

NEWSLETTER NR. 33 JANUARY 2021

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## HAPPY NEW YEAR

#### **CRITT M2A is developing the electric powertrain: discover the 4WD bench !**





CRITT M2A is expanding its range of tests and is now working on the entire vehicle powertrain, whether hybrid or electrical.

The 4WD test bench can accommodate the vehicle or e-powertrain during its development phase in order to optimize energy management, regardless of the vehicle architecture and hybridization strategy chosen.

Thanks to its exceptional power and torque capacities (500 kW and 2500 Nm per wheel), this bench can adapt to all types of applications, from private vehicles to ultra-sporty vehicles (Formula 1 & Formula-E).

The independent control of the dyno makes it possible to simulate each turn, for example, on a racing circuit. The repeatability of the driving cycles is ensured by a piloting robot, may be set up to study the influence of the driver on the powertrain and on pollutant emissions.

### **OECTE project: CRITT M2A is investing in new testing facilities**



CRITT M2A will develop the OECTE project, which will allow energy and mechanical optimization of the electric powertrain.

As part of this project and thanks to the financial support of the recovery plan, CRITT M2A will invest 4.6 million euros in new testing facilities by developing new methodologies that combine modeling and experimentation.

These methodologies will optimize the energy management of electrified powertrains, to reduce costs, development times, increase performance and reliability.

This project, which will start in January 2021 over a period of two year, s will bring a new solid experience to the entire CRITTM2A team.

#### C2E was upgrated and ready for strong currents

Since the opening of the Electrical Test Center in 2015, the energy density of cells is always growing and now allows electric vehicle users to benefit from more comfortable autonomy.

This development has brought increasingly high current demands in particular during typical «DCR pulse» tests:

«Before, these current peaks were around 300A. Today it is common to see peaks around 600A both under load and discharge conditions» explains Rémi, Manager of battery tests.

To support its customers in their development, CRITTM2A now has the possibility of paralleling on all its test benches (cells, modules and packs).

Since 2019, the pack benches allow to reach currents of up to 1800A with a maximum power of 750kW.

For module benches, the acquisition of new mobile resources allows current peaks up to 1200A. Finally, cell benches now offer the possibility of applying currents up to 1000A, which considerably increases our testing capabilities for «high power». Depending on the types of tests to be carried out, the Electrical Test Centre can configure its

channels in order to adapt to different requested current ranges: « This modularity allows us to meet the needs of our customers while continuing to guarantee optimal quality measurement». These new possibilities are very timely in a demanding and constantly changing battery market evolution. This allows the Electrical Testing Center to position itself on existing and emerging technologies.

www.crittm2a.com









#### New look pour CRITT M2A's website

The new CRITT M2A site has been designed to offer users simple, clear and intuitive navigation. This new site is responsive, it adapts perfectly to all screen sizes.

Its structure will quickly guide you in your research to find out about our service offers and our solutions.

Enjoy your visit!

### **CRITT M2A on Twitter**



CRITT M2A is now on Twitter !

To know our last news, follow us on our page

#### SYTEC 2021: Save the date

The next edition of SYTEC will take place on March 29 and 30, 2021.

Organized in partnership with FEAL and ARIA Hauts de France, this edition will be animated by an exceptional keynote and will present the projects and technological advances of CRITT M2A.

Conferences, round tables, workshops and driving experience will be on the program for this event.





# AGENDA 2021

CRITT M2A will organize the SYTEC 2021 in Bruay la Buissière, on March 29 and 30, 2021

CRITT M2A will participate in the Electric & Hybrid vehicle technology Expo in Stuttgart, from May 18 to 20, 2021 - stand 746

CRITT M2A will attend the SIA Powertrain & Electronics conference in Paris, on June 9 and 10, 2021

CRITT M2A will participate in the Automotive Testing Expo Europo show in Stuttgart, from June 8 to 10, 2021











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