

WBHE VS WB

PARTS COMPARISON

WBHE VS WB

The following presentation will outline the parts that have been modified to accommodate higher pressure ratings for the WBHE Compressor.

The WBHE and the WB are identical machines with the following exceptions presented in this PowerPoint presentation.

WBHE VS WB

Max Working Pressures

WB Max Working Pressure = **313 PSIG**

WBHE Max Working Pressure = **377 PSIG**

When equipped with high pressure rated refrigeration shut-off valves and appropriate safety relief valves.

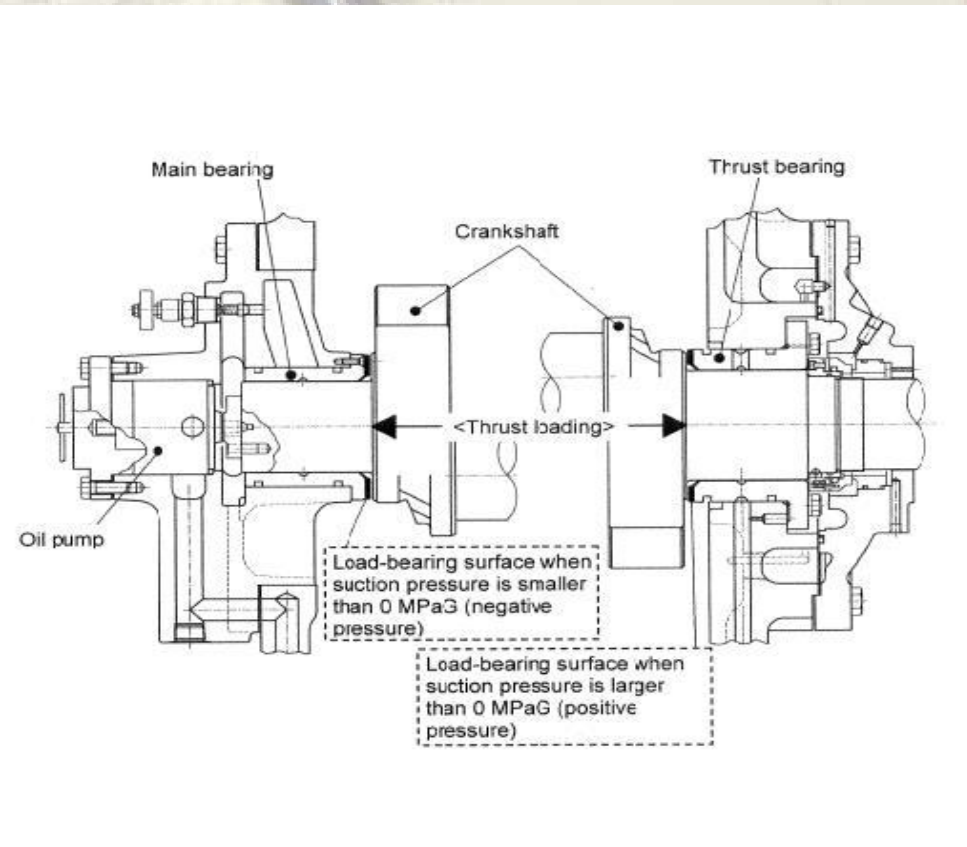
Main Bearing WBHE VS WB

- The new WBHE Main Bearing on the left as compared to the WB Main Bearing on the right.

