



Light Weight Tinplate Aerosol Cans

As part of Colep's Love Tomorrow Sustainability Strategy, we aim to bring sustainable innovations to our customers with the ultimate goal of becoming their **preferred sustainability partner**.

At Colep, we have been working over the past two decades to reduce the weight of our tinplate aerosol cans.

After a process of investments, new materials and expertise, we can now offer lighter tinplate aerosol cans, by decreasing the thickness of the rolled tinplate through a process called downgauging.

Downgauging is the most efficient initiative that can be taken to improve material efficiency and reduce the overall environmental footprint of the tinplate aerosol packaging, whilst maintaining product quality and performance. Downgauging consists of a decrease in packaging thickness and weight. The same quality and performance are maintained, with less stress on virgin material consumption.

The environmental impact is reduced, as less water and energy are used. Also, there is the benefit of reduced material costs. We started to implement double reduction technology on one of the aerosol can diameters that we produce (57x207 and 57x257). With this implementation, 704 tonnes of CO₂ were saved from being released into the atmosphere (from savings in virgin raw materials). Another reduction in CO₂ emissions was also achieved at the manufacturing stage, as the energy requirements for the seaming stage are lower with light weighted tinplate.

"Combining mathematical models, process investments and new materials, we are reducing the material consumption in the three metal components. In some cases, we are reducing the wall thickness of the aerosols by around 22%, using 'double reduction' material - harder material with lower wall thickness - in combination with a new seaming station. In this way, we can obtain the same performance, mechanical and chemical resistance assuring all the safety requests."

José Oliveira,
Colep Industrial Director Metal Packaging

Our ambition for the future is to fully implement this technology for all aerosol can diameters. If we succeed in implementing this for aerosol cans, we can expect the following savings:

- 3,425 tonnes of tinplate
- 18,494 cubic meters of water
- 7,774 metric tonnes of CO₂ emissions

We aim to expand the initiative to General Line & Industrial Cans.

For further information about Sustainability at Colep, please contact:

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Colep aims to be the **preferred sustainability partner** for its customers.