

## SunFlex tracking systems for photovoltaic plants



Increase the efficiency of your solar plant by up to  
40% with pesos SunFlex tracking systems.

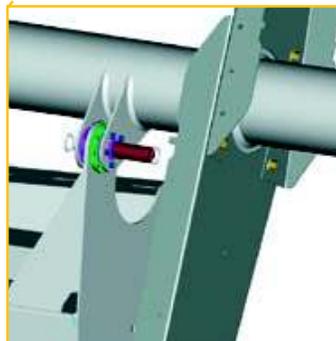
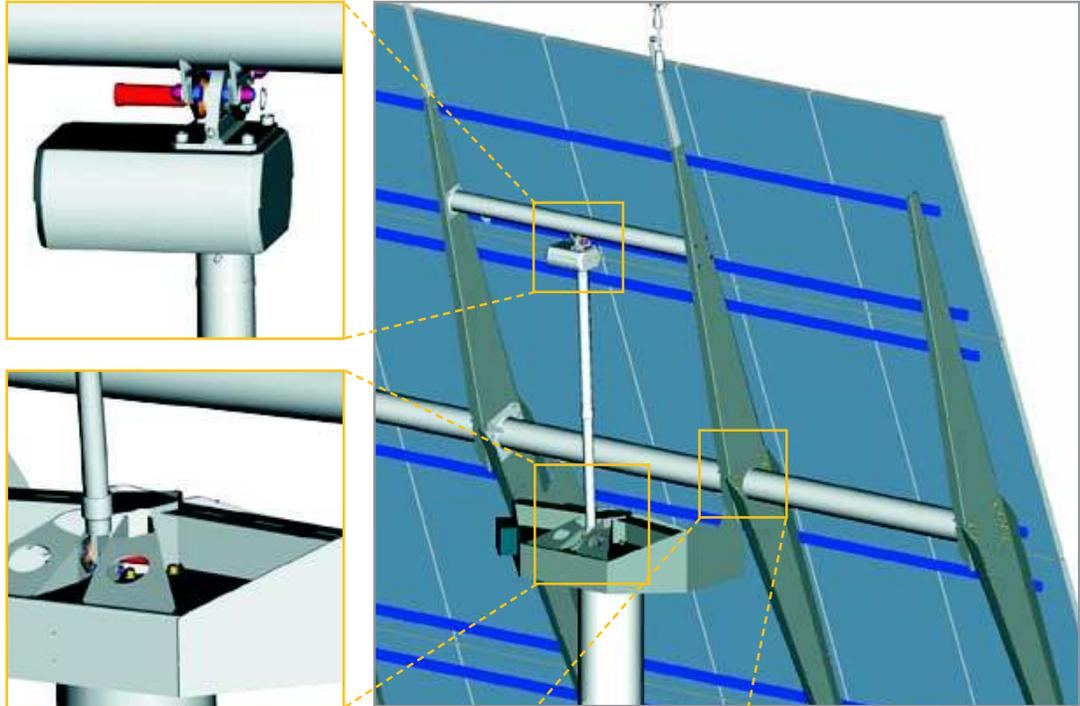


# Quality pays off because only premium technology guarantees long-term efficiency.

The swivel drive (elevation) takes the form of a spindle-type lifting gear and spans an angle of +3 to +75° to the horizontal.

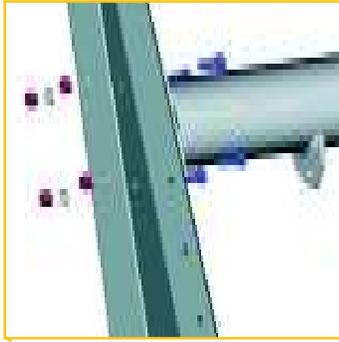
The efficiency of a solar plant can be hugely improved by using tracking systems. As solar modules supply the most energy when the sunrays hit the cells at right angles, the irradiation is most effectively used when the module surfaces track the position of the sun over the course of the day.

- Swivel drive (elevation) by spindle-type lifting gear
- Lifting force 25 kN
- Resilient even to strong winds and sudden gusts
- Automatic position recording



- Low friction thanks to slide bearing
- Low breakaway torque
- Durable even under heavy load
- Maximum precision

