

Steer Axle for Forklifts

Forklift Steer Axle - Axles are defined by a central shaft which rotates a gear or a wheel. The axle on wheeled vehicles could be fixed to the wheels and rotated with them. In this particular case, bushings or bearings are provided at the mounting points where the axle is supported. On the other hand, the axle can be fixed to its surroundings and the wheels could in turn revolve around the axle. In this instance, a bearing or bushing is positioned inside the hole within the wheel so as to enable the gear or wheel to revolve all-around the axle.

With trucks and cars, the word axle in several references is used casually. The term generally means shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates with the wheel. It is normally bolted in fixed relation to it and called an 'axle' or an 'axle shaft'. It is equally true that the housing surrounding it which is usually known as a casting is likewise called an 'axle' or occasionally an 'axle housing.' An even broader definition 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 generally known as 'an axle.'

In a wheeled vehicle, axles are an essential 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 motor vehicle body. In this system the axles should likewise be able to bear the weight of the motor vehicle together with any load. In a non-driving axle, like for example the front beam axle in several two-wheel drive light trucks and vans 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 consist of a solid rear beam axle.

The axle serves just to transmit driving torque to the wheels in some types of suspension systems. The position and angle of the wheel hubs is part of the operating of the suspension system seen in the independent suspensions of new sports utility vehicles and on the front of various new light trucks and cars. These systems still have a differential but it does not have connected axle housing tubes. It can be connected to the motor 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.

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