



Double adjustment pumps

You may already have a Metso pump without knowing it!
Discover here how to optimize its performance.

The Metso dual adjustment frame allows for optimal adjustment of the impeller parts (front and rear), thus reducing wear and increasing spare parts life.

Controlling the axial settings helps ensure proper pump operation by minimizing recirculation and wear.

Thanks to a regular adjustment, the efficiency is maintained, the absorbed power is minimized and the sealing optimized.

For proper operation of the pump, it is essential to follow periodic inspections as recommended in the manual supplied with the pump and in which the adjustment and maintenance procedure is described.

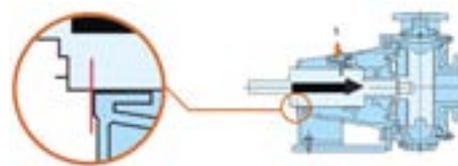
Here is an alternative method of adjusting the double adjustment pumps gained from our field experience.

1. Preparation before adjustment

After recording the pump,
Remove the transmission guard.
Remove the protective cover (P24)
Loosen the two bearing fixing screws (P16), the two tension screws (P23) and the stop nut

of the adjusting screw (P38).
While turning the shaft manually, move the shaft bearing forward until the impeller comes into contact with the front shield.

Using a punch, mark this position under the shaft bearing as shown in the diagram below:

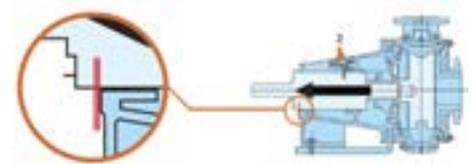


2. Adjusting clearances

Adjust the back clearance as shown in the manual, using the adjusting screw.
Tighten the fastening and tensioning screws and make sure that the turbine can rotate freely.

The distance between the frame and the line indicates the total space between the front of the turbine and the front armor.

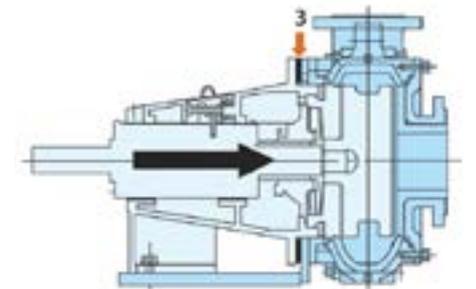
Subtracting from this value the necessary 2 mm clearance you get the number of shims to remove (each shim having a thickness of 2 mm).



3. Setpoint before restart

After adjusting the front clearance, do not forget to tighten the pump body screws as indicated in the manual. Make sure the turbine turns freely and realign the transmission if necessary before restarting.

REMINDER: The optimum clearance is 2 mm, obtained by loosening the adjusting screw one full turn when the turbine is in contact with the shield.



Did you know? +

To find out if you have a single or double adjustment pump, you only have to refer to the pump's nomenclature.

S = Simple and D = Double

For example, a HR150 ENR- (D) C4 is a double adjustment pump. ■