



EV-SYS Integration

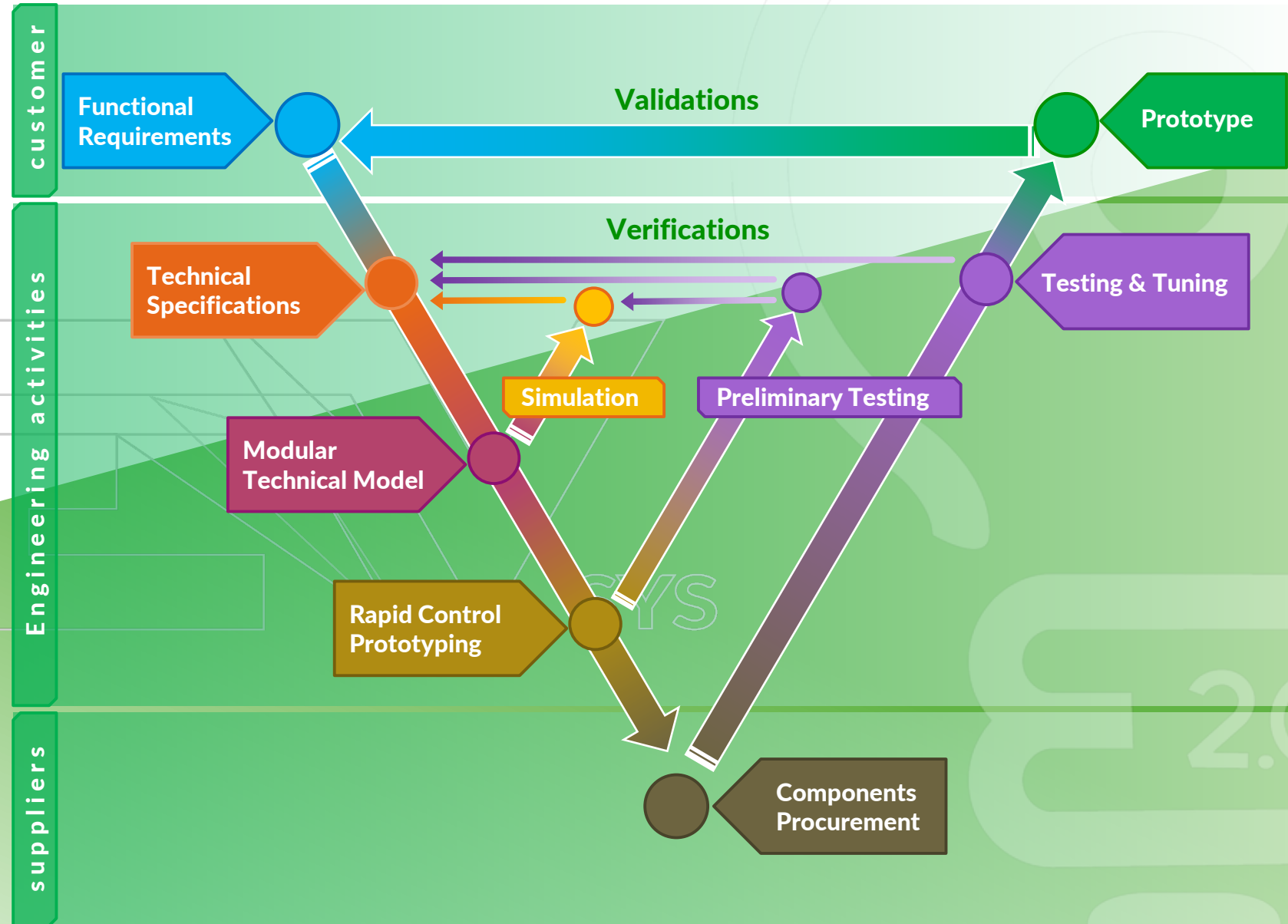
**COSTRUIRE
MOBILITÀ ELETTRICA**



MISSION realizzare mobilità elettrica partendo da modelli, integrando componenti, costruendo prototipi, verificando prestazioni.

E-VISION ispirata alla visione di una ingegneria che GUIDA la transizione energetica.

V-CYCLE in conformità con la metodologia propedeutica alla certificazione di prodotti automotive.



