



DRIVETRAIN & SUSPENSION SYSTEMS

INTELLIGENT, HOLISTIC CONCEPTS

SOLUTIONS FOR MOTORSPORTS
AND HIGH PERFORMANCE VEHICLES

Your Partner: Pankl Drivetrain & Suspension Systems



01. DRIVEN BY SYSTEM

Your system partner; we offer all of our drivetrain and suspension solutions as individual components, as well as complete, assembled systems. This gives our customers maximum flexibility.

Our key products are:

Single driveshafts and driveshaft assemblies (fully integrated, semi-integrated or standard), highly efficient fully integrated, semi integrated tripod and CV joints, wheel hubs with integrated race tracks, centre lock wheel nuts, uprights (fully machined, forged, or 3D printed), gearbox flanges (bolted, or integrated), gears, geared shafts and highly complex CNC parts.

COMPETENCIES

TECHNOLOGY	Machining, Additive, Heat Treatment
PRODUCTS	Driveshaft, Wheelhub, Tripod, Prop Shaft, Fully Machined Upright, Rocker, Gear Units, Output Flange, Wheel, Hub, Wheel Nut, Wishbone
CERTIFICATIONS	ISO 9001, ISO 14001, VDA 6.1

Driveshaft Assy

Pankl bespoke lightweight driveshaft assembly manufactured from signature high strength steel. Featuring most efficient tripod joint technology to transmitt highest torque figures. Developed for the pinnacle of motorsports and Hyper Cars.



Upright Assy

Pankl upright assembly, optimized for performance, stiffness and efficiency. Our upright assembly procedure assures reproducible quality and efficiency standards.



Inboard Suspension

Highly complex rockers and levers machined to perfection in order to meet the high customer demands and requirements. Torsion bars, anti-roll bars manufactured to meet the highest tolerance grades.



Outboard Suspension

Forged and milled aluminum and steel wishbones including engineering for joints and bushings.



Gearbox Components

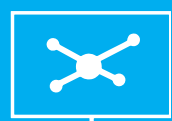
Gearbox components, such as ratios, selector forks, shafts, etc. manufactured to the highest quality standards utilizing our state-of-the-art machine park and surface treatment equipment for the top level of motorsports as well as high performance super cars.





03. INTELLIGENT SOLUTIONS

Pankl's goal is to provide intelligent and complete solutions to our customers. Living a holistic approach, Pankl has the ability to support customers from the first design steps until the complete system validation.



System
Development



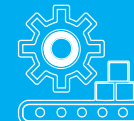
Material Research



Manufacturing



Testing



Supply & Delivery



Value Added

04. PRODUCTION

Small volume & prototype production

- Highly complex CNC machining
- Flexible machine park
- Vertical integration
- In-house availability of related processes such as heat treatment, coatings and validation
- Unique quality assurance and quality processes