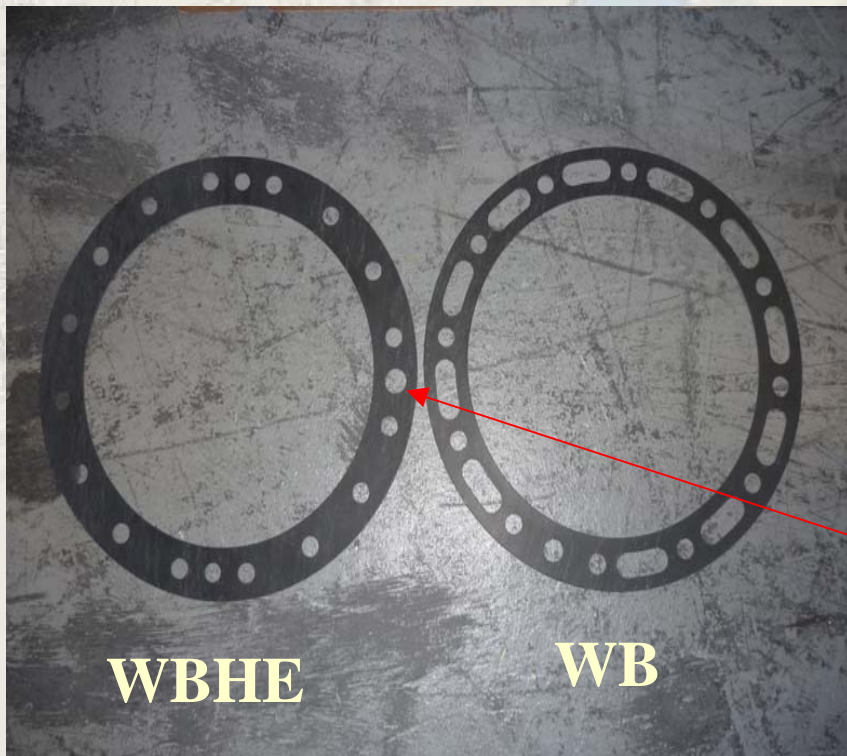


Main Bearing WBHE

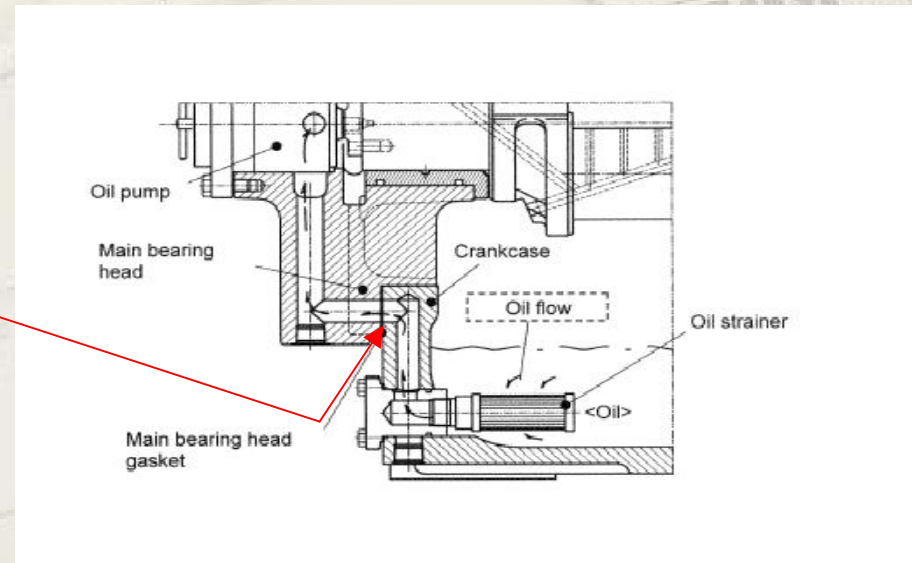
- Main bearing modified to absorb thrust load when suction pressure is below 0 PSIG.



