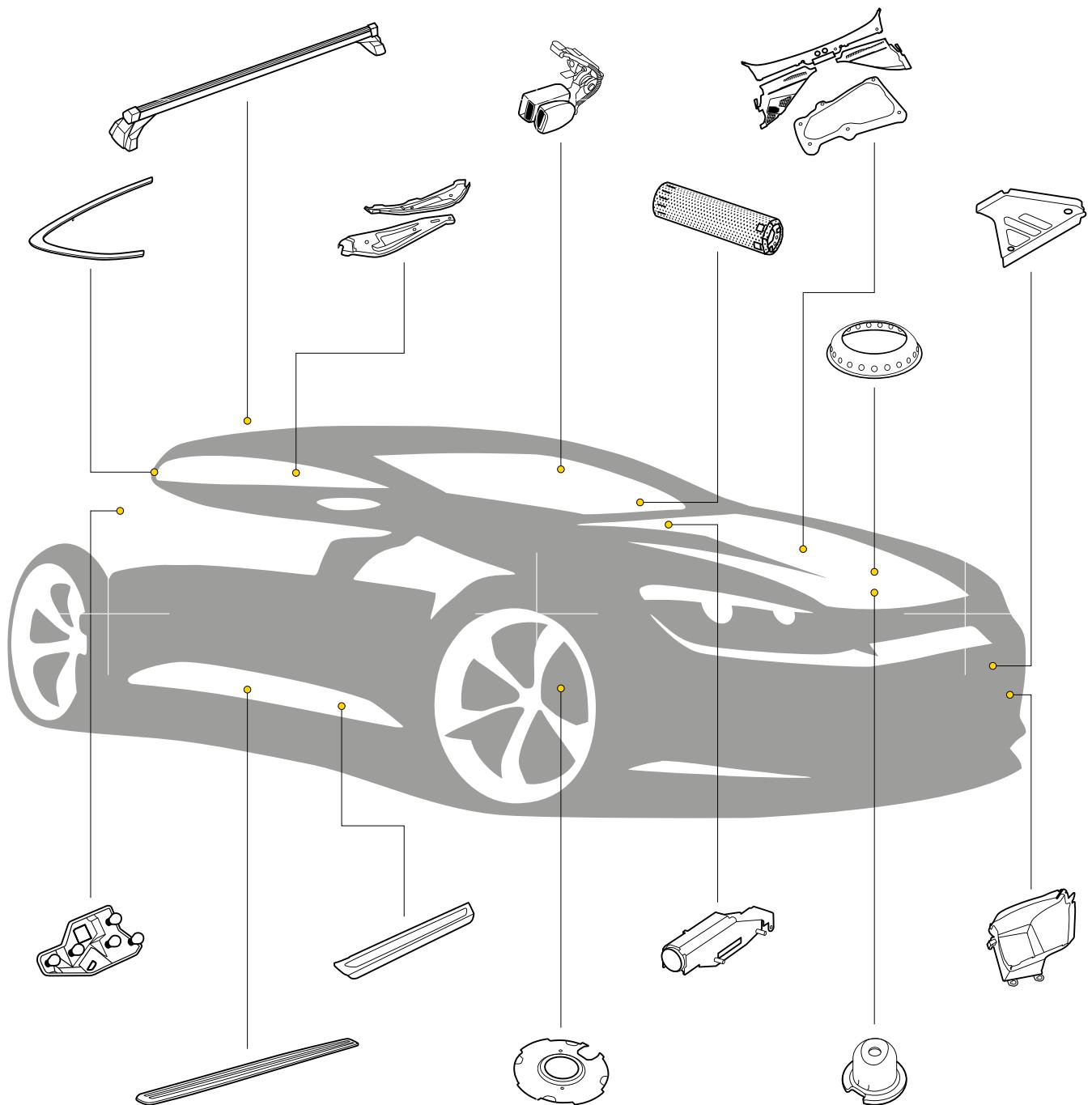


advaltech

ADDING VALUE THROUGH INNOVATION



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TOGETHER TO THE TOP

If you want to reach the top you need talent and experience, excellent know-how and passion. And also a partner you can rely on.

Here at Adval Tech, we want to go all the way to the top with you. And we want to create added value with you. As your preferred industrial partner and one-stop shop for technologically sophisticated metal and plastic components, we cover the entire value chain – from product development and prototype construction to tool and process development and ultimately component production and subassembly manufacture.

Do you operate in the automotive sector or focus on applications that are comparable to those in the automotive sector in terms of quantities, quality requirements, service life and production processes? If so, we look forward to going all the way to the top with you.



