Drive Axles

The piece of equipment that is elastically fastened to the frame of the vehicle with a lift mast is known as the lift truck drive axle. The lift mast affixes to the drive axle and could be inclined, by at least one tilting cylinder, round the drive axle's axial centerline. Forward bearing parts together with rear bearing parts of a torque bearing system are responsible for fastening the drive axle to the vehicle framework. The drive axle could be pivoted round a swiveling axis oriented transversely and horizontally in the vicinity of the back bearing parts. The lift mast could also be inclined relative to the drive axle. The tilting cylinder is affixed to the vehicle 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 made in Aschaffenburg, Germany by Linde AG, have the lift mast tilt ably mounted on the vehicle framework. The drive axle is elastically attached to the forklift framework by many bearing tools. The drive axle comprise tubular axle body together with extension arms attached to it and extend rearwards. This type of drive axle is elastically attached to the vehicle frame by back bearing elements on the extension arms along with frontward 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 forklift from the other bearing device in its respective pair.

The braking and drive torques of the drive axle on tis particular unit of forklift are sustained using the extension arms through the back bearing components on the frame. The forces produced by the load being carried and the lift mast are transmitted into the floor or roadway by the vehicle frame through the front bearing parts of the drive axle. It is vital to make sure the parts of the drive axle are constructed in a rigid enough way to maintain stability of the lift truck truck. The bearing components can reduce minor road surface irregularities or bumps during travel to a limited extent and provide a bit smoother operation.