



Method	Machine	Quantity	Device information	
<b>3-Dimensional</b>	<b>Coordinate measuring machine</b>	1	Type:	Zeiss Prismo Navigator
			Measuring range:	700 x 900 x 650 mm
			Accuracy:	$E_{MPE} = (0,9 + L / 350) \mu\text{m}$
			Features:	Software Calypso VAST
	<b>3D-Scanner</b>	1	Type:	Steinbichler COMET L3D 5M
			Measuring range:	45 Measuring field: 45 x 38 x 30 mm 100 Measuring field: 120 x 100 x 60 mm 250 Measuring field: 260 x 215 x 140 mm
			3D distance between dots	45 Measuring field: 18 $\mu\text{m}$ 100 Measuring field: 50 $\mu\text{m}$ 250 Measuring field: 100 $\mu\text{m}$
			Features:	Rotation table, Inspection software
<b>2-Dimensional</b>	<b>Profile projector</b>	1	Type:	Carl Zeiss Jena ZKM 01 - 250C
			Measuring range:	100 x 200 mm
			Accuracy:	$U = (1,5 + 1 * L / 200) \mu\text{m}$
		4	Features:	Quadra-Check analysis
			Type:	Carl Zeiss Jena BK 70x50
			Measuring range:	50 x 50 mm
	<b>Contour measuring machine</b>	1	Type:	Mitutoyo Contracer CV-3100H
			Measuring range:	Z1 = 50 mm; (Z2 = 600 mm) X = 100 mm
			Accuracy:	Z1 = $(2 + 4 * Z / 100) \mu\text{m}$ X = $(1 + 1 * L / 100) \mu\text{m}$
			Features:	Formtracepak
	<b>Concentricity gaging machine</b>	1	Type:	Mitutoyo Roundtest RA-1500
			Measuring range:	$\varnothing 150 \times 150 \text{ mm}$
			Accuracy:	concentricity = $(0,02 + 6 * H / 10000) \mu\text{m}$
		6	Features:	Roundpak
			Type:	Kematec concentricity KK1-10
			Measuring range:	$\varnothing 3 - 25 \text{ mm} \times 102 \text{ mm}$
	<b>Shaft measuring machine</b>	1	Type:	TESA SCAN 25
			Measuring range:	$\varnothing 0,25 - 25 \text{ mm} \times 200 \text{ mm}$
			Accuracy:	$\varnothing = (1,5 + D / 100) \mu\text{m}$ L = $(5 + L / 100) \mu\text{m}$
		2	Features:	
Type:			Jenoptik HOMMEL ETAMIC opticlone C305	
Measuring range:			$\varnothing 0,2 - 50 \text{ mm} \times 300 \text{ mm}$	
	Accuracy:	$\varnothing = (2 + D / 100) \mu\text{m}$ L = $(5 + L / 100) \mu\text{m}$		
	Features:	Statistics		

<b>1-Dimensional</b>	<b>Gauge block test station</b>	1	Type:	Steinmeyer EMP II
			Measuring range:	0,5 - 100 mm
			Accuracy:	$U = (0,03 + 0,002 * D) \mu\text{m}$
			Features:	Manipulator and PU22
	<b>Horizontal height rod</b>	2	Type:	Carl Zeiss Jena ULM 01 - 600C
			Measuring range:	0 - 100 mm
			Accuracy:	$U = (0,6 + 1 * L / 10000) \mu\text{m}$
			Features:	RS232-interface
	<b>vertikal height rod</b>	1	Type:	Carl Zeiss Jena ABBE 01 - 200C
			Measuring range:	0 - 100 mm
			Accuracy:	$U = (0,6 + 1 * L / 10000) \mu\text{m}$
		2	Features:	RS232-interface
			Type:	Garant Höhenmessgerät HC1
			Measuring range:	0 - 600 mm
	<b>Surface roughness tester</b>	7	Type:	Mitutoyo Surftest SJ-401 Mitutoyo Surftest SJ-301 Mitutoyo Surftest SJ-210
			Measuring range:	800 $\mu\text{m}$ x 17,5 mm
			Analysis	W-, P- und R-Profile
			Features:	Roughness standards, digital filter
	<b>Hand-held meter</b>	-	Type:	several Calipers
			Measuring range:	0 - 1500 mm
-		Type:	several micrometers (inside / outside / built-in)	
		Measuring range:	0 - 250 mm	
-		Type:	several gauges	
		Measuring range:	0 - 60 mm	
-		Type:	several gauge dials / lever gauges	
		Measuring range:	0 - 140 $\mu\text{m}$	
-		Type:	several plug gauges / -rings	
		Measuring range:	up to 250 mm	
-	Type:	several thread-plug-gauges / -rings		
	Measuring range:	up to M120		
-	Type:	several gauge blocks and testing pins		
	Measuring range:	0 - 1000 mm		
<b>Other</b>	<b>Weight tester</b>	-	Type:	several weight test machines
			Measuring range:	0 - 300 kg
	<b>Dynamometers</b>	-	Type:	several dynamometers
			Measuring range:	0 - 200 N
	<b>Torque meters</b>	-	Type:	several torque meters
			Measuring range:	0 - 1500 Nm
	<b>Hardness tester</b>	-	Type:	Mitutoyo Durotwin Plus DT-20
			Measuring range:	Rockwell; Super Rockwell; Brinell
			Accuracy:	$U = 0,5 \text{ HRC}$
			Features:	Manufacturing of hardness test piece