

## Torque Converter for Forklift

Forklift Torque Converter - A torque converter is a fluid coupling that is used so as 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 like 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 can offer the equivalent of a reduction gear by being able to multiply torque whenever there is a significant difference between input and output rotational speed.

The most popular type of torque converter used in automobile transmissions is the fluid coupling kind. In the 1920s there was likewise the Constantinesco or pendulum-based torque converter. There are various mechanical designs used for continuously variable transmissions that could multiply torque. For instance, the Variomatic is a kind that has expanding pulleys and a belt drive.

The 2 element drive fluid coupling could not multiply torque. Torque converters have an element referred to as a stator. This alters the drive's characteristics throughout occasions of high slippage and generates an increase in torque output.

Within a torque converter, there are a minimum of three rotating elements: the turbine, so as 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 change oil flow returning from the turbine to the impeller. Normally, the design of the torque converter dictates that the stator be prevented from rotating under whatever condition and this is where the term stator originates 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 enabling forward rotation.

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

Different car converters consist of a lock-up clutch so as to lessen heat and in order to enhance the cruising power and transmission effectiveness, 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 related with fluid drive.