



STEEL FOR
PACKAGING



Why Steel?



Choose Steel for Packaging

Eco-friendly alternative
cut food waste
fast and efficient filling
unique formability
greater differentiation
endless variety

easy recycling
safer stronger packaging
superior metallic finish
no additives
great value
Multiple Recycling

fresh for longer
shelf life champion
100% barrier protection
no spoilage
recycles forever
retail ready packaging



Message from the President

Never before has the issue of sustainability been so widely debated.

We have moved into a decade which for the packaging industry will be shaped by every aspect of sustainability, from resource efficiency to reducing food waste and designing for recyclability. Underpinning all of these is the global drive towards the realisation of a truly circular economy.

I am therefore proud to represent an industry actively and successfully tackling these challenges.

Innovation in steel manufacturing has enabled can walls that are 29% thinner today than 30 years ago. Using food cans can reduce household food waste by up to 30%. EU steel recycling rates have risen from 18% in 1986 to 82.5% in 2018.

Since 1960 the European steel industry has halved its energy usage and CO₂ emissions and we are currently working towards a carbon-neutral future. Steel is an integral part of the EU effort to achieve the resource-efficient vision for Europe and a greener future, the ultimate aims of the European Green Deal.

APEAL will continue to work towards the adoption of EU policy for sustainable products and circular design that recognise the sustainability benefits of multiple recycling whilst also acknowledging wider environmental issues including marine litter and deforestation.

We will also work collaboratively with the European Commission, the European Parliament, the Member States and all relevant stakeholders, to optimise the separate collection of packaging waste at source which is the key to high quality recycling as well as realising our ultimate goal of zero steel packaging to landfill.

Finally, the steel can is set to play a significant role in future global food challenges. How and where food is produced will inevitably change in the coming years and coupled with that will come increasing pressure to reduce waste at all stages across the supply chain, whilst continuing to preserve food safely and effectively.

As we get to grips with this new decade, I am confident that those which follow will see us all enjoying the benefits of a more sustainable and resource efficient economy. And there is no doubt in my mind of the vital role steel for packaging will continue to play in the most pressing challenges of our time.

Viliam Gašpar

President of APEAL

Protecting Today

Steel for Packaging protects products and cuts waste at every stage in the supply chain and beyond.

“Capturing food in productive years, steel packaging provides unbeatable protection, balancing production with consumer demand and reducing food waste.”

Saves taste and cuts waste



Food packaged in steel retains its flavour and nutritional value longer than in any other packaging format. It contains the equivalent vitamin content to freshly prepared food and portion-sized packaging allows consumers to choose the size they need and cut waste.

The most competitive FMCG packaging solution today



Steel for packaging provides the most competitive solution for fast moving consumers goods chains and e-commerce being easy to load, stack and store, optimising warehouse space and saving handling costs. It is easy to handle, impossible to spill or break and eliminates the waste and spoilage associated with other packaging formats.

Unique 100% barrier protection



Steel packaging is impermeable to light, gasses and liquids and provides greater product protection than any other material, delivering your brand's promise of quality in a format consumers can trust.

Multi-layer stackability



Steel cans require virtually no secondary packaging for protection and are strong enough to allow multilayer stacking being able to resist high axial loads – up to 10 times higher than beverage cartons for example.

