Drive Axle for Forklift

Forklift Drive Axle - The piece of machinery that is elastically connected to the frame of the vehicle with a lift mast is the lift truck drive axle. The lift mast affixes to the drive axle and could be inclined, by at least one tilting cylinder, around the axial centerline of the drive axle. Frontward bearing elements along with rear bearing components of a torque bearing system are responsible for fastening the vehicle and the drive axle framework. The drive axle can be pivoted around a swiveling axis oriented transversely and horizontally in the vicinity of the rear bearing components. The lift mast could also be inclined relative to the drive axle. The tilting cylinder is affixed to the lift truck frame and the lift mast in an articulated fashion. This allows the tilting cylinder to be oriented nearly parallel to a plane extending from the axial centerline and to the swiveling axis.

Lift truck models like for instance H35, H40 and H45 that are made in Aschaffenburg, Germany by Linde AG, have the lift mast tilt ably mounted on the vehicle framework. The drive axle is elastically affixed to the lift truck frame using numerous bearing devices. The drive axle contains a tubular axle body along with extension arms attached to it and extend rearwards. This type of drive axle is elastically attached to the vehicle framework using rear bearing elements 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 are sustained through the back bearing components on the framework by the extension arms. The load and the lift mast generate the forces that are transmitted into the roadway or floor by the framework of the vehicle through the drive axle's front bearing elements. It is essential to make sure the components of the drive axle are installed in a firm enough manner so as to maintain immovability of the forklift truck. The bearing elements could minimize small bumps or road surface irregularities all through travel to a limited extent and provide a bit smoother operation.