

Steer Axle for Forklifts

Forklift Steer Axle - Axles are defined by a central shaft which rotates a wheel or a gear. The axle on wheeled vehicles can be connected to the wheels and turned together with them. In this particular instance, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle could be connected to its surroundings and the wheels could in turn rotate around the axle. In this case, a bushing or bearing is positioned inside the hole inside the wheel to enable the wheel or gear to revolve 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 turns with the wheel. It is normally bolted in fixed relation to it and called an 'axle' or an 'axle shaft'. It is also true that the housing around it which is normally known as a casting is likewise referred to as 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. Thus, even transverse pairs of wheels in an independent suspension are generally called 'an axle.'

The axles are an integral part in a wheeled 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 motor vehicle body. In this system the axles must also be able to bear the weight of the motor vehicle together with whatever cargo. In a non-driving axle, like the front beam axle in various two-wheel drive light vans and trucks and in heavy-duty trucks, there will be no shaft. The axle in this condition serves only as a steering component and as suspension. Several front wheel drive cars consist of a solid rear beam axle.

The axle serves just to transmit driving torque to the wheels in various types of suspension systems. The angle and position of the wheel hubs is part of the functioning of the suspension system found in the independent suspensions of new sports utility vehicles and on the front of various new light trucks and cars. These systems still have a differential but it does not have connected axle housing tubes. It could be fixed to the 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 similar to 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 vehicle, regardless of their kind of mechanical connection to one another.