

## A) General Information



**Acronym:**

**INVERTER – 20100531-01**

**Title of the User-Project:**

Development of new PVC separators and nonwoven gauntlets for home UPS batteries: the Inverters

**TA Call:**

1<sup>st</sup> Call of Proposals, 31<sup>st</sup> May 2010

**Host Research Infrastructure:**

National Institute for Solar Energy (CEA-INES) on the STORE platform (Remote)

**Starting Date:**

18/01/2011

**End Date:**

23/12/2011

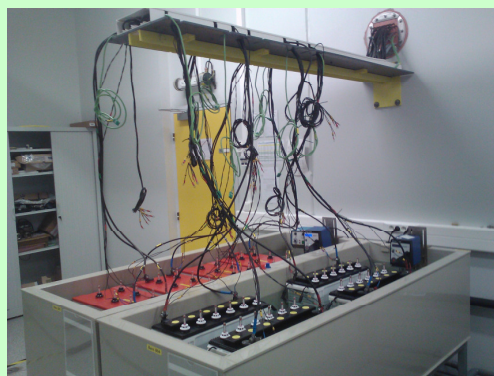
**Lead User:**

Carole Lainé – Amer-Sil –Luxembourg

**Additional Users:**

## B) Summary of the User-Project

The project proposal is part of a R&D project which consists in developing both new separators and new gauntlets for industrial lead acid batteries, especially battery for special Uninterrupted Power Supply (UPS) system called Inverter which is a cycling UPS. The aim is to develop products with better properties than the products already on the market ie: have a lower electrical resistance, improve charge acceptance and speed of charge, improve temperature resistance, improve partial state of charge and battery life time. Another aspect of the project is to develop such products at a lower price than products sold, at the moment, by Amer-Sil and its competitors because the targeted customers are mainly located in emerging countries where power outages are long and frequent.



Picture of some of the batteries on two test benches.

## C) Main Achievements

Initial capacities and charge acceptance were determined.

Cycling procedure is in progress (50 cycles done) and will continue until the end of the project.

Main results will be given by tear-down of batteries after life cycle test.

## D) Dissemination of the Results

Carole Lainé, Urbain Lambert: "Inverter - From today's challenge to tomorrow's opportunities"; presented at 14th ABC (Asian Battery Conference) in Hyderabad; India on 14th of September 2011

## E) Use of the Resources

**Nr. of Users involved:** 2

**Access Days:** 101

**Stay Days:** 4