
vertical pump

Posted by marine74 - 2008/07/07 05:36

I have a Allis Chalmers 20x12VTSC.(vertical) It pumps effluent water(nasty). There are 3 identical pumps. One of them keeps loosing impellers. They are the tapered sleeve fit type. The other two no problems except for bushing wear. Can't find any info on material or any on this pump. Was wondering if anyone else had this problem and how was it fixed. Right now there talking about welding impeller bore and bore with keyway. Then make a jib key. But my question is why?????? The other two are ok. The turn about 1180 rpm. Thanks!!

=====

Re:vertical pump

Posted by Norvicute - 2008/07/07 18:18

Hi Marine74,

Yes it is right to know why one has a problem since the two other pumps are working fine. Your curiosity is good.

Material standard in our company for effluent water service is 316SS construction with hard facing of wear rings (nitronic 50/60) for the protection from wear cause by abrasives.

Your problem is your loosing impeller. For a 18" and larger pump (yours is 20") the standard is keyed impeller and not tapered sleeve fit type. Taper locked is only good for 17" below.

Now modifying or reverse engineering on pump may cause problem specially on balancing.

You must contact Allis Chalmers for them to replace your bowl assembly with a keyed impeller.

You may consider also putting hardfaces on your wear rings and bushings.

You can also put strainer.

Hope that helps.

;) ;)

=====