Machine Tool. Global Solutions
Global Machine Tool Solutions

Renold is a global engineering group with over 130 years of experience in the design and manufacture of high-quality power transmission products and application-specific solutions.

Application knowledge and engineering expertise, together with global manufacturing and service, ensures that Renold is your ideal partner – whatever your industry need. It is this unique industry experience gained in demanding global environments that makes the vital difference.

Our skilled engineers work closely with customers to provide a wide range of solutions for critical, real-life applications. Solutions that are proven to stand the test of time – that is why we believe in the principle: ‘Engineering for Life’.

Renold is focused on servicing 9 key industry sectors

- Manufactured Products
- Transportation
- Mining & Quarrying
- Material Handling
- Food & Drink
- Energy
- Environmental
- Construction Machinery
- Agriculture, Forestry & Fishing

Renold. Engineering for life
Precision **Dual Lead Worm Gears**

DL Series Dual lead worm gears offer many advantages.

### Dual Lead Worm Gears

Dual lead worm gears are constructed with two leads. One flank of the thread and its mating sides of the wheel teeth are manufactured with one lead, and the other flank and its mating wheel teeth are manufactured to a slightly different lead. As far as the worm is concerned this has the effect of producing a worm thread that increases in thickness from one end of the worm to the other.

### Adjustment

If the worm is therefore moved in an axial direction when in mesh with the wormwheel, backlash between the pair can be adjusted to the required amount. In practice, the gears are manufactured so that the initial backlash is achieved at a certain distance relative to a datum plane on the worm. The worm can then be adjusted from this point as and when necessary during the life of the gears.

### Advantages

The DL Series Dual lead worm gear offers many advantages to the split worm gear design. It provides a kinematically correct gear, which can run in either direction of rotation, and on which the backlash is infinitely adjustable from an acceptable maximum to zero. Precision Dual lead backlash adjustable worm gears are now widely used in rotary tables, cutter drives and machine tool positioning mechanisms.
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Dual Lead Adjustment Mechanism

Renold Gears has launched a new, high-precision adjustment mechanism, Ren-Adjust, for Dual lead gear sets used on positional machinery requiring a high degree of accuracy, such as rotary tables and machine tools. The new system for precisely adjusting backlash is quick and simple to operate, by comparison to alternative systems, reducing downtime whenever an adjustment needs to be made.

Drop-in Replacement

The new Ren-Adjust has been designed as a simple replacement on existing machinery and can also be specified by machine tool and rotary table manufacturers as a like-for-like component, in many cases with no need to modify existing designs. Renold's system can therefore replace that of most other manufacturers without any redesign or modifications. This makes it easy for OEMs to switch to the Renold product and equally simple for machine operators to replace their existing equipment.

Simple Adjustment

Ren-Adjust permits precise adjustment without the need to remove the wormshaft or drain oil. It is quick and easy to use and cuts adjustment downtime to a minimum. The backlash is adjusted by simply removing the shrink disc, which will allow the wormshaft to move independently from the adjustment sleeve, and by turning the captive screw, which will axially move the dual lead wormshaft and adjust the working backlash. Once the backlash is acceptable, the shrink disc is re-applied. The size range of the DL series adjustment mechanism covers centre distances from 67 to 500 mm.
Key Industry Sectors

Renold products and services are utilised in a wide range of applications highlighted in the key industry sector brochures, available to download from www.renold.com.
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