

## Forklift Hydraulic Pumps

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

Hydrodynamic pumps can be considered fixed displacement pumps. This means the flow all through the pump for each pump rotation could not be changed. Hydrodynamic pumps can also be variable displacement pumps. These types have a more complex construction which means the displacement is capable of being adjusted. Conversely, hydrostatic pumps are positive displacement pumps.

The majority of pumps function as open systems drawing oil from a reservoir at atmospheric pressure. It is important that there are no cavities taking place at the suction side of the pump for this particular process to work efficiently. So as to enable this to work properly, the connection of the suction side of the pump is bigger in diameter as opposed to the connection of the pressure side. With regards to multi pump assemblies, the suction connection of the pump is usually combined. A common choice is to have free flow to the pump, meaning 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 the instances of a closed system, it is acceptable for both sides of the pump to be at high pressure. Often in these conditions, the reservoir is pressurized with 6-20 bars of boost pressure. In the case of closed loop systems, normally axial piston pumps are used. Because both sides are pressurized, the pump body needs a different leakage connection.