

CHARACTERIZATION AND LIFETIME TESTING FOR ELECTRIC BATTERIES AND STORAGE SYSTEMS, SUPERCAPACITORS

Innovations and Benefits - ENEA hosts a laboratory for battery testing among the most complete and advanced in Italy, equipped with several different power cyclators (up to 250kW) and climatic chambers of different volume, one of which is specialized for battery abuse tests (internal volume 1m³).

Use - Two-, three-, four-wheeled cars.

Applications and ongoing Activities - Thanks to specific funding/contracts, testing activities have been performed for studying: the ageing of Li-Io batteries when fast-charged; the thermal behaviour; and the evaluation of diverse commercial BMS systems under operating conditions.

Industria 2015 Projects, in collaboration with Centro Ricerche Fiat, IVECO, Piaggio, BredaMenarini, etc. Cluster Trasporti Italy 2020.



AVL 0-800 V Cyclator, I_{max}; 600 A, under both charge and discharge conditions

Characteristics: CUSTOM

Thanks to its flexibility, the characterization service can be adjusted to different needs and contexts