

gearSpect

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 measuring instruments

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 |



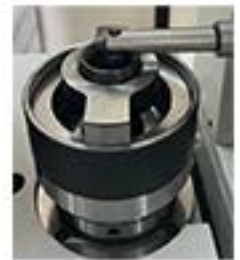
DO 3i LPC 280/240

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. | 250 / 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 | 2 - 120 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 - 320 mm |
| Clamping between the centres | 180 - 600 mm |
| Minimum/maximum module | 0.5 - 8 mm |
| Minimum/maximum centre distance | 5 - 250 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 | 0.1 - 2 mm |
| Minimum/maximum centre distance | 5 - 250 mm |



DO 2 PC 180/280/350

Internal & External SPUR/HELICAL
Gear Measuring Instrument

Single Flank Composite Test

Test of deviations of single flank and Mdk 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 - 315 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 - 108 mm |
| Minimum/maximum axis distance | 30 - 140 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 / 500 mm |
| Min./max. diameter of worm/worm wheel | 15 - 310 mm / 150 - 1000 mm |
| Min./max. length of worm between centre | 50 / 1250 mm |
| Maximum weight of worm/worm wheel | 150 / 500 kg |
| Axis angle | 90° |



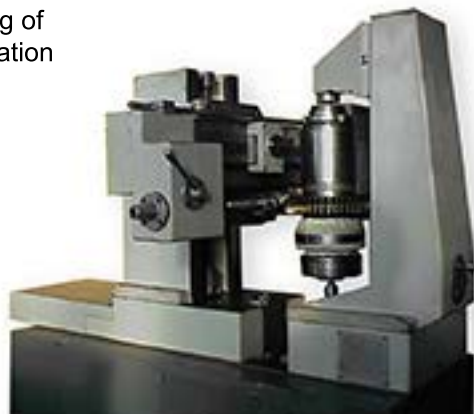
DO 500 W PC

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 axe | 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.

Our Indian and international clients from the automotive, aerospace and defence industries:





Global Sales & Service Offices:

Europe:

Gearspect Europe

Staňkovského 2062, 250 88 Čelákovice,
Czech Republic

Email: info@gearspect.com

Phone: +420 283 890 111

America:

Gearspect U.S.A.

14. Nosband Ave, Suite 3C White Plains,
New York 10605, U.S.A.

Email: usa@gearspect.com

Phone: +1 914 830 3402

India:

Gearspect India Pvt. Ltd.

104, S.V. Industrial Estate, Handewadi Road,
Hadapsar, Pune 411028, Maharashtra, India

Email: sales-india@gearspect.com

Phone : +91 99220 09135

Asia:

Taechang Trading Corporation

B 932, B 933, Geumgang IX Tower 27,
Dongtancheomdansaneop 1- ro,
Hwaseong-si Gyeonggi-do, Republic of Korea

Email: sales@tc-trading.com

Phone: +82 3150 89561

Local Sales & Service Office:

www.gearspect.com