

# Passive Safety Testing Services

Applus+ IDIADA is the best partner to perform passive safety testing thanks to its extensive experience of **over 30 years performing complex turnkey passive safety project packages** for the automotive industry worldwide.

## Our passive safety development services include:

- Crash/sled/component testing for worldwide legal standards and consumer test protocols, and vehicle architectures and powertrains
- Occupant assessment and vehicle inspection
- Test documentation and complete data set preparation and uploading
- Tear-down at vehicle level and component level (e.g. HV batteries) with dedicated spaces and tools
- In-depth test result analysis and improvement proposals
- Handling, storage, and disposal of HV batteries, meeting safety and environmental requirements
- Vehicle mechanical and electronic repairs for subsequent crash testing



## Testing capabilities:

IDIADA provides one-stop shop solutions for all passive safety testing projects. With **testing facilities in Europe and in the USA** and IDIADA-owned testing equipment, our international team has experience in the **management of simultaneous multi-site testing projects**, and are flexible to accommodate short notice changes in the test planning.

Our proactive engineers and technicians are highly experienced in solving unexpected situations on test day involving electronics, HV systems, ECUs, etc. Moreover, IDIADA's operative team **reconditions test vehicles** intended for multi-testing in a very short period.

## Consumer testing:

Applus+ IDIADA is the only engineering company certified by **Euro NCAP**, NHTSA (**US-NCAP**) and **ASEAN NCAP** for official vehicle safety assessment. In this sense, IDIADA is the best partner to develop worldwide consumer testing projects. Our capabilities include, among others, the following:

- **Full Euro NCAP test suite** available at IDIADA (MPDB, AE-MDB and Pole including Occupant to Occupant, knee mapping, far side). Pedestrian testing with **aPLI** impactor already available
- Full capability to undertake **IIHS** crash assessments (frontal SO driver and passenger side, side barrier). New side barrier trolley available
- Own official Euro NCAP **accredited inspector** with deep knowledge in other NCAPs (ASEAN, Latin, China, ...)
- Capability to undertake **vehicle inspections, CRS assessment, SBR, Tertiary safety dossiers** and provide reports according to NCAP standards
- **Reference test house** for official Euro NCAP assessment of benchmark BEVs (Tesla, Nissan, VW)

## HV battery testing:

IDIADA implements **robust processes to handle HV battery systems** at pre-test, on-test phases, and has its own emergency plant to deal with potential hazards associated with BEV testing. Our trained and experienced staff operate in environments that guarantee the safety of individuals, facilities, equipment, and customer property.

As for **tear-down and scrapping of HV battery systems**, we have dedicated facilities and certified processes that allow us to conduct such practices in a safe and confidential environment.

## Engineering:

IDIADA passive safety division is composed of senior experts in safety development for worldwide markets, capable of providing expert inputs when required. We can rapidly identify and report critical results after testing and propose countermeasures for further improvement.



Our expertise also allows us to support both passive safety testing and engineering activities for sports cars, super sport cars, hyper cars, small series, and few-offs.

## **North America self-certification (FMVSS / CMVSS):**

IDIADA has the capability for **self-certification testing (FMVSS and CMVSS)** available both at IDIADA's European and American passive safety laboratories. Our senior experts in safety development for the North American market provides support in the best **self-certification strategy**. Furthermore, we have extensive experience in preparing **self-certification test reports** and **auditing** OEM's self-certification reports.

## **Passive safety live streaming services:**

All testing activities can be followed remotely via a high-end streaming service using high-quality equipment, securing confidentiality and quality.