INNOVATION IS TEAMWORK

Understanding customer needs and requirements, developing new and innovative solutions from them, then implementing them successfully in mass-production products and manufacturing them worldwide – that is Adval Tech's core business.

FROM GOOD IDEA TO OPTIMAL SOLUTION

Conditions are changing faster than ever. So we combine our quality standards, ideas and manufacturing expertise to create innovative products that will reliably take our customers forward into the future.



The steering system is of key importance not only for a car's driving dynamics, but also for its safety. The steering column mountings developed by Adval Tech are continuously adjustable and include an integrated crash safety system. In an accident, when the driver hits the inflated airbag, the whole steering column retracts toward the engine compartment, further reducing the impact on the driver and absorbing energy.



INTERDISCIPLINARY AND INTERCULTURAL TECH CENTER

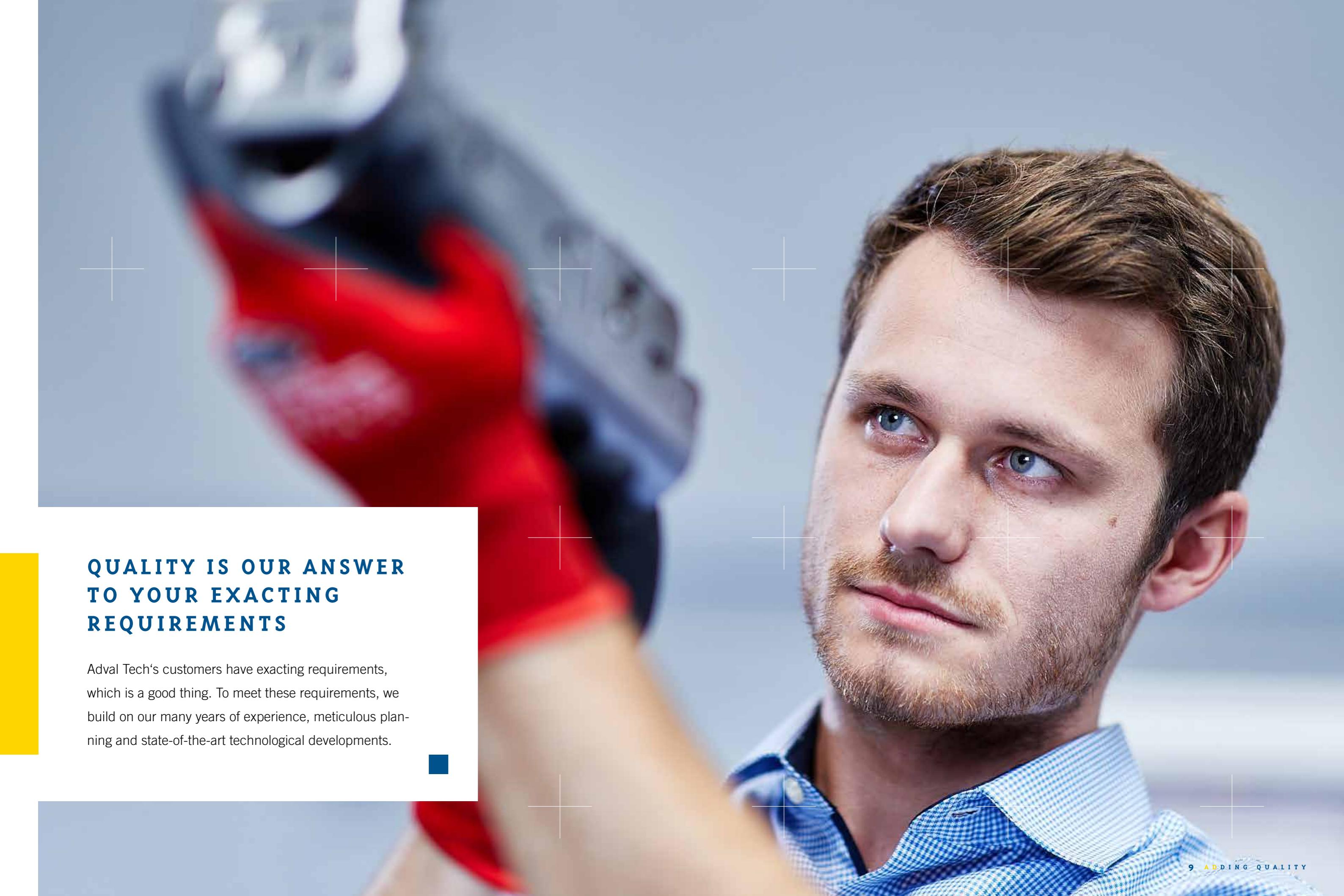
The extensive interdisciplinarity of today's innovation projects and their short development times call for a perfectly organized development process and a well-established development team. Adval Tech's interdisciplinary and intercultural Tech Center teams are the ideal development partners for customers in the automotive sector.

