



Recreate technologies and beyond demonstrated by HEAD

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Recycled CF for Sport







Characteristics of innovation:

- Tennis rackets, due to their requirements and shape are built from ~100% UD carbon fiber prepregs
- Due to a flat hitting surface, Paddel and Pickleball are produced with a different technology and have different mechanical specifications
- Recycled fibers, from Tennis rackets or other sources can be processed in a kind of SMC/BMC process and can fulfill the KPI

Customer benefit:

Challenges

- Quality of recycling fibers for new process
- Isotropic properties especially at thin layers

Solution

SMC/BMC Process adaption



Recycled GF for Sport



Can we use recycled Glass fibers in a ski?

Characteristics of innovation:

- A ski is a complex composite part, combining wood, glass fibes, metal, rubber, thermoplastic materials
- The lifetime of a ski is often limited by the steel edge, the racing base or the top sheet. The glass fibers can withstand much longer use periods
- Reusing the wooden core and the glass fibers, without shredding or other processe, allows the the CO2 saving production of a renewed ski without any loss in the mance

Customer benefit:

Challenges

- Process development of separating and remanufacturing of a ski
- NDT of composite parts

Solution

 These skis are made from materials that can be renewed and recycled up to 5 times, with 26% less carbon footprint for one cycle.



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