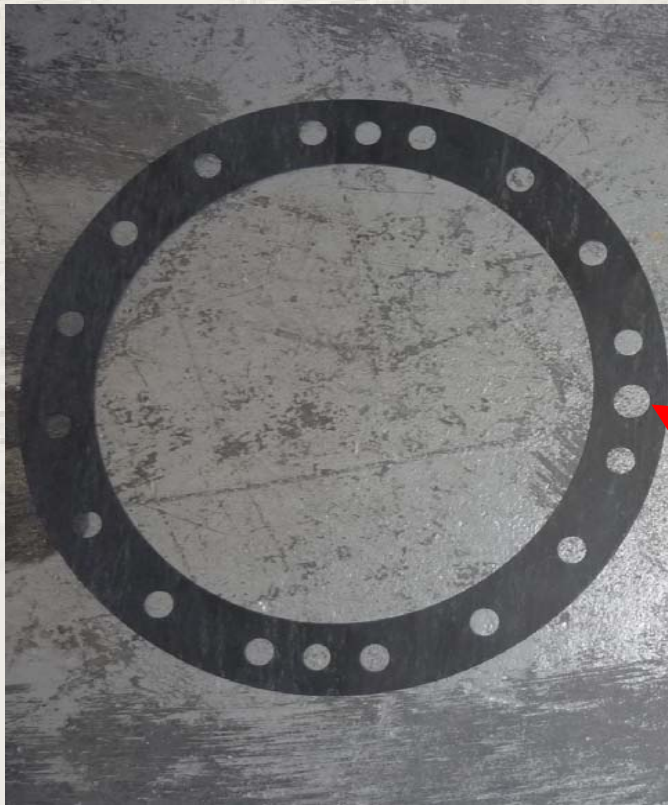
Main Bearing Head Gasket WBHE VS WB



- WBHE Main Bearing Head Gasket shown on the left.



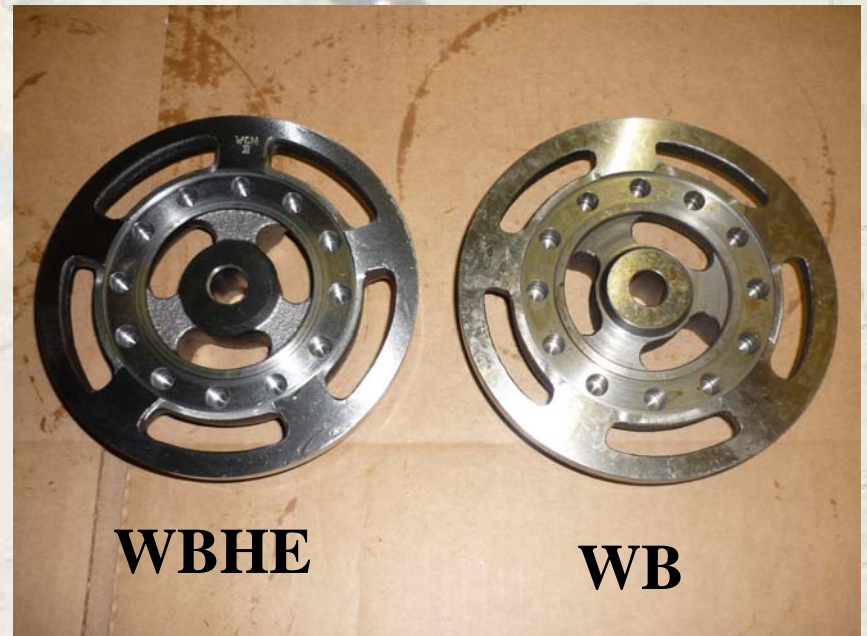
Main Bearing Head Gasket WBHE



- Redesigned to allow new oil pump suction flow.
- New design allows for improved seal on pump suction.
- Gasket hole for oil pump suction.

Discharge Valve WBHE VS WB

- New WBHE discharge valve on left.
- Model designation change from WCN to **WCN-II**
- Change done to incorporate higher pressure ratings.



Discharge Valve WBHE

- Standard WB springs and valves are still used.