TAILOR-MADE PRODUCT SOLUTIONS

In close collaboration with its customers, Adval Tech develops tailor-made product solutions and readies them for production. We offer competitive products based on a tried-and-tested understanding of systems, excellent product and technology know-how and an uncompromising focus on customers and on market orientation.

IMPROVING ROAD SAFETY

Over the years, Adval Tech has earned an outstanding reputation for safety components in the automotive industry. With its continuously adjustable steering column mountings plus integral crash safety system, dual combustion chambers for airbags, stainless steel sockets and ring connectors for lighting, air-water separation systems and other important passive safety elements, Adval Tech is the ideal development and production partner for vehicle safety.

A close-up photograph of a young man with light brown hair and a well-groomed beard and mustache. He is looking directly at the camera with a neutral expression. In the background, a robotic hand with red and black articulated fingers is positioned to look like it is interacting with the man's face. The background is a plain, light-colored studio backdrop.

QUALITY IS OUR ANSWER TO YOUR EXACTING REQUIREMENTS

Adval Tech's customers have exacting requirements, which is a good thing. To meet these requirements, we build on our many years of experience, meticulous planning and state-of-the-art technological developments.





PROCESS MASTERY LEADS TO EXCELLENT RESULTS

The high quality of its processes is one of Adval Tech's success factors. With our extensive manufacturing knowledge, we are in a position to meet all our customer requirements. Around the globe and across the board, we rely on uniform standards and the zero-error principle. Adval Tech's quality policy is aligned with international guidelines and standards. We offer the highest levels of process safety allied with premium product quality.



Plastic air flow elements and air guidance systems have to be individually tailored to fit the different engine options available for modern car models. Adval Tech's innovative tool concept is the efficient and reliable solution to this challenge.

RIGHT FIRST TIME

We rely on the zero-error principle and the maxim of "Doing it right the first time". So we consistently focus on quality, right from the development and construction phase. Even in the first stages of product development, we support our customers with our production expertise. This reduces development times, cuts production costs and minimizes process risks.

YEARS OF INTERNATIONAL DEVELOPMENT AND PROCESS EXPERIENCE

The story of Adval Tech is the story of the successful development and production of sophisticated parts. Adval Tech's multicultural development and planning team has many years of international experience. We use uniform process and quality standards in all our production plants worldwide.



WITH PASSION

Adding value through innovation – that's what Adval Tech stands for. And that's what drives our development, planning and production teams on, each and every day. Passionately and with a win-win mentality, we want to grow each day – together with our customers, as their reliable and valuable partner.



YOUR ONE-STOP-SHOP

As a one-stop shop, we support our customers throughout the entire adding value process.

Our customers can rely on the same professional partners from product development through to delivery of the perfect components.

METAL COMPONENTS

We use the latest simulation techniques to optimize existing forming processes and evaluate the feasibility of newly developed processes.

We build our own machinery and tools, and guarantee our customers stable and efficient manufacturing processes.

We are leaders in stamping and forming, in both progressive composite and transfer technology. By using state-of-the-art tools we guarantee our customers exceptionally short development lead times.

We provide a full range of follow-up processes, from laser drilling, laser welding and other connection technology through to high-spec cleaning. We work in flexible processes, organized in line with the latest criteria. In one-piece-flow or value-stream-optimized assembly lines, the flow principle is used to create complex subassemblies step by step.

To ensure top product quality at all times, we employ state-of-the-art testing and measuring systems along with a range of automated testing equipment. In cleanliness testing we use both gravimetric and particle analysis.



Consistent checking and documentation of the manufactured elements guarantees complete exchangeability of all components.

Consultancy and product development



Simulation and prototype engineering



Tool development and production



Component production



Assembly



Measuring and testing



PLASTIC COMPONENTS

We use molds to create prototypes for functional validation, then test them either internally, through an external partner or on the customer's premises, as required. When designing molds, we first conduct Moldflow simulations or, if necessary, extended simulations such as FEM or flow calculations and acoustic tests.

When developing and constructing our molds, we work with strategic partners worldwide. Our APQP (Advanced Product Quality Planning) team performs product and process validation for the stable, high-quality mass production of components, subassemblies and systems, applying statistical fault prevention methods.

Our equipment consists largely of multicomponent injection-molding machinery with clamping forces ranging from 800 to 130,000 kN.

