

Steer Axles for Forklifts

Forklift Steer Axle - Axles are defined by a central shaft that revolves a gear or a wheel. The axle on wheeled vehicles may be fixed to the wheels and revolved together with them. In this particular situation, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle may be attached to its surroundings and the wheels can in turn rotate around the axle. In this situation, a bearing or bushing is positioned within the hole in the wheel to enable the wheel or gear to revolve around the axle.

Whenever referring to cars and trucks, several references to the word axle co-occur in casual usage. Generally, the term means 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' or an 'axle shaft'. It is equally true that the housing surrounding it which is normally called a casting is likewise called an 'axle' or at times an 'axle housing.' An even broader sense of the term means every transverse pair of wheels, whether they are connected to one another or they are not. Thus, even transverse pairs of wheels within an independent suspension are generally called 'an axle.'

In a wheeled motor vehicle, axles are an important component. With a live-axle suspension system, the axles function to be able to transmit driving torque to the wheel. The axles even maintain the position of the wheels 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 plus whatever load. In a non-driving axle, like the front beam axle in various two-wheel drive light vans and trucks and in heavy-duty trucks, there will be no shaft. The axle in this particular condition works only as a steering part and as suspension. Many front wheel drive cars consist of a solid rear beam axle.

There are different types of suspension systems wherein the axles operate just 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 seen in the majority of brand new SUV's, on the front of numerous light trucks and on most brand new cars. These systems still have a differential but it does not have connected axle housing tubes. It can be fixed to the vehicle frame or body or likewise 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 vehicle weight.

The motor vehicle axle has a more ambiguous description, meaning that the parallel wheels on opposing sides of the vehicle, regardless of their type of mechanical connection to one another.