

Steer Axle for Forklifts

Forklift Steer Axle - The definition of an axle is a central shaft for turning a gear or a wheel. Where wheeled motor vehicles are concerned, the axle itself can be attached to the wheels and revolve together with them. In this instance, bushings or bearings 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 all-around the axle. In this case, a bushing or bearing is situated inside the hole within the wheel to allow the gear or wheel to rotate all-around the axle.

With trucks and cars, the term axle in several references is utilized casually. The word usually refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself revolves with the wheel. It is frequently bolted in fixed relation to it and referred to as an 'axle' or an 'axle shaft'. It is equally true that the housing around it which is usually known as a casting is also known as an 'axle' or sometimes an 'axle housing.' An even broader definition of the word 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 known as 'an axle.'

In a wheeled motor vehicle, axles are an integral component. With a live-axle suspension system, the axles function so as 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 should also be able to bear the weight of the motor vehicle together with whichever cargo. 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 would be no shaft. The axle in this particular condition serves only as a steering part and as suspension. Many front wheel drive cars have a solid rear beam axle.

There are various kinds of suspension systems where the axles work only to transmit driving torque to the wheels. The angle and position of the wheel hubs is a function of the suspension system. This is usually found in the independent suspension seen in the majority of brand new sports utility vehicles, on the front of various light trucks and on the majority of new cars. These systems still consist of a differential but it does not have fixed 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 vehicle weight.

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