A forklift drive axle is actually a piece of equipment that is elastically fastened to a vehicle frame using a lift mast. The lift mast is connected to the drive axle and could be inclined round the axial centerline of the drive axle. This is accomplished by at the very least one tilting cylinder. Frontward bearing components together with rear bearing elements of a torque bearing system are responsible for fastening the drive axle to the vehicle framework. The drive axle can be pivoted around a swiveling axis oriented horizontally and transversely in the vicinity of the back bearing parts. The lift mast could also be 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 enables the tilting cylinder to be oriented almost parallel to a plane extending from the swiveling axis to the axial centerline.

Lift truck units like H45, H35 and H40 which are produced in Aschaffenburg, Germany by Linde AG, have the lift mast t ilably attached on the vehicle frame. The drive axle is elastically affixed to the lift truck framework utilizing a multitude of bearing devices. The drive axle contains a tubular axle body together with extension arms affixed to it and extend rearwards. This particular type of drive axle is elastically attached to the vehicle framework utilizing rear bearing elements on the extension arms along with forward bearing tools located on the axle body. There are two rear and two front bearing tools. 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 this particular model of forklift are sustained using the extension arms through the back bearing parts 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 frame through the front bearing parts of the drive axle. It is important to be sure the parts of the drive axle are installed in a rigid enough manner to be able to maintain immovability of the lift truck truck. The bearing parts can lessen slight road surface irregularities or bumps all through travel to a limited extent and offer a bit smoother operation.