Forklift Drive Axle

Forklift Drive Axle - A forklift drive axle is a piece of machinery that is elastically connected to a vehicle frame with a lift mast. The lift mast is attached to the drive axle and can be inclined around the drive axle's axial centerline. This is done by at least one tilting cylinder. Frontward bearing elements combined with back bearing parts of a torque bearing system are responsible for fastening the vehicle and the drive axle frame. The drive axle can be pivoted round a swiveling axis oriented transversely and horizontally in the vicinity of the back bearing components. The lift mast is also capable of being inclined relative to the drive axle. The tilting cylinder is affixed to the vehicle frame and the lift mast in an articulated fashion. This allows the tilting cylinder to be oriented almost parallel to a plane extending from the axial centerline and to the swiveling axis.

Forklift models like for example H40, H45 and H35 which are made in Aschaffenburg, Germany by Linde AG, have the lift mast tilt capably mounted on the vehicle framework. The drive axle is elastically connected to the forklift framework by numerous bearing devices. The drive axle consists of tubular axle body together with extension arms connected to it and extend backwards. This particular type of drive axle is elastically connected to the vehicle framework utilizing rear bearing parts on the extension arms along with forward bearing tools situated on the axle body. There are two back and two front bearing tools. Each one is separated in the transverse direction of the forklift from the other bearing tool in its respective pair.

The braking and drive torques of the drive axle on tis particular unit of forklift are sustained utilizing the extension arms through the rear bearing components on the framework. The forces produced by the lift mast and the load being carried are transmitted into the floor or road 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 so as to maintain stability of the forklift truck. The bearing elements could lessen slight road surface irregularities or bumps throughout travel to a limited extent and give a bit smoother function.