

Hydraulic Pumps for Forklift

Forklift Hydraulic Pump - Commonly utilized within hydraulic drive systems; hydraulic pumps can be either hydrostatic or hydrodynamic.

Hydrodynamic pumps can be considered fixed displacement pumps. This means the flow all through the pump for every pump rotation could not be altered. Hydrodynamic pumps could also be variable displacement pumps. These types have a much more complicated construction that means the displacement can be altered. Conversely, hydrostatic pumps are positive displacement pumps.

Nearly all pumps are working within open systems. Normally, the pump draws oil from a reservoir at atmospheric pressure. In order for this process to run well, it is essential that there are no cavitations taking place at the suction side of the pump. So as to enable this to work right, the connection of the suction side of the pump is larger in diameter compared to the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is normally combined. A common option is to have free flow to the pump, that means the pressure at the pump inlet is a minimum of 0.8 bars and the body of the pump is normally in open connection with the suction portion of the pump.

In a closed system, it is okay for there to be high pressure on both sides of the pump. Often, in closed systems, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, generally axial piston pumps are utilized. Because both sides are pressurized, the pump body needs a different leakage connection.