



# **STRATEGY**

FOR SUSTAINABLE PRODUCTS & SERVICES

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Interacting in a sustainable way with our environment is of highest priority to Zell-Metall. It is of uppermost importance, to take social responsibility in our daily actions and decisions. This is the only way for us to lead us to a consistent and durable world of common existence. In the roadmap towards a sustainable world of technical plastics, Zell-Metall sets, among other topics, a strong focus on sustainable products and services.

Next to general approaches like reduction of energy consumption and improving CO2-footprint, sustainable supply chains etc. there are three main strategic approaches of Zell-Metall for sustainable technical plastic products:

- ▲ **BIOBASED MATERIALS**
- ▲ **CIRCULARITY**
- ▲ **AVOIDING WASTE**

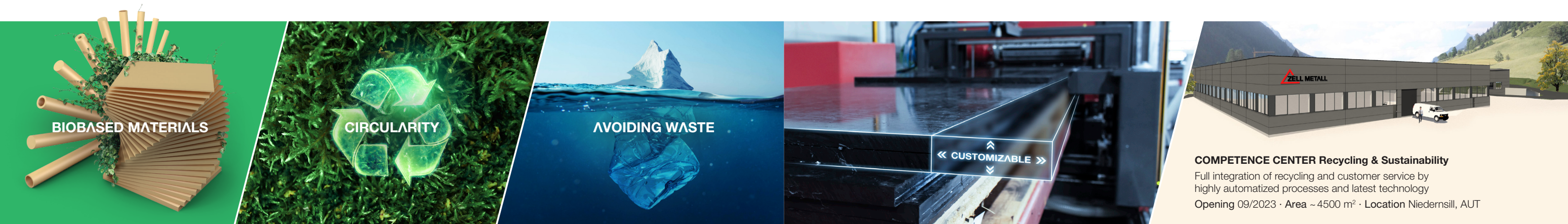
## AVOIDING WASTE OF TECHNICAL PLASTIC

Zell-Metall Engineering Plastics moves on the path of sustainable products by fostering avoidance of material waste at the very early stage of the value chain.

The top performance properties of **ZELLAMID®** technical plastics can only be obtained in a reasonable way if the material exists in very pure form. As soon as the material is mixed with other materials, sorting

gets highly expensive, and the technical properties get lost. Therefore, the approach of Zell-Metall goes into direction of early-stage customization.

This means, reduction of the bought shape to the shape that is indeed necessary directly at Zell-Metall by using all kind of latest technology and wherever possible from economic point of view.



## BIOBASED MATERIALS

Zell-Metall invests in the development of innovative new materials based on biological ingredients. Depending on the ingredients and its percentage these materials can replace not biodegradable materials and improves disposal of waste at the end of lifetime. Using sustainable raw materials helps to avoid over-exploitation of our planet. **ZELLAMID® 350 XF** is the latest material brought on the market by Zell-Metall, which is a biobased material with best technical properties for use in several applications.

## CIRCULARITY

Recycle materials for new use can reduce the amount of consumed natural resources dramatically. In technical plastics industry we mainly distinguish mechanical and chemical recycling. Mechanical recycling means to keep the chemical structure of the polymer and reuse plastic waste for new plastics manufacturing, whereas chemical recycling breaks up the chemical structure. Zell-Metall follows both approaches of recycling. Mechanical recycling is already in use in many different ways of production and will be expanded in the next year in cooperation with our partners.

## AVOIDING WASTE

In general, the use of technical plastics for parts in various application should lead to higher performance and longer, sustainable lifetime. The way of supplying and processing of these materials in machining e.g. on the other hand opens up huge potential in reduction of wasted material. The earlier in the value chain the technical plastic is brought close to the final shape of the part, the less waste and effort in logistics will be created.

Zell-Metall follows this approach by bringing up innovative new technologies to customize stock shapes of technical plastics in future with optimized less amount of waste. This can reduce material costs as well as transport costs significantly for many applications without loss of quality but huge impact to a sustainable world. To foster these business model, Zell-Metall invests into the new facilities of the Competence Center Recycling and Sustainability.

With this approach avoidance of waste respectively recycling the pure waste of performance plastics directly to the extrusion gets to the highest level and creates advantages like:

- ▲ Reduce waste of material and material costs
- ▲ Reduce transport costs and environmental pollution by avoiding transport of waste
- ▲ Reduce machining costs and production of waste by swarf
- ▲ Reduce cost for waste disposal
- ▲ Unmixed, pure recycled material without foreign matter
- ▲ Maximized recycling rate of performance plastics by preserving high quality standard

The newest projects of Zell-Metall in Niedernsill, Austria – called Competence Center for Recycling & Sustainability – is directly targeted to this direction of highest customization and customer service to our partners.

Within this completely new build up facilities many new technologies and business innovations have been taken into account to support our partner with

- ▲ latest technology & high standard of automatization
- ▲ wide range of customer service offer with fast and accurate service
- ▲ directly included into internal recycling processes

If you are interested in this way of working on “Avoiding waste of technical waste” together with Zell-Metall Engineering Plastics, please contact our Zell-Metall sales team for further information or visit us at our website **ZELLAMID.com**



## COMPETENCE CENTER Recycling & Sustainability

Full integration of recycling and customer service by highly automatized processes and latest technology  
Opening 09/2023 · Area ~ 4500 m² · Location Niedernsill, AUT

*klepsch group - the plastic power network*



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