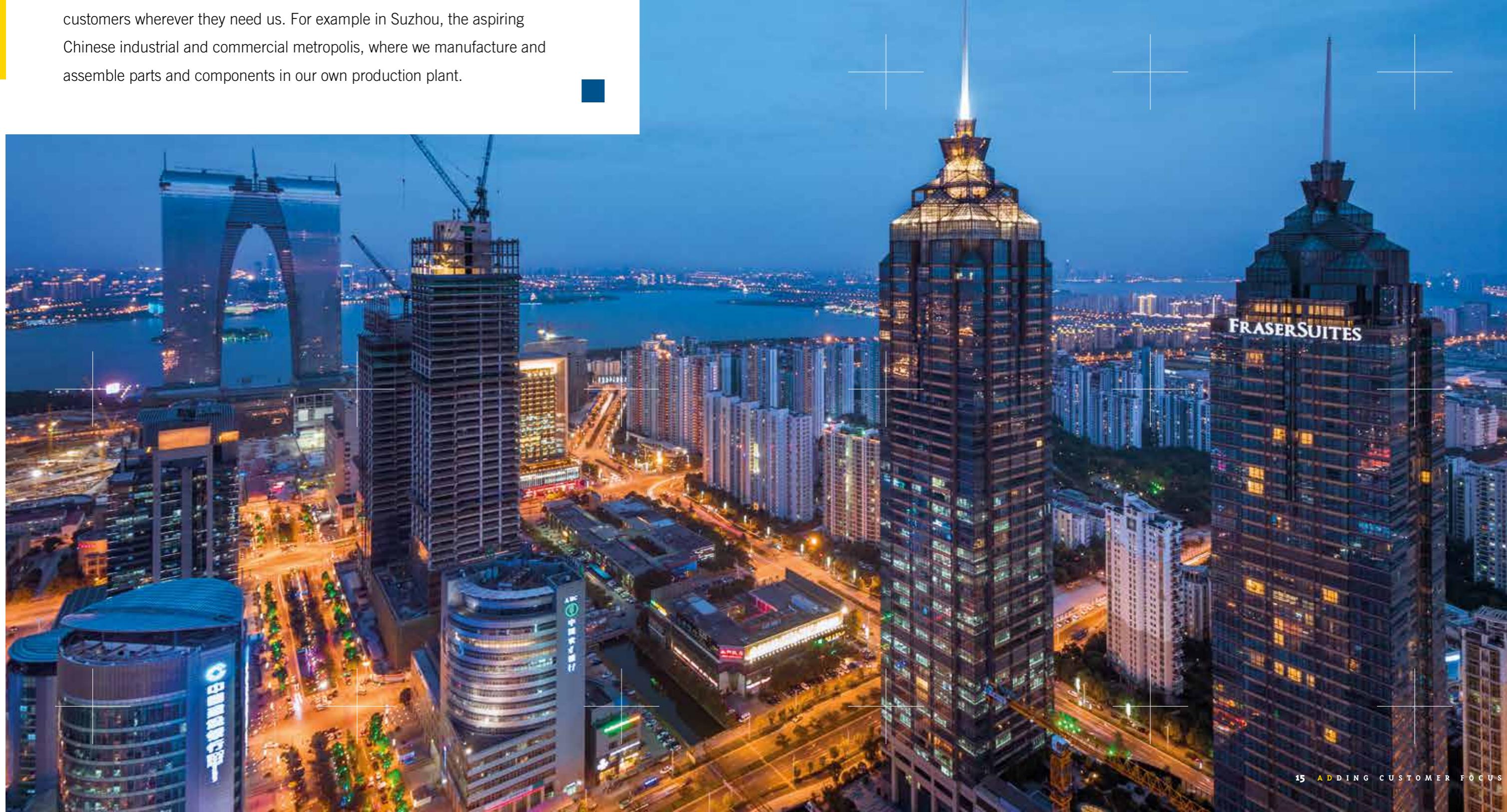
To produce subassemblies or systems in large volumes from individual components, we employ either fully automated assembly systems or semi-automated assembly aids with built-in quality control, as required. This ensures our production processes can be replicated worldwide.

We use state-of-the-art measuring and testing equipment in all our production plants worldwide to ensure top product quality, everywhere and at all times. Depending on the project, we employ functional gages, attribute gages or automated testing equipment.

WE BELONG WHEREVER OUR CUSTOMERS BELONG

For Adval Tech, customer proximity is crucially important in every respect.

We make our customers' needs and concerns our own, and support our customers wherever they need us. For example in Suzhou, the aspiring Chinese industrial and commercial metropolis, where we manufacture and assemble parts and components in our own production plant.

