Drive Axle for Forklifts

Forklift Drive Axle - The piece of machinery that is elastically fastened to the framework of the vehicle utilizing a lift mast is the forklift drive axle. The lift mast connects to the drive axle and can be inclined, by at least one tilting cylinder, round the drive axle's axial centerline. Forward bearing parts combined with back bearing elements 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 back bearing components. The lift mast could also be inclined relative to the drive axle. The tilting cylinder is connected to the vehicle frame and the lift mast in an articulated fashion. This allows the tilting cylinder to be oriented almost parallel to a plane extending from the axial centerline and to the swiveling axis.

Lift truck units like H40, H45 and H35 that are made in Aschaffenburg, Germany by Linde AG, have the lift mast tilt ably attached on the vehicle frame. The drive axle is elastically connected to the lift truck framework utilizing many bearing devices. The drive axle consists of tubular axle body along with extension arms affixed to it and extend backwards. This type of drive axle is elastically affixed to the vehicle framework using rear bearing elements on the extension arms along with forward bearing tools situated on the axle body. There are two rear and two front bearing tools. Each one is separated in the transverse direction of the vehicle from the other bearing tool in its respective pair.

The drive and braking torques of the drive axle are sustained through the rear bearing components on the framework utilizing the extension arms. The lift mast and the load create the forces which are transmitted into the roadway or floor by the frame of the vehicle through the drive axle's anterior bearing elements. It is important to ensure the components of the drive axle are configured in a rigid enough way so as to maintain immovability of the lift truck truck. The bearing parts can reduce slight road surface irregularities or bumps throughout travel to a limited extent and provide a bit smoother operation.