



Reorganized Schletter will exhibit new tracking system at SPI 2018

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🇺🇸 Solar Power World

At this year's Solar Power International (SPI), the globally active Schletter Group will present a new tracking system. With a width of 4 m, the single-axis tracking system has the same level of stability as a fixed mounting system thanks to a patent-pending locking mechanism.

"For the first time ever, this tracker combines the benefits of our fixed mounting systems with the additional yields of a tracking system," Dr Cedric Zapfe said. He and his team in Germany worked closely with the U.S. engineering team to develop the system. "Easy assembly and servicing were also key aspects when designing the system."

An innovative drive concept is at the heart of this new tracker. It requires no hydraulic dampers and completely avoids the dangerous 'galloping effect' under wind loads.

"This new tracker incorporates inputs from our customers in North America and leverages the experience and innovation of the Schletter group," remarked Russell Schmit, North American CEO. "We are confident that this tracker will meet or exceed expectations in terms of performance and reliability."

While most other tracking systems use hydraulic dampers or similar supporting structures to mitigate the vibrations and torsional forces caused by the wind, this Schletter system works with a self-locking mechanism. Each post is equipped with a mechanical locking element which automatically locks as soon as the row has stopped moving. This newly-developed and patent-pending drive system fully eliminates vibrations over the entire row which can be caused by wind. Therefore the system, while at rest, has the properties and durability of a fixed mounting system and is designed to withstand wind speeds of up to 160 mph.

The tracker has a rotational range of $\pm 60^\circ$ and tracks the sun astronomically. Each row can be up to 120 m long and is driven by one centrally located motor. At 4 m in width, each row is wide enough to hold either two panels oriented vertically or four horizontally, thus up to 480 sq m of solar can be installed per row and motor. This allows operators to make optimal use of the available land and a ground cover ratio of more than 50% can be achieved.

The motor and the control systems are self-powered by a dedicated PV panel in each row with a battery pack ensuring greatest possible reliability of operation. The system is controlled through wireless technology which completely obviates expensive wiring for both power supply and communication.

As the upper sub-assembly already comes pre-mounted to the motor unit, installing the system is very quick and safe. The motor and the control system are put into operation according to the principle of plug and play. The system is manufactured mostly from galvanised steel and can stand either on pile-driven or concrete foundations. Furthermore, the system is able to compensate slopes in the terrain of up to 10°.

To make maintenance and servicing easier, mechanical connections between the rows have been deliberately avoided. This allows unhampered vehicle access between the rows during servicing and maintenance work.

Both the German and U.S. Schletter divisions filed bankruptcy earlier this year and have since reorganized under new financial backing.

News item from Schletter

<https://powerlinks.news/article/8e6b69/reorganized-schletter-will-exhibit-new-tracking-system-at-spi-2018>