



## Gear Measuring Solutions

Internal & External SPUR/HELICAL  
Gear Measuring Instruments

WORM/WORM Wheel  
Measuring Instruments

BEVEL Gear  
Measuring Instruments

Design, development and manufacturing of gear cutting machines

Inspired by 100 Years of European Tradition | Custom Built in India

## DO 3i PC 180/280

Internal & External SPUR/HELICAL  
Gear Measuring Instrument

Geometric Form Inspection

Measuring instrument for testing of geometric deviations of spur and helical gears i.e. lead, profile and pitch errors along with run out, base tangent length, dimension over ball etc.

Max. diameter of the measured gear	180 / 280 mm
Min. diameter of the pitch circle	10 mm
Min./max. module of the measured gear	0.5 / 8 mm
Maximum tooth helix angle	40°
Maximum gear width	350 mm
Distance between centres	350, 500 or 700 mm



## DO 3i LPC 280/340

Internal & External SPUR/HELICAL  
Gear Measuring Instrument

Geometric Form Inspection

Measuring instrument for testing of geometric deviations of internal, external spur and helical gears i.e. lead, profile and pitch errors along with run out, base tangent length, dimension over ball etc.

Max. diameter of the measured gear int./ext.	240 / 340 mm
Min. diameter of the pitch circle	10 mm
Min./max. module of the measured gear	0.5 / 8 mm
Maximum tooth helix angle	40°
Maximum gear width	350 mm
Distance between centres	350, 500 or 700 mm



## G 260/400

Internal & External SPUR/HELICAL  
Gear Measuring Instrument

Geometric Form Inspection

Measuring center for complete testing of geometric deviation of internal, external spur and helical gears.

Max. diameter of the measured gear	260 / 400 mm
Min. diameter of the pitch circle	10 mm
Min./max. module of the measured gear	0.5 / 15 mm
Maximum tooth helix angle	90°
Maximum gear width	315 mm
Distance between centres	650 mm



## DO 0 PC

Internal & External SPUR/HELICAL Gear Measuring Instrument

Double Flank Composite Test

Test of deviations of small external and internal spur and helical gears by double flank rolling method with master gear, scanning and evaluation by PC.

Minimum/maximum diameter of gear	2 - 120 mm
Clamping between the centres	100 mm
Minimum/maximum module	0.1 - 8 mm
Minimum/maximum centre distance	35 - 125 mm



## DO 1 PC 180/280/400/600

Internal & External SPUR/HELICAL Gear Measuring Instrument

Double Flank Composite Test

Test of deviations of double flank and Mdk and spur gears with master gears. Scanning and evaluation by PC.

Minimum/maximum diameter of gear	10 - 180 / 280 mm
Clamping between the centres	180 - 600 mm
Minimum/maximum module	0.5 - 8 mm
Minimum/maximum centre distance	65 - 210 mm



## DO 1 D PC

Internal & External SPUR/HELICAL Gear Measuring Instrument

Double Flank Composite Test

Test of deviations of external spur and helical gears with dual station facility to achieve highest productivity.

Minimum/maximum diameter of gear	2 - 120 mm
Clamping between the centres	100 mm
Minimum/maximum module	0.5 - 8 mm
Minimum/maximum centre distance	50 - 140 mm



## DO 2 PC 180/280/350

Internal & External SPUR/HELICAL  
Gear Measuring Instrument

Single Flank Composite Test

Test of deviations of single flank helical and spur gears with master gears. Scanning and evaluation by PC.



Minimum/maximum diameter of wheel	10 - 320 mm
Clamping between the centres	180 / 280 / 350 mm
Minimum/maximum module	0.5 - 8 mm
Minimum/maximum centre distance	65 - 280 mm

## DO 0 W PC

WORM/WORM  
Wheel Measuring Instrument

Double Flank Composite Test

Measuring instrument for computerized testing of worm gears with master by double flank evaluation for small parts.



Maximum diameter	25 mm
Maximum module	0.1 - 2 mm
Center distance	3.5 - 125 mm

## DO 1 W PC

WORM/WORM  
Wheel Measuring Instrument

Double Flank Composite Test

Measuring instrument for computerized testing of worm gears with master by double flank evaluation for medium-sized parts.



Maximum diameter	60 mm
Maximum module	0.5 - 8 mm
Minimum/maximum axis distance	30 - 110 mm

## DO 2 W PC 180/280/500/1000

WORM/WORM  
Wheel Measuring Instrument

Single Flank Composite Test

Measuring instrument for computerized testing of worm gears with master by single flank evaluation for small and medium-sized parts.

