Technical excellence and eco-design, for your projects.

KNAUF INDUSTRIES

About us

KNAUF Industries, a division of the KNAUF Group, is recognized worldwide as a preferred partner of major industrial sectors such as food processing, housing, automotive and other industries (household appliances, HVAC, healthcare, etc.).

Knauf Industries specializes in packaging and technical parts, and is the market leader for molded parts made from cellular resins (EPS, EPP, circular materials). It is also a major player in plastic injection and extrusion-thermoforming.

KNAUF Industries is present on every continent, with 38 sites, 2,000 employees and an ID LAB research and development center dedicated to innovation.

CSR approach

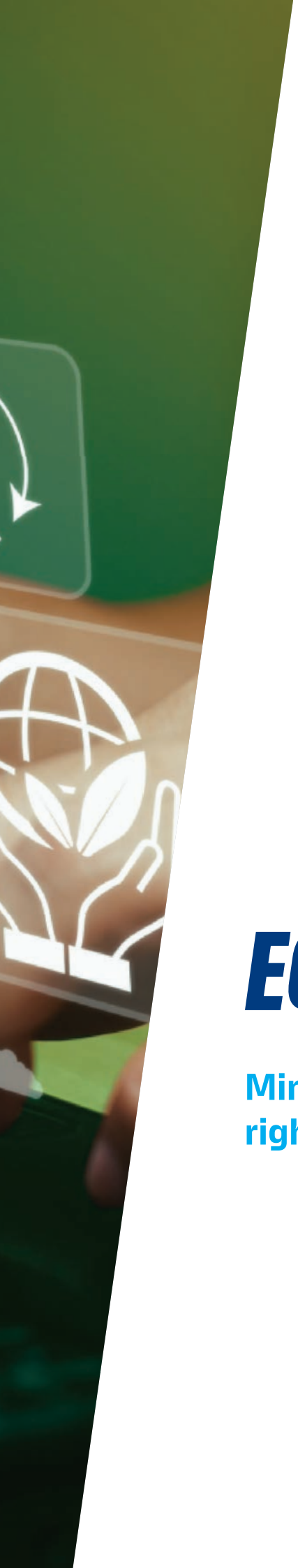
OUR COMMITMENTS IN 3 PILLARS :

