Forklift Drive Axle

Forklift Drive Axle - A forklift drive axle is actually a piece of equipment that is elastically affixed to a vehicle frame using a lift mast. The lift mast is attached to the drive axle and could be inclined around the drive axle's axial centerline. This is accomplished by at least one tilting cylinder. Forward bearing elements along with back bearing parts of a torque bearing system are responsible for fastening the drive axle to the vehicle framework. The drive axle can be pivoted around a swiveling axis oriented horizontally and transversely in the vicinity of the rear bearing parts. The lift mast is also capable of being inclined relative to the drive axle. The tilting cylinder is connected to the lift truck frame and the lift mast in an articulated fashion. This enables the tilting cylinder to be oriented practically parallel to a plane extending from the axial centerline and to the swiveling axis.

Lift truck units like for example H40, H45 and H35 that are made in Aschaffenburg, Germany by Linde AG, have the lift mast tilt capably attached on the vehicle frame. The drive axle is elastically connected to the lift truck frame utilizing numerous bearing tools. The drive axle consists of tubular axle body together with extension arms attached to it and extend backwards. This kind of drive axle is elastically attached to the vehicle framework by rear bearing parts on the extension arms along with forward bearing devices located on the axle body. There are two rear 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 drive and braking torques of the drive axle on this model of forklift are sustained by the extension arms through the back bearing elements on the frame. The forces generated by the lift mast and the load being carried are transmitted into the floor or street by the vehicle framework through the front bearing parts of the drive axle. It is essential to ensure the parts of the drive axle are constructed in a rigid enough way in order to maintain strength of the lift truck truck. The bearing elements could minimize slight road surface irregularities or bumps throughout travel to a limited extent and give a bit smoother function.