

Slewing drive can divide into open housing and enclosed housing by structure, take the hourglass worm technology and reach the multi-tooth meshing effect, to make the working condition more smoothly.

Slewing drive widely used in aerial working platform, truck mounted cranes, and deck cranes etc.



Along with the widely use in the different fields, slewing drive are more and more used in the modular trailers to replace the old structure design to make the vehicle more compact and the body of vehicle lower.

More and more new product are developed to satisfied the requirement from different fields, especially the "high precision" and "zero backlash" series are widely used in the robot , automatical manipulator, and high precision CNC machine tool industry





Slewing drive are more used in the solar single axis and dual axis tracking systems. They are main: crystalline silicon power generation, high concentrated power generation, disc type power generation, and trough type power generation and tower power tracking systems.

Slewing drive with dual axis are more and more used in small size or household tye solar tracking systems, because it can realize the tracking in horizontal direction and elevation direction, the generating efficiency can increase more than 20%. The total cost will be decreased and improve the economic benefit.



Small size four point contact ball slewing bearing are often used for excavator, the diameter usually will no more than 2000mm. The gear teeth will be after heat treatment and the hardness range $50\pm 5\text{HRC}$.

Slewing Bearing for truck mounted crane.



Slewing Bearing for tower cranes, usually we take the single row ball structure and the diameter no more than 2000mm.



Slewing bearing for ship loader, usually we take external gear, three row roller structure, the diameter exceed 4000mm.





Slewing bearings for stacker and reclaimer. The diameter usually over 3000mm, those bearings features in long life, high load capacity and high performance anti-dust sealing designed because they have to be worked for heavy-duty application in extremely dirty environmental condition.

Slewing bearing for ferris wheel, the max outer diameter can up to 4100mm, the overall height can reach only 85mm.



Slewing bearing for deck cranes. The structure can be choose according to the load carrying capacity, large size three row roller structure is often selected for the heavy duty deck crane, four point contact ball or double row ball slewing bearing are selected for the light duty deck cranes. Since the crane work in the temperature condition between -20°C — $+45^{\circ}\text{C}$, the bearings have high requirements on mechanical properties. Sometimes, customer will need CCS, ABS, DNV, BV, or GL certificate etc.

Harbour mobile crane often use three row roller slewing bearings with an external or internal gear with big diameter which can bear high tilting moment.



Slewing Bearing for ladle turret, usually take three row roller structure, this application has high requirement for the retainer, grease, and seals performance because it is under the condition with dust and high temperature.

Yaw slewing bearing is mounted between the connection of tower and cabin. Blade slewing bearing is mounted between the connection of blade root and wheel hub. Each wind turbine generator comprises of one yaw slewing bearing and three nos blade bearings, the material of the rolled rings is 42CrMo with heat treatment and tempering process. Raceway surface intermediate frequency induction hardened. Due to complexity of the stress situation, the bearing must bear impact and carry high impact and frequency, the yaw and blade slewing bearing must bear impact & high load.



20 years is a required lifetime for the wind turbine generator, it is also required by yaw and blade slew bearings as the mounting cost is too high. The Matrix hardness of bearing ring is 240-280HB, which can bear impact and don't happen plastic deformation, The hardness of raceway surface quenching up to 55-62HRC, that can increase the contact fatigue's life, so as to ensure the use requirement of bearing's long life.