05. ACCOMPLISHED EXCELLENCE

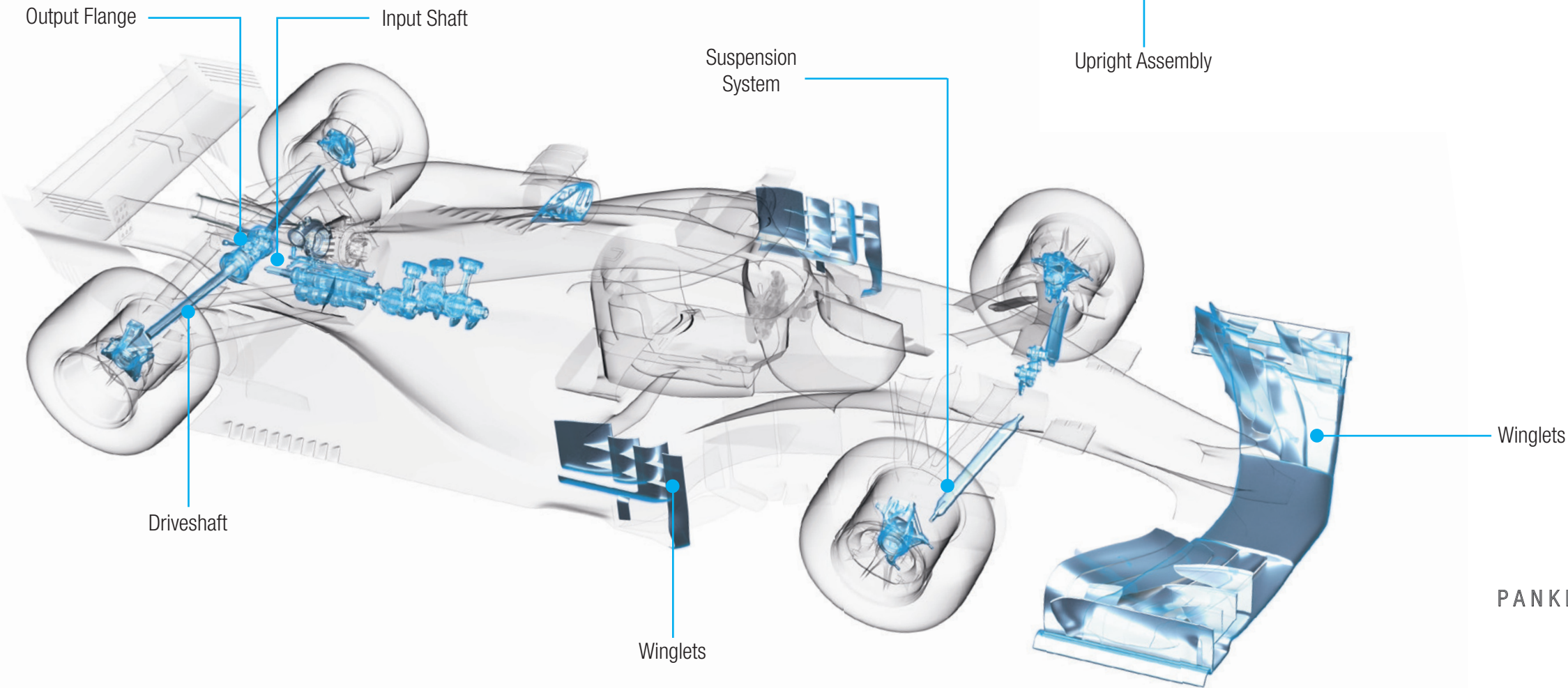