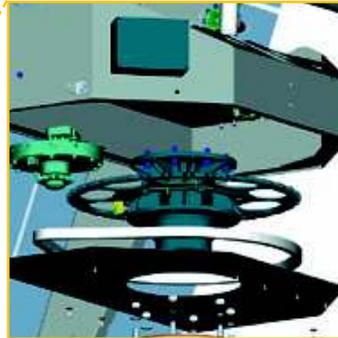
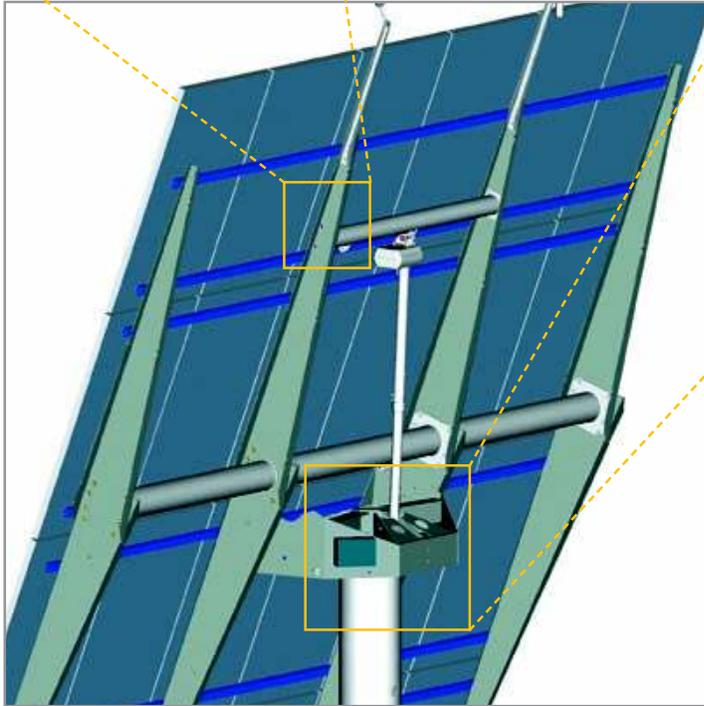




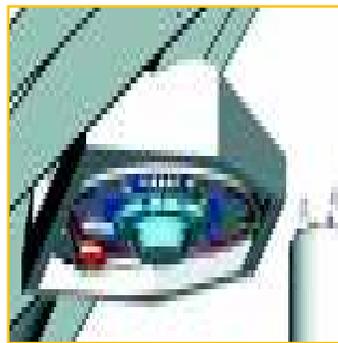
- *Simple assembly*
- *Easy to transport thanks to kit form*

The range of rotation (azimuth) of the tracking systems spans a maximum angle of 270°.

The drive is operated by a planetary gear with a high torque.



- *Rotary drive (azimuth) via planetary gear*
- *High torque transmission*



- *Maintenance-free inner bearing*
- *Effective dust cover*
- *Automatic position recording*

That is why we developed our innovative pesos SunFlex tracking system series. The biaxial tracking system is suitable for all types of module and ensures that the solar modules are positioned at the best possible angle to the sun. This means that not just direct solar irradiation but also scattered light are effectively converted into energy. Compared to a fixed, southward-facing plant, the pesos SunFlex tracking systems can increase yield by up to 40 percent.

pesos SunFlex tracking systems are very tough, low maintenance and extremely weatherresistant, ensuring that the solar plant can withstand long-term exposure to the elements. Because what use is a tracking system that stops working after a short period of time or in bad weather?

The control has the following operating modes:

- *by sensor*
- *astronomically*
- *centrally (master/slave) or*
- *manually using pesos SunSoft products*
- *autom. summer/winter detection*

The communicating control software has a low power requirement.



# SunFlex tracking systems for photovoltaic plants

reliable · low maintenance  
tough · weatherresistant

Biaxial SunFlex tracking systems can increase the energy yield of a solar plant by up to 40% compared to a fixed, southward-facing plant.

SunFlex tracking systems are suitable for all types of module. Thanks to its extremely high tracking accuracy the pesos SunFlex SFC 30 tracking system with precision gear can also be used for concentrator cells.

The special sensor head ensures accurate tracking both with direct solar irradiation and scattered light.

Wind sensors are used to position the solar modules horizontally if the wind speed exceeds 40 km/h, thus offering optimal protection even at high wind speeds.

All metal parts in the tracking systems are hot-dip galvanized and corrosion resistant. Which means that we can offer a 20 year rust-through warranty.

The SunFlex systems come as a cost effective construction kit and can be installed easily on-site without using any special tools.



## Technical specifications

	SF 40	SF 18	SF 12	SF 2
Maximum module surface	42 m <sup>2</sup>	20 m <sup>2</sup>	12 m <sup>2</sup>	3 m <sup>2</sup>
Minimum module surface	33 m <sup>2</sup>	16 m <sup>2</sup>	7 m <sup>2</sup>	1 m <sup>2</sup>
Minimum ground clearance	0.59 m	0.63 m	0.63 m	0.78 m
Mast height (above ground level)	3.5 m	2.5 m	2.5 m	1.3 m
Mast diameter	406 mm	245 mm	245 mm	76 mm

## Basic data

Wind load	DIN 1055-4 wind zone 4 = 30.0 m/s
Snow load	average
Slope of ground	0 to 5%
Soil pressure	average 150 kN/m <sup>2</sup>
Module weight	max. 14 kg/m <sup>2</sup>
Assembly system	max. 2.5 kg/m <sup>2</sup>