Suction Valve Plate WBHE VS WB

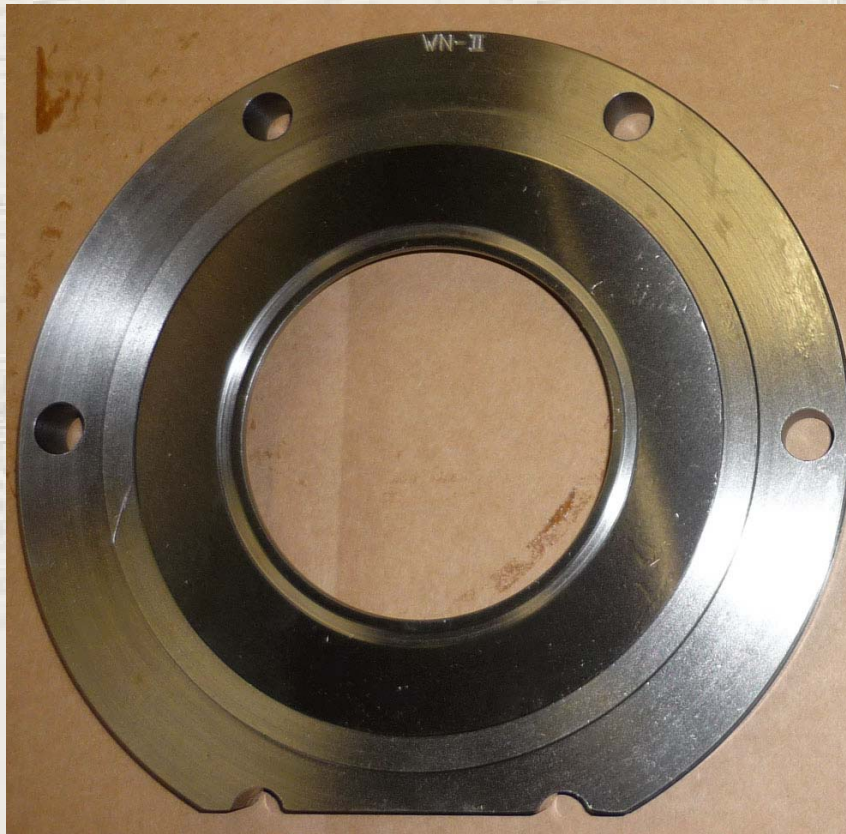


WBHE

WB

- New WBHE suction valve plate on left.
- Redesigned to accommodate higher pressures.

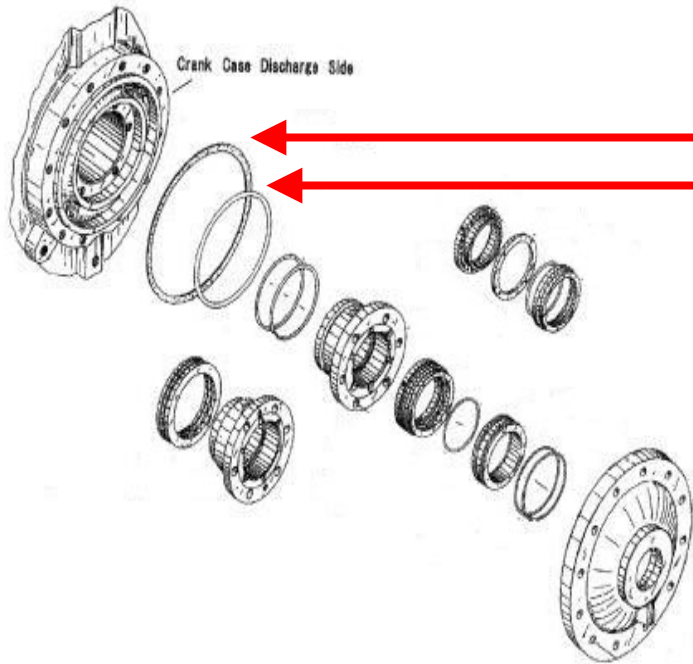
Valve Plates



- New model designation for WBHE suction valve plate stamped **WN-II**
- Uses the same suction springs and suction valves as the WB