· **Environment:** Innovating to reduce our impact on the environment

· **Social:** Promoting a safe and attractive working environment

· **Stakeholders:** Developing relationships with our stakeholders


E
S
G

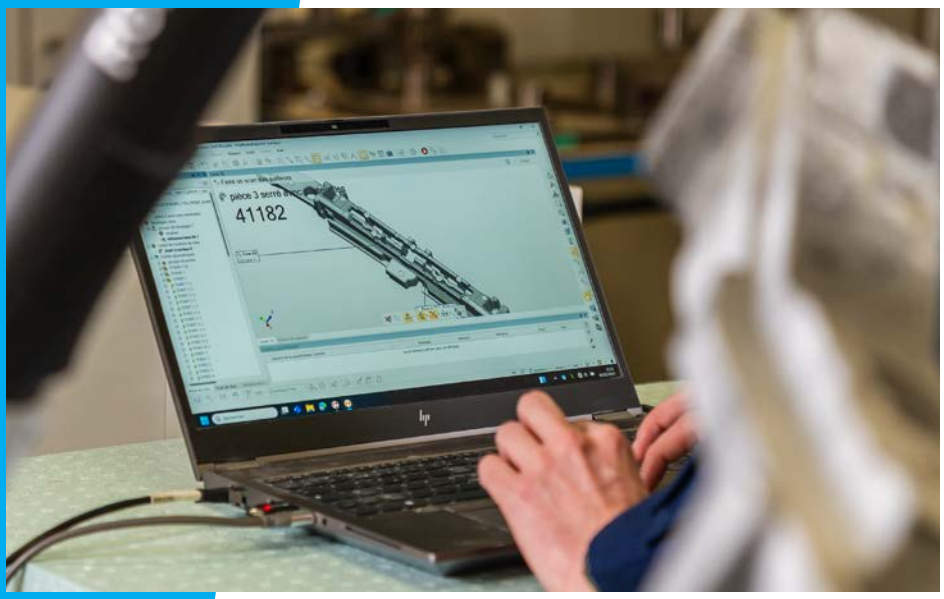


ECO-DESIGN

Minimizing environmental impact right from the product design phase

KNAUF INDUSTRIES AND ECO-DESIGN

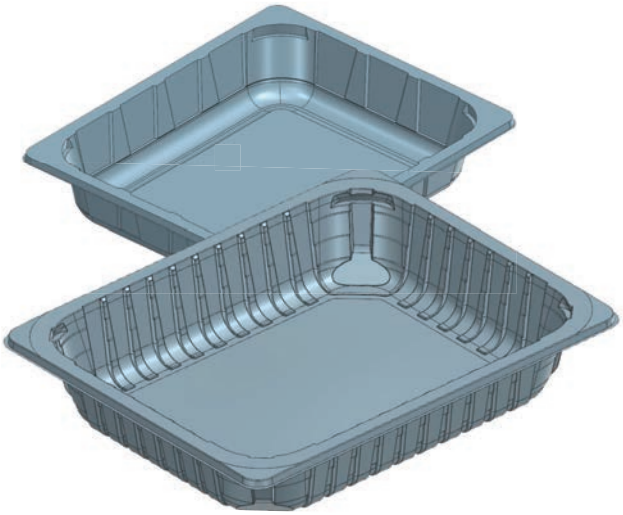
- **Lighter solutions:** design of lighter technical foam parts to replace existing material solutions (plastic, wood, metal).
- **Optimization (weight/volume) with digital simulation tools** for improved product performance: better airtightness, improved thermal insulation, reduced turbulence, optimized mechanical performance, reduced weight, Time To Market and number of prototypes, etc...
- **Eco-design and CO2 savings:** each design uses the ideal quantity of material for its specific function, thus reducing the carbon footprint.



"Simulation is used to automatically optimize any technical part or packaging using algorithms. This type of optimization mainly results in parts that retain their functionality while requiring less material, but many other optimization objectives can also be set."

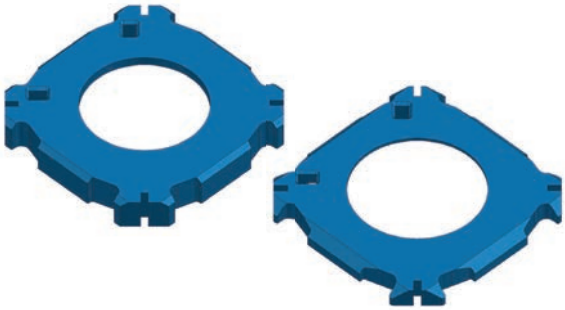
Some examples of lightening and optimization

Thanks to our advanced digital simulation tool, we can simulate products in real-life conditions for optimum quality!



Thermoformed trays for the food industry

For a 15 g thermoformed tray, numerical simulation enabled a **22% weight reduction**, i.e. a **reduction of 7.7 tons of raw material** for 100,000 pieces per year (around €12,000/year) and 77 tons CO2 eq./year.



Optimization of a tecnhical part in EPS

For a EPS part weighing 732 g, the simulation resulted in **a weight reduction of 45%**, i.e. a **reduction of 33.3 tonnes of raw material** for 100,000 parts per year and -165 tons CO2 eq.

New Weight: 399 g

Parts replacement

Replacement of a traditional metal structural part (5.6 kg) by a PPE structural part with plastic inserts (2.2 Kg), i.e. **340 tonnes of material saved**.

