

Drive Axle for Forklifts

Forklift Drive Axles - A lift truck drive axle is a piece of machinery that is elastically affixed to a vehicle frame using a lift mast. The lift mast is connected to the drive axle and can be inclined around the axial centerline of the drive axle. This is done by no less than one tilting cylinder. Forward bearing elements along with back bearing components 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 horizontally and transversely in the vicinity of the back bearing components. The lift mast is likewise capable of being inclined relative to the drive axle. The tilting cylinder is attached 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.

Unit H40, H45 and H35 forklifts, that are made by Linde AG in Aschaffenburg, Germany, have a attached lift mast tilt on the vehicle frame itself. The drive axle is elastically attached to the framework of the lift truck utilizing many various bearings. The drive axle contains a tubular axle body along with extension arms affixed to it and extend backwards. This particular kind of drive axle is elastically affixed to the vehicle framework by rear bearing elements on the extension arms along with forward bearing devices situated on the axle body. There are two back 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 braking and drive 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 created by the load being carried and the lift mast are transmitted into the floor or roadway by the vehicle framework through the front bearing parts of the drive axle. It is essential to ensure the parts of the drive axle are put together in a rigid enough manner in order to maintain stability of the forklift truck. The bearing elements could lessen slight bumps or road surface irregularities throughout travel to a limited extent and offer a bit smoother operation.