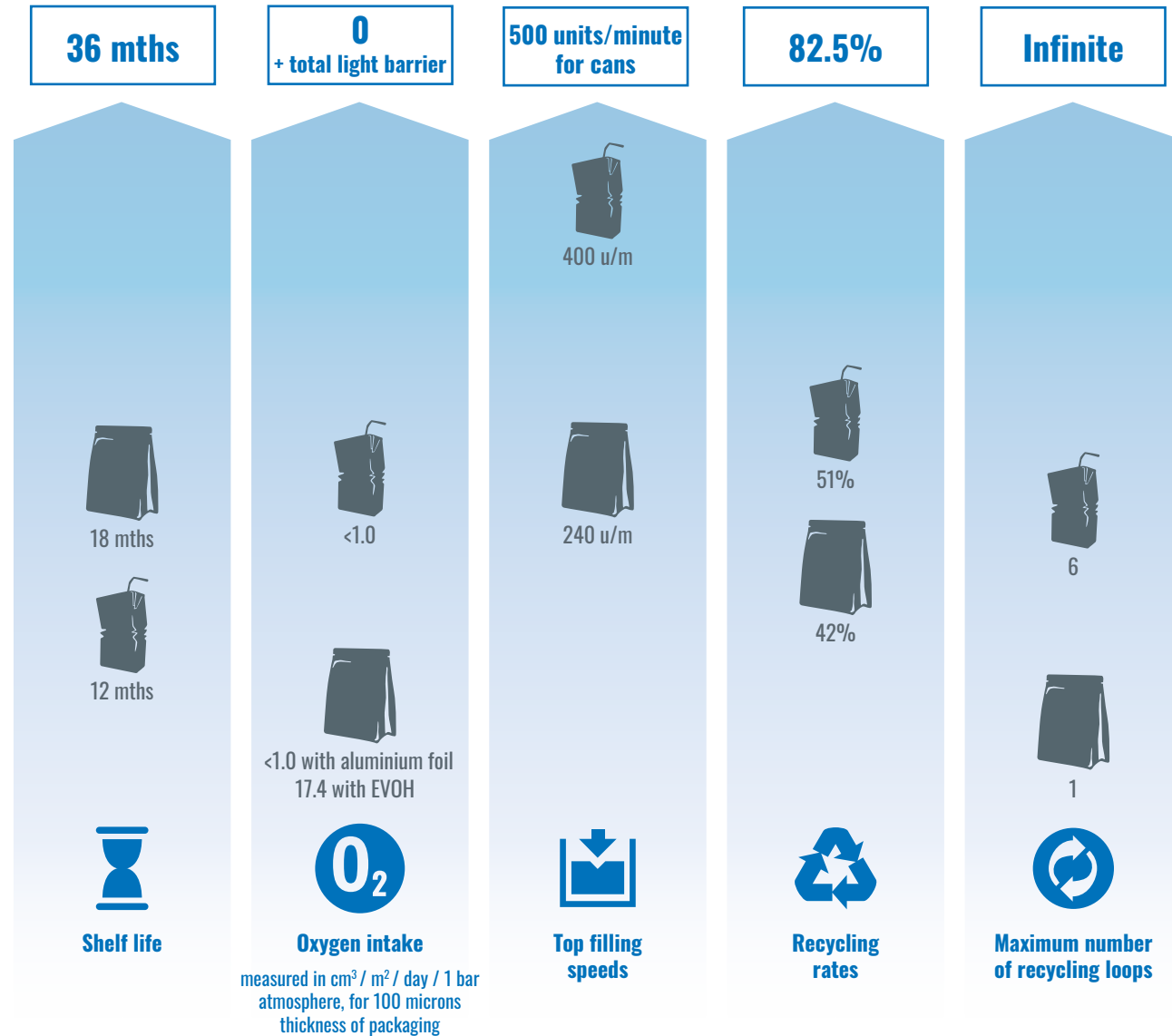
Unbeatable strength



The mechanical strength of steel packaging makes it impact-resistant, puncture-resistant, and virtually unbreakable in the supply chain, minimises damage, loss and waste and provides optimal resistance to high-pressure filling of aerosol cans.



How steel stacks up against other packaging materials



Sources: Shelf life & Oxygen intake: industry expert
Filling speeds: Tilisco study for MPE, high speed rates

Recycling rates: APEAL & ACE 2018 data, Eurostat 2017 data
Number of recycling loops: industry expert



Unique formable properties

Shaping, embossing, debossing, specialist printing and lacquers differentiates your brand.



High-quality metallic aesthetics

Matt or gloss opportunities for primary and secondary packaging with 360° of printable space.

Design for the 21st century



Endless variety in shape and volume

Complete product range for every target group from 50ml to 40l.

Preserving Tomorrow

“Steel packaging keeps food fresh even at high temperatures with no need for additives or preserving agents, allowing it to be stored safely for long periods of time without using additional energy.”

No Spoilage

Steel’s unique barrier properties mean it prevents contamination more effectively than any other material.

Shelf life champion

Steel packaging keeps food fresh for longer even at ambient or high temperatures, reducing energy use and cutting waste.

Saving natural resources

The energy and raw materials embedded in recycled cans are entirely reused and every item of recycled steel packaging saves over one and a half times its weight in CO₂.

