Forklift Steer Axles

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

With trucks and cars, the term axle in several references is used casually. The word usually means shaft itself, a transverse pair of wheels or its housing. The shaft itself turns with the wheel. It is usually bolted in fixed relation to it and referred to as an 'axle shaft' or an 'axle.' It is likewise true that the housing surrounding it that is generally known as a casting is also 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 frequently referred to as 'an axle.'

In a wheeled vehicle, axles are an integral part. 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 motor vehicle body. In this particular system the axles should even be able to support the weight of the motor vehicle plus whichever load. In a non-driving axle, like for instance 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 part and as suspension. Various front wheel drive cars have a solid rear beam axle.

There are different 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 normally found in the independent suspension seen in most brand new SUV's, on the front of several light trucks and on most new cars. These systems still have a differential but it does not have attached axle housing tubes. It can be connected to the motor vehicle frame or body 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 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 motor vehicle, regardless of their type of mechanical connection to one another.