

## Torque Converter for Forklifts

Forklift Torque Converter - A torque converter is actually a fluid coupling that is used in order to transfer rotating power from a prime mover, which 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 allows the load to be separated from the main power source. A torque converter can offer the equivalent of a reduction gear by being able to multiply torque when there is a significant difference between input and output rotational speed.

The fluid coupling type is the most common kind of torque converter used in automobile transmissions. During the 1920's there were pendulum-based torque or Constantinesco converter. There are different mechanical designs utilized for continuously changeable transmissions which could multiply torque. Like for example, the Variomatic is one version that has expanding pulleys and a belt drive.

The 2 element drive fluid coupling cannot multiply torque. Torque converters have an part called a stator. This alters the drive's characteristics during occasions of high slippage and produces an increase in torque output.

In a torque converter, there are a minimum of three rotating components: 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 turbine and the impeller so that it could 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 whatever situation and this is where the word stator begins 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 adjustments that have been integrated periodically. Where there is higher than normal torque manipulation is needed, adjustments to the modifications have proven to be worthy. More often than not, these adjustments have taken the form of many stators and turbines. Each and every set has been intended to produce differing amounts of torque multiplication. Several instances comprise the Dynaflo that utilizes a five element converter so as to produce the wide range of torque multiplication needed to propel a heavy vehicle.

Different automobile converters include a lock-up clutch to be able to reduce heat and to improve the cruising power and transmission efficiency, although 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 which eliminates losses associated with fluid drive.