

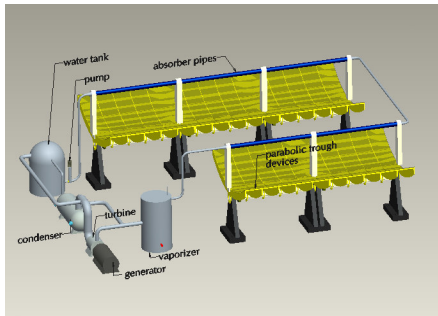
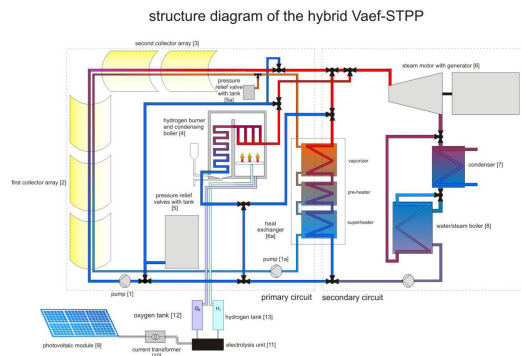


Karlsruhe/Ras Nache, 13<sup>th</sup> June 2010

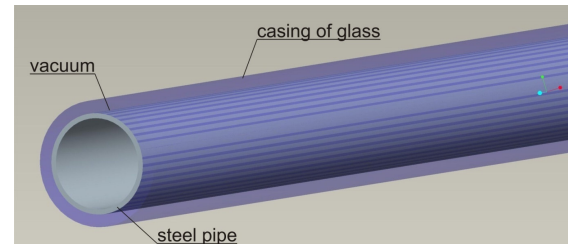
## Test stand for a Solarthermal Powerplant (STPP) as a hybrid (one/two-circuit system)



Abb. 1.1-1: Luftbild der solarthermischen Parabolrinnen-Kraftwerke bei Kramer Junction in der Mojave-Wüste in Kalifornien, USA



ProE Model of the Direct Heating Teststand



Absorption Pipe

In the context of the VaEf/MEAE - TEMO project „Modeling and construction of a two-circuit-STPP“, following work packages will be concerned as a student research project (master thesis or bachelor thesis):

### **Student research project (Master thesis or bachelor thesis)**

## **Modeling of water flow through an solar absorption pipe in a direct heating test rig for a Solarthermal Powerplant (STPP)**

Based on the previous results of the project following operations have to be done:

1. Learning the program FreeCFD
2. Modeling of the absorption pipe, which is from an Austrian company based on the former ProE model
3. Defining material
4. Undergoing CFD with the linux based program FreeCFD

**Keywords:** CFD (Computational Fluid Dynamics), Solar energy

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