Competenza

Powertrain elettrificate
Componentistica electrification
System Integration
Modelli e simulazione digitale

CONSULTING



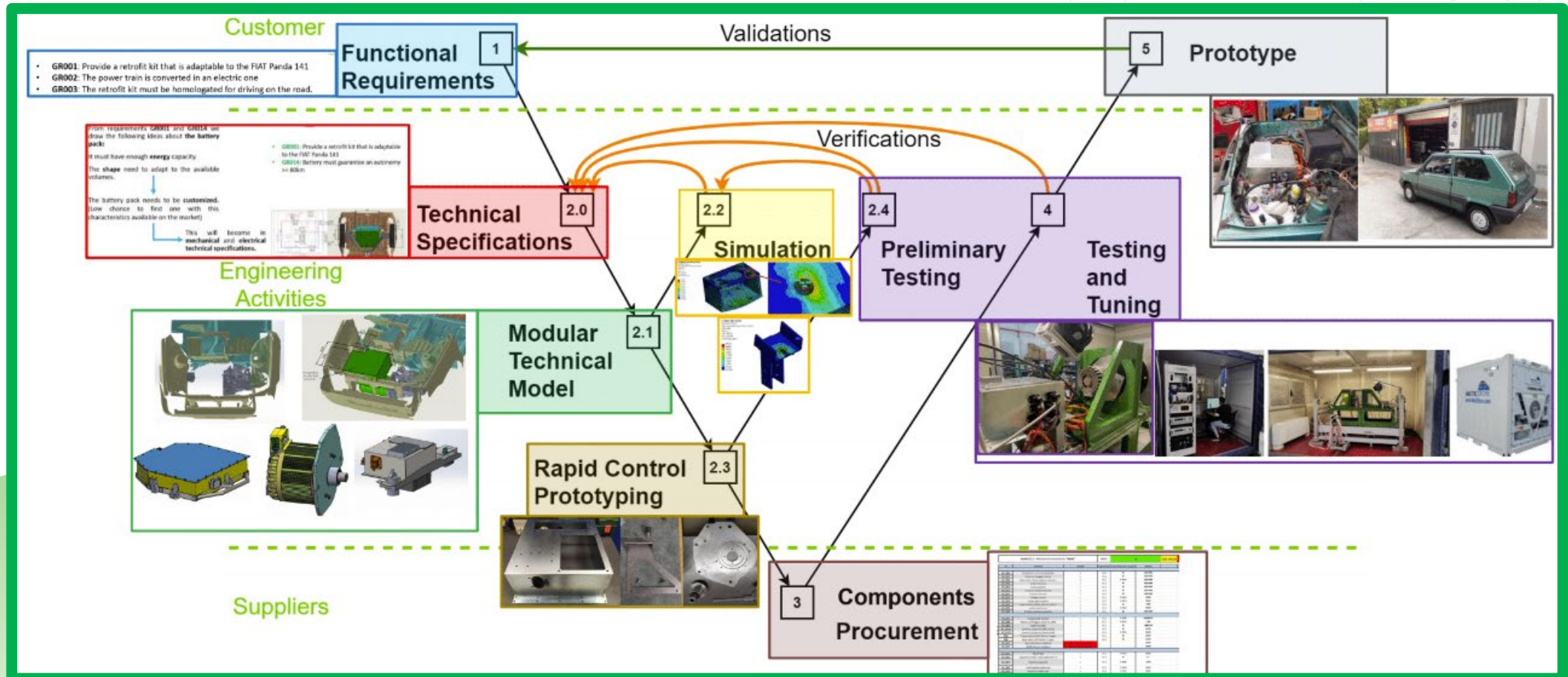
SERVICE



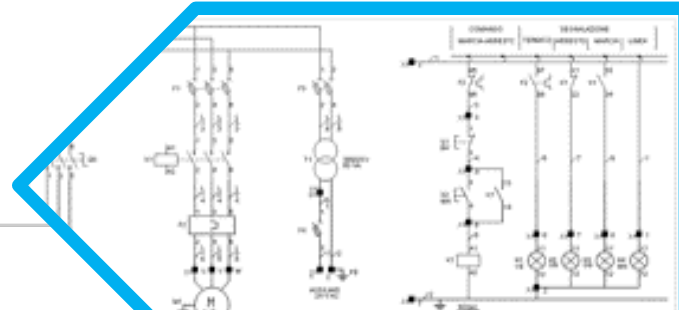
TESTING BENCHES



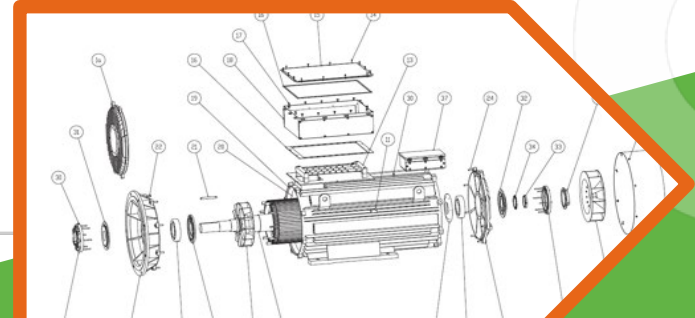
Applicazione del V-CYCLE



Specifiche e
