MOENS MOULDINGS
plastic rigid packaging

CASE STUDY
500gr Lightweight

CASE STUDY

500 Gram eurotub

As a leading packaging manufacturer, Moens Mouldings integrates sustainability, innovation and precision engineering to develop next-generation plastic rigid packaging solutions.

In-house R&D and robotics drive continuous packaging and production optimization, while advanced 3D metrology ensures consistent product quality. All solutions meet the highest food safety standards and are backed by BRC AA+ certification.

The result

Weight reduction:	14.5 g -> 12.15 g
Increased top load:	34.7 kg -> 41 kg
Stacking efficiency:	40% more units per truck
Reduced CO_2 footprint:	19,5% CO_2 reduction

BACKGROUND

Food producers are increasingly looking for packaging solutions that use less material while maintaining product safety, strength and shelf appeal. At the same time, there is a strong need to reduce secondary packaging, improve stackability and optimize logistics efficiency across storage and transport.

THE CHALLENGE

The challenge was to redesign an existing 500g tub using less plastic while maintaining strength, product safety and visual appeal. At the same time, the packaging needed to improve stackability and deliver logistical advantages across storage and transport.

DESIGN

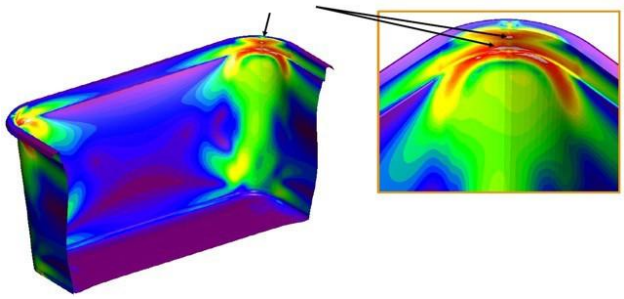
The 500g tub was completely redesigned to improve efficiency and performance:

- Weight reduction: from 14.5 g to 12.15 g
- Increased top load strength: from 34.7 kg to 41 kg
- Improved stacking height: enabling 40% more products per truck
- rPP, 10-100% applicable. ISCC

THE SOLUTION

Through advanced product design and optimization, Moens Mouldings achieved a thinner yet stronger, **patented** packaging solution. Moldflow analysis and strength calculations ensured optimal material distribution, while enhanced stacking and load-bearing performance improved logistics efficiency. By leveraging long-standing expertise in Injection Compression Moulding (ICM), the result is a lighter, stronger and more sustainable packaging solution with clear benefits across the entire supply chain.

Max yield strength at 41.0 kg



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