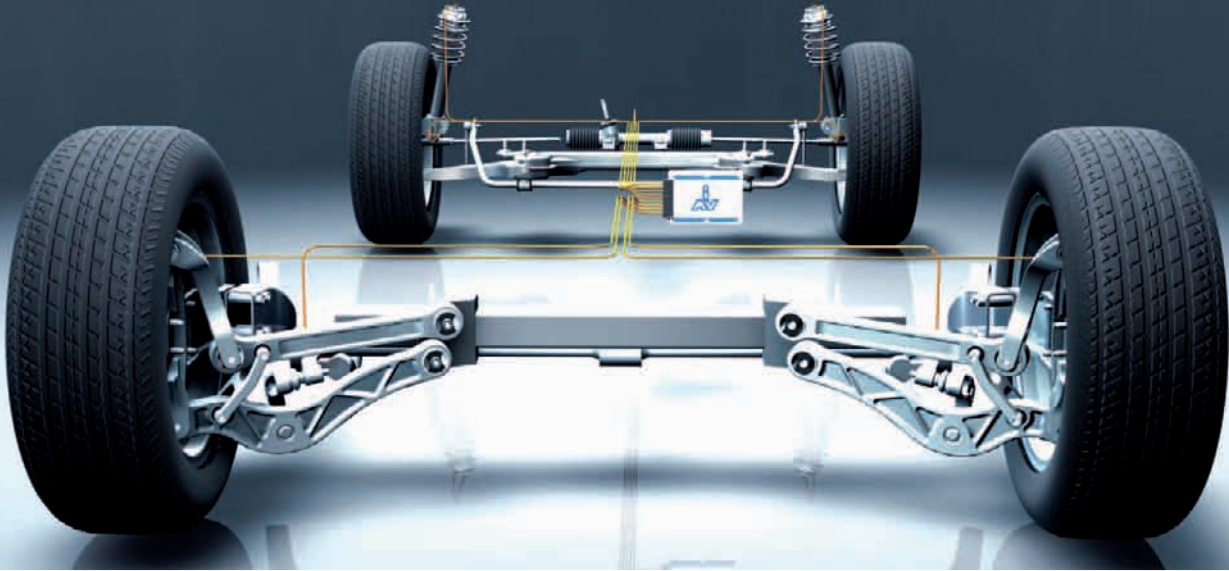


# Competence Center – Chassis

## Professional Development Support



### Competence Center – Chassis

Modern vehicle platforms reflect state-of-the-art technologies regarding driving safety and vehicle dynamics requirements. IAV and its subsidiary TRE are backing their development work by certified engineering expertise ranging from functional development and prototype design through mass-production development.

We face the market challenges with a clear client focus and highly skilled engineers. Take advantage of our many years of experience, whether you are planning an “electronic-free drive train” or a highly complex electronic control system for an active chassis management.

Beside IAV-developed tools for Simulation, Construction and Computation, there is a wide range of measurement facilities used by our engineers for testing and validation - from the regular CAN tools and gyro-platforms to the robotic driver used for conducting automated test processes according to OEM standards.

### Chassis development under one roof

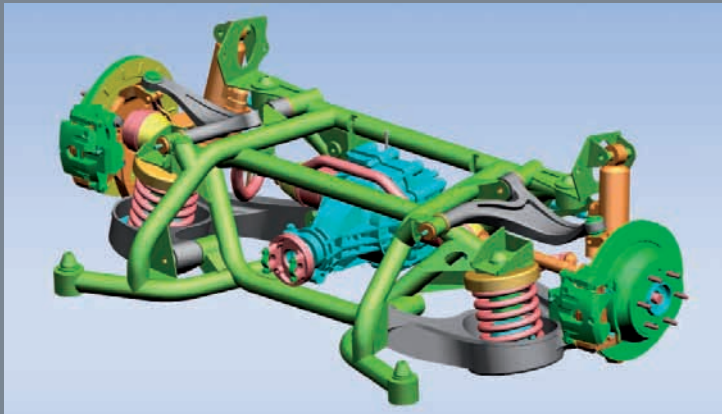
- ▶ *Concept development*
- ▶ *Simulation (from MBS to HiL)*
- ▶ *Design and functional development*
- ▶ *Electronics development and electrical integration*
- ▶ *Prototype builds - mechanical and electrical*
- ▶ *Integration, tuning and calibration*
- ▶ *Component and full vehicle test*



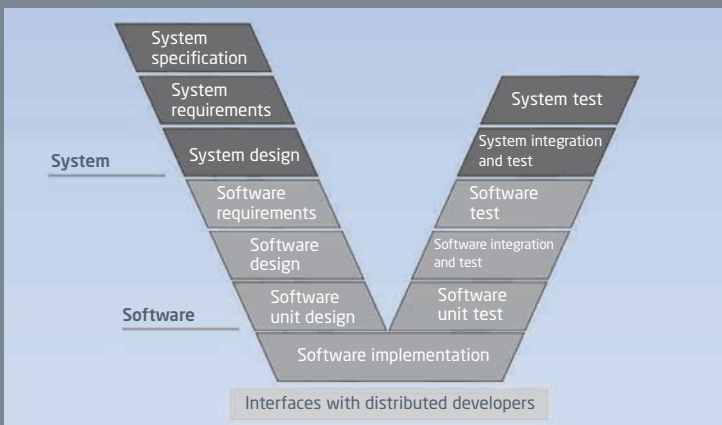
**TRE**  
powered by IAV



Simulation and modelling of handling performance



Design - layout - construction



Development process and mass production competence



Vehicle testing and tuning, even for unusual prototypes

## Mechatronic Chassis Systems

To meet our clients' requirements of a holistic chassis design approach, our development team provides profound knowledge and experience in the most relevant disciplines. This is supported by IAV's proven history for developing the entire vehicle; ensuring that all mandatory interfaces for vehicle integration and supporting processes are covered.

The "Competence Center - Chassis" provides proven experience from prototype to production. As with all of IAV's wide range of activities, responsibility can be taken for developing individual concepts for chassis components as well as for the entire chassis and development projects such as:

- ▶ Rolling chassis
- ▶ Single axle module
- ▶ Suspension (spring, damper, roll bar)
- ▶ Rubber and hydraulic bushings
- ▶ Steering (hydraulic/electric power assisted)
- ▶ Wheels, tires, tire pressure monitoring
- ▶ Braking systems (incl. electronic stability control)
- ▶ All wheel drive (incl. wheel individual torque vectoring)
- ▶ Driving dynamics control and system integration
- ▶ Functional safety
- ▶ Diagnostic and OBD

**TRE**  
powered by IAV

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