

Energy for the future

Solar tracker positioning with gearmotors



Project overview

Industry

Solar industry

Application

Solar tracking system

SEW-EURODRIVE Products

Standard gearmotors

Motion and logic controller

MOVI-PLC®

Customer

Stadtwerke Karlsruhe

(Karlsruhe public utility company)

Project

Electricity from solar power – not an unusual thing in Germany. Solar modules on countless roofs help to reduce CO₂ emissions and protect the climate. In cooperation with the IGATEC engineering company, the Karlsruhe public utility company has designed an extraordinary photovoltaic plant.

So far, using three large solar panels as architectural element is an unusual approach. The solar trackers allow for a high efficiency and have an extraordinary architectural structure.

Project description

The public utility company at Karlsruhe own three solar panels on the premises of Vollack, a construction service provider in Karlsruhe. This common effort has resulted in an architectural and technological highlight. IGATEC GmbH in Speyer on the Rhine was in charge of the preliminary and executive planning, and installed the plant. The drive solution for the solar panels was developed in cooperation with SEW-EURODRIVE. Three solar panels are provided as sails. Each sail weighs more than four tons, but follows the sun nonetheless.

Two SEW-EURODRIVE standard gearmotors each move the heavy sails without a problem. They are also used to protect the plant in the event of a storm: As of wind force 7, the solar panels are turned out of the wind to reduce the contact surface. The position is measured with an absolute encoder each. The calculations are performed by a programmable MOVI-PLC® controller according to IEC 1131.

With their extremely versatile modular gearmotor concept, SEW-EURODRIVE provides the perfect technical solution for any requirements regarding the regenerative energy sector. You might want to equip photovoltaic trackers, heliostats or solar power stations – the Bruchsal-based drive automation experts always find the perfect technologically efficient solution for their customers.



Gearmotors R series from the modular concept of SEW-EURODRIVE

Have we attracted your interest? Just send an e-mail to our experts: solar@sew-eurodrive.de

The slideshow podcast on this application is available on YouTube: <http://solartracker.sew.de>



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