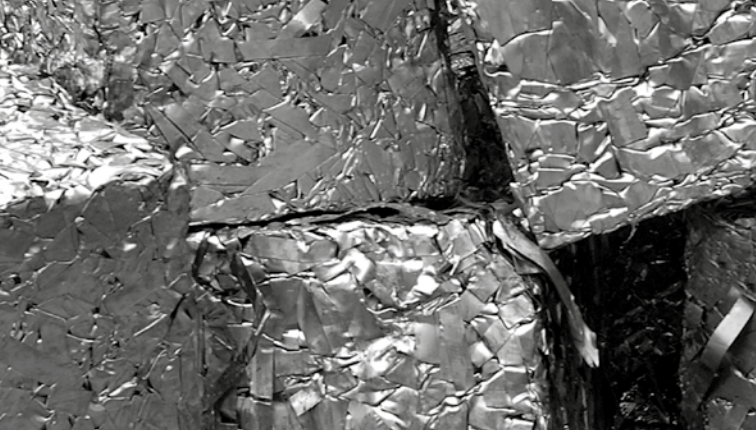
Fast and efficient filling

Steel’s strength and magnetic properties mean that modern cans are accurately magnetised to conveyor belts and filled at speeds of up to 500 food cans per minute. This high-speed process creates significant energy savings and minimises product spoilage and waste more effectively.

Recycling Champion

Europe has recycled steel for many years and the infrastructure is well established and highly efficient. Steel scrap is required to produce new steel and so every single one of the 500+ steel plants in Europe is already a recycling plant.

Choosing steel for packaging helps to keep recycling easy, reducing waste, saving energy and natural resources.



“100% of the steel recycled is used to make new steel products.”

The only “real recycling” is multiple recycling

In the last five years the packaging landscape has changed dramatically. The dual challenge of achieving a more circular economy and driving greater sustainability across all packaging formats has positioned “real recycling” high on the political agenda.

EU legislation adopted in 2018 means that higher recycling targets will take effect for most packaging materials in 2025, along with the introduction of specific legislation limiting non-recycled single use plastics.

Secondary legislation, under implementation by member states, will focus on a more harmonised recycling calculation point as well as new reporting obligations.

Early 2020 the European Commission adopted a new Circular Economy Action Plan (CEAP 2.0) as one of the main building blocks of the European Green Deal’s new agenda for sustainable growth. The CEAP 2.0 includes a sustainable products’ policy and a wealth of measures along the entire life cycle of products, such as initiatives to promote separate collection or support circular design.

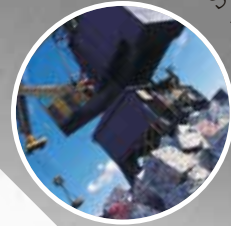
Circular design calls for a closed loop, where resources are repurposed; a process in which resources are continuously cycled in various forms, following a reuse or recycle loop. These resources therefore do not go to waste.

Most materials can in theory be recycled, but many can only go through the recycling process a finite number of times. Eventually, their quality is degraded to such an extent they cannot be used again.

If Europe is to achieve its vision of moving to an efficient, waste-free and circular economy, brands need to recognise the importance of using permanent materials such as steel that can maintain multiple material loops without loss of quality and where 100% of the output is used to make new products.

Steel for packaging is a proven model of circularity. Magnetic properties make steel the easiest and most economical packaging material to recover from any waste stream, steel scrap is a requirement in the process for new steel and it can be recycled forever without loss of quality. It is estimated that 75% of all steel products ever made are still in use today ².

¹World Steel Association: www.worldsteel.org



100% recyclable

Steel is already the most recycled packaging material in Europe and all steel products can be processed and recycled endlessly.



Stronger, thinner and lighter

Three-piece food cans are 29% thinner and beverage cans are 30% lighter than 30 years ago.

Innovating for a Circular Economy

“Having halved energy use and emissions since 1960, our industry is aiming for -30% by 2030 and 80-95% by 2050”
Source: Eurofer, European Steel Association

A zero-carbon future

The steel packaging industry is working collaboratively towards a carbon-neutral future, using a mix of process efficiency, breakthrough technologies and greater scrap availability.





APEAL

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Steel is a permanent material that can be infinitely recycled without any loss of quality

Worldsteel estimates that 75% of steel products ever made are still in use today

APEAL – the Association of European Producers of Steel for Packaging
– unites the five producers of steel for packaging in Europe. Founded in 1986, APEAL represents:



TATA STEEL



U. S. Steel Košice, s.r.o.
A Subsidiary of United States Steel

