Forklift Drive Axle

Forklift Drive Axle - The piece of machinery which is elastically connected to the framework of the vehicle with a lift mast is called the forklift drive axle. The lift mast affixes to the drive axle and can be inclined, by at least one tilting cylinder, round the axial centerline of the drive axle. Forward bearing components along with back 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 components. The lift mast could also be inclined relative to the drive axle. The tilting cylinder is connected to the vehicle frame and the lift mast in an articulated fashion. This enables 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 mounted lift mast tilt on the vehicle framework itself. The drive axle is elastically attached to the framework of the lift truck by many various bearings. The drive axle consists of tubular axle body together with extension arms connected to it and extend rearwards. This particular type of drive axle is elastically affixed to the vehicle frame using back bearing parts on the extension arms along with forward bearing devices located on the axle body. There are two back and two front bearing devices. Each one is separated in the transverse direction of the vehicle from the other bearing machine in its respective pair.

The drive and braking torques of the drive axle on tis particular unit of forklift are sustained by the extension arms through the back bearing elements on the framework. The forces generated by the load being carried and the lift mast are transmitted into the floor or street by the vehicle framework through the front bearing parts of the drive axle. It is important to make certain the parts of the drive axle are configured in a rigid enough method to be able to maintain strength of the forklift truck. The bearing elements can lessen minor bumps or road surface irregularities through travel to a limited extent and offer a bit smoother operation.