

Forklift Drive Axle

Forklift Drive Axle - A forklift drive axle is a piece of machinery that is elastically affixed to a vehicle frame utilizing a lift mast. The lift mast is fixed to the drive axle and is capable of being inclined around the axial centerline of the drive axle. This is done by at the very least one tilting cylinder. Forward bearing elements together with back bearing parts of a torque bearing system are responsible for fastening the vehicle and the drive axle framework. The drive axle can be pivoted round a swiveling axis oriented horizontally and transversely in the vicinity of the rear bearing components. The lift mast can also be inclined relative to the drive axle. The tilting cylinder is connected to the vehicle framework and the lift mast in an articulated fashion. This enables the tilting cylinder to be oriented almost parallel to a plane extending from the axial centerline and to the swiveling axis.

Forklift models like for instance H45, H35 and H40 which are made in Aschaffenburg, Germany by Linde AG, have the lift mast tiltably mounted on the vehicle framework. The drive axle is elastically connected to the lift truck framework using numerous bearing devices. The drive axle comprise tubular axle body together with extension arms connected to it and extend rearwards. This kind of drive axle is elastically connected to the vehicle frame using back bearing elements on the extension arms along with frontward bearing devices located on the axle body. There are two back and two front bearing devices. Each one is separated in the transverse direction of the lift truck from the other bearing device in its respective pair.

The braking and drive torques of the drive axle on this model of forklift are sustained by the extension arms through the rear bearing elements on the framework. The forces generated by the load being carried and the lift mast are transmitted into the floor or road by the vehicle frame through the front bearing components of the drive axle. It is vital to ensure the elements of the drive axle are installed in a rigid enough manner so as to maintain strength of the lift truck truck. The bearing elements could minimize slight bumps or road surface irregularities during travel to a limited extent and provide a bit smoother operation.