Steer Axles for Forklifts

Forklift Steer Axle - Axles are defined by a central shaft which rotates a gear or a wheel. The axle on wheeled motor vehicles may be attached to the wheels and revolved along with them. In this case, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle may be attached to its surroundings and the wheels may in turn revolve all-around the axle. In this particular case, a bearing or bushing is positioned inside the hole within the wheel to allow the wheel or gear to turn around the axle.

When referring to cars and trucks, some references to the word axle co-occur in casual usage. Generally, the word refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates 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 that is generally referred to as a casting is otherwise referred to as an 'axle' or sometimes an 'axle housing.' An even broader definition of the word refers to every transverse pair of wheels, whether they are connected to one another or they are not. Thus, even transverse pairs of wheels within an independent suspension are generally called 'an axle.'

The axles are an integral component in a wheeled motor vehicle. The axle serves 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 must even be able to support the weight of the motor vehicle together with any load. In a non-driving axle, as in the front beam axle in several two-wheel drive light trucks and vans and in heavy-duty trucks, there would be no shaft. The axle in this particular condition serves just as a steering component and as suspension. Lots of front wheel drive cars consist of a solid rear beam axle.

There are other kinds of suspension systems wherein 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 normally found in the independent suspension found in nearly all brand new sports utility vehicles, on the front of many light trucks and on nearly all new cars. These systems still consist of a differential but it does not have connected axle housing tubes. It could be attached to the motor vehicle body or frame 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 similar to a full floating axle system as in they do not support the motor vehicle weight.

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