

## Torque Converter for Forklift

Torque Converter for Forklifts - A torque converter in modern usage, is usually a fluid coupling that is utilized so as to transfer rotating power from a prime mover, like for instance an electric motor or an internal combustion engine, to a rotating driven load. Similar to a basic fluid coupling, the torque converter takes the place of a mechanized clutch. This allows the load to be separated from the main power source. A torque converter could provide the equivalent of a reduction gear by being able to multiply torque if there is a significant difference between output and input rotational speed.

The fluid coupling kind is actually the most popular kind of torque converter used in automobile transmissions. During the 1920's there were pendulum-based torque or likewise called Constantinesco converter. There are various mechanical designs utilized for constantly variable transmissions which can multiply torque. Like for instance, the Variomatic is a kind that has a belt drive and expanding pulleys.

A fluid coupling is a 2 element drive which is incapable of multiplying torque. A torque converter has an additional element that is the stator. This changes the drive's characteristics all through times of high slippage and produces an increase in torque output.

In a torque converter, there are a minimum of three rotating parts: the turbine, to drive the load, the impeller that is driven mechanically driven by the prime mover and the stator. The stator is between the impeller and the turbine 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 condition and this is where the term stator originates from. In point of fact, the stator is mounted on an overrunning clutch. This particular design prevents the stator from counter rotating with respect to the prime mover while still enabling forward rotation.

In the three element design there have been modifications which have been incorporated sometimes. Where there is higher than normal torque manipulation is considered necessary, alterations to the modifications have proven to be worthy. Usually, these adjustments have taken the form of various turbines and stators. Each and every set has been intended to generate differing amounts of torque multiplication. Several instances comprise the Dynaflo which makes use of a five element converter to be able to generate the wide range of torque multiplication required to propel a heavy vehicle.

Various car converters comprise a lock-up clutch to reduce heat and so as to improve the cruising power and transmission efficiency, though it is not strictly component of the torque converter design. The application of the clutch locks the turbine to the impeller. This causes all power transmission to be mechanical that eliminates losses associated with fluid drive.