

## Forklift Torque Converter

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, like for instance an internal combustion engine or an electrical motor, to a rotating driven load. Like a basic fluid coupling, the torque converter takes the place of a mechanical clutch. This allows 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 substantial difference between output and input rotational speed.

The most popular type of torque converter used in car transmissions is the fluid coupling unit. In the 1920s there was also the Constantinesco or pendulum-based torque converter. There are other mechanical designs for constantly variable transmissions which have the ability to multiply torque. Like for example, the Variomatic is a kind that has expanding pulleys and a belt drive.

A fluid coupling is a 2 element drive which could not multiply torque. A torque converter has an additional component which is the stator. This alters the drive's characteristics during occasions of high slippage and produces an increase in torque output.

Within a torque converter, there are at least of three rotating components: the turbine, in order 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 stopped from rotating under any situation and this is where the term stator starts from. Actually, 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 permitting forward rotation.

In the three element design there have been changes 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. Most commonly, these adjustments have taken the form of several stators and turbines. Every set has been meant to produce differing amounts of torque multiplication. Some examples comprise the Dynaflo which uses a five element converter so as to produce the wide range of torque multiplication required to propel a heavy vehicle.

Different automobile converters consist of a lock-up clutch so as to lessen heat and to enhance the cruising power and transmission efficiency, 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 that eliminates losses related with fluid drive.