

## Torque Converter for Forklift

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

The most popular kind of torque converter utilized in automobile transmissions is the fluid coupling kind. During the 1920s there was also the Constantinesco or pendulum-based torque converter. There are different mechanical designs for always variable transmissions which have the ability to multiply torque. For example, the Variomatic is a kind that has expanding pulleys and a belt drive.

A fluid coupling is a 2 element drive which could not multiply torque. A torque converter has an added component which is the stator. This changes the drive's characteristics through occasions of high slippage and generates an increase in torque output.

Within a torque converter, there are at least of three rotating elements: the turbine, so as to drive the load, the impeller which is driven mechanically driven by the prime mover and the stator. The stator is between the impeller and the turbine so that it could alter oil flow returning from the turbine to the impeller. Normally, the design of the torque converter dictates that the stator be prevented from rotating under any condition and this is where the word stator starts from. Actually, the stator is mounted on an overrunning clutch. This particular design stops the stator from counter rotating with respect to the prime mover while still permitting forward rotation.

In the three element design there have been modifications that have been integrated sometimes. Where there is higher than normal torque manipulation is needed, changes to the modifications have proven to be worthy. Usually, these alterations have taken the form of multiple stators and turbines. Each set has been meant to generate differing amounts of torque multiplication. Some instances comprise the Dynaflo that uses a five element converter so as to produce the wide range of torque multiplication considered necessary to propel a heavy vehicle.

Various auto converters consist of a lock-up clutch to be able to reduce heat and so as to enhance the cruising power and transmission effectiveness, although it is not strictly part of the torque converter design. The application of the clutch locks the turbine to the impeller. This causes all power transmission to be mechanical which eliminates losses related with fluid drive.