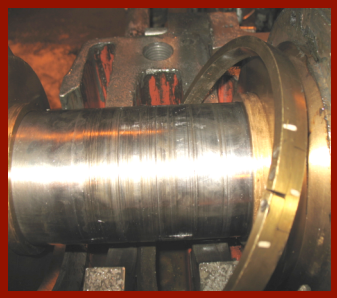
CASE STUDY

Shaft, Housing and Pump Repairs

An oversized bearing housing on a FM frame is built with Nickel and finished to size

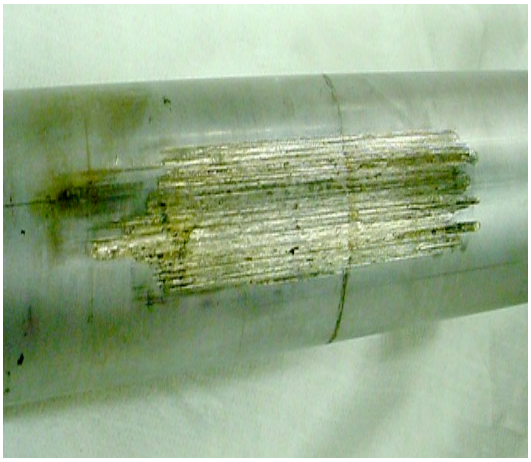


Scored seal journals on a Boiler feed pump is repaired in situ with only the removal of the seal and bearing housing

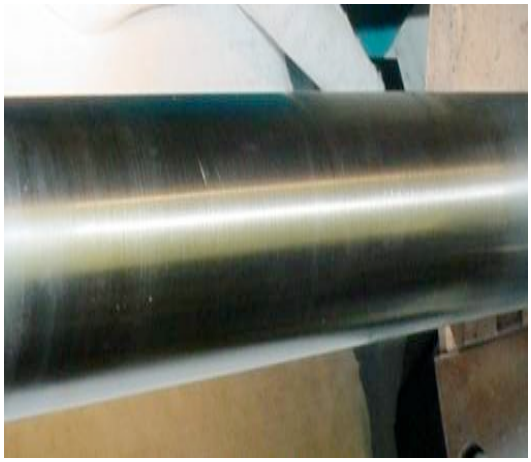
A worn 24" undersized bearing journal is built to size in place without the need of grinding.

Common uses for the Brush plating process can include multi stage pumps, bearing and seal journals, shafts and housings. Although there are many different ways to repair damaged components, Brush Plating should be considered when parts are contaminated, unavailable or is simply too large to move or disassemble.

THIS DAMAGED VALVE STEM SHAFT WAS FOUND DURING AN OUTAGE. BECAUSE NO SPARE WAS AVAILABLE MAINTENANCE WAS FACED WITH PUTTING THE DAMAGED PART BACK INTO SERVICE.



UTILIZING THE BRUSH PLATING PROCESS CMC WAS ABLE TO REFURBISH THE VALVE STEM AT SITE IN LESS THAN A SHIFT. A LOW COEFFICIENT HARD NICKEL WAS USED TO FILL THE SCORES AND THEN BLENDED WITH THE EXISTING CHROME SURFACE.



Canadian Metal-ad Corporation has found uses for the Brush plating process in many industries including OEM to after-market applications. At the specification end of the spectrum, aerospace and the nuclear industries are the prime users. The bulk of Brush Plating work is engineering applications requiring surface and profile modification, property enhancement, salvage or repair. Resizing of inside diameters on bearing housings, seal and bearing journals on shafts, repairs of fretting or corrosion, and low-stress metal additions are all possible with the CMC Brush Plating process.

How does Brush plating work: Unlike their tank counterparts, the Brush plating system uses very small volumes of solution (usually less than one or two gallons) and hand-held tools to apply the deposits or coating onto localized areas. The hand-held tool is covered with an absorbent material that is saturated with a solution then brushed or rubbed against the part. A portable power pack (rectifier) provides the direct current required for the processes. The power pack has two leads, one is connected to the tool and the other is connected to the part. The circuit is completed when the tool is touched to the work surface.

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