 0,20 \cdot 10^{-6} \cdot l$
Micrometer standards till 1500mm	€ 50		U(k = 2)	Steel: $0,10 \mu\text{m} + 0,50 \cdot 10^{-6} \cdot l$
Masterballs (0-30) diameter + roundness	€ 289		U(k = 2)	Diameter: $0,2 \mu\text{m}$ Roundness: $40 \text{ nm} + 2\% \cdot \text{RONt}$ Special request <u>roundness via double reversal</u> Roundness: $10 \text{ nm} + 2\% \cdot \text{RONt}$ Special request + roughness
Masterballs (0-30) diameter + roundness via double reversal	€ 621			
Masterballs (0-30) diameter + roundness + roughness	€ 559			
Masterballs (0-30) diameter	€ 193			
Ring gauges (4-50) diameter + roundness	€ 289		U(k = 2)	Diameter: $0,2 \mu\text{m}$ Roundness: $40 \text{ nm} + 2\% \cdot \text{RONt}$
Ring gauges (4-50) diameter	€ 193			

CMM							
Stepgauges 32 surfaces (310mm)	€ 640			U(k = 2)	0,16 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 46 surfaces (450mm)	€ 920				0,17 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 62 surfaces (610mm)	€ 1240				0,19 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 76 surfaces (750mm)	€ 1520				0,21 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 78 surfaces (770mm)	€ 1560				0,21 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 102 surfaces (1010mm)	€ 2040				0,24 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 116 surfaces (1150mm)	€ 2320				0,26 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 152 surfaces (1510mm)	€ 3040				0,30 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 18 surfaces (300mm) caliper checker 300	€ 360				0,16 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 24 surfaces (600mm) caliper checker 600	€ 480				0,19 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 26 surfaces (excl. 2 GB's) inside micrometer checker	€ 520				0,16 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 50 surfaces (excl. 2 GB's) inside micrometer checker	€ 1000				0,19 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 22 surfaces (250mm)	€ 440				0,15 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 30 surfaces (320mm)	€ 600				0,16 µm + 0,34.10 ⁻⁶ ./		
Stepgauge 38 surfaces (147mm) Kogame	€ 760				0,14 µm + 0,34.10 ⁻⁶ ./		
Stepgauge 40 surfaces (155mm) Kogame	€ 800				0,14 µm + 0,34.10 ⁻⁶ ./		
Stepgauge 20 surfaces (190mm) QV-TP	€ 400				0,14 µm + 0,34.10 ⁻⁶ ./		
Stepgauge 26 surfaces (250mm) QV-TP	€ 520				0,15 µm + 0,34.10 ⁻⁶ ./		
Stepgauge 32 surfaces (310mm) QV-TP	€ 640				0,16 µm + 0,34.10 ⁻⁶ ./		
Stepgauge 46 surfaces (450mm) QV-TP	€ 920				0,17 µm + 0,34.10 ⁻⁶ ./		
Stepgauge 66 surfaces (650mm) QV-TP	€ 1320				0,20 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 22 surfaces (420mm) KOBA	€ 440				0,17 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 32 surfaces (620mm) KOBA	€ 640				0,19 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 42 surfaces (820mm) KOBA	€ 840				0,21 µm + 0,34.10 ⁻⁶ ./		
Stepgauges 52 surfaces (1020mm) KOBA	€ 1040				0,24 µm + 0,34.10 ⁻⁶ ./		
Straightedges till 300mm	€ 139					U(k = 2)	1,5 µm
Straightedges till 500mm	€ 161						
Straightedges till 750mm	€ 182						
Straightedges till 1000mm	€ 203						
Block square, longest leg till 300mm	€ 182			U(k = 2)	1,5 µm for the straightness of the legs (0,5 m/L)" for the angle deviation (=appr. 2,4µm/L)		
Block square, longest leg till 500mm	€ 203						
Block square, longest leg till 750mm	€ 214						
Block square, longest leg till 1000mm	€ 235						
Quadra square	€ 353			U(k = 2)	1,5 µm for the straightness of the legs (0,5 m/L)" for the angle deviation (=appr. 2,4µm/L)		
Cube square	€ 535			U(k = 2)	1,5 µm for the straightness of the legs (0,5 m/L)" for the angle deviation (=appr. 2,4µm/L)		