Min./max. axis distance	50 / 250 mm
Min./max. diameter of worm/worm wheel	15 - 150 mm / 55 - 280 mm
Min./max. length of worm between centre	50 / 250 mm
Maximum weight of worm/worm wheel	10 - 100 kg
Axis angle	90°



## DO 500 W PC

WORM/WORM  
Wheel Measuring Instrument

Single Flank Composite Test

Measuring instrument for computerized testing of worm gears with master by single flank evaluation for medium-sized and large parts.

Max. axis distance	300 mm
Max. diameter of measuring worm	100 mm
Max. length of worm between centre	800 mm
Max. weight of workpiece	300 kg
Axis angle between worm and worm wheel	90°
Measuring accuracy	0.001°



## DO 1000 W CNC

WORM/WORM  
Wheel Measuring Instrument

Single Flank Composite Test

Measuring instrument for computerized testing of worm gears with master by single flank evaluation for large parts.

Max. axis distance	550 mm
Max. diameter of measuring worm	200 mm
Max. length of worm between centre	1500 mm
Max. weight of workpiece	1000 kg
Axis angle between worm and worm wheel	90°
Measuring accuracy	0.001°



## DO 125 K

BEVEL  
Gear Measuring Instrument

Single Flank Manual Test

Enables conventional contact pattern test of bevel gears. Reading and evaluation using dial gauges.

Minimum diameter of pinion	10 mm
Maximum diameter of gear	125 mm
Minimum/maximum assembly distance	35 - 90 mm
Angle between axes	50° - 140°



## DO 125 K PC

BEVEL  
Gear Measuring Instrument

Single Flank Composite Test

Measuring instrument for testing of bevel gearing by single flank method. Scanning and evaluation by PC.

Minimum diameter of the measured pinion	10 mm
Maximum diameter of the measured wheel	125 mm
Maximum assembly distance	100 mm
Angle of conical gearing axes	70° - 120°



## DO 140 K PC

BEVEL  
Gear Measuring Instrument

Single Flank Composite Test

Measuring instrument for testing of bevel gearing by single flank method. Scanning and evaluation by PC.

Minimum diameter of the measured pinion	10 mm
Maximum diameter of the measured wheel	140 mm
Maximum assembly distance	100 mm
Angle of conical gearing axes	70° - 120°



## DO 2 K PC

BEVEL  
Gear Measuring Instrument

Single Flank Composite Test

Measuring instrument for testing of bevel gearing by single flank rolling method. Angle of crossed axes is 90°. Scanning and evaluation by PC.



Minimum diameter of the measured pinion	10 mm
Maximum diameter of the measured wheel	140 mm
Maximum assembly distance	100 mm
Angle of conical gearing axes	90°

## DO 300/500 K CNC

BEVEL  
Gear Measuring Instrument

Single Flank Composite Test

Measuring instrument for testing of middle-sized bevel gearing (and hypoid bevel gearing) by single flank rolling method. Scanning and evaluation by PC.



Minimum diameter of pinion	30 mm
Maximum diameter of wheel	600 mm
Travel range - axis X / axis Y / axis Z	50 - 350 mm / ±50 mm / 0 - 100 mm
Angle between axes	90°

## DO 1000 K CNC

BEVEL  
Gear Measuring Instrument

Single Flank Composite Test

Measuring instrument for testing of large bevel gear by single flank rolling method. Scanning and evaluation by PC.



Minimum diameter of pinion	650 mm
Maximum diameter of bevel	1000 mm
Min./maxi. axial distance - axis X / axis Y	250 - 600 mm / 200 - 400 mm
Angle of conical gearing axis	90°



## AUTOMATIZATION

AUTOMATIC  
Gear Measuring Instrument

Special Purpose Machine

Fully automatic loading and unloading of measured gears with the optional conveyor and workpiece magazine with QR code scanner integration.



## SEMI-AUTOMATIZATION

SEMI-AUTOMATIC  
Gear Measuring Instrument

Special Purpose Machine

Semi-automatic exchange of measured workpieces with manual loading and unloading of workpieces.



## MARKERS

MARKING  
Gear Measuring Instrument

Special Purpose Machine

Automatic marking device to enable automatic marking for OK components.



## Design, development and manufacturing of gear measuring and gear cutting solutions since 1993

Gearspect specializes in manufacturing customized high-precision gear measuring instruments and gear cutting machines. Originating from the Czech Republic, member of the European Union, Gearspect follows more than 100 years of European tradition in gear technology production. Today, Gearspect continues its legacy with development and production facility in Pune, India, driven by a passion for providing world-class solutions.

## Our team of experts trained in Europe

In Gearspect, we are a team of highly skilled technicians and engineers with extensive experience in the automotive and defence industries who were trained in the European Union by the producer of gear technology. Our team delivers innovative and customized gear measuring and gear cutting solutions.

Gearspect serves the most respected companies across the automotive, aeronautics, heavy engineering, construction equipment, and defence sectors.

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