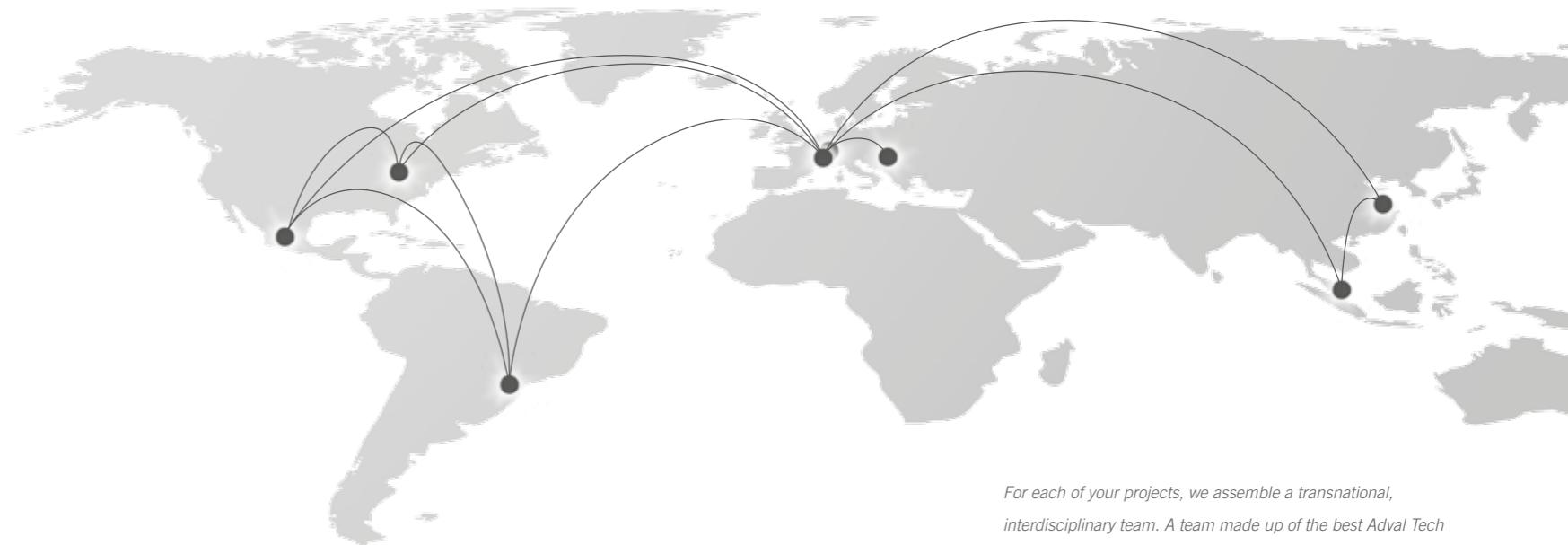


OUR MASS PRODUCTION FOLLOWS THE CUSTOMER

If it makes sense, we'll go as far as it takes to manufacture close to our customers. For example, we produce the air/water separation systems for a premium car manufacturer at our plant in Szekszárd (Hungary), and to the same quality at our plant in Suzhou (China). For another premium brand, we manufacture identically designed air flow and air guidance systems in Hungary and Mexico.



The air/water separation system ensures that no water enters the air-conditioning system and the interior of the car.



For each of your projects, we assemble a transnational, interdisciplinary team. A team made up of the best Adval Tech specialists in the world.

GLOBAL COLLABORATION, LOCAL AVAILABILITY

Thanks to global networking, Adval Tech is able to make the global expertise of a leading manufacturer of components and subassemblies locally available to customers. With a personal on-site contact partner. More and more manufacturers are availing themselves of this service for increasing numbers of applications. Wherever in the world they produce cars.

TOP-CLASS TEAM ON SITE

Only if you are on site with the customer, know the local circumstances inside out and know how to pull together a top-class team of appropriate experts and workers can you react immediately if needed and guarantee the required quality and necessary goods flows at all times.



Together we ensure maximum quality in order to meet our customers' expectations.