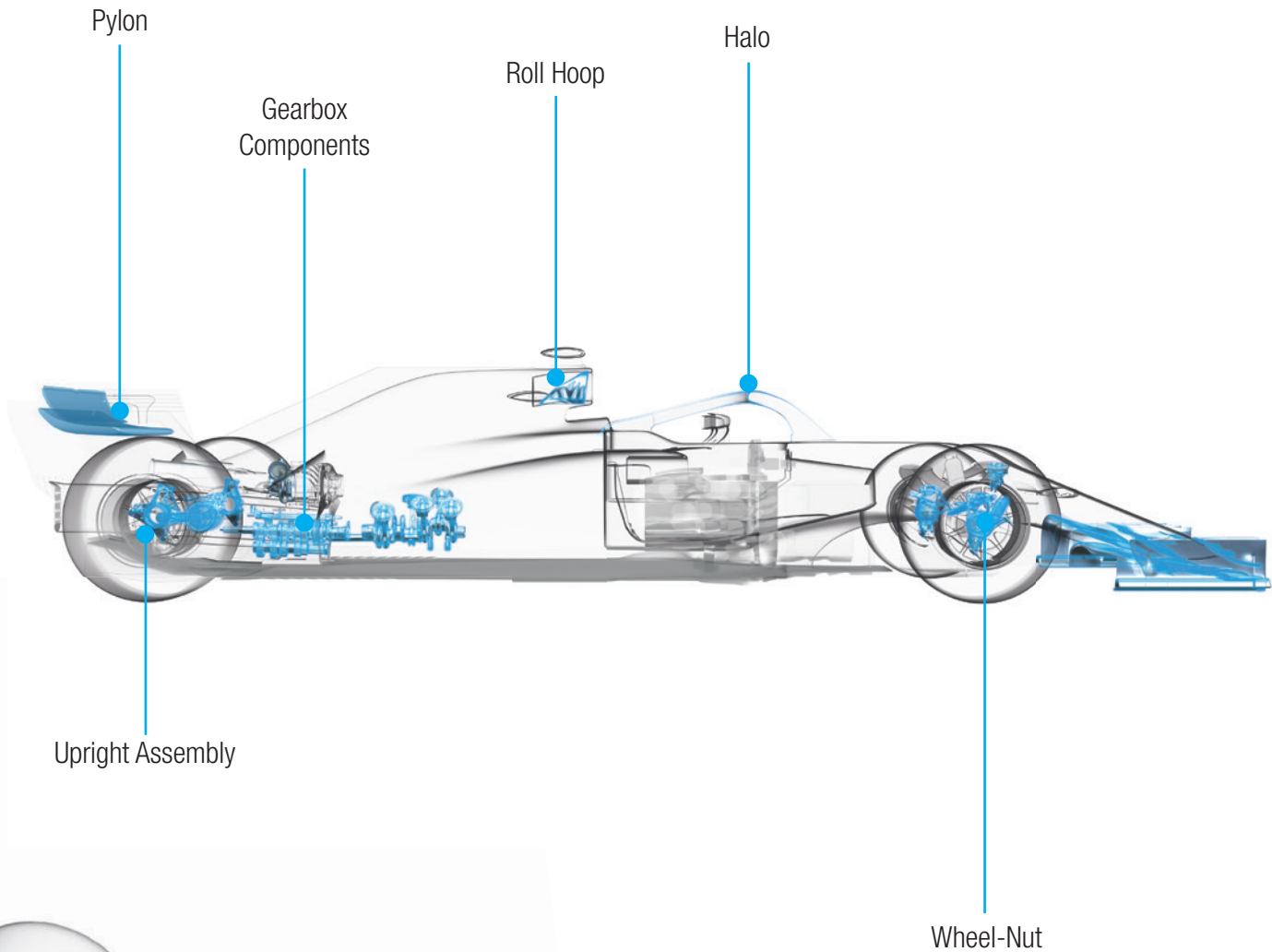