Analisi
Requisiti

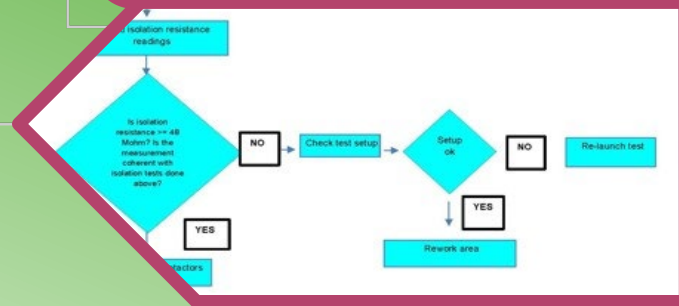


SCHEMI ELETTRICI

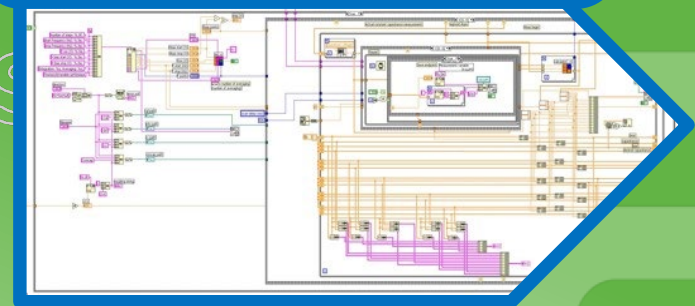


DISEGNI MECCANICI

REQUISITI DI PROVA



DESIGN DEL SOFTWARE



Modellazione e Simulazione



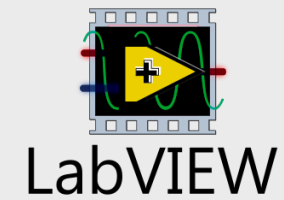
MATLAB®
& SIMULINK®

Vehicle dynamics
models and
development of driving
