## Torque Converter for Forklifts

Forklift Torque Converter - A torque converter is actually a fluid coupling which is used in order to transfer rotating power from a prime mover, that is an electric motor or an internal combustion engine, to a rotating driven load. The torque converter is similar to a basic fluid coupling to take the place of a mechanized clutch. This allows the load to be separated from the main power source. A torque converter can offer the equivalent of a reduction gear by being able to multiply torque whenever there is a substantial difference between input and output rotational speed.

The most popular kind of torque converter used in car transmissions is the fluid coupling type. In the 1920s there was even the Constantinesco or otherwise known as pendulum-based torque converter. There are different mechanical designs used for continuously variable transmissions which could multiply torque. Like for instance, the Variomatic is a type that has expanding pulleys and a belt drive.

The 2 element drive fluid coupling is incapable of multiplying torque. Torque converters have an part referred to as a stator. This changes the drive's characteristics throughout occasions of high slippage and generates an increase in torque output.

In a torque converter, there are a minimum of three rotating elements: the turbine, to be able to drive the load, the impeller which is driven mechanically driven by the prime mover and the stator. The stator is between the turbine and the impeller so that it could alter oil flow returning from the turbine to the impeller. Traditionally, the design of the torque converter dictates that the stator be prevented from rotating under whichever situation and this is where the word stator starts from. In point of fact, the stator is mounted on an overrunning clutch. This design prevents the stator from counter rotating with respect to the prime mover while still allowing forward rotation.

In the three element design there have been alterations which have been integrated periodically. Where there is higher than normal torque manipulation is required, changes to the modifications have proven to be worthy. Usually, these modifications have taken the form of many stators and turbines. Every set has been intended to generate differing amounts of torque multiplication. Various examples include the Dynaflow which makes use of a five element converter in order to generate the wide range of torque multiplication considered necessary to propel a heavy vehicle.

Though it is not strictly a part of classic torque converter design, various automotive converters comprise a lock-up clutch to be able to lessen heat and so as to improve cruising power transmission efficiency. The application of the clutch locks the impeller to the turbine. This causes all power transmission to be mechanical that eliminates losses connected with fluid drive.