Light Beam Technology, Inc.
7416 W 15th Avenue
Gary, Indiana 46406
219-944-8801 Fax 219-944-8819

Boyd Machine & Repair Company
P. O. Box 93
Wolf Lake, Indiana 46796
260-635-2195 Fax 260-635-2329

BMR provides expert services in equipment repair, modification, and salvage for steel mills throughout the Midwest. **We specialize in thermal-sprayed coatings, laser materials processing, and welded overlays** to help you combat the effects of erosion, wear, and corrosion in your plant.

Because of our expertise with coatings and overlays, our *customers save thousands of dollars every year*. By spraying tough coating materials on everything from bearings and shafts to mandrel surfaces, ***BMR*** can prolong your equipment life and help you *save hundreds of hours of line down-time*. Sprayed and coated surfaces combat the effects of corrosion, heat, and wear agents and **keep your production processes moving.**

BMR offers you a wide variety of materials for coated surfaces, from **tungsten carbide** to **ceramics** to **babbitt**, depending on your needs and application. We use a variety of different coating processes, according to the type of material you need for the coating and the intended application of your part.

BMR also specializes in repair, modification, rebuild, and salvage of many different types of components used in virtually every steel processing application, like these in the table below.

Rolls	Pump Components	Mandrel Components	Other Components
Tension	Sleeves	Segment surfaces	Cylinders & pistons
Deflector	Impellers	Grip areas	Motors
Idler	Defuser rings	Arbors	Shafts
Many others	Complete pumps	Strike areas	Compressor rods

Finally, ***BMR*** offers laser hardening on carbon based steels to 60 RHC and case depths of 0.080 inch with **virtually no distortion**. And we provide other laser materials processing services like surface remelting and cladding.

Industrial Services for Steel Mills and Steel Processing

BMR - Committed To Extending Equipment Life

Over the past 30 years, ***BMR*** has developed extensive skills in **repairing, modifying, and salvaging** all types of industrial machinery and equipment damaged by catastrophe or every-day operation. And we've become expert in building new components from prints and specifications.

With our **unique machining and coating/overlay capabilities**, ***BMR*** can repair damage to your rolls and steel processing equipment, like mandrels and segments, as well as to small shafts and bearing surfaces. We can also build up worn surfaces on rolls and other high wear components before finishing them to their original dimensions. This saves you from spending important time and money on new equipment.

We know that you don't make money unless your equipment components are installed and working properly. So we provide the unique services that help you prevent costly shutdowns from wear and equipment failure.

BMR employs many different metal spraying and welding techniques to ensure the highest quality coatings and overlays for our customers. We select the proper coating material and process based on your requirements and the application of your part. Primary coating processes are:

HVOF Spray System - High **V**elocity **O**xygen **F**uel uses high pressure liquid fuel and oxygen to deposit a very even uniform coating. HVOF is used for many different metallic coatings, although carbides are the most commonly used metals.

Plasma Spray System - This process uses a plasma flame to produces a dense high quality coating. The most commonly sprayed coatings are ceramics.

Arc Wire Spray System - This process is used to spray materials on a contour. The most common materials are 400 and 300 series stainless steel, low and high carbon steels, nichrome, monel, nickel, bronze A, brass, copper, aluminum and zinc.

Welding Overlays - Used to combat a wide range of problems from corrosion to gouging/galling to low-impact wear. Application methods include MIG, TIG, and plasma welding. A wide range of corrosion- and wear-resistant materials are used.

Combustion Powder Spray System - This process applies a smooth deposit on any contour. When used to deposit Spray and Fuse alloys, the deposit is fused to the base metal, resulting in a metallurgical bond between the overlay and the base metal.

For information on how BMR can help you, call one of our sales technicians

East Chicago (219) 944-8801 **Wolf Lake (260) 635-2195**

Specializing in Thermal-Sprayed Coatings and Laser Materials Processing