

Steer Axles for Forklifts

Steer Axles for Forklifts - Axles are defined by a central shaft that turns a wheel or a gear. The axle on wheeled vehicles can be connected to the wheels and rotated along with them. In this particular instance, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle may be connected to its surroundings and the wheels could in turn turn all-around the axle. In this situation, a bushing or bearing is situated inside the hole in the wheel in order to allow the gear or wheel to turn all-around the axle.

Whenever referring to trucks and cars, several 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 frequently bolted in fixed relation to it and referred to as an 'axle shaft' or an 'axle.' It is likewise true that the housing around it that is normally known as 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.'

The axles are an integral part 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 vehicle body. In this system the axles should also be able to support the weight of the vehicle along with whatever cargo. In a non-driving axle, like for example 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 particular condition serves just as a steering part and as suspension. Many front wheel drive cars have a solid rear beam axle.

There are other types 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 usually found in the independent suspension seen in most brand new sports utility vehicles, on the front of many light trucks and on nearly all new cars. These systems still have a differential but it does not have attached axle housing tubes. It can be attached 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 like a full floating axle system as in they do not support the motor vehicle weight.

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