

UNWIND**3D**
develop your idea

KNEE AND ELBOW PADS

CASE STUDY - THERMOPLASTIC COMPOSITE





PROBLEMS

Current production of composite pads protectors involves:



High selling price



Very labour intensive manufacturing process



High material waste



SOLUTION

The combination in using cutting edge technologies with innovative materials in order to:



AUTOMATE
PRODUCTION



BE SUSTAINABLE
DECREASING MATERIAL
AND ENERGY WASTE



DECREASE
MANUFACTURING
COAST

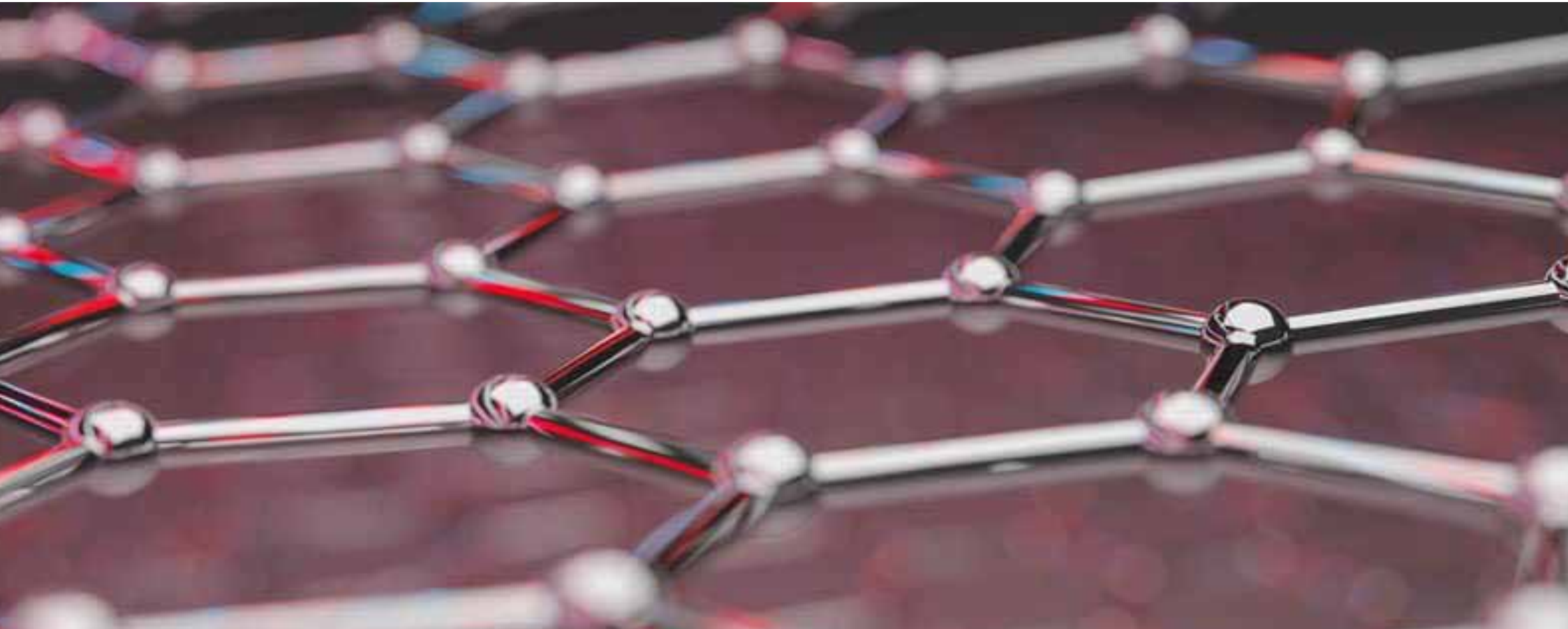


PRODUCT

Preformed and molded by automated processes

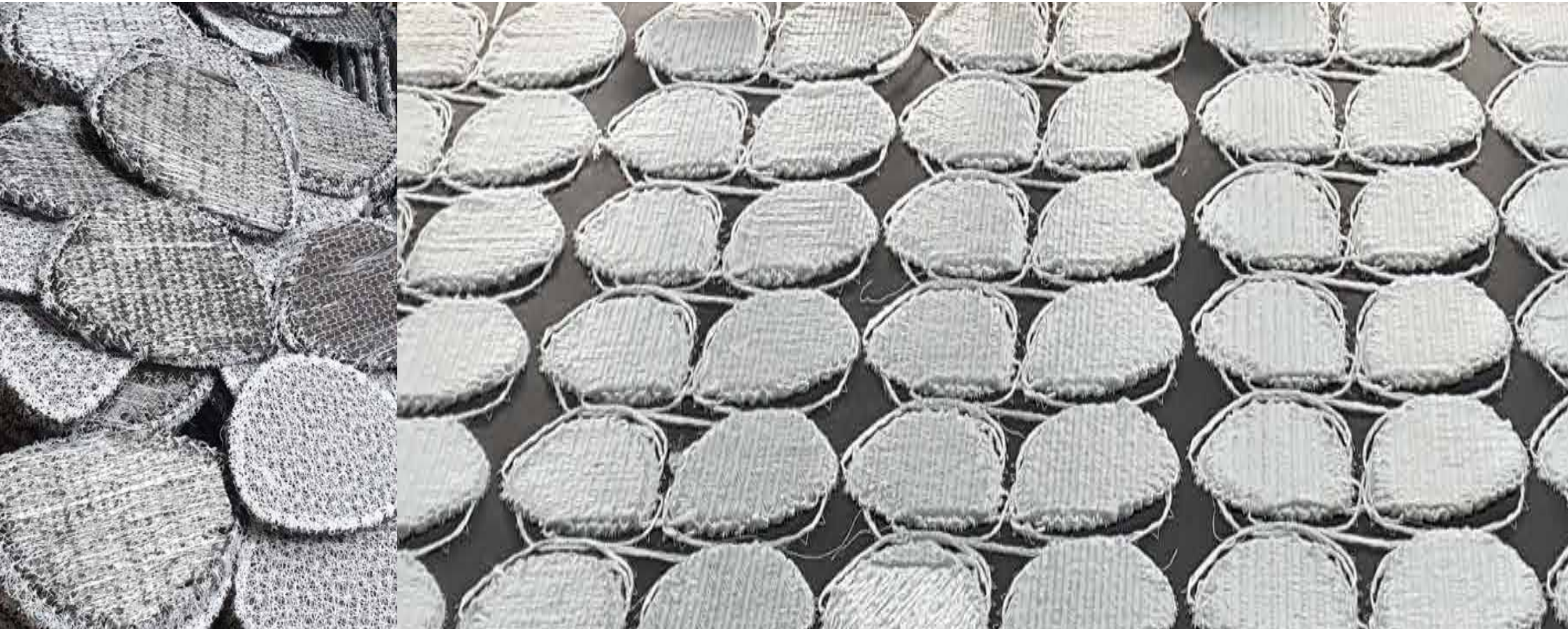
STEP 1