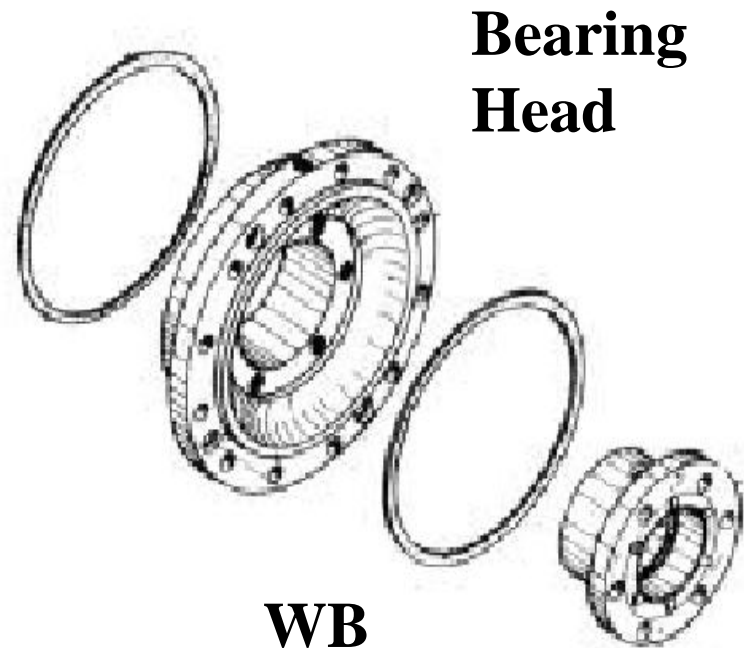
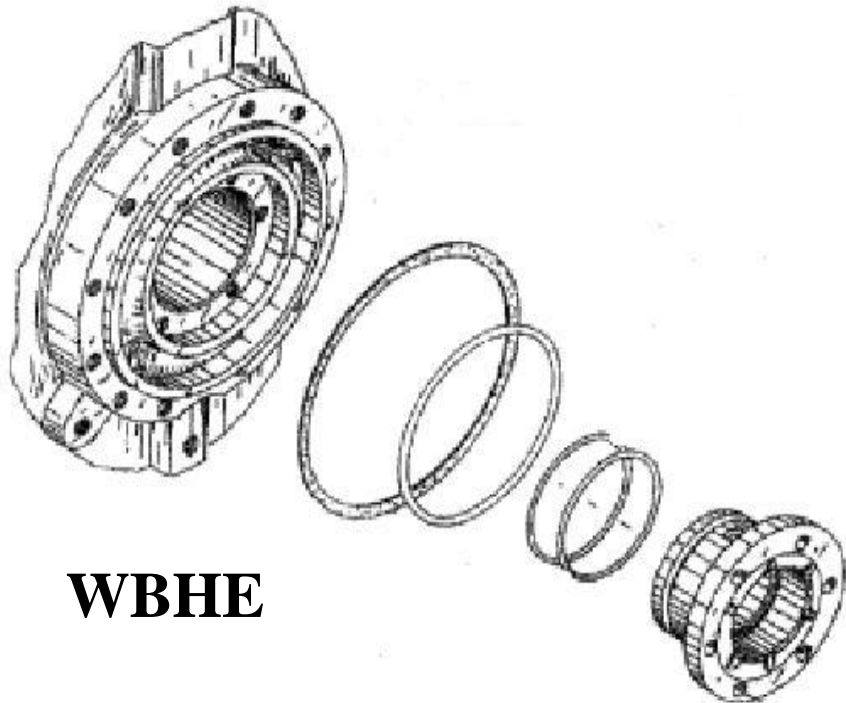
O-Rings

