



next-CSP

High Temperature concentrated solar thermal power plant with particle receiver and direct thermal storage

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Deliverable 4.2

WP4 – Construction and commissioning of the complete solar and heat conversion loops at Themis solar tower

Deliverable D4.2. Progress report on the construction and pre-assembly of the solar unit sub-systems

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1 Introduction

This document provides a progress report on the manufacture and testing of the solar loop components including the: dispenser, air preheater, hot store, cold store and receiver tubes. It also summarises the outstanding manufacture required.

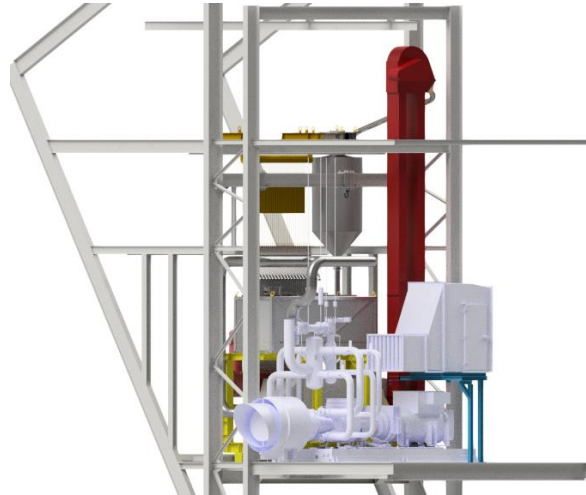


Figure 1 Computer generated overview of the solar loop including turbine package

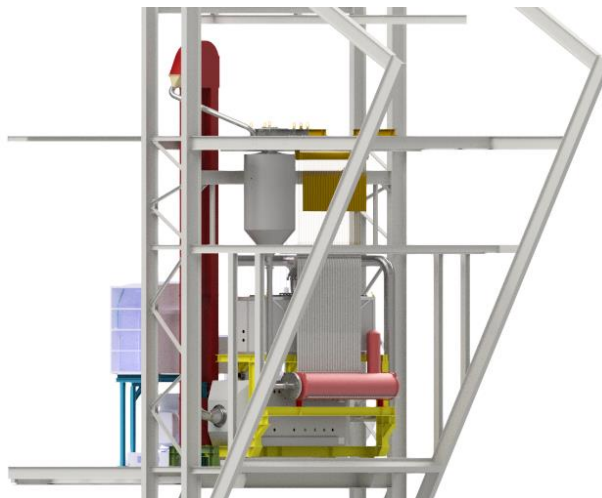


Figure 2 Computer generated overview of the solar loop including dispenser

9 Outstanding Manufacturing

The following are the main tasks required to complete the manufacturing of the solar loop:

- Final assembly of the air preheater
- Outstanding fabrication of cold store
- Fabrication of the outer (i.e. structural) box of the hot store
- Insertion and welding of fluidisation tubes into the hot store and air preheater
- Leak testing of air preheater
- Manufacturing of fluidisation manifolds to feed to the fluidisation tubes in the dispenser, hot store and air preheater.
- Manufacture of general pipework
- Installation of instrumentation bosses on air preheater and cold store