

Steer Axles for Forklifts

Forklift Steer Axle - The classification of an axle is a central shaft used for turning a wheel or a gear. Where wheeled motor vehicles are concerned, the axle itself could be connected to the wheels and revolve together with them. In this particular situation, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle may be fixed to its surroundings and the wheels may in turn revolve around the axle. In this particular situation, a bushing or bearing is placed in the hole within the wheel in order to enable the wheel or gear to revolve all-around the axle.

When referring to cars and trucks, several references to the word axle co-occur in casual usage. Generally, the term refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself revolves together with the wheel. It is usually 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 usually referred to as a casting is also called an 'axle' or occasionally an 'axle housing.' An even broader sense of the term refers to every transverse pair of wheels, whether they are attached to one another or they are not. Therefore, even transverse pairs of wheels in an independent suspension are often referred to as 'an axle.'

In a wheeled motor vehicle, axles are an essential component. With a live-axle suspension system, the axles serve in order to transmit driving torque to the wheel. The axles also maintain the position of the wheels relative to one another and to the vehicle body. In this particular system the axles should likewise be able to bear the weight of the vehicle together with whichever 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 condition works only as a steering component and as suspension. Many front wheel drive cars consist of a solid rear beam axle.

There are different types of suspension systems wherein the axles work 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 usually seen in the independent suspension found in nearly all brand new SUV's, on the front of numerous 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 can be attached to the motor vehicle body or frame or likewise 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 vehicle weight.

Last of all, in reference to a vehicle, 'axle,' has a more ambiguous definition. It means parallel wheels on opposing sides of the motor vehicle, regardless of their mechanical connection type to one another and the vehicle body or frame.