

## MANUAL CRANKSHAFT DEFLECTION GAUGES

Used by Service Engineers, Repairmen, Crankshaft Grinders, Production Supervisors and Quality Control Inspectors, Crankshaft Gauges measure the Web Deflection of crankshafts in:

- Ready-to-operate engines or compressors.
- Assembled engines or compressors with connecting rod in place.
- Assembled engines or compressors with connecting rod removed.
- Dismantled crankshafts, between centres.

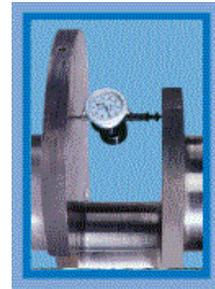
in the maintenance, repair or assembly of **marine engines, motor vehicle and railroad engines, compressors**, etc.

**Crankshaft Web Deflection should never exceed the tolerance permitted by the engine or crankshaft manufacturer.**

### **EXCESIVE WEB DEFLECTION IS A DANGER SIGNAL.**

Cause may be a faulty or damaged crankshaft, damaged bearings, poor bearing alignment, excessive bearing clearance or slackness, faulty flanging to transmission, flywheel, or vee belt pulley, etc.

**The cause of excessive crankshaft web deflection must be eliminated to prevent engine breakdown.**



**Made in Germany**

Our Crankshaft Deflection Gauges are sturdy in design and furnished with hardened gauging points. They are made in Germany and are ideally suited to rugged working conditions.

Each Crankshaft Gauge set comes in a fitted hardwood Case and consists of a dial gauge unit with spring-loaded (live) gauging point and a full set of gauging extensions and fixed gauging points to suit ranges stated. The Crankshaft gauge converts to a **CYLINDER GAUGE** by means of a set of ball-nosed anvils and cap, available as an accessory.

Model	Range	Dial graduation
KP-300	60-300mm	0.01mm
KP-500	60-500mm	0.01mm

### **Accessory**

**KP-300-ST** Set of ball anvil & ball cap for conversion to CYLINDER GAUGE.

## ELECTRONIC CRANKSHAFT DEFLECTION INDICATOR

Most engineers know the importance of regularly checking the rectilinearity of the crankshaft on marine diesel engines. To use an indicator clock was time consuming, unpleasant and dirty and it yielded dubious measurement results. As a consequence, these checks were made less and less frequently, which increased the risk of an engine break-down. The introduction of the electronic deflection indicator has made the task simpler and more effective and the measurement results more accurate.

The electronic deflection indicator DI-4 has been used by a large number of engineers in more than 60 countries. The manufacturing of this product has been going on for almost 20 years. Easy usage, along with high reliability and accurate measurements, have made the DI-4 very popular. Many engine producers use the DI-4 to keep their own production in check.

The DI-4 is a complete unit with a battery-driven digital instrument and a transducer with extension bars. The product is kept in a strong wooden case. Thanks to its simplicity, the DI-4 is used whenever a need for measuring arises and it detects the errors that might otherwise have lead to costly repairs.

The latest model, the DI-4C, looks very much like the DI-4, but it is controlled by a micro-processor and has the capacity to store documents and transfer the information to a PC. Up to 45 documents can be stored internally in the DI-4C. Supervisory control and adjustments of the instrument can be made, where after the test protocol can be transferred to the computer for comparison with earlier measurement results.

The OVALITY KIT is an accessory to the DI-4C model and is primarily designed to measure cylinder liner ovality and for wear comparison at bore diameters 180-600mm and stroke up to 870mm. This aluminium jig may be modified to take measurements in other applications as well. The software supplied with Deflection Indicator DI-4C also handles the measurements taken with the Ovality Kit. By this you may transfer ovality data to your PC and evaluate & compare, all with graphs and printouts.



**Models DI-4 & DI-4C**

**Made in Sweden**

### TECHNICAL SPECIFICATIONS

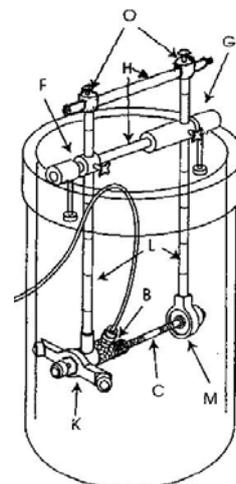
#### Models DI-4 & DI-4C

<b>Measuring Range</b>	89-565mm
<b>Resolution</b>	0.001mm
<b>Extension Bars</b>	10, 20, 40, 80 and 2 x 160mm
<b>Cable Length</b>	7 meters
<b>Batteries</b>	3 x 1.5V LR14

#### Accessory for

<b>Model DI-4C</b>	<b>Range</b>	<b>Stroke</b>
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<b>OVALITY KIT</b>	180-600mm	870mm
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**Ovality Kit**