control strategies



NI VeriStand™

I / O management
environment, user
interface and test cycle
programming



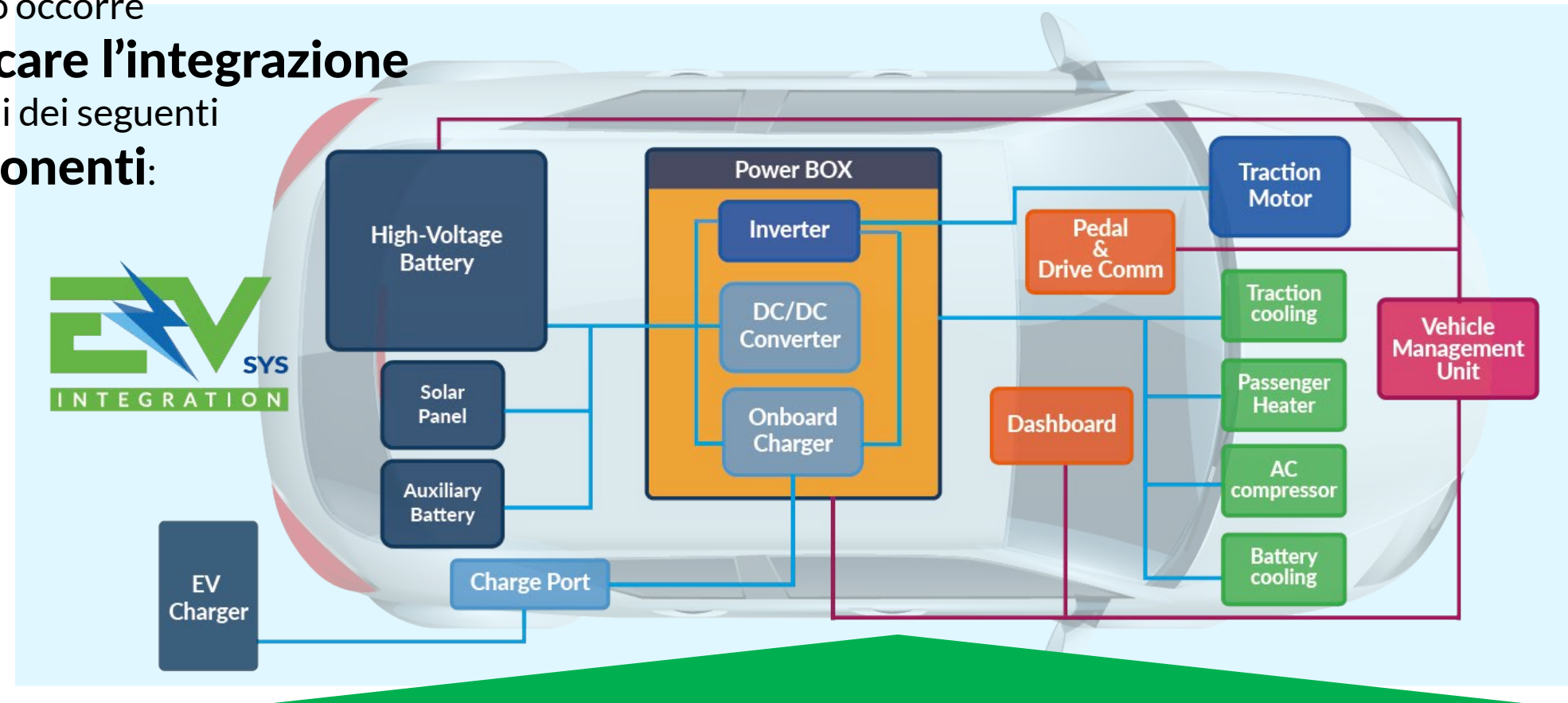
LabVIEW

Driver customization



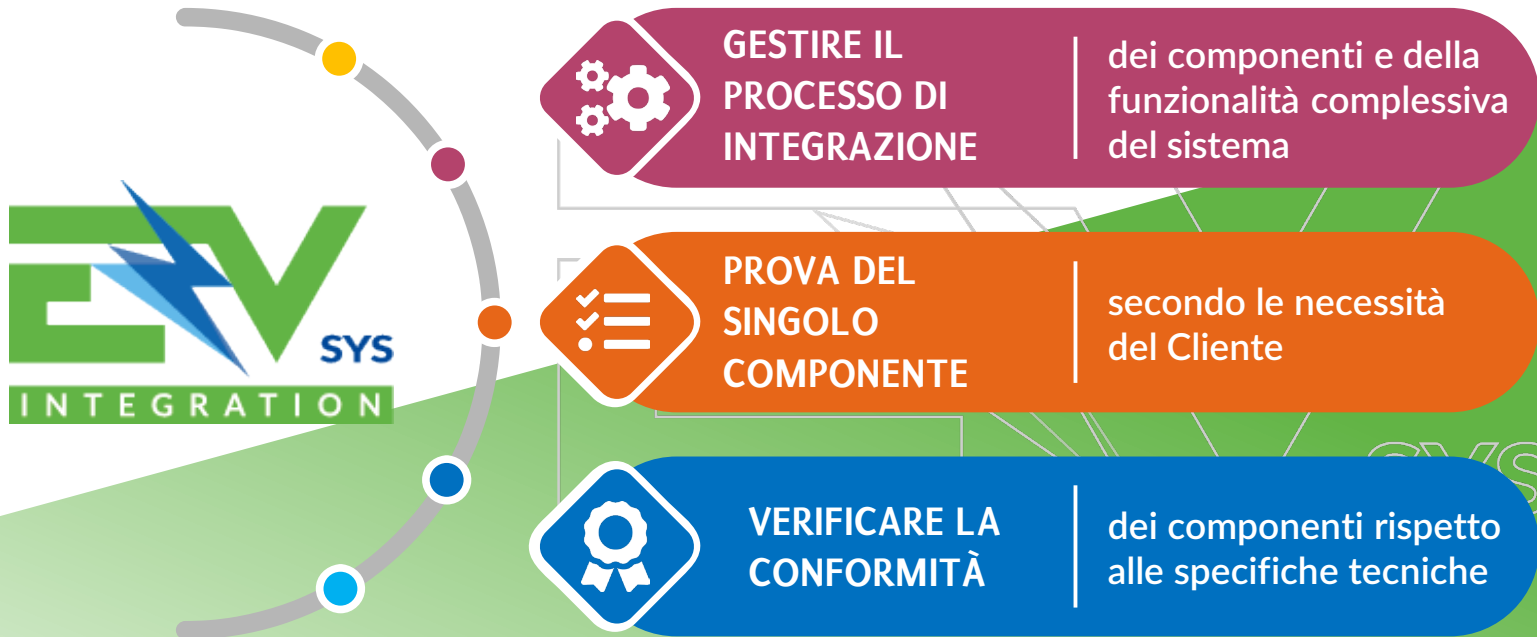
Environment for the
acquisition and
measurement of the
signals detected by the
sensors

