

Case Study

New Concentrated Solar Power Plant Equipped with Sulzer Pumps



Sulzer ZF pump for HTF overflow service in final inspection

The Sulzer Difference

Sulzer Pumps is a world leader in innovative pumping solutions. We are applying our hydraulic and mechanical experience and knowledge to find the most reliable and cost effective solutions. We want to help our customers to provide sustainable solutions to energy needs today and in the future. To produce dependable, clean energy from renewable resources is a challenge we are taking on.

Project Highlights

A Spanish operator of Solar Power Plants and a long-standing customer of Sulzer Pumps approached us for the delivery of pumps for a newly built Parabolic Trough Collectors Concentrated Solar Power Plant in Spain. The customer was looking for an experience supplier being able to offer reliable solutions for heat transfer fluid (HTF) and boiler feed pump applications.

The Challenge

Reliable and long cycle operation requires a proven pump design and optimized sealing arrangements. In order to protect the environment the sealing must have low leakage rates. The customer was also looking for a supplier with local services in Spain and worldwide sourcing capabilities.

The Solution

Sulzer Pumps can comply with all these requirements. High quality products at competitive prices provided the optimum solution for the customer. The availability of quick service through our Service Center in Spain was one purchasing criteria of the customer. The product range ZF was found to be the optimum solution for the HTF application and the high pressure pumps MD were selected for the boiler feed pump application.

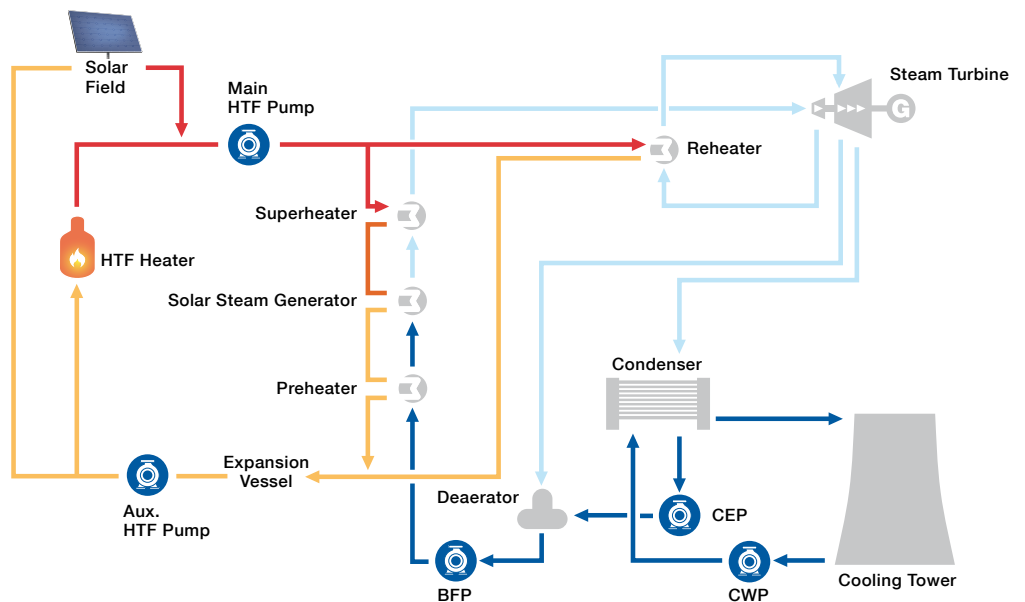
Customer Benefits

Sulzer Pumps is a full-line supplier of pumps for the power generating industry and the customer can benefit from our global experience in the Solar business. Our global manufacturing network and the local service close to the customer were the decision criteria for selecting Sulzer Pumps.

Application	Pump type
Boiler Feed	8 x MD 80-260 /11
Main HTF	8 x ZF 200-6401
HTF Overflow	4 x ZF 300-5500
HTF Boiler Feed	6 x ZF 200-3250
HTF Storage	4 x ZF 50-3315

Parabolic Trough Collectors Concentrated Solar Power Process

This system is using synthetic thermal oil heated up to around 400 °C (750 °F) as heat transfer fluid. It is continually pumped through the solar field with high and variable flow rates and temperatures. Sulzer Pumps equipment for these operations includes pumps for Boiler Feed (BFP), Condensate Extraction (CEP) and Cooling Water (CWP), as well as both main and auxiliary pumps for Heat Transfer Fluids (HTF)



	Boiler Feed	Condensate Extraction	Cooling Water	Auxiliary Services	Main HTF	Auxiliary HTF
Single Stage Pumps		ZE		AHLSTAR	ZF/BBS/CD/HZB	ZE/ZEM/ZF
Ring Section Pumps	MBN/MC/MD					
Barrel Pumps	GSG					
Axially Split Pumps	MSD		SMN/ZPP			
Vertical Pumps		SJD (CEP)	SJT/SJM			

Contact

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Applicable Markets

Power Generation

Applicable Products

ZF, MD