BELZONA 1131 & 1341 COATINGS

Pump:- Weir 18”x14” Gland Packed Stock **Industry:- Paper Mill** **Pumped Media:- Paper**

Unit as received

The unit prior to disassembly was imaged and booked on to our database which allocates a unique internal repair and tracker number.

The pump was then dismantled, pressure cleaned and shot blasted and inspected and the following was found

- The shaft is generally in a good condition but both shaft sleeves are deeply grooved due to gland packing abrasion.
- Both will need replacing after being pressed from the shaft. All sleeve make up bushes are in reasonable condition and can be re-used. The locking nuts need replacing.
- The impeller itself is in good condition but its wear rings are deeply grooved due to the abrasive action of the stock. Both wear ring areas will need to be machined away, re-built and the clearance brought back to standard.

Scored impeller neck

Scored Sleeves

Top and Bottom Pump Casings

- The bottom pump casing has been previously coated. The area around the cutwater is worn back and this ideally needs bringing back to a standard profile in order to maintain pump efficiency. The two saddles where the casing wear rings locate are in good condition. The body surface contour has lost sections of its previous coating. Both wear rings, although in a good condition, are worn on the bore. The excessive clearance will be adjusted back to standard when the impeller wear rings are refurbished.
- The top casing likewise has been coated and has lost sections of its previous coating during service. The two saddles where the casing wear rings locate are in good condition.”



Top half saddle **Cutwater wear** **Flaking coating from previous repair**

A full quotation report was then produced and sent to the customer

- The rotating assembly was brought back to standard with the impeller wear ring areas adjusted to tolerance. New bearings were fitted. All gland packing rings were replaced and the lantern rings cleaned of existing grime.
- The rotating element was dynamically balance checked and adjusted if outside tolerance.
- Both shaft sleeves were repaired with Belzona 1131 which has a unique micro-porous structure to trap and hold lubricating oil and minimize friction and wear on start up.
- The body was grit blasted to SA 2 ½ @75 microns to remove suspect coating, and achieve correct surface profile and cleanliness requirements. The internal surface contours were then coated in a two coat system of 1341 super glide due to the customer's requirement to improve efficiency and improve power consumption.
- The unique hydrophobic nature of the Belzona 1341 system makes water simply roll off. Wear by abrasion is minimized by its encapsulated blend of lubricating and abrasion resistant fillers. When applied to fluid flow equipment, Belzona 1341 can reduce power consumption, increase efficiency; lower operating costs and improve hydro dynamic performance



Casings coated with Belzona 1341 efficiency coating

The unit was then rebuilt with the following spares 2 Bearings . 2 Gland packing sets. 1 Casing Gasket .2 Throwers. 2 Sleeve O-Rings.4 Locknuts On completion of rebuild the unit was installed on to our dedicated test facility and performance tested to OEM curve


Unit being performance tested in our workshop

A test certificate was then produced and the pump spray painted and packed for despatch

C P House, 3 The Furrows,
Merlin Park, Off Barton Dock Road,
Trafford Park, **Manchester** M32 0SZ

Telephone: 0161 864 4678
Facsimile: 0161 865 0295

Email: sales@pumpgroup.co.uk

www.pumpgroup.co.uk
www.surpluspumps.co.uk