

Dear Sir,

Tracker No: T58488

Your Ref: [REDACTED]

Pump Ref: 8"/10" DMEB Medivane Split Case Pump

The unit was collected from your site by our transport.

It was returned with drive coupling but with no DE bearing housing and no DE or NDE bearing bush. **The complete DE bearing housing and split bush will be supplied free of charge** but the NDE end bearing bush will be charged for as part of the overhaul.

We confirm receipt of this pump and quote you accordingly to repair it.

The pump has been stripped, power cleaned, examined and the following found.

Condition Report



Pump as received

Inspection Report

Based on standard operational conditions and normal wear pattern we would quote to undertake the following scope of repair work.

The pump is to be rebuilt to full working condition

Rotating Assembly

The complete assembly was placed in a lathe between centre's and clocked to check concentricity. We found that the impeller run out at the periphery was 0.005" TIR which we find acceptable. As you check out from the centre outwards both shaft sleeves (which are worn) ran out by as much as 0.030" TIR (**DE**), which is unacceptable. However as rectification work is needed to the sleeves this can be rectified during the sleeve re-coating process.

Going further out to the shaft area where the bronze bearings locate we find the **NDE** is running out 0.004" TIR which is acceptable but the **DE** is running out 0.012" TIR which is outside tolerance. We propose during the shaft sleeve reclamation to metal spray and re-machine the shaft in this area to bring back to an acceptable figure

The impeller is in good condition requiring a general clean only.

The impeller wear ring location is in a good condition and the radial gap (clearance) checks out at 0.013" as measured between the casing wear ring and the impeller neck ring area at both the **DE** and the **NDE**. This is considered to be on the top side for clearance but remains acceptable.

Both shaft sleeves are worn/scored along their lengths due to gland packing action, we intend to reclaim this area back to a good surface condition by coating as previously detailed.

The shaft at the DE and the NDE (apart from the deflection previously detailed) remains in good condition requiring a general polish only to the remaining landings.

The complete rotating element will be balance checked and if found outside tolerance will be dynamically re-balanced back to specification.

The supplied half coupling will be re-fitted prior to return of the pump.



General View



Impeller vanes and shrouds



Shaft Sleeve



Shaft Sleeve



Shaft at bearing journal



Impeller wear ring areas



Casing Volute top and bottom halves

Both volute casing top and bottom halves remain in reasonable condition. They will be cleaned up during the re-assembly stage. The casing wear rings have been checked against the impeller and found to be acceptable.

The stuffing box bores and lantern restrictors will be cleaned up during re-assembly.



Top Half



Bottom Half



NDE and DE Casing Wear Rings



Bearing Assemblies

The ball thrust bearing will be replaced.

The DE bearing cap will be replaced at our cost and the cap married to the bottom half casing in our possession. The complete assembly will be bored out as a whole for concentricity.

The DE split bronze bush bearing will be replaced at our cost by manufacturing a new assembly and toleranced to suit the bearing housing above. The top half clearance will be maintained for oil lubrication.

The NDE bearing housing is in good condition but it will be machined out to the same dimensions as that for the DE assembly.

As we did not receive the NDE split bronze bearing bush this will be replaced and sized to suite the revised dimensions of the NDE bearing housing.

All bolts, dowel pins and oil site glasses will be replaced.

The two oil rings remain in good condition as does the bearing endplates.

NOTE only one temperature gauge was fitted when it came back we assume you will supply your own from stock and fit.

Repair Proposal

Dismantle for inspection report together with images the condition found.

Pressure wash all components after dismantling.

Carry out remedial work as detailed above.

Check and adjust running tolerances back to standard

Check and adjust rotating element balance.

Re-Set bearing setting.

Carry out Performance Test.

Spray unit Hamerite Blue

Prepare for despatch

Transport unit back to your site – Offload by yourselves

Supply & Fit

1 x Thrust Bearing

1 x PB NDE Split Bearing Bush

2 x Sets Housing Gaskets

1 x Casing Gasket

4 x Oil Site Glass

2 x Sets Gland Packing Rings

1 x DE Bearing Assembly with PB split DE bearing bush **to our cost**

Replacement of various fastenings, dowel pins, oil and consumables as required.

Rectification Work

As detailed above

Price to Repair the above unit fitting all parts as detailed £ inclusive of return delivery to site, excluding VAT.

Anticipated availability will be 4 to 5 working weeks from your permission to proceed.

As an **extra** to the above and for your consideration, we can at this overhaul coat the internal water passage profile of the top and bottom half pump casings together with the impeller with an energy efficient coating.

The additional price to carry out the complete coating process is £ **excluding VAT.**

Delivery would remain on a similar timescale to that given above

Goods supplied as our standard terms and conditions. Terms 30 days.

We trust our quotation meets your approval. In the meantime no further action will be taken on this unit until your full instructions are received.

We offer a full installation and commissioning service on this type of pump. Whether it's a simple like for like swap or a brand new installation involving, mechanical, electrical and civil work. PSRG can offer - [The complete service for industrial pumps!](#)

Yours faithfully,

Jeff Milner
Quotation Department