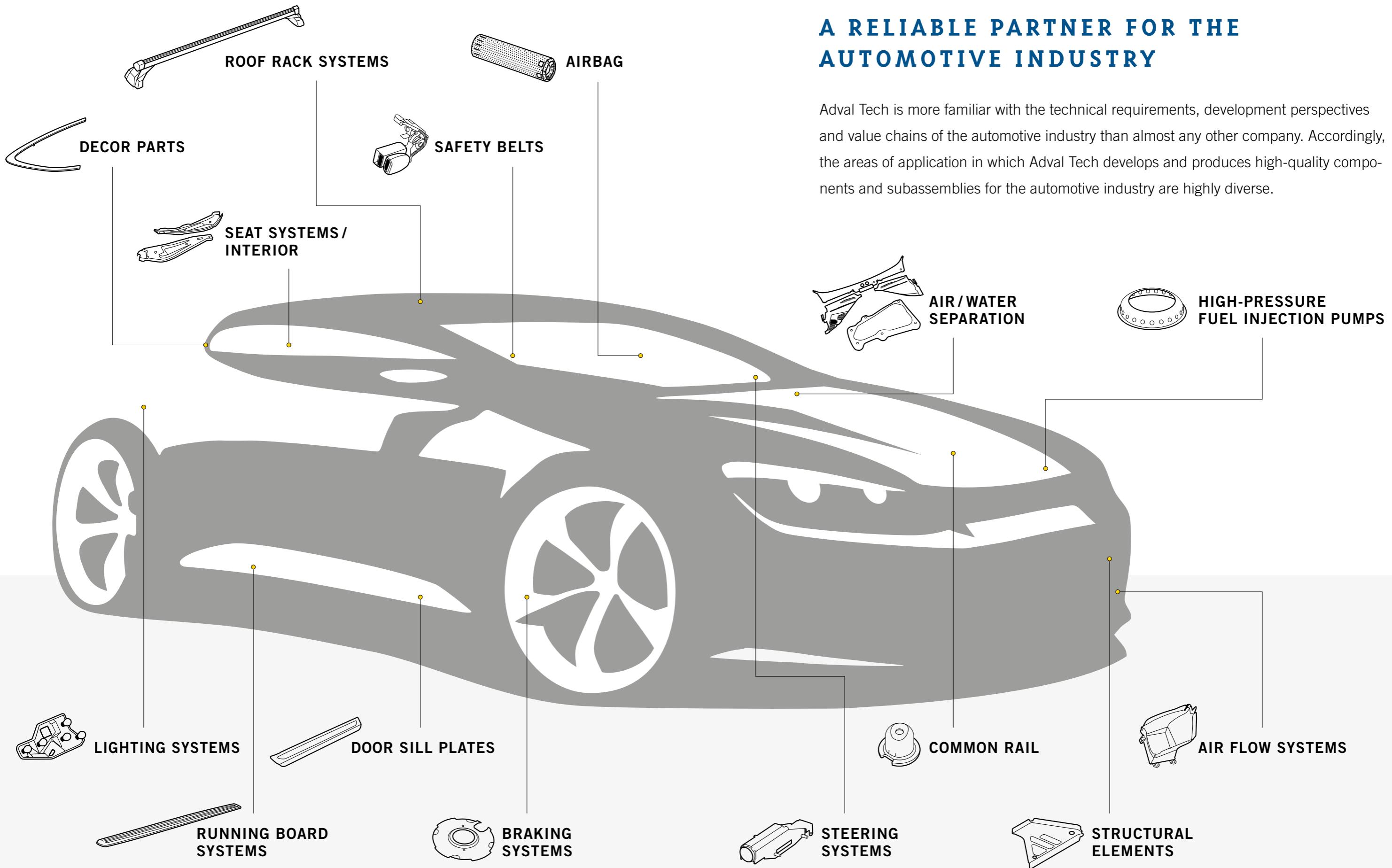
ADVAL TECH – A GLOBAL PRESENCE

Adval Tech is a globally acting Group with local presence. It has its own facilities in all major regions of the world's automotive production industry.



A RELIABLE PARTNER FOR THE AUTOMOTIVE INDUSTRY

Adval Tech is more familiar with the technical requirements, development perspectives and value chains of the automotive industry than almost any other company. Accordingly, the areas of application in which Adval Tech develops and produces high-quality components and subassemblies for the automotive industry are highly diverse.



METAL COMPONENTS

We manufacture stamped and formed high-volume production parts and subassemblies, developing and producing the required tools in-house. We also build complete production lines for selected applications, thereby supporting our customers throughout the entire adding value process.

