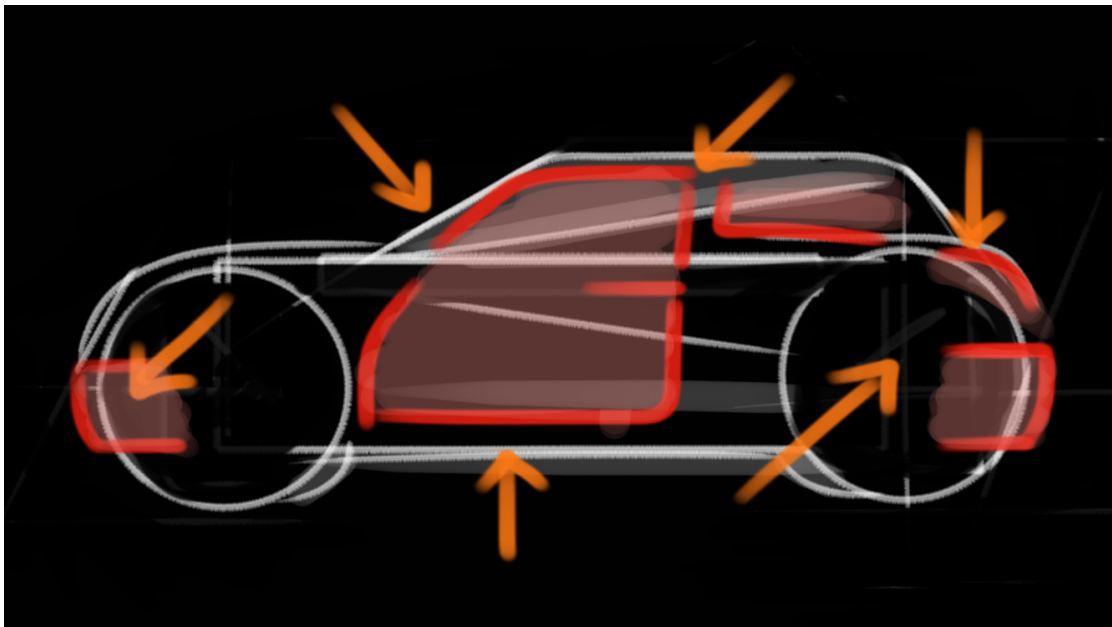


1. Project complexity in prototype tool tracking

Prototypes are an essential part of the development and testing of vehicle components! But what exactly is behind the manufacturing processes of prototypes and their tools and equipment, in order to gain the necessary added value for series production?

For which services exactly is Schnitzer Group being commissioned?



Having a look on the vehicle as a whole, we support our customers in tool tracking across various manufacturing processes:

- Plastic injection molding (1K, 2K) and laminating
- Metal forming processes, such as punching, roll bending, pressing, and deep drawing
- Metal die casting processes
- Additive processes such as SLS, SLA, or silicone tools

The components come from the full range of vehicle parts, both interior and exterior:

- Front and rear cladding
- Lighting
- Sealings
- Various types of cladding components
- Metal main structural components
- Electrical components/connectors

What are the challenges in these projects?

International project teams require intercultural understanding. A team from Asia has a different working and communication style compared to a team from Europe or the United States. Development timelines for new vehicles are getting shorter. Therefore, reduced tool manufacturing timelines are more challenging, and quick insights from prototype testing are even more important. Further, the ongoing shortage of skilled workers is particularly noticeable among toolmakers all over the world. Sufficient knowledge transfer often barely takes place. In addition, there is a demand for a so called "New Work Culture" and more flexible working hours, which is somewhat at odds with the volatile prototype tool manufacturing. **#weareglobal**

What are the roles of Schnitzer Group's project managers in the projects?

Technology Expert: Especially in the field of prototypes, new technical trends and technologies are constantly being "tested." It is important to have a precise understanding of the component's requirements, such as strength, durability, surface characteristics, and functionality, in order to select the right manufacturing process. We support customers in this regard with a broad range of expertise and extensive experience gained from numerous prototype projects. **#technology**

Transparency Provider: Our systemic approach is particularly relevant when it comes to managing the product development process for prototypes. Only those who understand the project's interconnections and technical requirements can act purposefully. Lack of information leads to incorrect actions. Our goal: Complete transparency in the project. A systematic and recipient-oriented reporting system is crucial for managing the various aspects. **#datatransparency**

Communicator: We diplomatically address and convey open topics, including project "hurdles" that hinder project progress. An objective and technically informed assessment of the situation is necessary to make rational decisions in favor of project goals. In a technical context, we also value communication on an equal level. **#allaboutcommunication**



What are the added value results from collaborating with us?

- One-Face-to-the-Customer – while having access to the expertise of the entire Schnitzer Group
- Internationality – connectivity through our own locations in CN, USA, CH, and Italy, as well as external colleagues worldwide
- Cooperative support – with specialized know-how, task forces in cases of capacity constraints
- Global network – within the industry, built over 30 years with 55 colleagues in the family-owned business
- Professional interface communication – targeted and differentiated information flow to stakeholders.

The SYSTEMIC Upgrade for your engineering project!

patrick.heine@schnitzer-group.com

2. Expertise in Casting!

Strong addition to the team: Casting Expert, Dipl. Ing. Faruk Al-Sibai



Whether it's component design, casting implementation, tool build, industrialization, series launch, and/or process production improvement, our casting expert manages projects from the initial stage to successful completion. They provide support in analysis, consultation, and planning, all the way through practical implementation within the framework of our SYSTEMIC Upgrade approach.

