

## Torque Converters for Forklift

Torque Converter for Forklift - A torque converter in modern usage, is usually a fluid coupling which is used in order to transfer rotating power from a prime mover, for example an internal combustion engine or an electrical motor, to a rotating driven load. Similar to a basic fluid coupling, the torque converter takes 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 considerable difference between output and input rotational speed.

The most common type of torque converter utilized in auto transmissions is the fluid coupling kind. During the 1920s there was likewise the Constantinesco or pendulum-based torque converter. There are different mechanical designs for continuously changeable transmissions that have the ability to multiply torque. Like for instance, the Variomatic is one 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 called a stator. This alters the drive's characteristics throughout occasions of high slippage and generates an increase in torque output.

There are at least three rotating parts within a torque converter: the turbine, that drives the load, the impeller, that is mechanically driven by the prime mover and the stator, which is between the turbine and the impeller so that it can alter 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 situation and this is where the term stator originates from. In point of fact, 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 enabling forward rotation.

In the three element design there have been alterations which have been incorporated sometimes. Where there is higher than normal torque manipulation is considered necessary, modifications to the modifications have proven to be worthy. More often than not, these alterations have taken the form of several stators and turbines. Each set has been designed to generate differing amounts of torque multiplication. Various instances include the Dynaflo which utilizes a five element converter so as to generate the wide range of torque multiplication considered necessary to propel a heavy vehicle.

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