

SANLUCAR 90, A NEW HELIOSTAT FOR A 10 MWe SOLAR PLANT

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Inabensa is developing a new 91m² glass metal heliostat for its 10 MWe solar tower power plant in Sanlucar la Mayor –PS10-, Seville. This prototype is called Sanlucar 90.

The main characteristics of this prototype are resumed in the following two points:

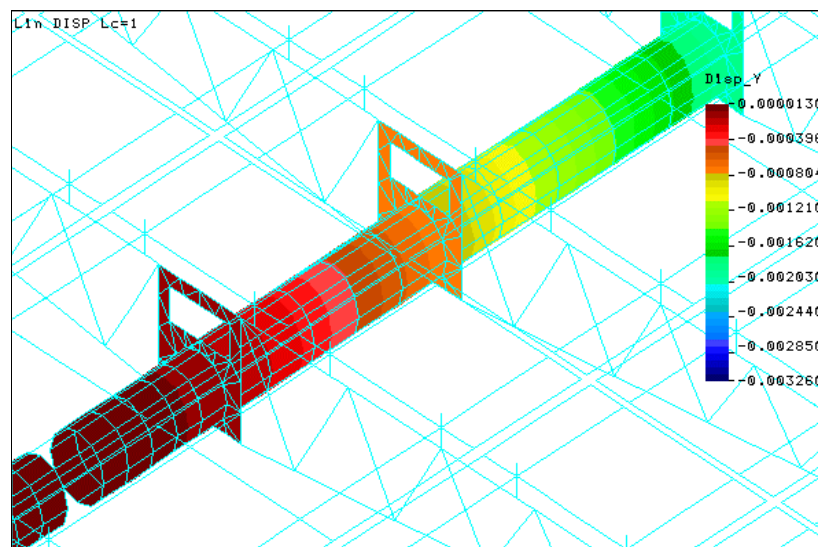
- Lighter structure.
- Easier erection.

Both characteristics are directly pointing to the reduction of costs in the manufacturing and assembling of the great number of units –around one thousand-, that are going to be installed at the PS10 plant site.

Heliostats components manufactured in foundry factories will be completely assembled at the heliostat field. The assembling building will provide then, canted “on axis” heliostats ready to fix to their specific concrete pedestals previously erected in the solar field.

Local and global controls are being developing too in order to provide the heliostat with a low cost electronic card. Acceptance, optical and tracking tests will be performed during 1999 in the Plataforma Solar de Almería and will be reported at the conference. For these activities, -control development and tests assays-, the collaboration of Ciemat/DER-PSA will be necessary and estimated.

As a result of these works, estimated costs for heliostat surface unit will be about 130\$/m² in a massive production of 1000 units/year.



Vertical displacement study of the horizontal arm of Sanlucar 90 heliostat.