

Motorized Bevel Gear Tester

Model KIPL - 300



Useful for :

Measuring of clearance of gear flanks and detection of bearing areas.

Measuring of composite error by double flank rolling of Bevel Gears.

Checking of assembly distance.

Checking of Backlash.

Instrument

The Bevel Gear Tester is a unique solution for testing the Bevel Gear assemblies during production and final inspection. The tester allows adjustment of production machines for bevel gearing and bevel gears assembly. It is necessary to check the above parameters for the users and manufacturers of bevel gears. The tester helps shorten the setting-up time and secures the assembly dimensions.

The instrument is motorized for rotating the bevel gear under inspection. Due to motorization the inspection time is reduced accuracy of inspection is enhanced and thus the motorized BGT has eased bevel gear inspection.

The instrument consists of precisely machined rigid Cast iron semi-circular base with two swiveling arm assemblies. The arm assemblies revolve around the bush mounted on the base. The rotors are mounted in cylinders of arm assemblies. The rotors actuate on spring pressure. The setting mandrel is mounted in bore of bush on the base, to set assembly distance. A pair of bevel gear to be checked on the machine is required to mount on mandrels on the rotor's bore. Before that the calculated slip gauge size is used for setting specified assembly distance between gear mandrels and bush mandrels. With the help of Dial gauge, the assembly distance can be set. Angular separation of both the arm assemblies can be set by slip gauge size between bottom disk of arm assembly and triangular plate on base.



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After setting of assembly distance and angle between arm assemblies, the gears are mounted on respective mandrels. The dial gauges on arm assemblies are used for measuring actual center distance and total composite error by double flank rolling separately.

Specifications

- ◆ Max. Dia. of bevel gear 300 mm.
- ◆ MorseTaper4 - for one Bearing Shaft
- ◆ Cylindrical bore 30 mm-for another Bearing Shaft
- ◆ Angle adjustment of axes 50°-140°
- ◆ Max. Assembly distance for bevel gear 220 mm.
- ◆ Min. Assembly distance for bevel gear 150 mm.

Standard Accessories

- | | |
|-------------------------------------|--------|
| 1) Setting Mandrel of Dia. 30 mm | 1 No. |
| 2) Slip Gauge for setting angle 90° | 1 No. |
| 3) Dial Indicators | 4 Nos. |
| • Range - 0 to 10 mm. | |
| • Least count - 0.01 mm. | |
| 4) Handle for Rotor | 1 No. |
| 5) Spanner | 1 No. |
| 6) Hook Spanner | 1 No. |
| 7) Dust Cover | 1 No. |

Dimensions and Weight

- ◆ Base (L x W x H) 770 x 550 x 180 mm (Approx.)
- ◆ Required area 1080 x 590 mm (Approx.), Height 550 (Approx.)
- ◆ Weight with standard accessories 375 kg (Approx.)
- ◆ Standard Package 500 kg (Approx.)
- ◆ Sea Fright Package 520 kg (Approx.)



Mikrotech



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