

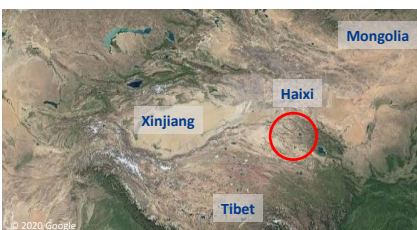
# Luneng Haixi Geermu Power Plant (China)



## Project description

Located in Haixi, Qinghai province in northwest China, Lu'neng Haixi 50 MW Molten Salt Tower CSP Project is a crucial part of 700 MW Lu'neng Haixi Geermu Multi-energy Complement Integration Optimization Pilot Project. The CSP facility, which will contribute 50 MW of capacity is expected to reduce coal consumption by about 400,000 metric tonnes per year and dust emission by over 5,000 metric tonnes. The CSP facility has a central tower of height 188 m, with a receiver of height 14 m near the top onto which sunlight is reflected from the 4,400 "heliostat" mirrors that are arranged around the tower in concentric circles. Each heliostat has an area of 138 m<sup>2</sup>, and is supported, high above the ground, on a column which enables it to rotate. The orientation of all heliostats is controlled by a computer system which ensures that all mirrors are optimally tilted to reflect the sun's rays onto the receiver as the sun moves across the sky.

The project is located in Haixi, Qingdao province in northwest China



## mageba scope

8 RESTON®SPHERICAL bearings have been used in the construction of the tower, supporting the large receiver element and 4 of these are designed to protect against uplift forces.

The decision to use RESTON®SPHERICAL bearings, which are essentially fabricated only from steel and high-performance ROBO®SLIDE sliding material, was particularly appropriate considering the high temperatures of up to 150 °C arising at the bearing locations.

The CSP facility has a central tower with a height of 188 m



## Highlights & Facts

### mageba products:

Type: RESTON®SPHERICAL bearings  
 Features: Four bearings designed with uplift protection  
 Installed: 2019

### Structure:

City: Haixi  
 Country: China  
 Type: Power plant  
 Completion: 2019  
 Owner: Luneng New Energy (Group) Co., Ltd  
 Contractor: SEPCOIII Electric Power Construction Co., Ltd  
 Designer: Northwest Electric Power Design Institute Co., Ltd

RESTON®SPHERICAL bearings in the Chinese factory after coating

