Special Feature

The PALFINGER Endless Slewing Mechanism permits an unrestricted radius of action. The crane is rotated or 'slewed' using a gear box and hydraulic motor rather than a rack and pinion system.

All endless slewing mechanisms come as standard with a high quality roller ball bearing.
Benefits

- Faster cycle times especially for parcel loads (form cages, pallets, lumber, etc.) because the crane doesn’t have to be rotated backwards to the deck
- The crane works more efficiently and cost effectively
- Safer and smoother operation since there are no dead stops to run up against
- Higher slewing moment through minimized friction in the slewing mechanism
- Extremely smooth rotation with virtually no bearing slackness even after years of operation
- Bearing is designed to last as long as the crane, unlike nylon bushings which usually need to be replaced one or two times in a crane’s lifetime

How It Works

A hydraulic motor drives a pinion which meshes with a base-mounted high quality roller ball bearing, rotating the crane. The gears are precision machined to minimize back lash between the gears. The roller ball bearing is made with very tight tolerances for width, flatness, and perpendicularity. The matching surfaces on the base and the column are machined in a single clamping for the highest possible accuracy.

On larger cranes two identically sized slewing motors are set across from each other on the column. One motor is hydraulically preloaded against the other, which eliminates all backlashes in the rotation system.

Hydraulic and electrical lines are fed through an easily accessible rotary distributor in the crane column, so that the rotation is not restricted by hose bundles.