Steer Axle for Forklift

Steer Axle for Forklift - The description of an axle is a central shaft intended for turning a wheel or a gear. Where wheeled motor vehicles are concerned, the axle itself could be fixed to the wheels and rotate together with them. In this particular case, bearings or bushings 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 rotate all-around the axle. In this situation, a bearing or bushing is placed inside the hole in the wheel to enable the gear or wheel to turn all-around the axle.

When referring to trucks and cars, some references to the word axle co-occur in casual usage. Normally, the term refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself revolves along with the wheel. It is frequently 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 normally called a casting is otherwise known as an 'axle' or at times an 'axle housing.' An even broader definition of the word 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 frequently called 'an axle.'

In a wheeled vehicle, axles are an important component. 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 even be able to bear the weight of the vehicle plus whatever cargo. In a non-driving axle, like the front beam axle in several two-wheel drive light trucks and vans and in heavy-duty trucks, there will be no shaft. The axle in this situation works only as a steering part and as suspension. Many front wheel drive cars consist of a solid rear beam axle.

There are various types of suspension systems wherein the axles function just 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 new sports utility vehicles, on the front of many light trucks and on most brand new cars. These systems still have a differential but it does not have connected axle housing tubes. It can be fixed to the motor vehicle body or frame 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.

Lastly, with regards to a motor vehicle, 'axle,' has a more ambiguous 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.