Steer Axles for Forklifts

Forklift Steer Axle - Axles are defined by a central shaft which revolves a wheel or a gear. The axle on wheeled motor vehicles can be fixed to the wheels and turned with them. In this situation, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle could be fixed to its surroundings and the wheels could in turn turn around the axle. In this situation, a bearing or bushing is situated within the hole inside the wheel so as to allow the gear or wheel to rotate all-around the axle.

With trucks and cars, the word axle in some references is used casually. The word usually means shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates with the wheel. It is usually bolted in fixed relation to it and known as an 'axle' or an 'axle shaft'. It is also true that the housing around it which is usually known as a casting is otherwise referred to as an 'axle' or occasionally an 'axle housing.' An even broader sense of the word refers to every transverse pair of wheels, whether they are connected to one another or they are not. Therefore, even transverse pairs of wheels within an independent suspension are often known as 'an axle.'

In a wheeled motor vehicle, axles are an essential part. With a live-axle suspension system, the axles work in order to transmit driving torque to the wheel. The axles even maintain the position of the wheels relative to one another and to the motor vehicle body. In this system the axles must likewise be able to support the weight of the motor vehicle together with any cargo. In a non-driving axle, like the front beam axle in various two-wheel drive light vans and trucks and in heavy-duty trucks, there will be no shaft. The axle in this condition serves only as a steering part and as suspension. Numerous front wheel drive cars have a solid rear beam axle.

There are other types of suspension systems wherein the axles function 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 often seen in the independent suspension found in most brand new SUV's, on the front of various light trucks and on nearly all brand new cars. These systems still have a differential but it does not have fixed axle housing tubes. It could 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, with regards to a vehicle, 'axle,' has a more ambiguous description. It means parallel wheels on opposing sides of the motor vehicle, regardless of their mechanical connection type to one another and the vehicle body or frame.