Forklift Steer Axles

Steer Axle for Forklifts - Axles are defined by a central shaft which turns a gear or a wheel. The axle on wheeled motor vehicles can be connected to the wheels and revolved together with them. In this situation, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle could be attached to its surroundings and the wheels may in turn revolve around the axle. In this case, a bushing or bearing is located inside the hole in the wheel to allow the gear or wheel to turn all-around the axle.

With cars and trucks, the word axle in some references is used casually. The word normally means shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates along with the wheel. It is frequently bolted in fixed relation to it and known as an 'axle shaft' or an 'axle.' It is also true that the housing around it which is generally called a casting is likewise known as an 'axle' or occasionally 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. Thus, even transverse pairs of wheels in an independent suspension are generally called 'an axle.'

In a wheeled vehicle, axles are an important component. With a live-axle suspension system, the axles function to transmit driving torque to the wheel. The axles even maintain the position of the wheels relative to one another and to the motor vehicle body. In this system the axles must likewise be able to bear the weight of the vehicle plus any load. In a non-driving axle, like 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 situation serves just as a steering component and as suspension. Various front wheel drive cars consist of a solid rear beam axle.

The axle serves only to transmit driving torque to the wheels in some kinds of suspension systems. The position and angle of the wheel hubs is part of the functioning of the suspension system found in the independent suspensions of newer sports utility vehicles and on the front of numerous new light trucks and cars. These systems still consist of a differential but it does not have attached axle housing tubes. It can be fixed to the motor vehicle body or frame or also 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 motor vehicle weight.

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