Quando occorre
verificare l'integrazione
 di alcuni dei seguenti
componenti:

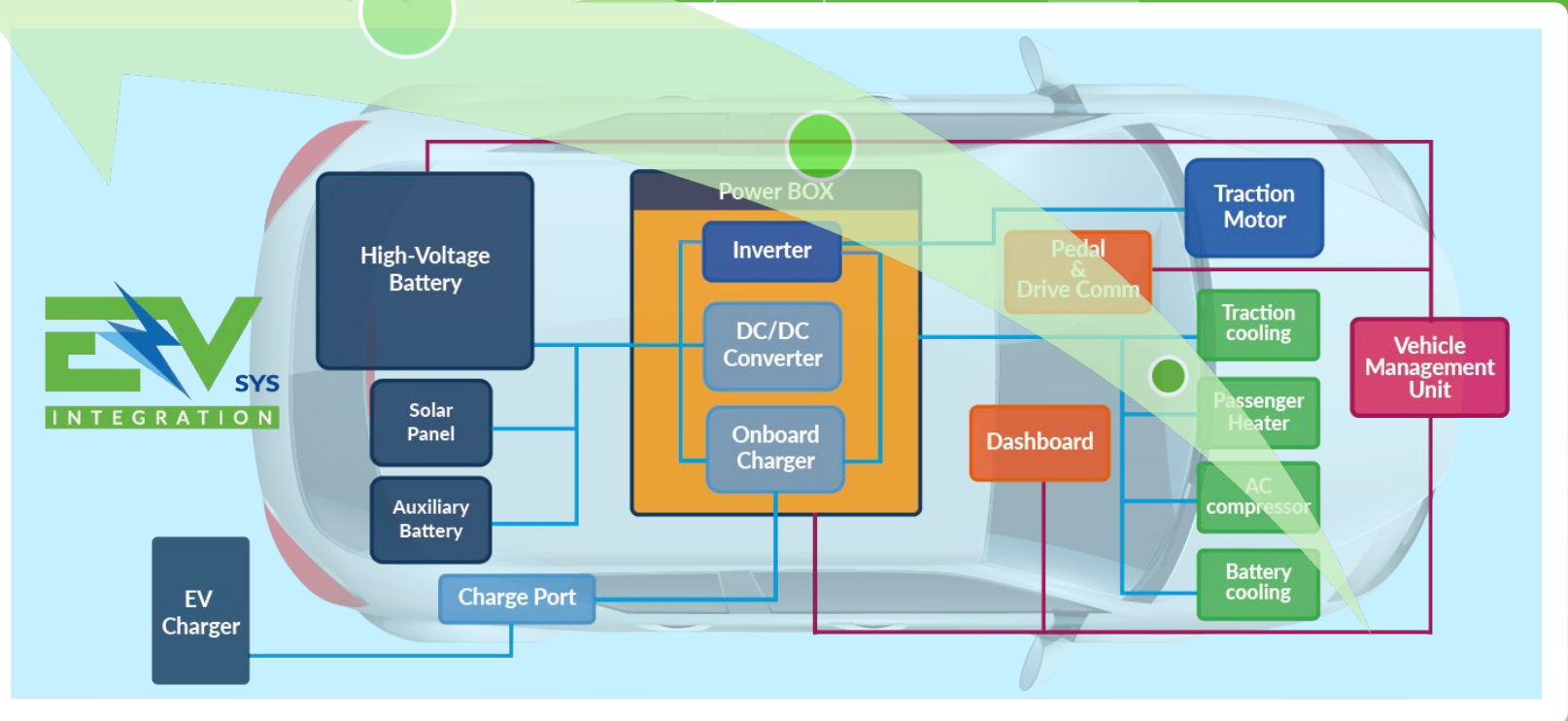
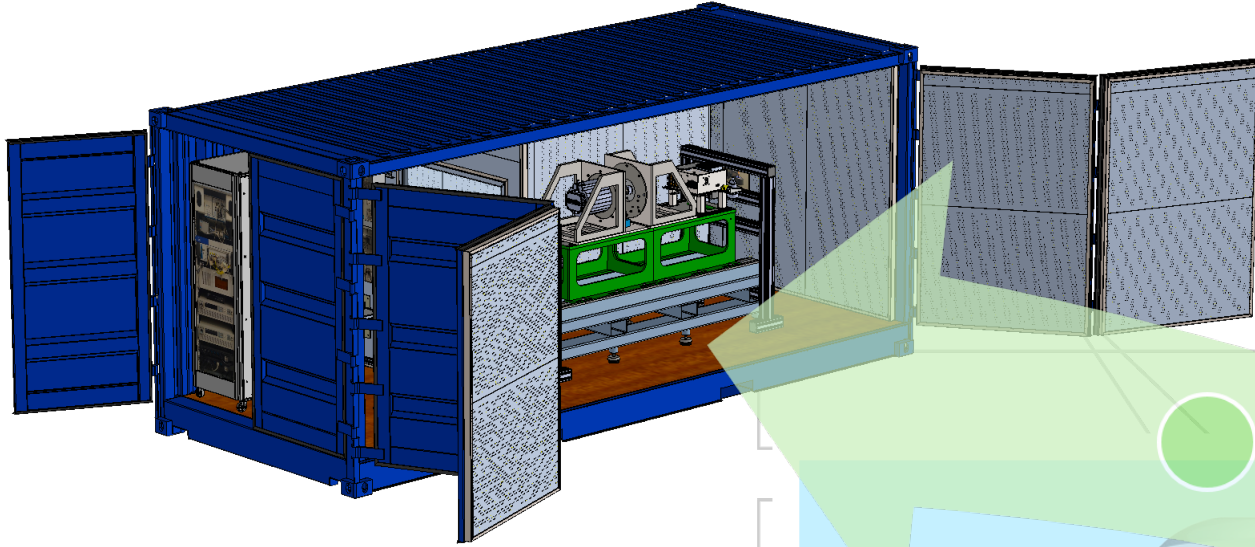


