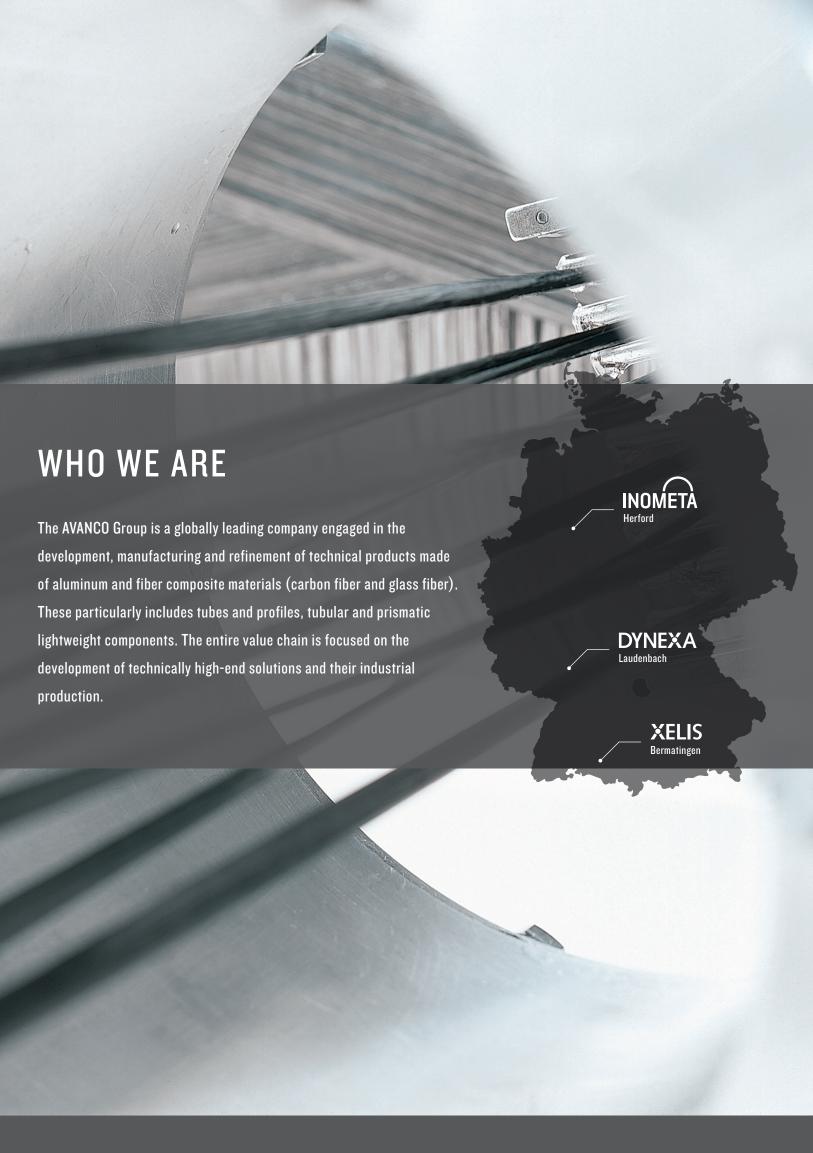


INNOVATIVE COMPOSITE SOLUTIONS FROM A SINGLE SOURCE

# EXTRAORDINARY COMPETENCE IN LIGHTWEIGHT





#### THERMOPLASTIC TAPE WINDING

Innovative manufacturing has always been a part of AVANCO. Thermoplastic tape winding offers a high degree in process automation enabling high lot sizes. We are your development partner and contract manufacturer for wound CFRP and GFRP composite profiles made of thermoplastic UD tapes. As experts for part design, material selection and process design, we take your application from the idea to series production.

Innovations arise from the need to improve, a desire for advancement and the pursuit of perfection. Together we will drive developments and move you all the way to the front.





## **AUTOMOTIVE**

#### Drive shafts and side shafts

- O Series production in 5-digits
- O Higher specific stiffness

#### Rotors and rotor cans

- o Minimum cycle times
- $\circ\,$  Thin shell improves drive efficiency



#### Drive shafts and connector parts

- O Lightweight at high performance
- O Metal/composite hybrid parts

#### Continuous profiles

- O Complex shapes
- O High consolidation quality
- O Aircraft OEM approved

## Tailored laminates

- o Individual lay-ups
- $\circ \ \ \textbf{Continuous processing}$



#### THERMOSET FILAMENT WINDING

We are producing more than just high-end composite tubulars. We are designing ready-to-install solutions, connecting composite and metal parts. As a lightweight composite expert, we focus on the sensible integration of the extraordinary material properties of composites for use in traditional and modern applications.









## **ENERGY**

#### Pressure vessels

- One step process
- O Material matching liner

## Bearings and downhole products

- $\,\circ\,$  Good chemical and temperature resistance
- O Advantageous abrasion behavior

## Risers, casings and shafts

- Preventing corrosion
- O Saving installation costs



# **INDUSTRY**

## Rollers and profiles

- O Superior damping properties
- O Metal/composite hybrids

#### Functionalized tubes

- O Material bonding/shapeability
- O Process integration with short cycle times



# CONTINUOUS COMPRESSION MOULDING (X-CCM®)

We have a long history in processing thermoplastic via X-CCM<sup>®</sup>. Post processing such as forming, quality assurance and machining is also part of the portfolio. As a built-to-print manufacturer, we are able to offer customized lightweight design solutions, which are adapted to our customer's special requirements.











## Formed parts

- o Implantable
- One shot forming



## Radomes

- $\circ \ \, \mathsf{Lightweight}$
- O Protective/durable
- Preventing corrosion



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