

## Torque Converters for Forklift

Forklift Torque Converter - A torque converter in modern usage, is normally a fluid coupling that is utilized in order to transfer rotating power from a prime mover, for example an electric motor or an internal combustion engine, to a rotating driven load. Same as a basic fluid coupling, the torque converter takes 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 substantial difference between output and input rotational speed.

The most common type of torque converter used in automobile transmissions is the fluid coupling kind. During the 1920s there was also the Constantinesco or likewise known as pendulum-based torque converter. There are other mechanical designs utilized for continuously changeable transmissions which could multiply torque. For instance, the Variomatic is one type that has a belt drive and expanding pulleys.

The 2 element drive fluid coupling is incapable of multiplying torque. Torque converters have an element known as a stator. This alters the drive's characteristics through times of high slippage and produces an increase in torque output.

In a torque converter, there are at least of three rotating elements: the turbine, so as to drive the load, the impeller that is driven mechanically driven by the prime mover and the stator. The stator is between the turbine and the impeller so that it can change oil flow returning from the turbine to the impeller. Usually, the design of the torque converter dictates that the stator be prevented from rotating under whichever condition and this is where the term stator begins from. In truth, 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 that have been integrated at times. Where there is higher than normal torque manipulation is needed, alterations to the modifications have proven to be worthy. Most commonly, these alterations have taken the form of several turbines and stators. Each and every set has been intended to generate differing amounts of torque multiplication. Several examples consist of the Dynaflo that uses a five element converter so as to produce the wide range of torque multiplication needed to propel a heavy vehicle.

Various automobile converters include a lock-up clutch so as to reduce heat and in order 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.