EV-SYS è la **soluzione perfetta** a **costi contenuti**
 per eseguire prototipazione e test
in breve tempo e in **condizioni reali**

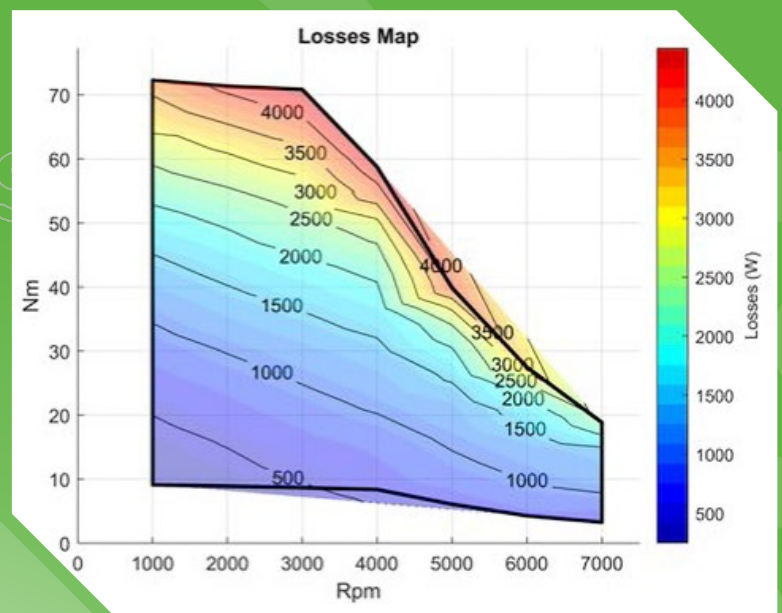
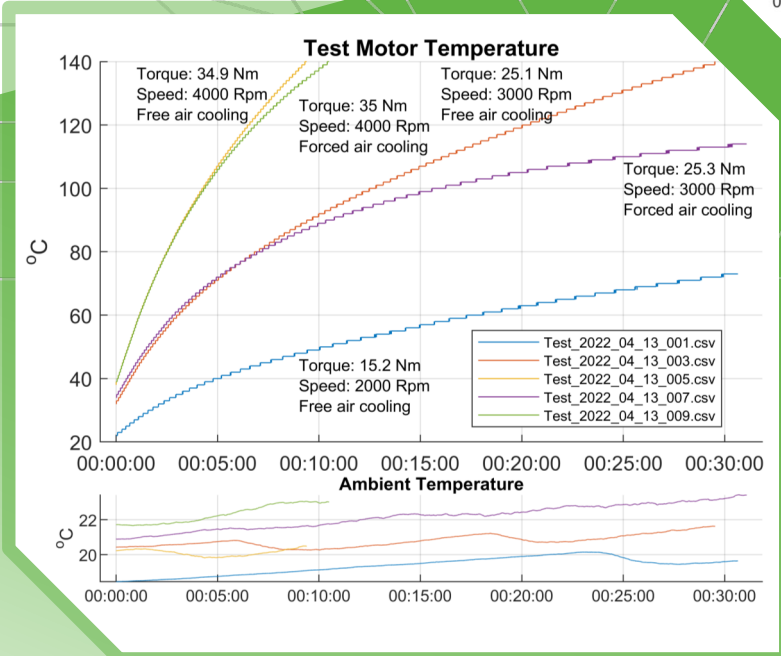
