# Gear Drive Remanufacturing Keeps Mills Online

B&W Roll Wheel® pulverizers are a vital part of coal preparation systems and are built to last under severe conditions. To maintain peak mill operating conditions, systematic maintenance procedures are critical. In particular, gear drives require a comprehensive remanufacturing program to maintain high availability and optimize service life. Babcock & Wilcox (B&W) offers many services to support the operation of gear drive assemblies:

- Original equipment manufacturer (OEM) replacement parts to exacting specifications
- Equipment upgrading
- Remanufacturing services
- Technical expertise

## *Replace, refurbish or reuse?*

Upon dismantling the drive, all key components (including shafts, gearsets and housings) are thoroughly cleaned prior to a nondestructive examination (NDE). The NDE results identify which key components are suitable for reuse in the process. Also, in the uncommon event of drive failure during service, it is important to identify the probable failure mechanism before remanufacturing the unit. Gear drives operating under severe conditions can experience component failures resulting from a loss of lubrication, corrosion and a variety of other problems.

B&W's process of remanufacturing gear drive assemblies involves an in-depth inspection prior to re-assembly. After conducting in-depth inspections and examinations, B&W provides a detailed report that specifies the disposition of each gear drive component – parts are designated for replacement, refurbishment or reuse. Customer input is obtained at this important decision point in the remanufacturing process.

*B&W's experience has shown that preventing just one gear drive failure easily justifies the cost associated with a quality rebuild.*

## *Remanufactured and guaranteed to meet B&W's OEM standards*

Upon customer review of the inspection report, remanufacturing requirements are established. Complete refurbishment of the gear drive is performed to B&W's exacting OEM specifications. Critical custom fitting procedures are performed on all bearings, shims, shaft retainer plates and bearing caps to ensure that the drive is returned to its original dimensional standards and quality.

Remanufactured assemblies are subjected to a six-hour no-load spin test (typically only performed on new drives), and are then prepared and preserved for indoor storage. A complete summary of the service inspection and job report is sent to the owner.

## *Customized programs offer flexible solutions and options*

B&W can customize a gear drive remanufacturing program that includes all similar mills within a power

*Before*

*After*

*(Continued on reverse side)*