Anti-submarining seats in EPP

Traditional structure replacement: PU with metal structure (8.011 kg) by PU with EPP (5.014 kg).

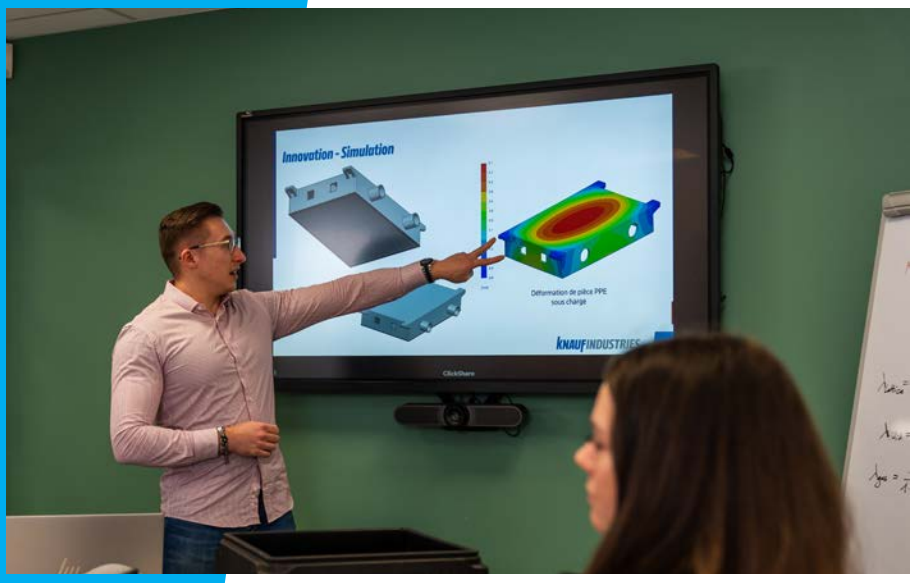
Savings: 37.4% in weight

RESPONSIBLE RESOURCE MANAGEMENT

Towards optimized, sustainable use of materials

KNAUF INDUSTRIES AND RESOURCE MANAGEMENT

- **Use of alternative materials** in favor of the circular economy and reuse
- **Reduction in the use of fossil resources** by favoring renewable materials and those derived from post-consumer plastic waste resources
- **Improved energy performance** through more efficient processes and materials
- **Recyclable & recycled materials:** Integrating product end-of-life from the design stage to facilitate recycling, and reusing recycled materials in our production processes for more responsible resource management
- **Collecting and recovering production waste** through our collection and recycling program



A few examples of realizations

Examples of how our reusable solutions can replace one-off packaging

KEEPY®

KEEPY® reusable containers comply with current standards for plastic materials in contact with food. Intensive tests, carried out in collaboration with a central kitchen and a washing industry, have confirmed their compliance after more than 20 reuse cycles.

KOMEBAC®

Komebac® is a reusable bin ideal for transport. Made from expanded polypropylene, it is 62% lighter than an injected polypropylene bin of the same size, and reduces CO2 emissions by 45%. With a lifespan of over 10 years, it replaces 1,000 cardboard boxes, and is certified by the Solar Impulse label for its environmental performance.

Examples of the use of alternative materials

NEOPS®

For a boiler manufactured at a rate of 100,000 units per year, the use of NEOPS® protective packaging made in France saves 100 tonnes of fossil raw materials per year and reduces the CO2 equivalent by 56% (internal calculations).

Internal average data France 2022, cradle-to-gate

R'KAP®

Replace PP with our innovative R'KAP® alternative, made from recycled waste*. For a tray produced at a rate of 2.5 million units per year, using R'KAP® material saves 30 tonnes of raw materials.

Internal average data France 2022, cradle-to-gate.

** Only 60% fossil-based plastic.*

KNAUF INDUSTRIES

Knauf Industries

ZA
68600 WOLFGANTZEN
France

info-industries@knauf.com
www.knauf-industries.com