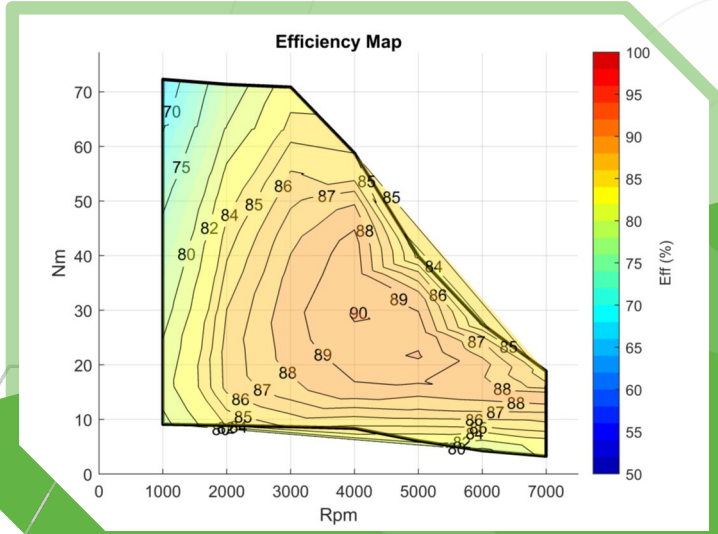
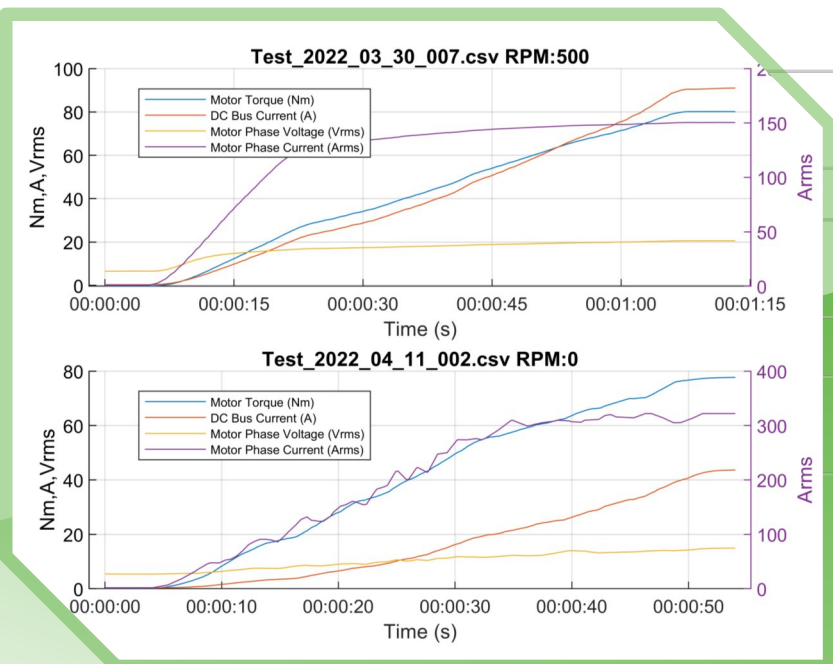
Un **Sistema Integrato** in grado di simulare perfettamente **tutte le funzionalità** di un **Veicolo Elettrico**

