

Steer Axle for Forklift

Forklift Steer Axle - Axles are defined by a central shaft that rotates a wheel or a gear. The axle on wheeled motor vehicles may be attached to the wheels and turned with them. In this case, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle can be fixed to its surroundings and the wheels may in turn rotate around the axle. In this particular instance, a bushing or bearing is located within the hole in the wheel to enable the gear or wheel to revolve around the axle.

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

The axles are an integral part in a wheeled motor 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 should likewise be able to bear the weight of the vehicle plus whatever cargo. In a non-driving axle, like for instance the front beam axle in several two-wheel drive light trucks and vans and in heavy-duty trucks, there would be no shaft. The axle in this particular situation serves only as a steering part and as suspension. Many front wheel drive cars consist of a solid rear beam axle.

There are various types of suspension systems wherein the axles function only to transmit driving torque to the wheels. The position and angle of the wheel hubs is a function of the suspension system. This is usually seen in the independent suspension seen in the majority of new sports utility vehicles, on the front of several light trucks and on most new cars. These systems still have a differential but it does not have fixed axle housing tubes. It could be attached to the vehicle body or frame or even could 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.

Last but not least, in reference to a vehicle, 'axle,' has a more ambiguous definition. It means parallel wheels on opposing sides of the vehicle, regardless of their mechanical connection kind to one another and the motor vehicle body or frame.