

Steer Axles for Forklifts

Forklift Steer Axle - The definition of an axle is a central shaft meant for rotating a wheel or a gear. Where wheeled vehicles are concerned, the axle itself could be fixed to the wheels and rotate together with them. In this particular situation, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle may be fixed to its surroundings and the wheels could in turn turn all-around the axle. In this situation, a bushing or bearing is positioned within the hole inside the wheel in order to allow the gear or wheel to turn all-around the axle.

When referring to trucks and cars, several references to the word axle co-occur in casual usage. Normally, the word means the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates with the wheel. It is frequently bolted in fixed relation to it and referred to as an 'axle shaft' or an 'axle.' It is equally true that the housing around it which is usually known as a casting is also referred to as an 'axle' or sometimes an 'axle housing.' An even broader definition 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 inside an independent suspension are frequently referred to as 'an axle.'

In a wheeled motor vehicle, axles are an important component. With a live-axle suspension system, the axles serve to be able 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 even be able to bear the weight of the vehicle together with whatever cargo. In a non-driving axle, like for instance 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 condition serves only as a steering component and as suspension. Various front wheel drive cars have a solid rear beam axle.

There are various kinds of suspension systems wherein 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 seen in the independent suspension seen in nearly all new SUV's, on the front of various light trucks and on nearly all brand new cars. These systems still have a differential but it does not have attached axle housing tubes. It can be attached to the motor vehicle body or frame or likewise 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.

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