

Steer Axle for Forklifts

Forklift Steer Axle - The definition of an axle is a central shaft meant for turning a wheel or a gear. Where wheeled motor vehicles are concerned, the axle itself may be fixed to the wheels and rotate with them. In this particular situation, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle may be attached to its surroundings and the wheels may in turn turn around the axle. In this particular situation, a bearing or bushing is positioned inside the hole within the wheel so as to allow the gear or wheel to revolve all-around the axle.

With trucks and cars, the word axle in some references is used casually. The term usually refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself revolves with the wheel. It is usually bolted in fixed relation to it and called an 'axle' or an 'axle shaft'. It is equally true that the housing surrounding it that is usually known as a casting is likewise referred to as an 'axle' or occasionally an 'axle housing.' An even broader sense of the term refers to every transverse pair of wheels, whether they are attached to one another or they are not. Thus, even transverse pairs of wheels within an independent suspension are often referred to as 'an axle.'

In a wheeled motor vehicle, axles are an essential part. 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 vehicle body. In this system the axles must even be able to bear the weight of the motor vehicle together with any cargo. In a non-driving axle, like the front beam axle in some two-wheel drive light vans and trucks and in heavy-duty trucks, there will be no shaft. The axle in this particular situation serves only as a steering part and as suspension. Many front wheel drive cars have a solid rear beam axle.

The axle works just to transmit driving torque to the wheels in several types of suspension systems. The position and angle of the wheel hubs is part of the operating of the suspension system seen in the independent suspensions of newer sports utility vehicles and on the front of various new light trucks and cars. These systems still consist of a differential but it does not have fixed axle housing tubes. It could be attached 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 like a full floating axle system as in they do not support the motor vehicle weight.

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