

Steer Axles for Forklifts

Forklift Steer Axle - The description of an axle is a central shaft for revolving a gear or a wheel. Where wheeled vehicles are concerned, the axle itself may be fixed to the wheels and revolve along with them. In this situation, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle can be fixed to its surroundings and the wheels can in turn revolve all-around the axle. In this particular situation, a bearing or bushing is placed in the hole in the wheel so as to enable the wheel or gear to rotate all-around the axle.

With cars and trucks, the term axle in several references is utilized casually. The term usually refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates with the wheel. It is normally bolted in fixed relation to it and referred to as an 'axle' or an 'axle shaft'. It is equally true that the housing surrounding it which is usually known as a casting is likewise called an 'axle' or at times an 'axle housing.' An even broader definition of the term means every transverse pair of wheels, whether they are connected to one another or they are not. Hence, even transverse pairs of wheels inside an independent suspension are frequently referred to as 'an axle.'

The axles are an integral component in a wheeled motor vehicle. The axle serves so as 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 vehicle body. In this particular system the axles must also be able to bear the weight of the vehicle along with any load. In a non-driving axle, like the front beam axle in some two-wheel drive light trucks and vans and in heavy-duty trucks, there will be no shaft. The axle in this condition works just as a steering part and as suspension. Various front wheel drive cars consist of a solid rear beam axle.

There are other types of suspension systems wherein the axles operate 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 found in the independent suspension seen in most brand new SUV's, on the front of various light trucks and on the majority of new cars. These systems still have a differential but it does not have attached axle housing tubes. It can be attached to the vehicle frame or body or likewise 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 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.