Forklift Steer Axles

Steer Axles for Forklifts - Axles are defined by a central shaft which turns a gear or a wheel. The axle on wheeled motor vehicles could be fixed to the wheels and rotated with them. In this situation, bushings or bearings are provided at the mounting points where the axle is supported. On the other hand, the axle could be connected to its surroundings and the wheels could in turn turn around the axle. In this particular case, a bushing or bearing is situated within the hole inside the wheel to enable the wheel or gear to rotate all-around the axle.

When referring to trucks and cars, some references to the word axle co-occur in casual usage. Normally, the term refers to the 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 called an 'axle' or an 'axle shaft'. It is likewise true that the housing around it which is usually referred to as a casting is otherwise referred to as an 'axle' or sometimes an 'axle housing.' An even broader sense of the word means every transverse pair of wheels, whether they are attached to one another or they are not. Hence, even transverse pairs of wheels inside an independent suspension are frequently called 'an axle.'

In a wheeled motor vehicle, axles are an integral 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 motor vehicle body. In this particular system the axles must even be able to support the weight of the vehicle along with any load. In a non-driving axle, like for instance the front beam axle in several two-wheel drive light vans and trucks and in heavy-duty trucks, there will be no shaft. The axle in this condition works just as a steering part and as suspension. Many front wheel drive cars consist of a solid rear beam axle.

There are various kinds of suspension systems where the axles operate just to transmit driving torque to the wheels. The position and angle of the wheel hubs is a function of the suspension system. This is often seen in the independent suspension found in nearly all brand new SUV's, on the front of numerous 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 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 like a full floating axle system as in they do not support the vehicle weight.

To finish, in reference to a motor vehicle, 'axle,' has a more ambiguous classification. 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.