

Steer Axles for Forklifts

Steer Axle for Forklift - The description of an axle is a central shaft used for revolving a wheel or a gear. Where wheeled vehicles are concerned, the axle itself could be fixed to the wheels and turn along with them. In this case, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle may be fixed to its surroundings and the wheels can in turn turn around the axle. In this case, a bushing or bearing is placed within the hole inside the wheel to enable the gear or wheel to revolve around the axle.

With cars and trucks, the word axle in some references is used casually. The word normally refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates 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 likewise true that the housing surrounding it that is usually known as a casting is also known as an 'axle' or at times an 'axle housing.' An even broader sense of the term refers to every transverse pair of wheels, whether they are attached to one another or they are not. Thus, even transverse pairs of wheels within an independent suspension are often called 'an axle.'

In a wheeled vehicle, axles are an integral component. With a live-axle suspension system, the axles serve so as to transmit driving torque to the wheel. The axles likewise maintain the position of the wheels relative to one another and to the vehicle body. In this particular system the axles should also be able to support the weight of the motor vehicle together with whatever load. In a non-driving axle, like for example the front beam axle in various two-wheel drive light vans and trucks and in heavy-duty trucks, there would be no shaft. The axle in this particular situation serves only as a steering component and as suspension. Lots of front wheel drive cars have a solid rear beam axle.

There are other kinds of suspension systems where the axles function 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 seen in the majority of brand new sports utility vehicles, on the front of various light trucks and on most brand new cars. These systems still consist of a differential but it does not have fixed axle housing tubes. It can be fixed to the vehicle body or frame or also could 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.

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