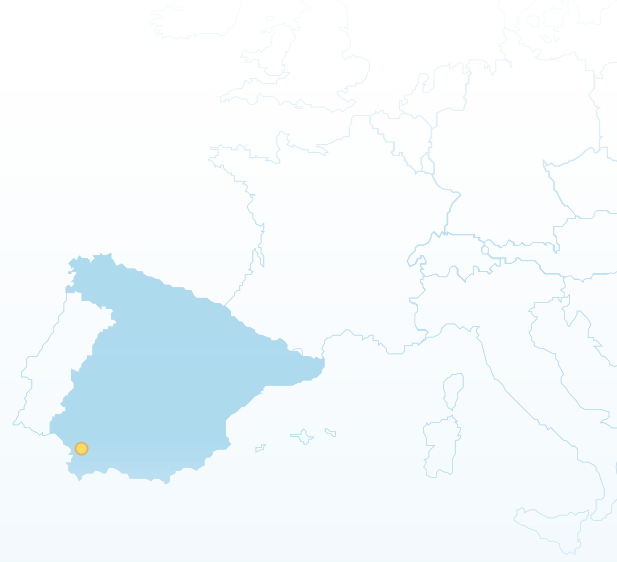


Concentrated Solar Power (CSP)

PS10, Seville, Spain



Background

- DP's boiler technology was adapted and deployed in PS10, the first commercial plant to use concentrated solar power tower technology (CSP).
- Located at the Solúcar Complex in Sanlúcar la Mayor, Seville, Spain.
- The solar field occupies 148 acres and has 624 heliostats (moveable mirrors) each being 121 sqm and a 100m high tower with 11MW capacity.
- The heliostats concentrate the solar radiation onto a receiver located at the top of the tower.
- Online in mid-2007 and operating successfully since then.
- Supplying 23,00 GWh of electricity every year to the grid.

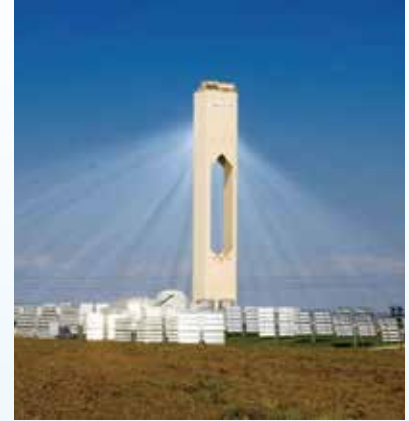
Technology

- During operation at full load, the tower receives about 55,0MWt of concentrated solar radiation (with peaks of 650kW/m²).
- Molten salt fluid within the receiver is heated at 600 -1,000°C through 4 panels with an overall heat exchange surface of about 260m² (5.40m width x 12.00m height).
- The heat exchanger uses DP technology to convert the solar radiation flux to over 100,000 kg/h of saturated steam at 40bar - 250°C.
- Low ratio of steam at the panels, in order to ensure wet inner walls in the tubes.
- Special steel alloys allow operation through heat fluxes and high temperatures.



Summary

Developer	Abengoa
Location	Sanlúcar la Mayor, Sevilla, Spain
Nominal Power	11.02MWe
Tower Height	100.5m
Receiver Heat Exchange Technology	Saturated Steam
Receiver Geometry	180° cavity, 4 Panels 5.40m x 12m
Heliostats	624 @ 121m ²
Thermal Storage Technology	Water/Steam
Thermal Storage Capacity	20MWh 50min @ 50% Rate
Steam Cycle Electric Generation	40bar 250°C 2 Pressures
Land Annual Electricity Production	6.3kV, 50Hz -> 66kV, 50Hz 55Has, 23.0GWh



DP Worldwide Projects (April 2026)



Contact Us

DP has 7 offices around the world in 6 countries – China, Denmark, Poland, Thailand, UAE and UK.

To ensure that we can address your needs appropriately, please email info@dpcleantech.com for enquiries or further information.

