

Steer Axle for Forklifts

Forklift Steer Axle - The definition of an axle is a central shaft utilized for turning a wheel or a gear. Where wheeled vehicles are concerned, the axle itself could be attached to the wheels and turn together with them. In this situation, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle could be connected to its surroundings and the wheels may in turn rotate all-around the axle. In this situation, a bushing or bearing is situated within the hole within the wheel to enable the wheel or gear to revolve all-around the axle.

With cars and trucks, the term axle in several references is used casually. The word usually means shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates together with the wheel. It is normally bolted in fixed relation to it and referred to as an 'axle' or an 'axle shaft'. It is likewise true that the housing surrounding it which is generally known as a casting is also called an 'axle' or occasionally an 'axle housing.' An even broader definition of the term refers to 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 generally called 'an axle.'

The axles are an integral part in a wheeled vehicle. The axle serves to be able 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 also be able to bear the weight of the vehicle together with whatever cargo. In a non-driving axle, like for instance the front beam axle in various two-wheel drive light trucks and vans and in heavy-duty trucks, there would be no shaft. The axle in this particular situation works only as a steering component and as suspension. Lots of front wheel drive cars have a solid rear beam axle.

There are different kinds 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 found in most new SUV's, on the front of many light trucks and on nearly all brand new cars. These systems still consist of a differential but it does not have attached axle housing tubes. It can be attached to the vehicle body or frame or even 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 vehicle weight.

To finish, in reference to a vehicle, 'axle,' has a more vague definition. It means parallel wheels on opposing sides of the motor vehicle, regardless of their mechanical connection type to one another and the vehicle frame or body.