Optical						
	Glass Scale (Projector scale) 50 mm (11 stripes, pitch 5 mm)	€ 253			U(k = 2)	0,40 µm + 1,00.10 ⁻⁶ ./
	Glass Scale (Projector scale) 80 mm (17 stripes, pitch 5 mm)	€ 391				
	Glass Scale (Projector scale) 100 mm (11 stripes, pitch 10 mm)	€ 253				
	Glass Scale (Projector scale) 150 mm (16 stripes, pitch 10 mm)	€ 368				
	Glass Scale (Projector scale) 200 mm (21 stripes, pitch 10 mm)	€ 483				
	Glass Scale (Projector scale) 250 mm (26 stripes, pitch 10 mm)	€ 598				
	Glass Scale (Projector scale) 300 mm (31 stripes, pitch 10 mm)	€ 713				
	Glass Scale (Projector scale) 400 mm (41 stripes, pitch 10 mm)	€ 943				
	Glass Scale (Projector scale) 500 mm (51 stripes, pitch 10 mm)	€ 1173				
	Glass Scale (Projector scale) 600 mm (61 stripes, pitch 10 mm)	€ 1403				
low expansion	Glass scale 250 mm, working standard (26 stripes, pitch 10 mm)	€ 598				
low expansion	Glass scale 500 mm, working standard (51 stripes, pitch 10 mm)	€ 1173				
	Motic calibration slide	€ 110			U(k = 2)	10 µm
VMM						
	Line standard (Vision scale) QI 60 mm (13 stripes, pitch 5 mm)	€ 299				
	Line standard (Vision scale) QI 80 mm (17 stripes, pitch 5 mm)	€ 391				
	Line standard (Vision scale) QI 105 mm (22 stripes, pitch 5 mm)	€ 506				
	Line standard (Vision scale) QI 180 mm (37 stripes, pitch 5 mm)	€ 851				
	Line standard (Vision scale) QI 205 mm (42 stripes, pitch 5 mm)	€ 966				
	Line standard (Vision scale) QI 305 mm (62 stripes, pitch 5 mm)	€ 1426				
	Line standard (Vision scale) QI 380 mm (77 stripes, pitch 5 mm)	€ 1771				
	Line standard (Vision scale) QI 405 mm (82 stripes, pitch 5 mm)	€ 1886				
	Line standard (Vision scale) QS/QV 200 mm (21 stripes, pitch 10 mm)	€ 483				
	Line standard (Vision scale) QS/QV 250 mm (26 stripes, pitch 10 mm)	€ 598				
	Line standard (Vision scale) QS/QV 300 mm (31 stripes, pitch 10 mm)	€ 713				
	Line standard (Vision scale) QS/QV 330 mm (34 stripes, pitch 10 mm)	€ 782				
	Line standard (Vision scale) QS/QV 400 mm (41 stripes, pitch 10 mm)	€ 943				
	Line standard (Vision scale) QV 600 mm (61 stripes, pitch 10 mm)	€ 1403				
low expansion	Line standard (Vision scale) HQV 200 mm (21 stripes, pitch 10 mm)	€ 483				
low expansion	Line standard (Vision scale) HQV 300 mm (31 stripes, pitch 10 mm)	€ 713				
low expansion	Line standard (Vision scale) HQV 400 mm (41 stripes, pitch 10 mm)	€ 943				
ISO 10360-7 low expa	Line standard (Vision scale) HQV 200 mm (41 stripes, pitch 5 mm)	€ 943				
ISO 10360-7 low expa	Line standard (Vision scale) HQV 300 mm (61 stripes, pitch 5 mm)	€ 1403				
ISO 10360-7 low expa	Line standard (Vision scale) HQV 440 mm (89 stripes, pitch 5 mm)	€ 2047				
ISO 10360-7 low expa	Line standard (Vision scale) HQV 650 mm (131 stripes, pitch 5 mm)	€ 3013				
	2-D grids 200x200 mm pitch 10 mm (21 mp x-as, 21 mp, Y-as)	€ 966			U(k = 2) -afstand tussen 2 punten -lineariteit -rechtheid -haaksheid -rotatie	0,8 µm + 0,5.10 ⁻⁶ ./ 0,2 µm + 0,5.10 ⁻⁶ ./ 0,2" 0,4"
	QV calibration chart 001	€ 509		like 02AKN020 	U(k = 2)	0,24 µm
	QV calibration chart 009	€ 2000		like 02AKX160 	U(k = 2)	0,24 µm + 2,0.10 ⁻⁶ ./ voor de scales 0,04 µm for RONt

ISO 10360-7

FMI					
Straightedges till 280mm on Roundtest with reversal method (low uncertainty)	€ 321			$U(k = 2)$	$38\text{nm} + 3,5\%.z$
Straightedges till 1000 mm on CMM with autocollimator (low uncertainty)	€ 428			$U(k = 2)$	$36\text{ nm} + 0,12 \cdot 10^{-6} \cdot l$
Hemisphere with reversal or multi-step method	€ 428		like 211-016 	$U(k = 2)$ RONt (0-1 μm)	$10\text{nm} + 2\%.\text{RONt}$
Flick standard	€ 321			$U(k = 2)$ RONt (0-100 μm)	$150\text{nm} + 2\%.\text{RONt}$
Roughness specimen, depth standards	€ 214		Type A1 Step standards	Type A2 Groove Depth-setting standards	
			like 178-611 & 178-610  	like Halle standards 	
				$U(k = 2)$	d (0-20 μm): $10\text{ nm} + 2\%.d$ Pt (0-20 μm): $10\text{ nm} + 2\%.Pt$

Roughness specimen, 1 profile	€ 270		Type B (tip control) & C (vertical / horizontal spacing & amplitude) sine waves or saw-tooth like Mitutoyo: 178-601 (mm) & 178-602 (inch/mm) Rubert: 178-605 (mm) & 178-606 (inch/mm) 	Type D1 roughness standards fine, middle, large like Halle standards	
Roughness specimen, 2 profiles	€ 540		Type B & C sine waves like 178-604 	U(k = 2)	Ra (0-20 μm): 3 nm + 3%. <i>Ra</i> Rz (0-80 μm): 30 nm + 2%. <i>Rz</i> Rt (0-80 μm): 40 nm + 3%. <i>Rt</i> Rsm (10-250 μm): 0.1%. <i>Rsm</i> special request: Rsm (10-250 μm): 0.01%. <i>Rsm</i>
X-axis contour normaal	€ 500			U(k = 2)	0,24 μm + 0,16.10 ⁻⁶ . <i>I</i>
Temperature					
Temperature sensors	€ 107			U(k = 2)	0,03 K