► STEERING SYSTEMS

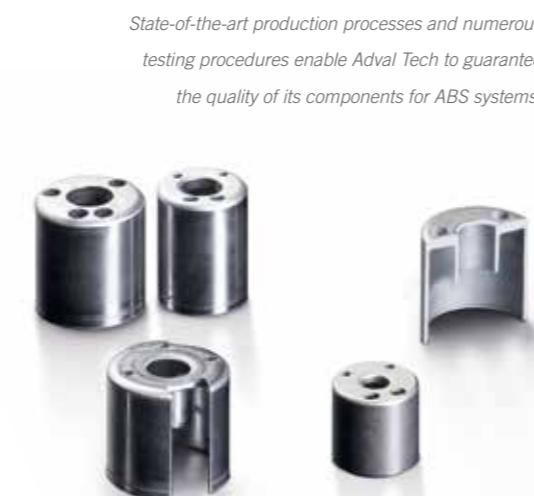
The steering system is of key importance not only for a car's driving dynamics, but also for its safety. Most of the steering column mountings produced by Adval Tech are continuously adjustable and include an integrated crash safety system. In an accident, when the driver hits the inflated airbag, the whole steering column retracts toward the engine compartment, further reducing the impact on the driver and absorbing energy.

► AIRBAG

Safety enjoys top priority at Adval Tech. We produce millions of safety-related formed parts and subassemblies, such as dual combustion chambers for airbags. This sophisticated production component consists of stamped and formed metal with an integral fixed spring assembly.



Safety-related formed parts:
combustion chambers for airbags.



State-of-the-art production processes and numerous testing procedures enable Adval Tech to guarantee the quality of its components for ABS systems.

► FUEL MANAGEMENT

Adval Tech supplies sophisticated individual parts for high-pressure fuel injection pumps for around 50% of the world's car production. Extremely complex fuel injector valve sleeves and sealing plugs are required to meet high standards of strength, dimensional accuracy and surface finish, and are traditionally produced using a machining process. We use a blanking and forming process to produce them efficiently and to impeccable quality standards.

► BRAKING SYSTEMS

Motorists need to be able to rely on their vehicle's ABS system in all situations. The individual components of such braking systems must therefore conform to high standards.



► DECOR PARTS

Thanks to our many years of experience in manufacturing decor and trim parts, we have developed exceptional expertise in this field.

For our high-quality decor parts, we use aluminum ribbon, extruded aluminum and stainless steel.

► OTHER APPLICATIONS

The wide range of metal components we manufacture for the automotive industry includes:

- Side rails and brake pistons for car seat adjusters
- Rolled and deep-drawn electric motor housings
- Ratchet segments for handbrakes
- Plastic-covered link brackets for gearshift levers
- Fans
- Various body components



PLASTIC COMPONENTS

We produce high-volume plastic parts for selected applications. As a one-stop shop, we offer our customers project management from the initial design phase through to the delivery of series items, with innovative product development, mold design and our own production plants in Europe, America and Asia.



When working on projects for OEMs, the Adval Tech Group applies its technical expertise plus its development and innovation strengths from the outset and throughout the value chain.



► AIR/WATER SEPARATION

Adval Tech's air/water separation system ensures that no water enters the air-conditioning system or the interior of the car. The plastic components are assembled in the windshield/engine compartment area, where they separate the air inflow from rainwater. At our site in Szekszárd (Hungary), we produce hundreds of thousands of plastic components for the air/water separation systems in BMW 1 Series and 3 Series cars. We deliver the finished subassemblies directly to the vehicle manufacturer's factories in Germany.

► AIR FLOW SYSTEMS

We are developing and producing plastic air flow elements and air guidance systems for the next generation of Audi models. Audi offers a variety of engine options, and a correspondingly diverse range of dual-component plastic parts are required for those engines' air flow systems. Adval Tech's innovative tool concept provides an efficient and reliable solution for all variations.

► TECHNICAL COMPONENTS

We deliver our components directly to vehicle manufacturers (OEMs) and to tier-one customers who supply those vehicle manufacturers. As a one-stop shop, we support vehicle manufacturers from start to finish: from product and process development through to component production and assembly.



