

## Torque Converter for Forklifts

Torque Converter for Forklift - A torque converter is a fluid coupling that is used to be able 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 mechanical clutch. This enables the load to be separated from the main power source. A torque converter could offer the equivalent of a reduction gear by being able to multiply torque whenever there is a considerable difference between output and input rotational speed.

The most popular type of torque converter used in car transmissions is the fluid coupling unit. During the 1920s there was likewise the Constantinesco or also known as pendulum-based torque converter. There are other mechanical designs for constantly changeable transmissions that can multiply torque. Like for example, the Variomatic is one version which has a belt drive and expanding pulleys.

A fluid coupling is a 2 element drive which cannot multiply torque. A torque converter has an additional part that is the stator. This alters the drive's characteristics through occasions of high slippage and produces an increase in torque output.

Inside a torque converter, there are at least of three rotating parts: 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 impeller and the turbine 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 originates from. In reality, 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 changes that have been incorporated sometimes. Where there is higher than normal torque manipulation is required, alterations to the modifications have proven to be worthy. Usually, these modifications have taken the form of many turbines and stators. Every set has been meant to produce differing amounts of torque multiplication. Various examples include the Dynaflo that uses a five element converter in order to generate the wide range of torque multiplication considered necessary to propel a heavy vehicle.

Various car converters include a lock-up clutch to reduce heat and to be able to enhance the cruising power and transmission efficiency, even if it is not strictly component of the torque converter design. The application of the clutch locks the impeller to the turbine. This causes all power transmission to be mechanical that eliminates losses related with fluid drive.