Exploded View of Thrust Bearing



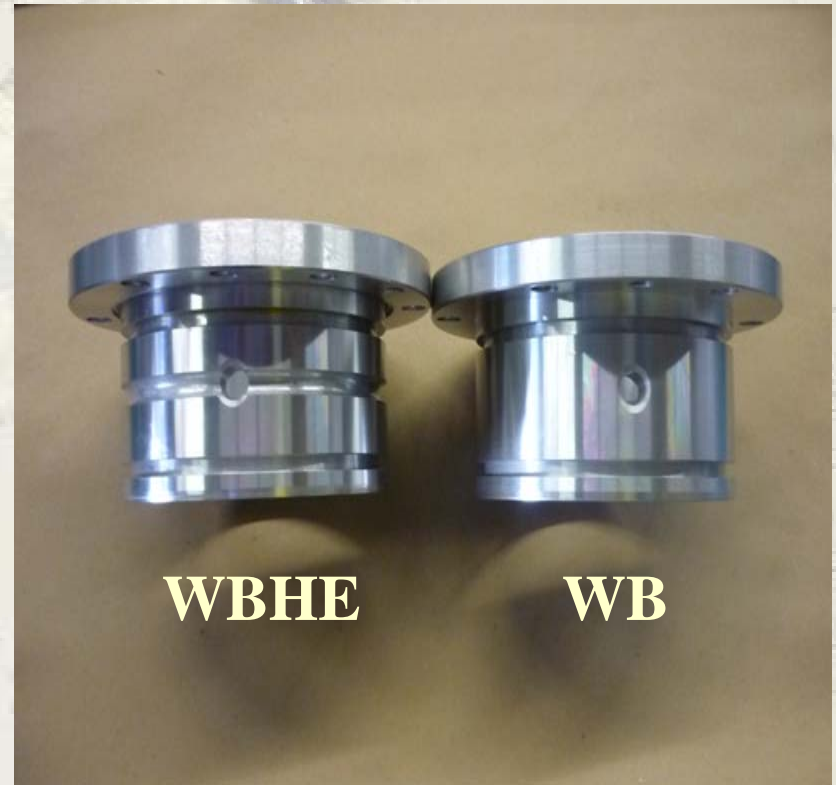
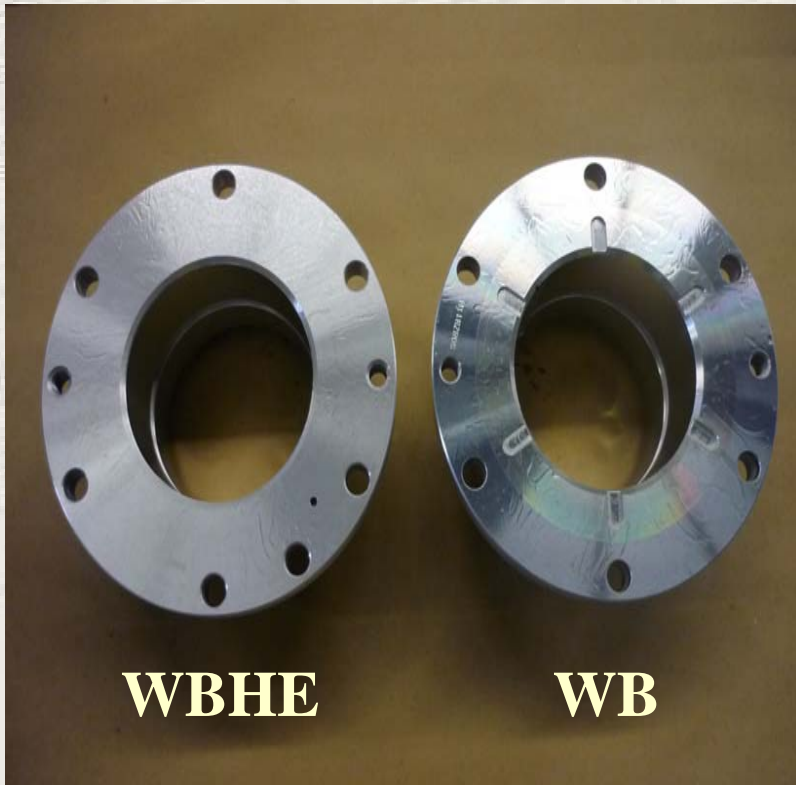
Bearing Head Change

