

Hydraulic Pumps for Forklift

Forklift Hydraulic Pumps - Normally utilized within hydraulic drive systems; hydraulic pumps could be either hydrostatic or hydrodynamic.

Hydrodynamic pumps could be considered fixed displacement pumps. This means the flow throughout the pump per each pump rotation cannot be adjusted. Hydrodynamic pumps can likewise be variable displacement pumps. These types have a more complex assembly which means the displacement is capable of being adjusted. On the other hand, hydrostatic pumps are positive displacement pumps.

The majority of pumps are functioning in open systems. Usually, the pump draws oil from a reservoir at atmospheric pressure. In order for this process to run smoothly, it is essential that there are no cavitations happening at the suction side of the pump. In order to enable this to function correctly, the connection of the suction side of the pump is bigger in diameter than the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is typically combined. A general 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 often in open connection with the suction portion of the pump.

In the cases of a closed system, it is acceptable for both sides of the pump to be at high pressure. Often in these situations, the tank is pressurized with 6-20 bars of boost pressure. In the instance of closed loop systems, generally axial piston pumps are utilized. Since both sides are pressurized, the pump body needs a different leakage connection.