

WGT series of Gear Measuring Machines



		WGT280	WGT400	WGT600	WGT850	WGT1200
Max. workpiece Ø	[mm]	5 – 280	5 – 400	5 – 600	850 (1,000 tailstock retracted)	1,200 (1,600 tailstock retracted)
Min. module	[mm]	0.5 (0.12)	0.5 (0.12)	0.5 (0.12)	0.5 (0.3)	0.5 (0.3)
Measurable face width	[mm]	500	500	650 (800)	800	1,000 (1,400)
Distance between centers	[mm]	50 – 500	20 – 650 (900)	20 – 900 (1,200)	20 – 930 (1,200, 1,600, 2,000)	50 – 1,200 (1,600, 2,000)
Max. rotary table load	[kg]	50	180	400	1,000	3,000 (5,000)
Helix angle	[°]	<90	<90	<90	<90	<90
Measuring range	[mm]	X: 340 Y: 200 Z: 500	X: 400 Y: 220 Z: 500	X: 500 Y: 320 Z: 650 (Z:800)	X: 950 Y: 500 Z: 850	X: 1,200 Y: 650 Z: 1,000 (1,400)
Measurement accuracy		Gear inspection accuracy according to VDI/VDE 2612/2613 Group I				

The WGT series

The 4-axis measuring instruments of the WGT series have high-precision mechanics and electronics, which are controlled by smart and user-friendly software. They meet all accuracy requirements regarding gear wheel manufacturing and comply with VDI guideline VDI/VDE 2613, group 1. In addition to the gear inspection machine options available as standard, customer-specific solutions are also available, such as extending the travel range on the Z axis, longer tailstocks to accommodate long shafts and rotary tables adapted to

the payload. An automatic probe changing system ensures uninterrupted measurement of the workpieces and also offers the highest levels of convenience for the operator. The extensive software features make the machines suitable for measuring gears such as all types of spur gears, bevel gears, worms, worm gears, shafts, gear hobbing, cutting, and shaving tools as well as and rotationally symmetrical parts such as shafts and many more.

Highlights

- Highest precision provided by granite guides and air bearing
- Low operating costs due to contactless guides and reliable probes as well as inexpensive spare parts
- Flexible for all types of gears
- User-friendly interface and ergonomic design
- Manufacturer-neutral GDE interface for data transmission to production machines

Software

The TMain software supplied by the WGT series consists of the basic functions:

- TStylus for stylus configuration management
- TAlign for axis alignment
- TGear for automatic measuring external and internal involute gears

Software modules

- External and internal splines
- Broaches
- Worms
- Worm wheels
- Shafts
- Bevel gears
- Calculation of nominal grid points of straight bevel gears
- Female/male rotors, cycloids, sprockets
- Hobs
- Cutting tools
- Shaving tools
- Root fillet radius scanning
- Face coupling and clutch teeth gear inspection
- Determining gear data for unknown gears
- Racks