Powertrain integration projects

Applus IDIADA offers a complete engineering solution for the integration of complex powertrain systems into new vehicles or already existing.

DESCRIPTION

Applus IDIADA has capabilities to perform component modifications as to lead the complete system integration

- Diesel / gasoline engines
- Alternative fuel engines
- Automatic transmissions
- CVT / DCT transmissions
- Hybrid / electric powertrains
- Powertrain calibration
- Driveline
- Control system
- Interface: i.e. mountings and wiring
- Intake and exhaust system

Specification and packaging

At the beginning of any powertrain integration project IDIADA AT studies the best package configuration and design in order to achieve the targets of the project

Engine and transmission
IDIADA is capable to perform any kind of integration changes to engine and transmission by using design, calculation and simulation tools in order to increase quality and efficiency. Also can improve the NVH, HVAC, etc. features of the system.

**Complete calibration**

With its advanced tools, facilities and experienced staff, IDIADA AT has the capabilities to perform calibrations of the complete system as of individual components of the powertrain for optimal performance, emissions, NVH, etc.

**Product validation**

Systematic activity to ensure that the final product at prototype level meets the targets of the project. This validation can be done for the complete system or for individual components, by using both simulation and testing.

**Pre-production check**

Activity to check that the final product meets all the targets and is ready to start its production. Reliability test in proving ground and open road.