

## Torque Converters for Forklift

Torque Converter for Forklift - A torque converter in modern usage, is usually a fluid coupling that is used so as to transfer rotating power from a prime mover, like for instance an internal combustion engine or an electrical motor, to a rotating driven load. Similar to a basic fluid coupling, the torque converter takes 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 if there is a substantial difference between output and input rotational speed.

The fluid coupling kind is actually the most popular type of torque converter used in car transmissions. During the 1920's there were pendulum-based torque or otherwise called Constantinesco converter. There are other mechanical designs for always variable transmissions which can multiply torque. For example, the Variomatic is one type which has a belt drive and expanding pulleys.

The 2 element drive fluid coupling cannot multiply torque. Torque converters have an part referred to as a stator. This alters the drive's characteristics all through times of high slippage and produces an increase in torque output.

There are at least three rotating elements inside a torque converter: the turbine, that drives the load, the impeller, that is mechanically driven by the prime mover and the stator, which 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 stopped from rotating under whichever condition and this is where the term stator starts from. Actually, 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 enabling forward rotation.

Adjustments to the basic three element design have been integrated periodically. These modifications have proven worthy especially in application where higher than normal torque multiplication is needed. More often than not, these alterations have taken the form of several stators and turbines. Each and every set has been intended to generate differing amounts of torque multiplication. Several instances consist of the Dynaflo which uses a five element converter in order to produce the wide range of torque multiplication required to propel a heavy vehicle.

Different car converters comprise a lock-up clutch in order to lessen heat and to enhance the cruising power and transmission efficiency, though 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 associated with fluid drive.