

## Torque Converter for Forklift

Forklift Torque Converter - A torque converter is actually a fluid coupling that is used 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 like 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 could provide the equivalent of a reduction gear by being able to multiply torque whenever there is a considerable difference between input and output rotational speed.

The most common type of torque converter utilized in auto transmissions is the fluid coupling type. During the 1920s there was likewise the Constantinesco or also known as pendulum-based torque converter. There are various mechanical designs utilized for always variable transmissions which can multiply torque. For instance, the Variomatic is a version which has a belt drive and expanding pulleys.

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

In a torque converter, there are at least of three rotating components: the turbine, to be able 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 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 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.

Modifications to the basic three element design have been integrated sometimes. These modifications have proven worthy specially in application where higher than normal torque multiplication is considered necessary. Most commonly, these adjustments have taken the form of several turbines and stators. Every set has been designed to generate differing amounts of torque multiplication. Some examples comprise the Dynaflo which makes use of a five element converter in order to generate the wide range of torque multiplication required to propel a heavy vehicle.

While it is not strictly a part of classic torque converter design, different automotive converters comprise a lock-up clutch to lessen heat and to be able to enhance cruising power transmission effectiveness. The application of the clutch locks the turbine to the impeller. This causes all power transmission to be mechanical that eliminates losses connected with fluid drive.