

## Replacement Worm Gears



RILEY POWER INC.

## RB/RP/RPS Coal Pulverizer Replacement Worm Gears

### OVERVIEW

Riley Power Inc., a Babcock Power Inc. Company, has made a commitment to the power generation industry to provide unique and continuously improved products and services.

RPI, in conjunction with Renold Inc., a machine tool builder and worm gear manufacturer with over a 100 year history, can now offer interchangeable Replacement Worm Gears for existing RB/RP/RPS Coal Pulverizers in North America. Utilizing a state-of-the-art manufacturing facility dedicated to

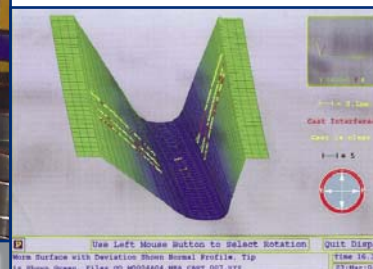
producing worm gears, we can furnish the wide range of worm gear sizes and ratios for RB/RP/RPS Coal Pulverizers.

### FEATURES / BENEFITS

#### High quality for longer life

- Worm shafts - made from high quality alloy steel.
- Threads - case hardened to produce a uniform hardened thread flank of 56-60 R/C and precision ground to 32 RMS finish.
- Gear rims - machined from centrifugally cast tin-nickel bronze with teeth hobbled to a 64 RMS finish.
- Gear teeth – hobbled to a pre-determined backlash and lead correction for each size mill providing an adequate oil wedge entry gap under deflection at full load operation.

# RENOLD Gears

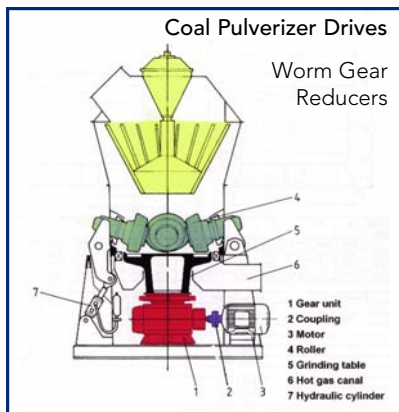




## RILEY POWER INC.

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## FEATURES / BENEFITS (CON'T)

### Match original manufacturer's profile

- Utilize a proven on-site two-part epoxy putty "profile plug lifting" technique from original manufacturer's worm.
- Hardened profile plug is used to generate the software to replicate the original profile in manufacturing of a master worm, the thread milling cutter, thread grinding wheel profile and gear hobbing tool.
- With above in-house tooling only the replacement of the failed part ( worm or gear) is required, providing a significant savings in cost.

### Manufacturing

- All manufacturing is performed in a dedicated state-of-the-art facility.
- ISO 9001: 1994, ISO 9000: 2000, and QS9000 certified.

- Each production worm is checked against master for thread size and profile.

- Each gear is checked with master worm for backlash and undergoes a contact pattern check from no-load to simulated full load (shift) condition.

### Fast turnaround

- With tooling available for several sizes and a planned stocking program of worm shaft forgings and gear rim blanks, turnaround will be within a few weeks on many replacements.

### Experience

- RPI and Renold combined have over 50 years experience in the application, servicing and manufacturing of coal pulverizer worm gears.

### Wide variety of sizes available

See chart below.

## Replacement Worm Gears for RB/RP/RPS Coal Pulverizers North American Market

Worm Gear Size Center Distance	Gear Ratio	Main Mill Sizes* RB/RP/RPS Mill No's	Installed Mills N. America**
48.010"	13 3/7	943, 923, 903, 883	257
	18 3/5	863, 843, 823	331
41.010"	17 1/5	803, 783, 763	183
36.010"	13 5/6	753, 733, 713	107
	15 1/5	703, 683	81
	16 1/5	743, 723	79
30.010"	12 2/5	673	155
	14 2/5	663, 643	36
27.010"	10 4/5	633, 613, 593	823
	13 1/2	623, 603, 583	55
21.847"	9 2/5	573	210
	11 3/4	563, 543	28
	13 3/4	533, 533A	494
	15	523, 503, 483	14

\*All sizes available

\*\*Approximate numbers

Full-Load  
Contact

No-Load  
Contact

