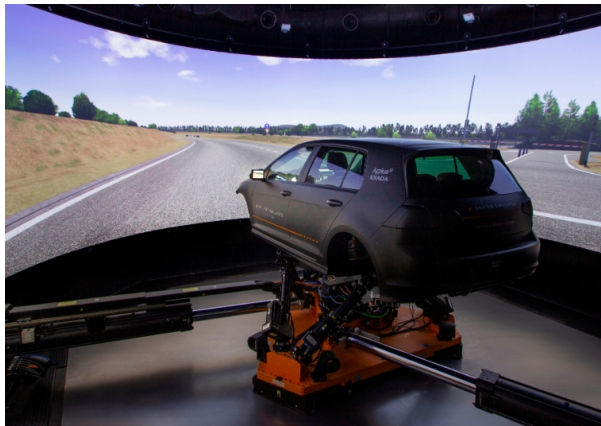


Driving Simulator

The automotive industry is undergoing a revolution. The level of complexity is increasing, but at the same time there is a greater pressure to reduce the development time. To face such challenges, Applus IDIADA brings together the physical and the virtual development with its class-leading **Driving Simulator Lab**.



IDIADA Driving Simulator Lab:

The laboratory is comprised of a **dynamic simulator** and a **static simulator**. The dynamic simulator is the best-in-class **VI-grade DiM250**, which offers a great compromise between dynamic response and motion envelope, making it suitable for a wide range of applications. The static simulator is a **VI-grade Compact**, an excellent and affordable solution for applications where motion is not required, such as model preparation, initial stage development, active systems debugging, etc.

Driving simulator lab in our facilities in China:

IDIADA also has a **VI-grade DiM250 DYNAMIC driving simulator** at its facilities in China. This new equipment, unique in the country, has been fully operational since October 2021 and is located 4 km away from the **IDIADA China Proving Ground** facilities in Zhaoyuan, in the Shandong province.

The innovative combination of one of Asia's most comprehensive proving grounds, together with the new **Driving Simulator lab** represents a **key step forward in our vehicle development activities in China**, by providing the possibility for our clients in this part of



the world to conduct both physical and virtual testing in the same location, in an efficient manner.

The best setting for driving simulator projects:

IDIADA Driving Simulator Lab is the best solution for all customers who want to empower their projects with **class-leading simulators**, without having to invest in their own facility. There is much more than just the simulators and the modern and comfortable facility: a complete team of **driving simulator experts** committed to maximizing the effectiveness of your development programmes.

Furthermore, IDIADA provides the unique possibility to combine **physical and virtual driving** on the same tracks. The digital models of IDIADA's proving ground and of surrounding roads, makes it possible for the drivers to have solid references for their assessment. This provides the best possibility for **model validation, driver training and hybrid testing**. Our virtual proving ground currently comprises the following tracks:

- General Road (Track #0)
- Dry Handling (Track #5)
- Ride Comfort A (Track #3)
- Ride Comfort B (Track #7)
- IDIADA Ride (combination of tracks #3 and #7)
- La Juncosa (public road with bends, only 5 minutes away from the proving ground)

Additionally, IDIADA can provide several other track models such as Nürburgring, Mugello, infinite straight, etc. The integration of **AVS SCANeR Studio** also gives access to a vast **library of scenarios**, including highways, cities, secondary roads, etc.

Software and model integration:

IDIADA uses **VI-grade eco-system for driving simulation**. However, thanks to our experience in **model integration** and **real-time simulation**, we can support the integration of your preferred vehicle model. The following software is currently integrated in our simulators:

- VI-CarRealTime
- Cosin FTire
- Simpack
- AVS SCANeR Studio



- Matlab/Simulink

We can support the conversion to **VI-CarRealTime** of existing **ADAMS**, **IPG CarMaker** and **CarSim** models.

Both on the Compact and on the **DiM250**, it's possible to integrate **Simulink** models either in co-simulation or as compiled models.

Your Driving Simulator Lab:

IDIADA is fully committed to making our simulators your simulators. We aim to establish solid and **long-standing partnerships** with our customers, in order to offer them a fully personalized **virtual driving experience**.

At IDIADA we will keep your specific settings for **motion cueing**, **data recording**, **software**, etc. Before any session on the simulator, the vehicle models are checked on the **Compact Simulator**, to guarantee the fastest possible ramp up. At the end of each session all the data you need are shared on a secured exchange area. **All confidential information is eliminated**.

The DiM250 room has a crane that can be used to change **cockpit safely and rapidly**, so that you can always use your own cockpit during the driving sessions.

All IDIADA's services at your hand:

IDIADA's Driving Simulator Lab does not only offer a top-class virtual driving experience, but is also fully integrated into IDIADA's **wide range of services in the fields of vehicle dynamics, chassis and ADAS engineering**, such as:

- Turnkey model build and validation
- Active systems integration
- Chassis testing (KandC, full vehicle, etc)
- ADAS testing and development
- CAV scenarios generation
- XiL support
- Human factor
- Real-time simulation

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