Forklift Drive Axles

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

Model H40, H45 and H35 forklifts, that are made by Linde AG in Aschaffenburg, Germany, have a mounted lift mast tilt on the vehicle framework itself. The drive axle is elastically connected to the framework of the forklift using many different bearings. The drive axle contains a tubular axle body along with extension arms connected to it and extend rearwards. This kind of drive axle is elastically attached to the vehicle framework using rear bearing parts on the extension arms along with forward bearing tools situated 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 utilizing the extension arms through the rear bearing elements on the framework. The forces generated by the load being carried and the lift mast are transmitted into the floor or roadway by the vehicle frame through the front bearing components of the drive axle. It is important to be certain the elements of the drive axle are constructed in a firm enough manner to maintain strength of the lift truck truck. The bearing elements can reduce slight road surface irregularities or bumps through travel to a limited extent and provide a bit smoother function.