

Steer Axle for Forklifts

Forklift Steer Axle - The classification of an axle is a central shaft for rotating a gear or a wheel. Where wheeled motor vehicles are concerned, the axle itself can be connected to the wheels and revolve together with them. In this particular situation, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle could be attached to its surroundings and the wheels can in turn revolve all-around the axle. In this particular situation, a bearing or bushing is situated in the hole in the wheel to enable the wheel or gear to revolve around the axle.

With cars and trucks, the term axle in some references is used casually. The word normally 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 called an 'axle' or an 'axle shaft'. It is equally true that the housing surrounding it which is usually referred to as a casting is likewise called 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 in an independent suspension are generally referred to as 'an axle.'

The axles are an important 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 vehicle plus whatever cargo. In a non-driving axle, like the front beam axle in several 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 part and as suspension. Numerous front wheel drive cars have a solid rear beam axle.

There are other kinds of suspension systems where the axles serve 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 seen in the majority of brand new sports utility vehicles, on the front of various 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 can be fixed to the motor vehicle frame or body or even 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 vehicle weight.

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