In order to meet the highest quality standards, Pankl has a quality assurance system that is unique in the industry. More than 3000 measuring instruments and a sophisticated, electronic quality management system guarantee the highest component quality.

Weight and efficiency optimized

High precision manufacturing

Performance testing

Tailored solutions



PANKL COMPONENTS OVERVIEW



06. ULTIMATE PERFECTION

Pankl Drivetrain and Suspension Systems is a major global player in the challenging market of motorsports and exclusive high performance vehicles. The racing business faces challenges every day and our team meets these challenges with enthusiasm and passion. Pankl is known and appreciated for competence in design, development and manufacturing of lightweight components that are designed to operate under extreme conditions. Our strength is to offer all our customers a comprehensive package of sophisticated products and extensive support. In-house R&D, engineering, production and testing departments are available for product development.



07. COMPREHENSIVE INNOVATION

In-house R&D, top-level engineering skills, the latest process and measuring technology with state-of-the art software tools, high-tech testing and manufacturing facilities ensure the highest quality for all our products and systems, from the first sketch all the way to design and FEA (Finite Element Analysis) of the complete system, and finally to the toughest test of all – real-life racing applications.



08. TESTED QUALITY

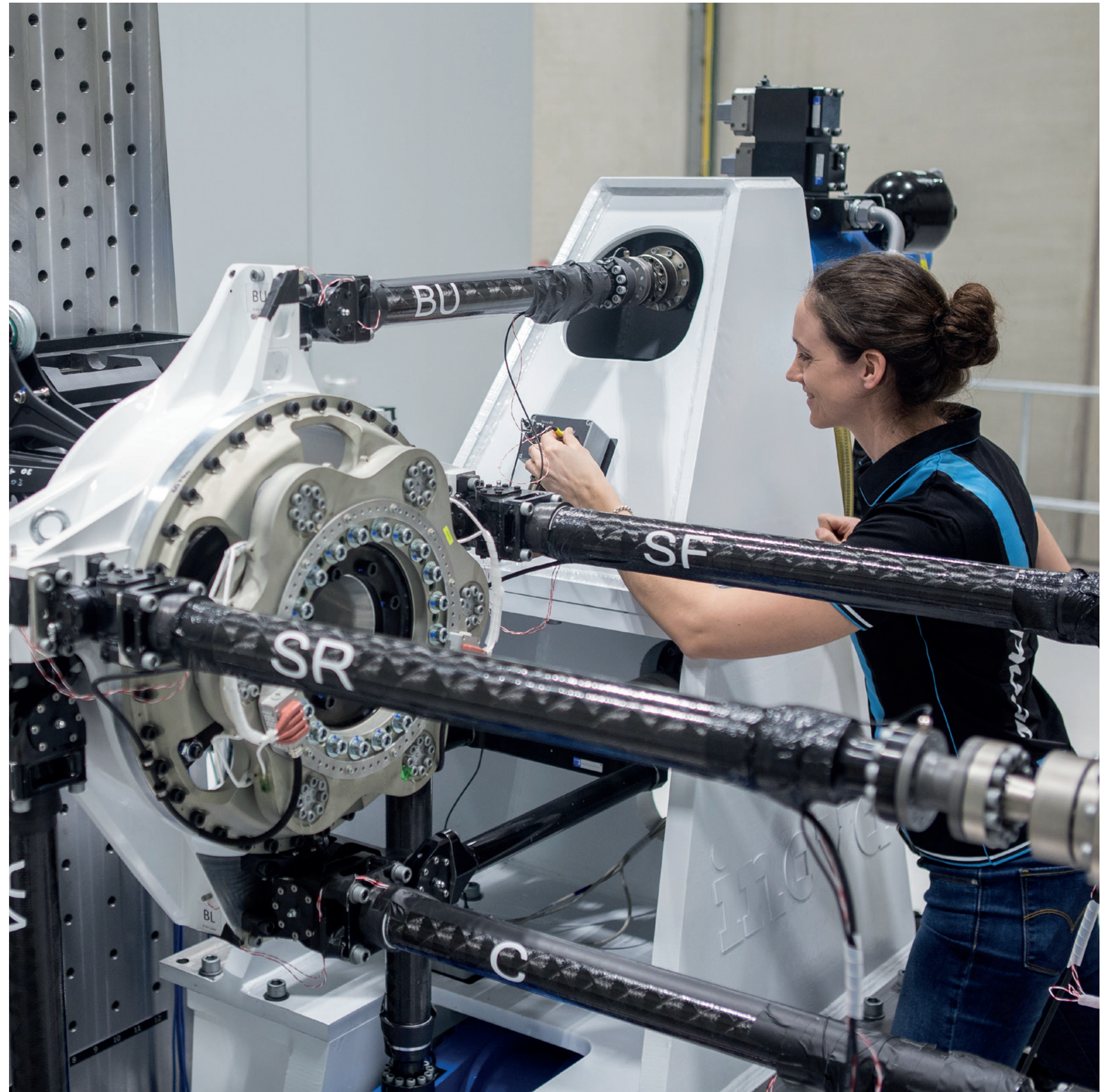


The whole range of development steps such as design, FEA and testing, is done in-house. In addition we have a unique drivetrain test rig that can replicate real time torque, suspension and steering conditions. This allows components to be validated in conditions ranging from the high speed driveshaft requirements of F1 to the extensive suspension and steering movements associated with Rallye or Rallye Raid and Hyper Cars.

