

## Torque Converter for Forklift

Forklift Torque Converter - A torque converter is a fluid coupling which is utilized in order 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 mechanical clutch. This enables 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 if there is a significant difference between input and output rotational speed.

The fluid coupling model is actually the most popular type of torque converter used in automobile transmissions. During the 1920's there were pendulum-based torque or otherwise called Constantinesco converter. There are various mechanical designs utilized for always changeable transmissions which have the ability to multiply torque. Like for example, the Variomatic is a kind which has a belt drive and expanding pulleys.

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

Inside a torque converter, there are a minimum of three rotating parts: the turbine, 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 any situation and this is where the word stator begins from. Actually, the stator is mounted on an overrunning clutch. This design stops the stator from counter rotating with respect to the prime mover while still enabling forward rotation.

Modifications to the basic three element design have been integrated periodically. These changes have proven worthy particularly in application where higher than normal torque multiplication is needed. Usually, these modifications have taken the form of several turbines and stators. Every set has been designed to produce differing amounts of torque multiplication. Several instances consist of the Dynaflo that utilizes a five element converter so as to generate the wide range of torque multiplication required to propel a heavy vehicle.

Different auto converters consist of a lock-up clutch in order to lessen heat and to be able to enhance the cruising power and transmission efficiency, although it is not strictly component of the torque converter design. The application of the clutch locks the impeller to the turbine. This causes all power transmission to be mechanical that eliminates losses associated with fluid drive.