DRY VACUUM PUMP SR-DVP-200/ SR-DVP-300/ SR-DVP-400



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SYSTEM DRY VACUUM (SR-DVP200)

MODEL : SR-DVP200/ SR-DVP300/ SR-DVP400

CAPACITY :- 200 m3/HR

CUSTOMR:-

MFG DATE :/....../......

DAL-DATE/...../...../

PUMP SR NO:-

MOTOR / RPM :- 10 HP / 15 HP / 1440 RPM HP

OIL MAKE :- HP MAKE / ENCLO 100

CYLINDER :- SS 316

VALVES :- SS 316

Water cooling outlet (Top 1/2 " bsp) must go to drain without any valve .

Valve should be installed in water inlet line only for isolation when required . valve in exit water line

Interlock pump motor with booster motor such that booster can not be Started without pump motor running . Install vacuum switch to Insure That Booster Starts only after 30 to 40 torr vacuum is reached .

Purging Chamber has been provide Below bottom vacuum header,

Purging of gas if required please S R INDUSTRIES conta +91 9604299733. Tray with wet packed column at suction in very Necessary

STRCTURE

- 1) Pump base
- 2) Body
- 3) Crank shaft
- 4) Taper roller bearing
- 5) Connecting rod bushes
- 6) Connecting rod
- 7) Crosshead
- 8) Crosshead pin
- 9) Needle bearing
- 10) Skeleton bearing
- 11) Cylinder neck
- 12) Filler bin
- 13) Axle sleeve
- 14) Cylinder
- 15) Piston rod
- 16) Piston
- 17) Piston ring
- 18) Cylinder cover
- 19) Air valves sets
- 20) Belt Pully

Maintenance manual

- A) To prevent pellet from outside into pump, the covers of gas inlet and gas outlet cannot be removed until pipes are welded & cleaned.
- B) The pump must be fixed on horizontal ground with foundation bolts.
- C) Three way pipe valve can be installed for pump communicate with air or pumped case.
- D) Rust, metal bits and electric welding bits or other impurity must be cleaned away in pipe

E) Thin mesh filter (not more than 0.5 mm) should be installed in the inlet pipe to prevent impurity in pipe before start.

F) In the case of following, some accessories is need Condenser must be installed in the front of inlet, pipe when the gas contains a great deal steam.Gas must be neutralized before gas into pump or use Cautery-resistant when gas contain causticity gas.

The gas must be cooled before entering pump when gas temperature is over than 60 degree. Separator must be installed when gas contain a great deal liquid so that it can avoid a great deal liquid into pump and damage it.

4 Start

A). To check flange, tie-in and valve in gas inlet pipe and ensure that there is no leak.

B) To check vacuum pump, ensure that there is no any impurity inside.

C) To inject clean .lubricant. lubricant level can swung on the top of crosshead when pump is running; Lubricant level reaches over half of lubricant window.

- D) Lubricant:
 No. 40 mechanical oil in winter
 No. 50 mechanical oil in summer
- E) To turn on cooling water valve
- F) To turn on three-way pipe
- G) To turn triangle belt wheel a few rounds by hand if it is first time or no work for long time, ensure there is no fault.

5 Run

A) To turn on power of motor to start vacuum pump. Running direction is clockwise seen from end of belt wheel.

6 Stop

- A) To shut off inlet valve
- B) To turn on valve, and shut off inlet valve of cooling water after the pump is stop for 10 minutes
- C) To release ail water from pipe to avoid ice over in winter.

7 Maintenance

- A) To check lubricant level If it is not enough, supply it in time
- B) To check water inlet valve and gas inlet valve, if there is leak, repair it at once.
- C) To check triangle belt, if loose or tighten, adjust it at once
- D) To often check bearing and cross nead and other, if there is overheat, repair it at once.
- E) To often check stuffing of piston rod, if it is loosen or damaged, replace new one
- F) First time, to replace lubricant after 100-120 hours' running. Then replace lubricant after 1000-1500 hours' running later
- G) To check all part of pump after 1000-1500 hours' running. Such as piston and piston ring in the Cylinder, bearing, axle sleeve and other, if there is damaged, new one must be changed instead of old one
- H) To check and clean cylinder and passing pipe of air valve after 1000-1500 hours' running. If there is mushy matter, or a block in the pipes, to check and clean it in tune or check it timely.
- I) Heavy repair must be held after 2500 hours' running. All part is unpicked and washed, and reassembly it. Piston position must be adjusted after repairing, ensure that there is 1.5mm leak between cylinder cover and cylinder neck surface when piston is on top or bottom of cylinder.
- J) To often check if piston, connecting rod, crankshaft, crosshead loosen.

8 Note

- A) When user suck gas by the pump and ask to reclaim discharged air and impurity in vacuum system and reclaim equipment r cleaned out before start
- B) When user suck flammable and explosive gas by the pump, there is no any leak, and stop valve must be installed to a\ leak into pump
- C) When user suck flammable and explosive gas by the pump, impurity in vacuum system and Reclaiming equipment must be cleaned out before start