

Steer Axle for Forklifts

Forklift Steer Axle - Axles are defined by a central shaft that turns a gear or a wheel. The axle on wheeled motor vehicles can be connected to the wheels and revolved along with them. In this case, bushings or bearings are provided at the mounting points where the axle is supported. On the other hand, the axle could be attached to its surroundings and the wheels can in turn revolve all-around the axle. In this case, a bearing or bushing is positioned in the hole in the wheel in order to enable the wheel or gear to rotate all-around the axle.

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

In a wheeled vehicle, axles are an essential part. With a live-axle suspension system, the axles function in order to transmit driving torque to the wheel. The axles also maintain the position of the wheels relative to one another and to the motor vehicle body. In this system the axles must also be able to support the weight of the motor vehicle along with whatever cargo. In a non-driving axle, like the front beam axle in various two-wheel drive light trucks and vans and in heavy-duty trucks, there will be no shaft. The axle in this particular situation serves just as a steering component and as suspension. Many 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 position and angle of the wheel hubs is a function of the suspension system. This is normally found in the independent suspension found in nearly all brand new sports utility vehicles, on the front of many light trucks and on nearly all new cars. These systems still consist of a differential but it does not have attached axle housing tubes. It could be attached to the motor vehicle frame or body 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.

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