



PRESSEMITTEILUNG • PRESS RELEASE

## **NEP Solar, Winner of Intersolar 2009 Innovation Award in solar thermal, Chooses Alanod-Solar for Reflective Surface Solution**

*Alanod-Solar MIRO-SUN<sup>®</sup> material used in PolyTrough 1200 collector*

**Ennepetal, Germany – June 29, 2009** – Alanod-Solar, a worldwide leader in manufacturing advanced reflective and absorptive solar surfaces, revealed today that its MIRO-SUN<sup>®</sup> reflective material is used by NEP Solar in its Polytrough 1200 and upcoming PolyTrough 1800 solar thermal collectors. The NEP Solar Polytrough 1200 was the recent recipient of the Innovation Award in the solar thermal category at Intersolar 2009 in Munich, Germany.

NEP Solar's new solar process heat collector won the award using a proprietary process for the production of composite reflector panels. Instead of the more traditional two-step attachment process, NEP Solar molds the aluminium reflector sheet directly onto a composite sandwich structure in one single production step. The MIRO-SUN aluminium reflector then becomes an actual part of the composite panel and contributes to the overall structural stiffness of the panel. This guarantees the geometric precision of the panel, crucial for the high thermal performance of the collector.

"This pioneering approach to innovation, quality design and a focus on life cycle costs will contribute significantly to the growth of solar thermal around the world," said NEP Solar CEO Johan Dreyer. "The performance and reliability of Alanod-Solar's MIRO-SUN material are critical to this formula, and will be an important factor in our long term success."

NEP Solar's integration of the MIRO-SUN reflective surface into the parabolic reflector panels has a number of additional advantages:

- In-house geometric quality assurance by photogrammetry;
- Highly compact shipping volume;
- Excellent durability and form stability;
- Extremely light reflector panels to facilitate on site assembly;
- Market leading life cycle costs for the solar industry.

The PolyTrough 1200 with MIRO-SUN targets an untapped market segment because it is designed for mid-range process temperatures between 100 and 220°C. The system offers enormous market potential because it can be installed on roofs or on the ground and is used primarily for the generation of process heat and solar cooling. The PolyTrough 1800, an upscale version allowing cost savings for larger solar fields, is already in the development stage. Both systems take advantages of MIRO-SUN's highly reflective surface, coupled with its lightweight, durable, and efficient performance characteristics.

MIRO-SUN is a weatherproof, highly reflective aluminum sheet that is used in parabolic troughs and for other reflective solar applications. MIRO-SUN is also available in a special backside lacquered version for CPC mirrors for vacuum tube collectors and as MIRO-SUN PV, a reflector that is spectrally matched for photovoltaic applications with silicon cells.



## PRESSEMITTEILUNG • PRESS RELEASE

The innovative nature of the NEP Solar reflector system impressed the Intersolar award jury. With its PolyTrough 1200, NEP Solar demonstrates that the potential for using synthetics in the solar industry has not been fully explored and that composite materials can even be employed in concentrating collecting systems.

NEP Solar's PolyTrough 1200 was successfully developed with assistance from a grant under the Australian Government Renewable Energy Development Initiative and was tested at the CSIRO Energy Centre in Newcastle.

### **About Alanod-Solar**

Alanod-Solar is a division of ALANOD Aluminum Veredlung, a thirty-year leader in surface solutions based in Ennepetal, Germany. Alanod-Solar leverages the world's most advanced development labs and production lines to create superior reflective and absorptive surface solutions. The company's long history of excellence and reliability set it apart in the industry, with the performance of its products leading to higher efficiency, better durability and an overall lower cost of systems for solar technologies.



NEP Solar Pty Ltd. collector PolyTrough 1200 with MIRO-SUN®