Coal Pulveriser. Global Solutions

- Worm Gears
- Gear Units
- Couplings & Freewheels

RENOLD Engineering for Life
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

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

Renold. Engineering for life
Unique replication programme provides interchangeable replacements.

Coal Pulverisers

Committed to servicing the power generation industry, Renold provides a complete range of products including gearboxes, chain, couplings, holdbacks and worm gears manufactured to the renowned Renold profile. A unique replication program provides interchangeable replacements for existing CE/Alistom Coal Pulverisers, installed worldwide.

Long life

Worm shafts are produced from high-quality alloy steel with the threads case-hardened to produce a uniform, hardened thread flank of 56-60 R/C and precision ground to 32 RMS finish. Gear rims are machined from centrifugally cast tin nickel bronze. The gear teeth are hobbed to a 64 RMS finish and to a predetermined backlash and lead correction for each size of mill, providing an adequate oil entry gap under deflection at full load operation.

Profile replication

Renold has developed an onsite ‘profile plug lifting’ technique using a two-part epoxy putty to produce a plug from original manufacturer’s worm shaft. When hardened, the profile plug measurements are input into Renold profile-generating software to replicate the original profile, allowing the manufacture of a master worm, thread-milling cutter, thread-grinding wheel profile and gear-hobbing tool.
Replacement of the failed part only provides significant cost savings.

**Availability**

The in-house tooling requires only the replacement of the failed part (worm or gear) providing a significant cost saving. As tooling, worm shaft forgings and gear rim blanks are all available for the most common sizes, replacement lead time is considerably reduced.

**Quality**

Our manufacturing facilities are ISO 9001 and ISO 18001 certified with each production worm checked against the master for thread size, profile and backlash before undergoing a contact pattern check from no-load to simulated full load (shift) condition.

**Associated Products**

Renold supplies standard gear units for inclined and horizontal conveyors, together with bespoke designs manufactured to allow drop-in replacement. Renold also offers a wide range of couplings, sprag clutch and trapped roller freewheels for use on a wide range of coal applications.

### Replacement Worm Gears for CE Coal Pulverisers

<table>
<thead>
<tr>
<th>Worm Gear Size Centre Distance</th>
<th>Gear Ratio</th>
<th>Mill Size CE Mill Numbers</th>
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<tbody>
<tr>
<td>54.010&quot;</td>
<td>14 2/7</td>
<td>1003, 983, 963</td>
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<tr>
<td>48.010&quot;</td>
<td>13 3/7</td>
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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