

## Forklift Torque Converters

Forklift Torque Converter - A torque converter is a fluid coupling which is utilized 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 same as a basic fluid coupling to take the place of a mechanical 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 if there is a considerable difference between output and input rotational speed.

The fluid coupling unit is the most common kind of torque converter used in car transmissions. In the 1920's there were pendulum-based torque or otherwise called Constantinesco converter. There are other mechanical designs used for continuously changeable transmissions that have the ability to multiply torque. For instance, the Variomatic is one type which has a belt drive and expanding pulleys.

The 2 element drive fluid coupling is incapable of multiplying torque. Torque converters have an component called a stator. This alters the drive's characteristics through occasions of high slippage and generates an increase in torque output.

There are a minimum of three rotating parts in 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 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 any 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 stops the stator from counter rotating with respect to the prime mover while still allowing forward rotation.

In the three element design there have been modifications which have been incorporated at times. Where there is higher than normal torque manipulation is considered necessary, changes to the modifications have proven to be worthy. Usually, these modifications have taken the form of many stators and turbines. Each and every set has been meant to produce differing amounts of torque multiplication. Several instances consist of the Dynaflow which uses a five element converter to be able to generate the wide range of torque multiplication needed to propel a heavy vehicle.

Various automobile converters consist of a lock-up clutch so as to lessen heat and in order to improve the cruising power and transmission effectiveness, even though 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.