

Steer Axle for Forklifts

Steer Axles for Forklifts - Axles are defined by a central shaft that turns a gear or a wheel. The axle on wheeled vehicles may be attached to the wheels and rotated together with them. In this case, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle may be attached to its surroundings and the wheels could in turn turn around the axle. In this situation, a bushing or bearing is located in the hole in the wheel to allow the wheel or gear to revolve all-around the axle.

With cars and trucks, the word axle in several references is utilized casually. The word usually means shaft itself, a transverse pair of wheels or its housing. The shaft itself turns together 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 around it which is usually called a casting is likewise known 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 often called 'an axle.'

In a wheeled vehicle, axles are an integral part. With a live-axle suspension system, the axles function to be able to transmit driving torque to the wheel. The axles also maintain the position of the wheels relative to one another and to the motor vehicle body. In this particular system the axles must likewise be able to support the weight of the motor vehicle together with any load. 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 would be no shaft. The axle in this condition works just as a steering component and as suspension. Several front wheel drive cars consist of a solid rear beam axle.

There are other kinds of suspension systems where the axles function only to transmit driving torque to the wheels. The angle and position of the wheel hubs is a function of the suspension system. This is normally found in the independent suspension found in most new sports utility vehicles, on the front of several light trucks and on nearly all brand new cars. These systems still consist of a differential but it does not have attached axle housing tubes. It can be connected to the motor vehicle body or frame or also could be integral in a transaxle. The axle shafts then transmit driving torque to the wheels. The shafts in an independent suspension system are similar to a full floating axle system as in they do not support the vehicle weight.

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