

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 may be fixed to the wheels and revolved along with them. In this particular situation, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle can be fixed to its surroundings and the wheels can in turn rotate all-around the axle. In this particular situation, a bearing or bushing is located within the hole inside the wheel to allow the gear or wheel to revolve all-around the axle.

If referring to trucks and cars, several references to the word axle co-occur in casual usage. Normally, the term means the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates along with the wheel. It is normally 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 normally known as a casting is also referred to as an 'axle' or at times 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 within an independent suspension are generally referred to as 'an axle.'

The axles are an essential component in a wheeled motor vehicle. The axle serves to be able 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 also be able to bear the weight of the motor vehicle plus any cargo. In a non-driving axle, like the front beam axle in some two-wheel drive light trucks and vans and in heavy-duty trucks, there will be no shaft. The axle in this particular situation works only as a steering component and as suspension. Various front wheel drive cars have a solid rear beam axle.

There are different types of suspension systems where the axles operate just to transmit driving torque to the wheels. The angle and position of the wheel hubs is a function of the suspension system. This is usually found in the independent suspension found in nearly all new SUV's, on the front of numerous 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 attached to the vehicle frame or body or even 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.

Last but not least, in reference to a motor 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.