

## Forklift Steer Axles

The classification of an axle is a central shaft meant for revolving a gear or a wheel. Where wheeled vehicles are concerned, the axle itself can be fixed to the wheels and rotate along with them. In this situation, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle may be connected to its surroundings and the wheels can in turn revolve all-around the axle. In this particular instance, a bearing or bushing is placed in the hole inside the wheel in order to allow the gear or wheel to rotate all-around the axle.

With cars and trucks, the word axle in several references is used casually. The term generally refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself revolves along with the wheel. It is usually bolted in fixed relation to it and referred to as an 'axle shaft' or an 'axle.' It is also true that the housing surrounding it which is normally called a casting is likewise known as an 'axle' or sometimes an 'axle housing.' An even broader definition of the term means every transverse pair of wheels, whether they are attached to one another or they are not. Hence, even transverse pairs of wheels in an independent suspension are frequently called 'an axle.'

The axles are an essential component in a wheeled motor vehicle. The axle serves 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 vehicle body. In this system the axles must even be able to support the weight of the vehicle together with whatever cargo. In a non-driving axle, like for example the front beam axle in some two-wheel drive light vans and trucks and in heavy-duty trucks, there will be no shaft. The axle in this situation serves only as a steering component and as suspension. Numerous front wheel drive cars consist of a solid rear beam axle.

There are various kinds of suspension systems where the axles operate just to transmit driving torque to the wheels. The position and angle of the wheel hubs is a function of the suspension system. This is often seen in the independent suspension found in the majority of brand new sports utility vehicles, on the front of numerous light trucks and on most new cars. These systems still have a differential but it does not have fixed axle housing tubes. It could be attached to the motor vehicle frame or body or also can be integral in a transaxle. The axle shafts then transmit driving torque to the wheels. The shafts in an independent suspension system are like a full floating axle system as in they do not support the motor vehicle weight.

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