

COMPONENTS AND SYSTEMS FOR MOLTEN-SALT FACILITIES

Innovations and Benefits - Design, support to fabrication, and qualification tests of solar facilities components, using molten-salt mixtures as thermal vector fluid and storage material.

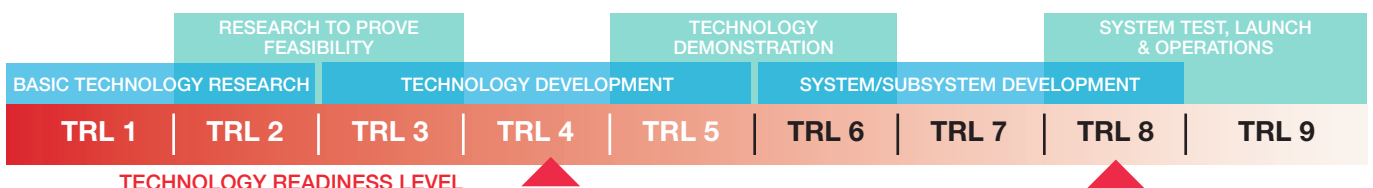
This technology aims to achieve better performance and reliability of components, to produce highly-efficient and low-cost thermal energy and electricity.

Uses - Components and systems of molten-salt solar facilities (solar receiver tubes, flexible hoses, rotation joints, valves, storage tanks, steam generator, equipments), to produce heat and electricity by hybrid solar plants (integrated by biomass or biofuel powered boiler), with co-generation systems (production of electricity, heat for industrial application, air-conditioning of buildings, desalination facilities).

Past and Present Activities - ENEA is endowed of expertise and infrastructures for development and qualification, in laboratory and in operating conditions, of components and systems for molten-salt facilities. Such expertise and infrastructures are used under national and European Research Programs, in collaboration with several manufacturing companies. To mention a few: ASE (Archimede Solar Energy), MTU (Meccano Tecnica Umbra), Astroflex, Lanaro Costruzioni Meccaniche, Reflex, D.D. Costruzioni Meccaniche, Fumagalli, Soltigua, Enerray, Ingeco, Gabbioneta, Glynwed, Ofmeco.



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Energy Technologies Department
Solar Thermal and Thermodynamic Division
Solar Technologies Engineering Laboratory
Contacts: Antonio De Luca, antonio.deluca@enea.it; Walter Gaggioli, walter.gaggioli@enea.it