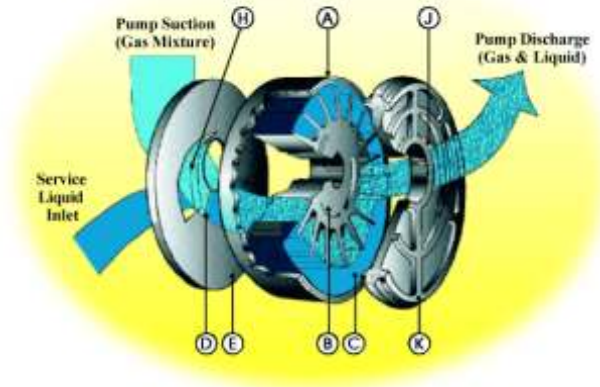


Sihi LIQUID RING VACUUM PUMP



How does it work

In a round pump body (A), a shaft mounted impeller (B) is positioned at a point eccentric to the centerline of the pump body. The centrifugal action of the rotating impeller forces the service liquid introduced via channel (D) towards the periphery of the pump body forming the liquid ring (C). When pumping action is achieved, the gas mixture being handled is introduced to the impeller through the suction port (H), in the intermediate plate (E), causing a vacuum at the pump suction.

During the compression cycle heat is being imparted to the liquid ring. In order to maintain a temperature below the vapor point of the service liquid, cooling must be applied. Cooling is achieved by continuously adding a cool supply of service liquid to the liquid ring. The amount of service liquid added is equal to that discharged through the discharge port (J) together with the compressed gas mixture. The gas mixture and service liquid is eventually passed through the pump discharge for separation..



Operation

Start up procedure:

- With water, fill the pump to the centre of the impeller shaft.
- Turn the transmission axis manually to ensure it is turning freely. If it does not turn, tap the end of the axis to free the impeller. The problem is usually caused by rust. A solvent may be necessary.
- Make sure the pump is turning in the direction indicated on the end covers.
- Check the alignment of the coupling on the drive shaft.
- Open the fresh water feed line..

Hook-Up Requirements

- Electrical: According to motor selection.
- Exhaust pipe: (1/2"to3/4"Diameter depending on the pump size)
- Cold water feed pipe (1/2"to3/4"Diameter depending on the pump size)
- (If surface water is used as feed line, a filter is needed)

Models

- 3404 Sihi pump with 3HP motor, frame, coupling & protection cover
- 3404 pump head only
- 3408 Sihi pump with 5HP motor, frame, coupling & protection cover
- 3408 pump head only
- 40412 Sihi pump with 7.5HP motor, frame, coupling & protection cover
- 40412 pump head only
- 40517 Sihi pump with 10HP motor, frame, coupling & protection cover
- 40517 pump head only

Do & Don't's

- Follow the start up and shut down procedures
- Do not overfill the pump with water. It may cause damage to the Motor.

Maintenance

Very little **maintenance** is required.

- Lubricate the bearings every 3000 hours with bearing grease.

Storage procedures:

- The pump must be at all time protected from the frost.
- Drain the unit completely by removing the drain plugs to protect from against freezing.
- When draining, rotate the shaft by hand. Once properly drained, install back the plugs. Fill with glycol.