Steer Axles for Forklifts

Steer Axles for Forklifts - The classification of an axle is a central shaft meant for revolving a wheel or a gear. Where wheeled vehicles are concerned, the axle itself can be attached to the wheels and revolve with them. In this situation, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle can be connected to its surroundings and the wheels could in turn revolve around the axle. In this instance, a bearing or bushing is placed inside the hole within the wheel to allow the gear or wheel to turn all-around the axle.

When referring to cars and trucks, several references to the word axle co-occur in casual usage. Generally, the term 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 also true that the housing around it that is normally known as a casting is likewise called an 'axle' or at times 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. Thus, even transverse pairs of wheels in an independent suspension are generally known as 'an axle.'

In a wheeled motor vehicle, axles are an essential component. With a live-axle suspension system, the axles work to transmit driving torque to the wheel. The axles likewise maintain the position of the wheels relative to one another and to the vehicle body. In this system the axles should also be able to bear the weight of the vehicle together with whatever load. In a non-driving axle, like for instance 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 works just as a steering component and as suspension. Several front wheel drive cars have a solid rear beam axle.

There are various kinds of suspension systems where the axles operate 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 seen in the independent suspension seen in most new sports utility vehicles, 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 fixed axle housing tubes. It can be attached to the vehicle body or frame 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 similar to a full floating axle system as in they do not support the motor vehicle weight.

Last of all, in reference 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 body or frame.