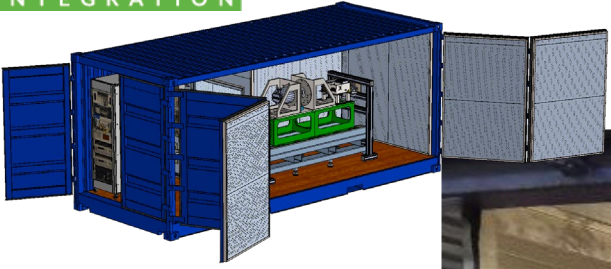


TEV2021

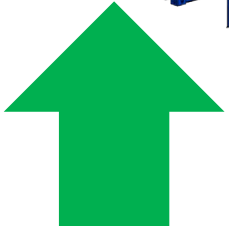
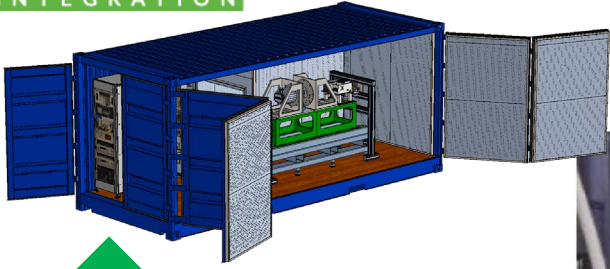


simulare la stessa identica condizione di una prova su strada verificando i risultati insieme al Cliente





TEV2021



TEV2021



CONDITIONING EQUIPMENT				
Equipment Type	Output Range	Resolution	Quantity	Equipment type
HV DC Power Supply	0-300V, 225A, 18kW	0.01V	2x	Bi-directional DC Power Supply (ITECH IT6018C-300-225)
LV Signal Power Supply	0-60V, 30A, 400W	0.001V	1x	LV Power Supply (ITECH M3422-60-30)
Motor	Speed: 0 - 8.000 RPM Nominal Torque: 89 Nm Maximum Torque: 189 Nm		1x	ENGIRO type 205 water cooled motor
Inverter	Operating Voltage: 60-96V Current limit: 600Arms Continuous current: 300A		1x	DMC SuperSigma2 (IPM960T4-02C)
Environmental Temperature	Ambient 20-25°C		1x	Ambient climatization
CAN Communication			6x	PXIe-8510/6 on PXI Controller 8861

MEASUREMENTS (HBK GEN Series GEN4tB)				
Measurement Type	Measurement Range	Accuracy	Quantity	Equipment type
Torque	±200Nm	±0,05% of measurement range	1x	Torquemeter (HBM T40B)
Current (Supply DC)	±600A	±0,2% of measured value	2x	Current transducer (HBM GEN Series CTS400ID)
Current (AC Phase)	±400A	±0,2% of measured value	3x	Current transducer (HBM GEN Series CTS400ID)
Voltage (Supply DC)	1500V	±0,02% of measured value	3x	Three channels power card (HBM GEN Series GEN310B)
Voltage (AC Phase)	1500V	±0,02% of measured value	3x	Three channels power card (HBM GEN Series GEN310B)
Speed	0 - 24000 RPM	±2 RPM	1x	Torquemeter (HBM T40B)
Temperatures (contact)	-40°C to 250°C	±1°C	1x	Thermocouples K Type
Temperatures (acquisition)	-40°C to 250°C	±1°C	1x	Eight channels measurement card (HBM GEN Series GN840B)
Oscilloscope			1x	Not installed, to be implemented
Vibration measurement	±50g	±5% of measured value	2x	Kistler 8752A50



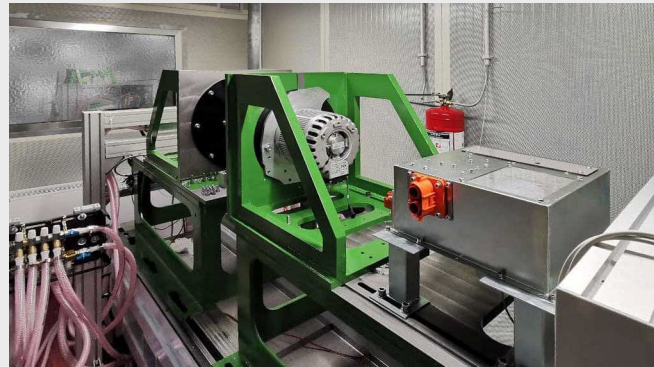
 **BorgWarner**



TEB2021 Banchi EOL
Testing Battery Packs



EVERGRIN



TEV2021 Facility di testing
per Electric-Vehicles



 **ELDOR**[®]
CORPORATION



PEV2020
Power Management Solutions

Grazie per l'attenzione



Design solution, enjoy success



CUSTOM[®]m2.0
Design solution, enjoy success

www.customsrl.com