

## Torque Converters for Forklift

Forklift Torque Converter - A torque converter in modern usage, is usually a fluid coupling that is utilized 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. Like 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 offer the equivalent of a reduction gear by being able to multiply torque whenever there is a significant difference between output and input rotational speed.

The fluid coupling kind is the most popular kind of torque converter used in automobile transmissions. In the 1920's there were pendulum-based torque or otherwise called Constantinesco converter. There are other mechanical designs utilized for constantly variable transmissions that can multiply torque. For example, the Variomatic is a version that has expanding pulleys and a belt drive.

The 2 element drive fluid coupling is incapable of multiplying torque. Torque converters have an element referred to as a stator. This alters the drive's characteristics during occasions of high slippage and generates an increase in torque output.

There are a minimum of three rotating elements inside 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 alter 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 situation and this is where the word stator originates from. In reality, 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.

In the three element design there have been adjustments which have been incorporated periodically. Where there is higher than normal torque manipulation is needed, changes to the modifications have proven to be worthy. More often than not, these modifications have taken the form of various stators and turbines. Each and every set has been meant to generate differing amounts of torque multiplication. Various examples consist of the Dynaflo that utilizes a five element converter in order to produce the wide range of torque multiplication considered necessary to propel a heavy vehicle.

Although it is not strictly a component of classic torque converter design, various automotive converters consist of a lock-up clutch to reduce heat and in order to improve 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.