

Steer Axle for Forklift

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

Whenever referring to cars and trucks, some references to the word axle co-occur in casual usage. Usually, the word means the shaft itself, a transverse pair of wheels or its housing. The shaft itself revolves with the wheel. It is usually bolted in fixed relation to it and referred to as an 'axle shaft' or an 'axle.' It is also true that the housing around it that is usually known as a casting is also known as an 'axle' or occasionally an 'axle housing.' An even broader definition of the word refers to every transverse pair of wheels, whether they are connected to one another or they are not. Hence, even transverse pairs of wheels within an independent suspension are often referred to as 'an axle.'

In a wheeled motor vehicle, axles are an integral component. With a live-axle suspension system, the axles work to transmit driving torque to the wheel. The axles even maintain the position of the wheels relative to one another and to the motor vehicle body. In this system the axles must likewise be able to bear the weight of the vehicle along with any load. In a non-driving axle, as in 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 situation serves only as a steering part and as suspension. Several front wheel drive cars consist of a solid rear beam axle.

There are different kinds of suspension systems wherein the axles operate just to transmit driving torque to the wheels. The position and angle of the wheel hubs is a function of the suspension system. This is usually found in the independent suspension seen in nearly all brand new sports utility vehicles, on the front of various light trucks and on most new cars. These systems still have a differential but it does not have attached axle housing tubes. It could be connected to the motor vehicle body or frame or also 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 motor vehicle weight.

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