

## Forklift Torque Converter

Forklift Torque Converter - A torque converter is a fluid coupling which is used to be able to transfer rotating power from a prime mover, that is an internal combustion engine or as electrical motor, to a rotating driven load. The torque converter is similar to a basic fluid coupling to take the place of a mechanized clutch. This enables 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 when there is a substantial difference between output and input rotational speed.

The most popular kind of torque converter utilized in car transmissions is the fluid coupling kind. In the 1920s there was likewise the Constantinesco or also known as pendulum-based torque converter. There are various mechanical designs used for continuously changeable transmissions which have the ability to multiply torque. Like for example, the Variomatic is one version that has a belt drive and expanding pulleys.

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

There are a minimum of three rotating components in a torque converter: the turbine, that drives the load, the impeller, which is mechanically driven by the prime mover and the stator, which is between the impeller and the turbine so that it can change oil flow returning from the turbine to the impeller. Traditionally, the design of the torque converter dictates that the stator be stopped from rotating under whatever situation and this is where the term stator starts 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 needed, changes to the modifications have proven to be worthy. More often than not, these alterations have taken the form of various turbines and stators. Each and every set has been intended to generate differing amounts of torque multiplication. Several examples comprise the Dynaflow that makes use of a five element converter so as to produce the wide range of torque multiplication needed to propel a heavy vehicle.

Different car converters comprise a lock-up clutch in order to reduce heat and in order 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 impeller to the turbine. This causes all power transmission to be mechanical which eliminates losses related with fluid drive.