Bearing head is now incorporated in the crankcase of the WBHE

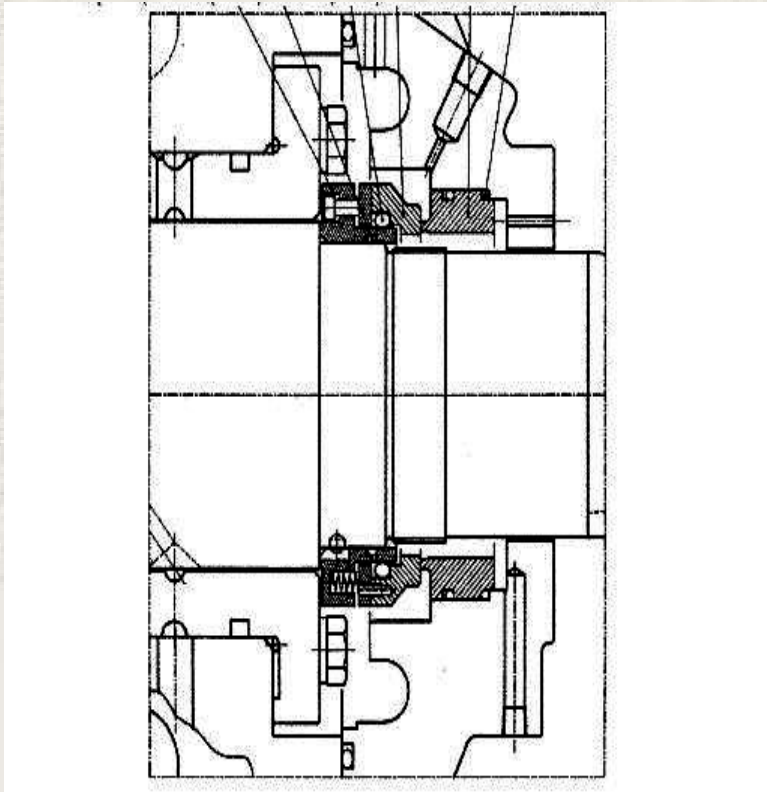


Note: Crankshaft can only be removed through main bearing end on the WBHE.

Thrust Bearing WBHE VS WB



Thrust Bearing WBHE



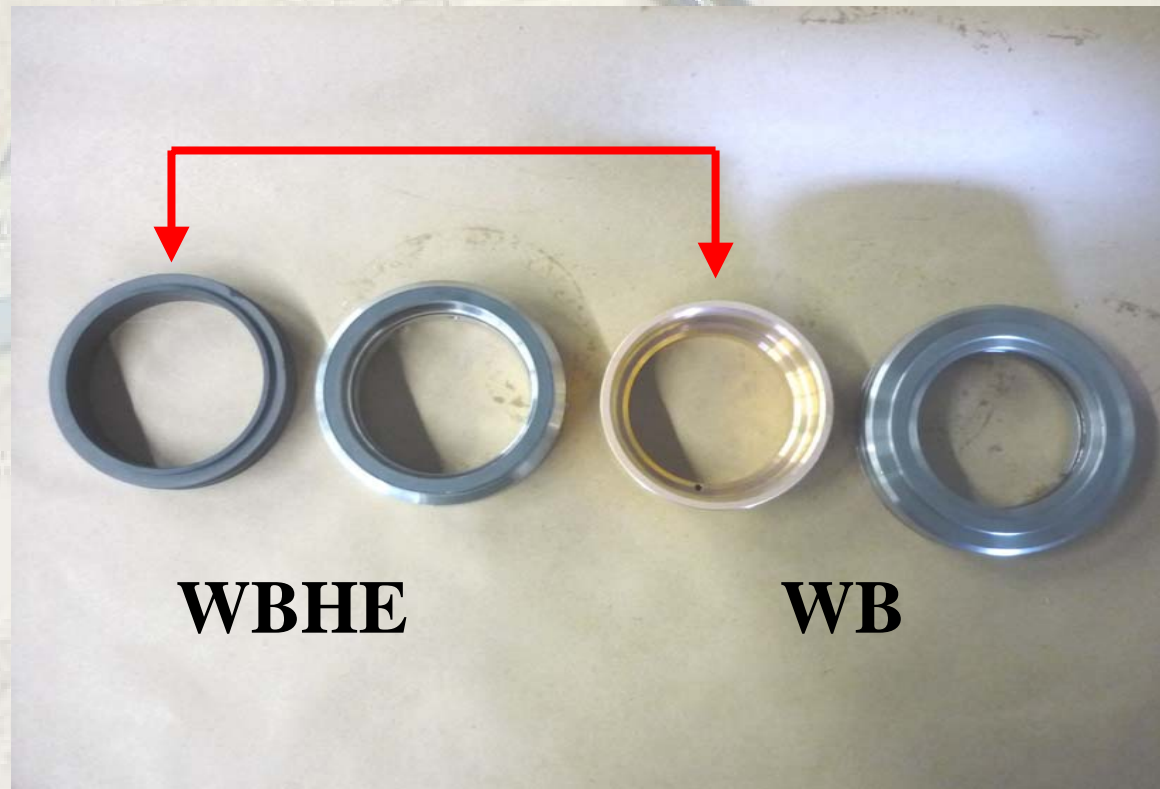
- Note: The thrust surface is plain as opposed to the dimpled surface on the WB series.
- This is due to the new seal configuration.

