Drive Axle for Forklift

Forklift Drive Axle - A forklift drive axle is a piece of equipment which is elastically affixed to a vehicle framework using a lift mast. The lift mast is connected to the drive axle and is capable of being inclined around the axial centerline of the drive axle. This is done by at least one tilting cylinder. Frontward bearing components together with rear bearing parts of a torque bearing system are responsible for fastening the vehicle and the drive axle framework. The drive axle can be pivoted round a swiveling axis oriented transversely and horizontally in the vicinity of the back bearing parts. The lift mast can likewise be inclined relative to the drive axle. The tilting cylinder is attached to the lift truck 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.

Lift truck models like H45, H35 and H40 which are manufactured in Aschaffenburg, Germany by Linde AG, have the lift mast tilt ably mounted on the vehicle framework. The drive axle is elastically connected to the forklift frame using a multitude of bearing devices. The drive axle consists of tubular axle body along with extension arms attached to it and extend backwards. This particular type of drive axle is elastically affixed to the vehicle frame by back bearing parts 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 machine 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 parts on the framework. The forces generated by the load being carried and the lift mast are transmitted into the floor or road by the vehicle frame through the front bearing elements of the drive axle. It is essential to ensure the components of the drive axle are put together in a firm enough manner to be able to maintain stability of the forklift truck. The bearing components can reduce small road surface irregularities or bumps during travel to a limited extent and give a bit smoother function.