Forklift Steer Axles

Axles are defined by a central shaft that turns a wheel or a gear. The axle on wheeled vehicles can be attached to the wheels and revolved together with them. In this particular 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 may in turn revolve all-around the axle. In this particular instance, a bearing or bushing is placed inside the hole within the wheel in order to enable the wheel or gear to revolve all-around the axle.

With trucks and cars, the word axle in some references is utilized casually. The term usually refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates along with the wheel. It is usually bolted in fixed relation to it and referred to as an 'axle shaft' or an 'axle.' It is equally true that the housing surrounding it that is normally called a casting is otherwise called an 'axle' or at times an 'axle housing.' An even broader sense of the word means every transverse pair of wheels, whether they are connected to one another or they are not. Hence, even transverse pairs of wheels within an independent suspension are frequently called 'an axle.'

In a wheeled vehicle, axles are an important part. With a live-axle suspension system, the axles serve so as 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 even be able to bear the weight of the motor vehicle plus any cargo. In a non-driving axle, like for example the front beam axle in several two-wheel drive light vans and trucks 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. Various front wheel drive cars have a solid rear beam axle.

The axle serves only to transmit driving torque to the wheels in several types of suspension systems. The angle and position of the wheel hubs is part of the operating of the suspension system seen in the independent suspensions of newer SUVs and on the front of several new light trucks and cars. These systems still have a differential but it does not have attached axle housing tubes. It could be attached to the vehicle frame or body 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 vehicle weight.

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