► OTHER APPLICATIONS

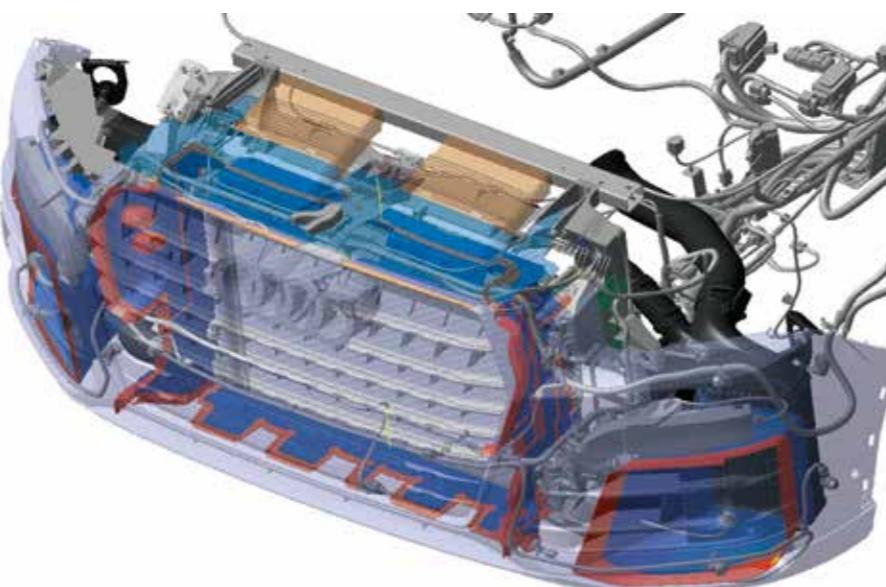
We also produce plastic parts, subassemblies and systems for the following application areas: household appliances and medical devices.

SUBASSEMBLIES

In addition to individual parts, Adval Tech also manufactures and installs complete subassemblies. Adval Tech's subassemblies enable its customers to considerably reduce their logistics and warehousing costs and obtain a complete solution from a single source in the form of a one-stop shop. We manufacture a wide range of installation and welded subassemblies, including roof racks and running board systems.

COMPLETE UNITS INSTEAD OF INDIVIDUAL PRODUCTS

With subassemblies too, we support our customers along the entire supply chain, from product development to packaging management and design. We produce a variety of roof rack systems for several car manufacturers. We also supply one premium vehicle manufacturer with running board systems. Our broader portfolio also includes aluminum subassemblies that promote passive safety and meet the highest quality standards thanks to one hundred percent automated optical inspections. We use the very latest manufacturing methods – welding robots with integral quality control, and the automated feeding of press-fit and rivet components.



This is an example of a complex subassembly consisting of between four and six two-component plastic parts. The air flow elements are mounted behind the radiator grille in the middle of the car. They direct the air to the main engine's radiator. The optional air guidance systems are installed on the sides in front of the wheelhouses. Depending on the specifications, they direct the air to auxiliary water coolers or intercoolers.



► ROOF RACK SYSTEMS

Roof rack systems consist of over 100 individual plastic, extrusion press and blanked components. We combine these to create functional safety-related subassemblies. Thanks to the one-piece flow concept, we are able to produce large volumes.



► RUNNING BOARD SYSTEMS

We deliver subassemblies for the vehicle accessory market, such as running board systems, directly to the OEM in end-customer packaging. Adval Tech offers everything from a single source, from the development of individual components, the manufacture of tools and the subsequent mass production of metal components right through to fitting the subassemblies.

► DOOR SILL PLATES

Adval Tech produces door sill plates in series. During the production process, we make use of our expertise in composite technology. At our plant at Szekszárd, in Hungary, the plastic component is injection-molded, the metal insert is die-cut, and the components assembled to form the finished subassembly. As a tier-one supplier, we deliver directly to BMW's assembly lines.

THE ADVAL TECH HISTORY

In its 90-year history, Adval Tech has evolved from a local business to become a globally active industrial group. It all started in 1924 in a small mechanics workshop ...

1924

Fritz Styner and Rudolf Biezn found the collective partnership of Styner+Biezn as a small mechanics workshop in Bümpliz (Bern).

1963

Styner+Biezn relocates to Niederwangen (Köniz).

1997

As part of a strategic realignment, the holding company and corporate group are renamed Adval Tech.

1999

The production company Styner+Biezn do Brasil Ltda. is founded in Curitiba, PR, Brazil.

1942

Styner+Biezn becomes a limited company.

1974

By acquiring AWM Muri, Styner+Biezn gains an excellent foothold in the promising plastic injection molding technology market.

1998

Going public: shares in Adval Tech Holding AG are traded on the stock exchange in Zurich.

2004

Acquisition of Lanz Industrietechnik AG, Wolfwil.

2005

Acquisition of Teuscher Kunststoff-Technik AG, Grenchen.

2003

Acquisition of FOBOHA GmbH Formenbau, Haslach, Germany.

2007

Acquisition of QSCH Termelő és Kereskedelmi Kft., Szekszárd, Hungary.

2015

Founding of the production company Adval Tech (Mexico) S.A. de C.V. in Querétaro.

2018

Sale of Adval Tech (Thailand) Co. Ltd.

2008

Acquisition of the Omni Group, Singapore.

2016

Acquisition of Fischer IMF GmbH & Co. KG, Endingen, Germany. Divestment of the Molds segment (FOBOHA).

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The original German-language version is binding.

