

Steer Axles for Forklifts

Steer Axle for Forklift - Axles are defined by a central shaft that revolves a gear or a wheel. The axle on wheeled vehicles can be attached to the wheels and revolved with them. In this particular situation, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle can be attached to its surroundings and the wheels may in turn rotate around the axle. In this particular instance, a bushing or bearing is placed within the hole in the wheel in order to allow the gear or wheel to turn all-around the axle.

With cars and trucks, the term axle in some references is utilized casually. The word generally means 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 referred to as an 'axle' or an 'axle shaft'. It is also true that the housing surrounding it which is usually called a casting is likewise referred to as an 'axle' or sometimes an 'axle housing.' An even broader sense of the term means every transverse pair of wheels, whether they are connected to one another or they are not. Thus, even transverse pairs of wheels inside an independent suspension are often known as 'an axle.'

The axles are an important part in a wheeled vehicle. The axle works 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 motor vehicle body. In this system the axles should even be able to bear the weight of the vehicle together with whatever load. In a non-driving axle, as in the front beam axle in several two-wheel drive light vans and trucks and in heavy-duty trucks, there will be no shaft. The axle in this situation serves only 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 where 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 seen in the independent suspension found in most brand new SUV's, on the front of various light trucks and on most brand new cars. These systems still have a differential but it does not have fixed axle housing tubes. It could be fixed to the vehicle frame or body or also can 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 motor vehicle axle has a more ambiguous definition, meaning that the parallel wheels on opposing sides of the motor vehicle, regardless of their type of mechanical connection to one another.