Use of thermoplastic fibre reinforced carbon/glass/natural fibres. 3k, 12k, 24k, 48k.



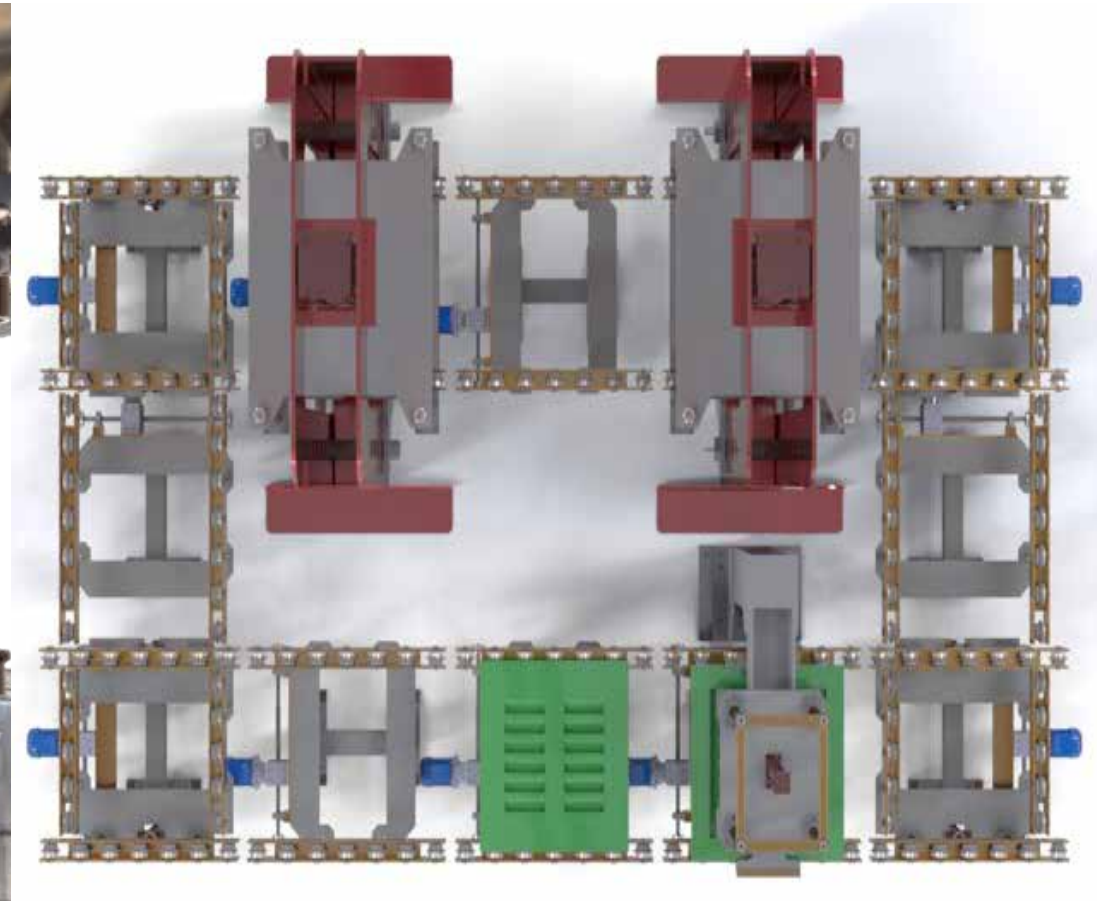
STEP 2

Use of automated and tailored placement technology for high volume preforms production



STEP 3

Use of dedicated fast, cost and energy efficient molding solutions for high volume production





RESULTS

After several physical testing, thanks to Unwind3D expertise the following results have been demonstrated:

30%

DECREASE IN
PRODUCTION
COSTS

400%

DECREASE IN
MATERIAL
WASTE

100%

REUSABLE AND
RECYCLABLE



CONTACT US

To stay ahead of innovation

UNWIND**3D**

Matteo Moretti

E: info@unwind3d.com

W: www.unwind3d.com