



# e-IsoTech™ Auto

## Automatic machine for Dielectric Strength test and Insulation Resistance test for EV car's components



**e-IsoTech™** is a machine designed for mass production for performing safety test on automotive components installed on hybrid and electric cars.

**e-IsoTech™** is a compact solution, that allows an easy integration into automatic production lines.

### MAIN FEATURES:

- ❑ Built-in MQTT 5.0 client for Industry 4.0 conformance
- ❑ Quick and precise measurement of insulation resistance, dielectric strength and micro discharges
- ❑ Check spring probe connection to ensure the real measure of insulation resistance
- ❑ High Voltage Matrix to perform separate test between different points of the product under test
- ❑ Fast discharge of the product at the end of the test
- ❑ Real time graphs during the measures
- ❑ Compliant with SMEMA 1.2 interface for interfacing with other production line's modules.
- ❑ PLC Controller to exchange data in Profinet, Profibus, Ethercat, Ethernet/IP, Modbus TCP/IP protocols.

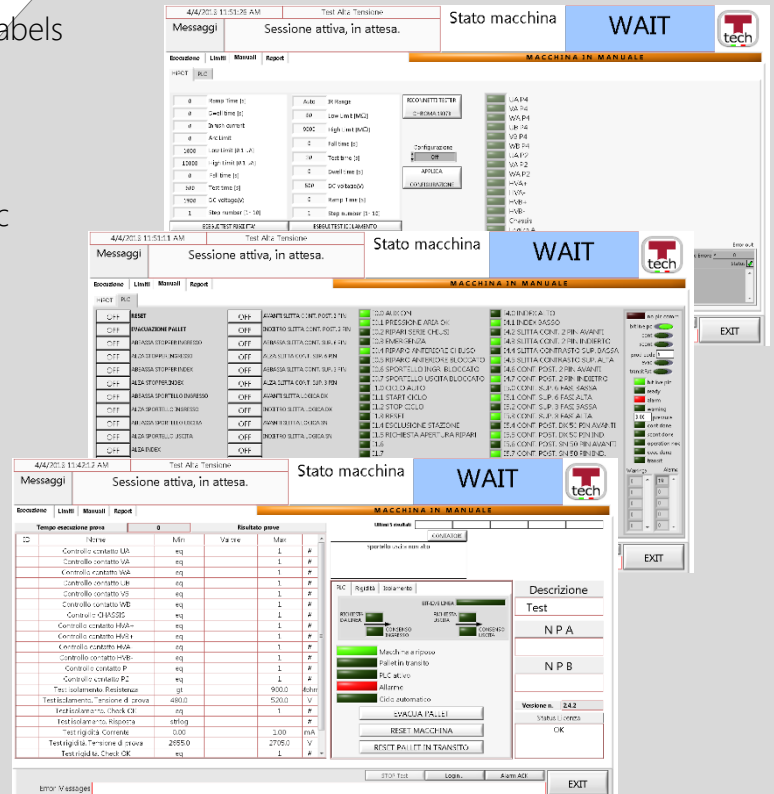
### TECHNICAL SPECIFICATIONS

Specification	Details	Notes
Dielectric Strength	Output Voltage Voltage Accuracy and resolution Current Cut Off Current Accuracy and resolution Frequency	AC : 0.1 ~ 5kV and DC : 0.1 ~ 6kV 1% + 5 counts, 2V AC : 0.1~20 mA, DC : 0.01~5 mA 1.5% + 5 counts, AC : 1µA, DC : 0.1µA 50/60 Hz
Insulation Resistance	Output Voltage Voltage Accuracy and resolution Range of measurement Resistance Accuracy	DC : 50 ~ 1000V 5% + 5 counts, 2V 0.1MΩ -50GΩ ≥ 500V : 1MΩ -1000MΩ±(4% + 5 counts) 1GΩ -10GΩ ± (7% + 5 counts) 10GΩ-50GΩ ± (12% + 5 counts) < 500V : 0.1MΩ -1000MΩ ± (10% + 5 counts)
Micro Discharge (Arc Detection)	Detection Current Minimum Pulse Width	AC : 1mA ~ 15mA, DC : 1mA ~ 5mA 10 µs
Dimensions	WxHxD : 2000 x 2200 x 2000 mm	Weight 400 Kg



## SOFTWARE FEATURES

- Applicative software with easy user interface displaying test sequence with limits and measured values, pass-fail indication for each step with different background color
- Manual operation panel and test sequence editor under password
- Multi-language interface, with user editable labels and messages
- Customizable test sequence to perform different tests configurations
- Test time programmable from 0.1 s to 999 sec
- Auto test of the instrument that perform the measurements of insulation and strength
- Test Report saved for each part
- Database for Traceability (MySQL Database; Tool for Statistic Analysis)



## APPLICATIONS

- Mass production of Electric Vehicles components like Inverter, Battery management system (BMS), Electric Motor, HV Battery Junction Box (eBOX)

## CONFIGURATIONS AND OPTIONS

Product Code	Description
<b>e-IsoTech-A</b>	Automatic machine for Strength test and Insulation test for hybrid EV car's components
<b>e-IsoTech-AM</b>	Automatic machine for Strength test and Insulation test for hybrid EV car's components with High Voltage matrix