Drive Axles

A lift truck drive axle is actually a piece of machinery which is elastically affixed to a vehicle frame with a lift mast. The lift mast is connected to the drive axle and is capable of being inclined round the drive axle's axial centerline. This is accomplished by no less than one tilting cylinder. Forward bearing parts along with back bearing components 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 transversely and horizontally 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 almost parallel to a plane extending from the axial centerline and to the swiveling axis.

Forklift models like for example H40, H45 and H35 which are manufactured in Aschaffenburg, Germany by Linde AG, have the lift mast tilt capably mounted on the vehicle frame. The drive axle is elastically attached to the lift truck frame using many bearing devices. The drive axle has tubular axle body together with extension arms attached to it and extend rearwards. This particular type of drive axle is elastically attached to the vehicle frame utilizing back bearing elements on the extension arms together 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 vehicle from the other bearing device in its respective pair.

The drive and braking torques of the drive axle are sustained through the back bearing components on the framework utilizing the extension arms. The lift mast and the load create the forces that are transmitted into the street or floor by the framework of the vehicle through the drive axle's anterior bearing parts. It is important to ensure the parts of the drive axle are configured in a firm enough manner to be able to maintain stability of the lift truck truck. The bearing parts could lessen small road surface irregularities or bumps through travel to a limited extent and give a bit smoother operation.