

Steer Axles for Forklift

Forklift Steer Axle - Axles are defined by a central shaft which turns a gear or a wheel. The axle on wheeled motor vehicles may be connected to the wheels and turned along with them. In this case, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle could 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 in the hole inside the wheel to enable the wheel or gear to revolve all-around the axle.

With trucks and cars, the word axle in several references is used casually. The word usually means shaft itself, a transverse pair of wheels or its housing. The shaft itself revolves with the wheel. It is normally bolted in fixed relation to it and known as an 'axle shaft' or an 'axle.' It is equally true that the housing surrounding it which is generally known as a casting is likewise referred to as an 'axle' or sometimes an 'axle housing.' An even broader definition of the term means every transverse pair of wheels, whether they are connected to one another or they are not. Therefore, even transverse pairs of wheels within an independent suspension are generally known as 'an axle.'

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

The axle works only to transmit driving torque to the wheels in various types of suspension systems. The angle and position of the wheel hubs is part of the functioning of the suspension system seen in the independent suspensions of new SUVs 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 attached to the 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.

Last but not least, in reference to a vehicle, 'axle,' has a more ambiguous classification. It means parallel wheels on opposing sides of the motor vehicle, regardless of their mechanical connection type to one another and the motor vehicle frame or body.