

ABB site in Terranuova

Electrification business

The ABB site, located in Terranuova Bracciolini, has an important role in designing and manufacturing products and solutions for Solar and EVCI applications and hosts a Research and Development center along with various laboratories.

Most of ABB EV charging fast solutions are manufactured at the Terranuova Bracciolini facility. The Unit produces: ABB Terra 54, the best-selling 50 kW DC charging station in Europe and North America, ABB Terra HP (from 175 kW to 350 kW), fast charging stations with higher power for the next generation of electric transportation and ABB eBus Charger that allows electric buses to be quickly recharged at endpoints.

Excellence

With about 140 engineers employed in the R&D department, the unit represents one of the main centers of excellence in the Solar & EVCI industry for the Electrification business globally. It is also involved in various collaborations with Italian and international universities.

The historical strength of the site is represented by technological innovation on which its products and industrial processes have been leveraged.



ABB product highlights

ABB is the first player in DC charging in Europe and North America, 10500 ABB DC fast chargers are sold across 73 countries.

Three EV charger typologies are produced in the Terranuova Bracciolini site.

	<p>Terra 54 is the best sold 50 kW DC charging station in Europe and North America. Supporting increasing EV battery capacities, Terra 54 enables continuous charging at full 50 kW at 150 – 500 V, while 150 – 920 V is supported by Terra 54HV. Terra 54 supports CCS, CHAdeMO and AC functionality, and introduces sophisticated new connector holders. It complies with all relevant international standards, including the EMC Class B norm, formally required for safe operation on residential, office, retail and petrol station locations. The redesigned cabinet increases usability and reliability. All chargers come with integrated Connected Services, allowing remote monitoring, diagnostics, statistics, and software upgrades. Terra 54 is ideally suited for highway rest stops and petrol stations, as well as for retail and office locations, car dealerships and fleet applications. Starting from this, ABB has designed a custom-made, compact Terra fast charger, capable of providing a typical electric vehicle with 200 km (125 miles) of cruising range in just eight minutes. This technology is specifically produced for the Jaguar I-PACE eTROPHY series, which debuted in December 2018 as the main support series to the ABB FIA Formula E Championship.</p>
	<p>Terra HP is a modular high power charging system with high output current capability, supporting both 400 VDC and 800 VDC vehicles. A single power cabinet system can deliver up to 375 A and 160 kW continuously, and 175 kW peak. With two power cabinets the system delivers up to 500 A and 350 kW. With unique ABB Dynamic DC power sharing technology two charge posts can be powered by just two instead of four power cabinets, whereby available power is dynamically shared between the charge posts. This is a cost effective solution for sites with multiple charge posts. The system is modular and expandable over time. It is possible to add additional power cabinets and charge posts later on. This is a cost efficient way to scale charging sites with the demands of a growing EV base. All ABB EV chargers come with ABB Ability™ Connected Services, allowing customers to easily connect their chargers to different software systems like back-offices, payment platforms or smart grid energy systems. Terra HP is ideally suited for highway rest stops and petrol stations where the highest power is required to minimize charging time.</p>
	<p>HVC Overnight Charging increases efficiency and reduces costs. This system allows up to three electric buses or trucks to be connected and charged sequentially while parked at the depot. The logic programmed into the depot feeding station “wakes up” each vehicle in turn for charging, and puts them back into “sleep mode” once the charge is complete. Power cabinets can be upgraded from 100 kW or 150 kW at any time, allowing operators to scale their operation and to spread investments. Safe and reliable operation ABB fast chargers comply with the highest international electrical, safety and quality standards, guaranteeing safe and reliable operation in public areas. ABB chargers come with an extensive suite of connectivity features including remote monitoring, remote management, remote diagnostics and remote software upgrades. These advanced services provide equipment owners with powerful insight into their charging operation, and enable high uptime and fast response to problems.</p>