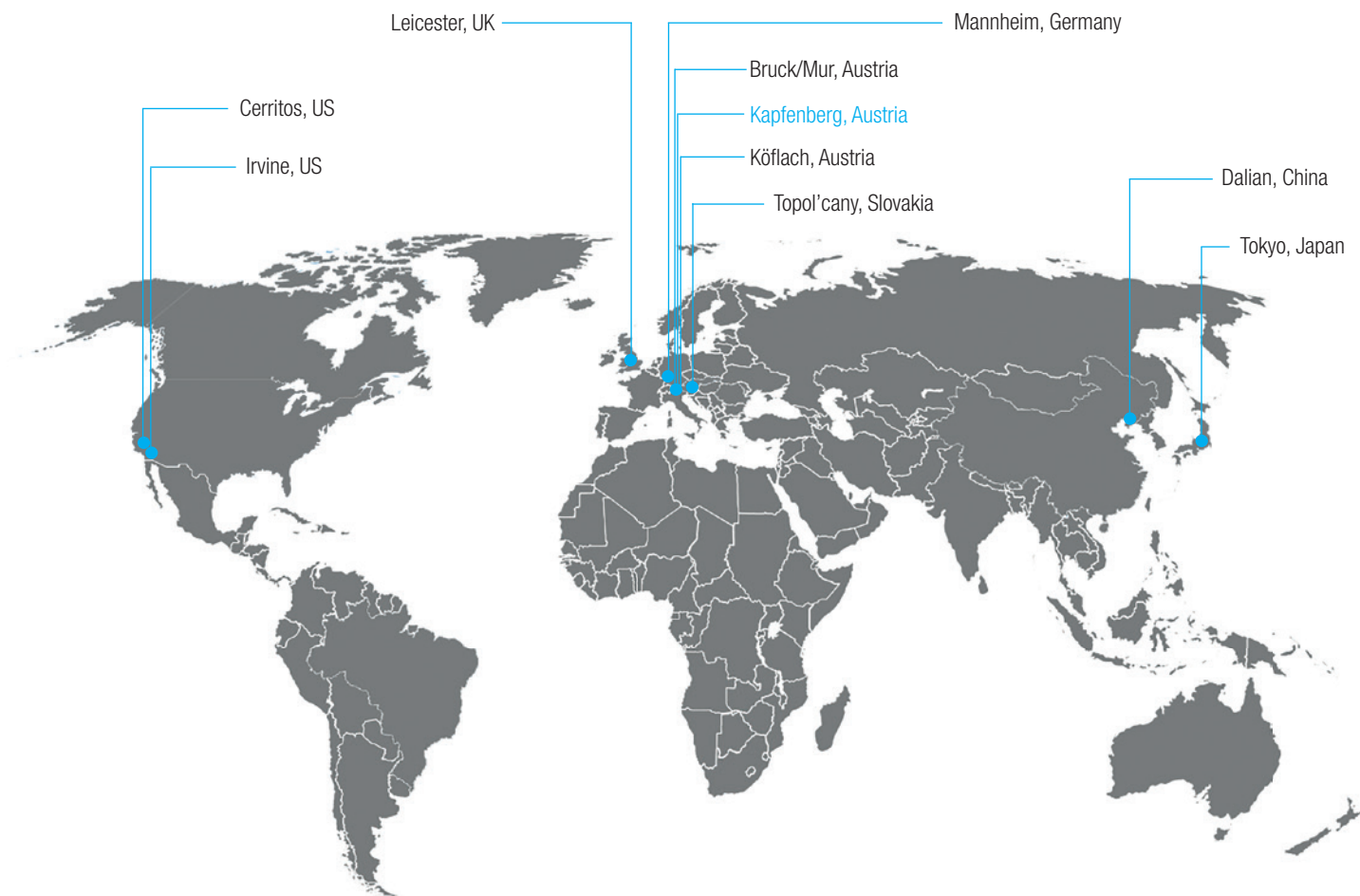
TEST RIG CAPABILITIES

Fully dynamic endurance testing and bearing evaluation

- single components 1DOF & 3 DOF
- full suspension corner assemblies 6DOF
- bearing endurance testing 7DOF
- static compliance testing
- dynamic compliance testing
- efficiency testing and evaluations



PANKL LOCATIONS



A Member of the Pankl Group

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