With years of experience combined with excessive expertise, Faruk Al-Sibai and his colleagues in the field of casting technology excel at achieving significant improvements, even in well-established processes. In cases of urgent casting issues, their neutral, fact-based trouble-shooting "made by Schnitzer Group" comes to the rescue, along with a diplomatic approach and technical expertise in handling extraordinary situations.

In addition to the targeted analysis of technical details, we work solution-oriented to rationalize communication and to design and implement measures for sustainable process security.

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3. Another Anniversary: 15 Years of International Swiss GmbH

Schnitzer International Swiss was founded in 2008 by Peter Schnitzer as another strategic location. Right from the start, the company has been located centrally on the banks of the Limmat River on Hardturmstrasse in Zurich. The success of the Swiss subsidiary has been in the hands of Managing Director Herbert Hojnack, a native of Tyrol, for 15 years.

Mr. Schnitzer,

What was your motivation for founding a company in Switzerland, and why in Zurich?

We were fortunate to acquire a Swiss client, and during the course of this initial project, it became clear that it would lead to a long-term commitment. Since Switzerland is not a member of the EU, it was necessary to establish a company in Switzerland.

What were the initial challenges?

Every country has its own bureaucratic hurdles, but these were easily resolved. The company formation was successfully carried out with the assistance of our Swiss trustee, OBT.

As with any new market, initially, it was challenging to establish the Schnitzer Group in the Swiss market and build a customer base.

Do you offer a similar range of services in Switzerland as you do in Germany?

We offer the same portfolio, but when it comes to the customer base, we have exactly opposite circumstances. Our Swiss customers are 80% from the non-automotive sector, while in Germany, we are 80% automotive-oriented.



From left to right: Eckehard Hochholzer, Ulrike Schnitzer, Herbert Hojnack

Herbert Hojnack – 23 Year at Schnitzer Group

Mr Hojnack,

You're Austrian, living in Ramsen on the Swiss shore of Lake Constance, and serving as the managing director of a Swiss company headquartered in Wangen in Allgäu. How do you reconcile these different cultures?

Bringing together the different cultures is like the successful composition of Röstli with Tyrolean bacon and Allgaeu mountain cheese for me.

Being with the Schnitzer Group since the year 2000, essentially starting as a pioneer, how does that feel?

It feels comforting. I've had the privilege of witnessing the growth for over 20 years. We've celebrated many successes, but there have also been precarious situations. However, challenging times bring people more closer. Our "start-up culture" #workingwithfriends is still alive and continues to provide us with a very positive working atmosphere across our global locations.

What are your professional priorities?

I primarily operate in project management, especially with international components, combined with various manufacturing technologies. Additionally, my specialization lies in site or manufacturing relocations. I also possess additional technical expertise due to my engineering background.

How has Switzerland evolved over the last 15 years?

In Switzerland, as mentioned, we primarily focus on the non-automotive sector and serve a variety of technologies and industries. (Partial list of reference customers: Bernina, WIFAG-Polytype, ABB, SBB, Voith, Huber+Suhner, Porsche)

What are your favorite projects?

I appreciate every project I get to work on, and my favorite project is always the next one. Each project has its own appeal. It's the different teams and company structures that continually fascinate and drive me. That's what makes our business so exciting. I have yet to come across a company where I can say, "I've seen these processes or structures exactly like this before." It's always new experiences and challenges waiting to be discovered.

What motivates you on a daily basis?

For me personally, it's about sharing my positive mindset and know-how. It's also about interacting with different project teams and the daily learning, knowing that each day won't be the same as yesterday.

What do you value in your daily work life?

Naturally, I'm a positive and always cheerful person. Therefore, it's not a struggle for me to start the day with a "Good morning" and to be delighted by the successes or experiences achieved at the end of the day.

What do you see as the challenges in manufacturing in the upcoming years?

I believe the primary challenge is the shortage of skilled workers. Over the past 30 years, technical professions and skilled labor have been undervalued. This was further influenced by the perspective of parents who often had physically demanding manual jobs. They want their children to have a better life and tend to favor raising them as academics. Especially as a technical service provider and a global project manager, it requires a high level of commitment, flexibility, including those from the family, and a strong desire to travel. As a trained machinist, I still miss the smell of metal and plastic.

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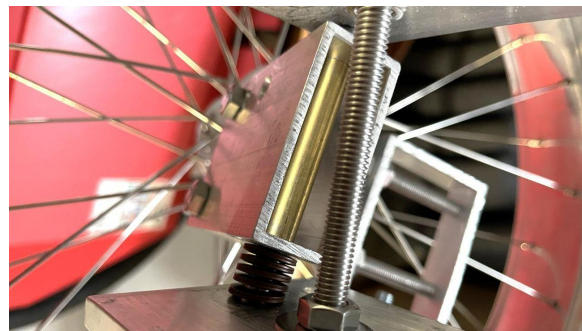
4. The Upgrader in transformation

Our UPGRADER, the concept vehicle of the Schnitzer Group, continues to move forward. Numerous test drives in the past months have allowed our dedicated colleague, Dipl. Ing. (FH) Stefan Mangold, to gather many new insights. These continuously contribute to the further development of the Upgrader.

During the recent testing phase, our focus was on evaluating the new housing and switching the original tires to the new 24-inch rims. This change not only brought increased agility and maneuverability but also promised to enhance the overall driving experience. In addition to these improvements, significant signs of wear were observed on various components, especially on the chain guide. To extend the lifespan and maximize overall performance, we replaced and further improved it after the last stint.

These innovations have elevated the vehicle to a new level of performance and offer an exciting glimpse into the future of electric urban mobility.

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Kind Regards from the Allgaeu

Ulrike Schnitzer and Patrick Heine

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