## Steer Axles for Forklifts

Forklift Steer Axles - Axles are defined by a central shaft which revolves a wheel or a gear. The axle on wheeled motor vehicles may be fixed to the wheels and turned along with them. In this particular situation, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle may be fixed to its surroundings and the wheels may in turn revolve around the axle. In this particular situation, a bearing or bushing is located in the hole within the wheel to allow the gear or wheel to revolve all-around the axle.

If referring to cars and trucks, several references to the word axle co-occur in casual usage. Usually, the word means the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates with the wheel. It is usually bolted in fixed relation to it and known as an 'axle shaft' or an 'axle.' It is equally true that the housing around it which is usually referred to as a casting is also known as an 'axle' or sometimes an 'axle housing.' An even broader sense of the term refers to every transverse pair of wheels, whether they are connected to one another or they are not. Therefore, even transverse pairs of wheels in an independent suspension are frequently called 'an axle.'

The axles are an important component in a wheeled vehicle. The axle works to transmit driving torque to the wheel in a live-axle suspension system. The position of the wheels is maintained by the axles relative to one another and to the motor vehicle body. In this system the axles should also be able to support the weight of the motor vehicle plus whatever cargo. In a non-driving axle, like for instance the front beam axle in several two-wheel drive light trucks and vans and in heavy-duty trucks, there will be no shaft. The axle in this condition works only as a steering part and as suspension. Lots of front wheel drive cars have a solid rear beam axle.

There are other kinds of suspension systems wherein the axles work only to transmit driving torque to the wheels. The angle and position of the wheel hubs is a function of the suspension system. This is usually seen in the independent suspension found in most brand new sports utility vehicles, on the front of many light trucks and on most brand new cars. These systems still consist of a differential but it does not have connected axle housing tubes. It could be attached to the vehicle body or frame or even can be integral in a transaxle. The axle shafts then transmit driving torque to the wheels. The shafts in an independent suspension system are similar to a full floating axle system as in they do not support the motor vehicle weight.

Last but not least, in reference to a motor vehicle, 'axle,' has a more vague definition. It means parallel wheels on opposing sides of the vehicle, regardless of their mechanical connection kind to one another and the motor vehicle frame or body.