Mechanical Seal Assembly WHBE



Mechanical Seal Assembly WBHE VS WB

Note: The WBHE seal ring is of a carbon construction as opposed to the WB which is of a Derry Bronze.



Piston WBHE



- Note: 3 ring configuration on the WBHE as opposed to the 4 ring configuration on the WB.

Pistons WBHE VS WB



WBHE

WB

Piston Rings WBHE VS WB

- The WBHE 3 ring configuration.

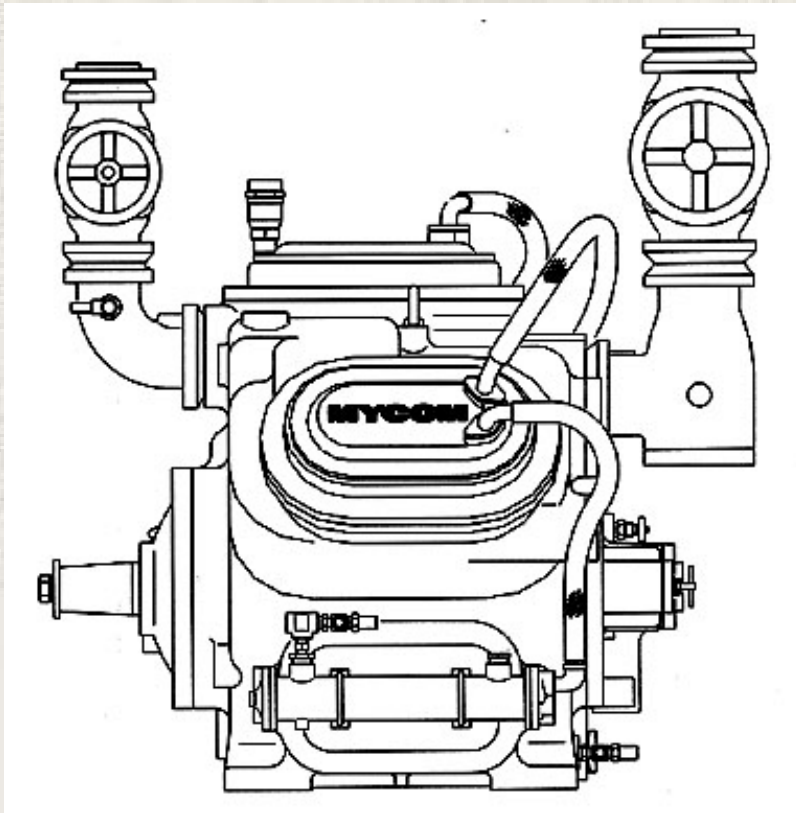


Piston Rings WBHE

- WB standard 4 ring configuration.



Water Cooling WBHE



- No jacket cooling required.
- Head cooling and oil cooler remain the same as WB series.

WBHE / WB

STANDARD CONFIGURATION SIMILIARITIES

- Pressure Configuration ⇔ Same as WB
- Footing Dimensions ⇔ Same as WB
- Valves ⇔ Same as WB
- Shaft ⇔ Same as WB
- Oil Pump ⇔ Same as WB
- Head Gaskets ⇔ Same as WB
- Flywheels ⇔ Same as WB

WBHE COMPRESSOR PROFILE



WBHE NAMEPLATE

