

Hydraulic Pumps for Forklift

Forklift Hydraulic Pump - Hydraulic pumps could be either hydrostatic or hydrodynamic. They are usually utilized within hydraulic drive systems.

Hydrodynamic pumps can be considered fixed displacement pumps. This means the flow through the pump per each pump rotation cannot be changed. Hydrodynamic pumps could even be variable displacement pumps. These types have a much more complex composition which means the displacement is capable of being altered. On the other hand, hydrostatic pumps are positive displacement pumps.

Most pumps are functioning in open systems. Normally, the pump draws oil from a reservoir at atmospheric pressure. In order for this particular process to run well, it is essential that there are no cavitations occurring at the suction side of the pump. So as to enable this to work correctly, the connection of the suction side of the pump is larger in diameter as opposed to the connection of the pressure side. Where multi pump assemblies are concerned, the suction connection of the pump is normally combined. A general alternative is to have free flow to the pump, meaning the pressure at the pump inlet is at least 0.8 bars and the body of the pump is normally in open connection with the suction portion of the pump.

In the cases of a closed system, it is okay for both sides of the pump to be at high pressure. Usually in these conditions, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, usually axial piston pumps are used. As both sides are pressurized, the pump body needs a separate leakage connection.