

Steer Axles for Forklifts

Forklift Steer Axle - Axles are defined by a central shaft that rotates a gear or a wheel. The axle on wheeled motor vehicles could be fixed to the wheels and revolved 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 can be attached to its surroundings and the wheels can in turn revolve all-around the axle. In this particular situation, a bushing or bearing is located in the hole inside the wheel in order to allow the wheel or gear to rotate around the axle.

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

The axles are an important component in a wheeled 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 motor vehicle body. In this system the axles should likewise be able to support the weight of the vehicle along with whatever cargo. 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 would be no shaft. The axle in this condition works just as a steering component and as suspension. Many front wheel drive cars have a solid rear beam axle.

There are different kinds of suspension systems wherein the axles serve 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 often seen in the independent suspension found in most 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 could be fixed to the vehicle frame or body or even could 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 vehicle weight.

Lastly, with regards to a vehicle, 'axle,' has a more ambiguous classification. It means parallel wheels on opposing sides of the vehicle, regardless of their mechanical connection type to one another and the motor vehicle frame or body.