Drive Axle for Forklifts

Forklift Drive Axle - The piece of machinery that is elastically connected to the frame of the vehicle with a lift mast is called the forklift drive axle. The lift mast affixes to the drive axle and could be inclined, by no less than one tilting cylinder, around the axial centerline of the drive axle. Forward bearing elements together with rear bearing elements of a torque bearing system are responsible for fastening the drive axle to the vehicle frame. The drive axle can be pivoted around a swiveling axis oriented transversely and horizontally in the vicinity of the back bearing parts. The lift mast is likewise capable of being inclined relative to the drive axle. The tilting cylinder is affixed to the lift truck framework 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.

Model H40, H45 and H35 forklifts, that are produced by Linde AG in Aschaffenburg, Germany, have a affixed lift mast tilt on the vehicle framework itself. The drive axle is elastically affixed to the frame of the lift truck utilizing numerous various bearings. The drive axle consists of tubular axle body along with extension arms attached to it and extend backwards. This particular kind of drive axle is elastically connected to the vehicle frame using back bearing elements on the extension arms together with forward bearing tools located 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 tool 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 components on the framework. The forces created by the lift mast and the load being carried are transmitted into the floor or road by the vehicle framework through the front bearing elements of the drive axle. It is vital to ensure the parts of the drive axle are constructed in a rigid enough method to be able to maintain stability of the lift truck truck. The bearing parts can reduce minor bumps or road surface irregularities during travel to a limited extent and offer a bit smoother function.