

Forklift Drive Axles

Forklift Drive Axle - A lift truck drive axle is actually a piece of machinery which is elastically fastened to a vehicle framework utilizing a lift mast. The lift mast is fixed to the drive axle and is capable of being inclined round the drive axle's axial centerline. This is done by at least one tilting cylinder. Forward bearing parts combined with back bearing parts of a torque bearing system are responsible for fastening the vehicle and the drive axle framework. The drive axle could be pivoted around a swiveling axis oriented transversely and horizontally in the vicinity of the back bearing elements. The lift mast could likewise be inclined relative to the drive axle. The tilting cylinder is attached to the vehicle frame and the lift mast in an articulated fashion. This allows the tilting cylinder to be oriented practically parallel to a plane extending from the swiveling axis to the axial centerline.

Lift truck units like for example H45, H35 and H40 which are produced in Aschaffenburg, Germany by Linde AG, have the lift mast tilt capably attached on the vehicle frame. The drive axle is elastically affixed to the lift truck frame by numerous bearing devices. The drive axle contains a tubular axle body together with extension arms attached to it and extend rearwards. This type of drive axle is elastically affixed to the vehicle frame by rear bearing parts on the extension arms together with frontward 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 forklift from the other bearing device in its respective pair.

The drive and braking torques of the drive axle on this unit of forklift are sustained using the extension arms through the rear bearing elements on the frame. The forces created by the load being carried and the lift mast are transmitted into the floor or roadway by the vehicle frame through the front bearing elements of the drive axle. It is important to make sure the elements of the drive axle are put together in a firm enough manner so as to maintain stability of the lift truck truck. The bearing parts can lessen minor bumps or road surface irregularities throughout travel to a limited extent and provide a bit smoother operation.