wifag//polytype group

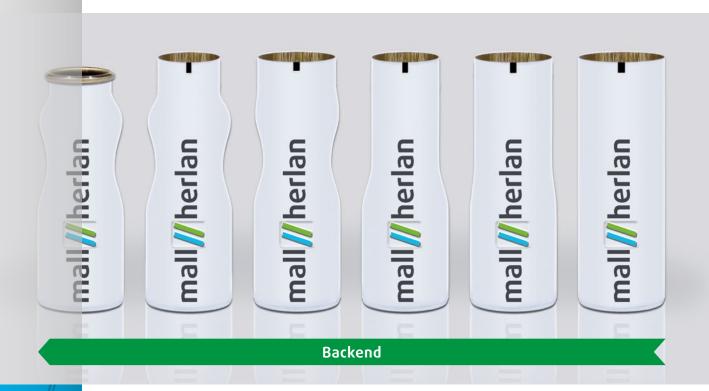
The CanMaker



The workhorse in the industry for impact extruded monoblock aerosol cans

mall//herlan

Leading solution provider of production lines for monoblock aerosol cans

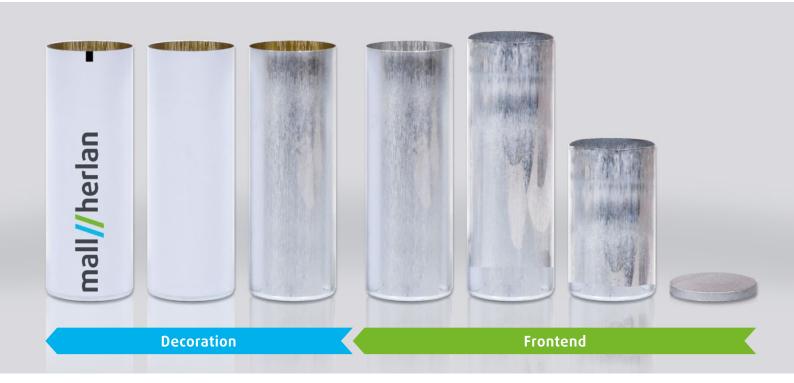


mall//herlan is one of the world's leading producers of machines and complete production lines for monoblock metal packaging such as aerosol cans, bottles and tubes made from aluminium or steel.

mall//herlan is known for producing the highest quality products in conjunction with providing the highest quality of services for its customers. Each single employee is motivated to continuously improve the products and services offered by mall//herlan. This not only means that top-class industrial production lines are produced, but also new trends are constantly being set through continuous further development.

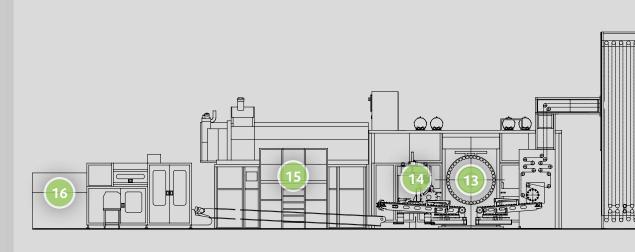
As a reliable partner and innovative trendsetter, mall//herlan is only interested to make our customers the most successful players in the industry. The company is more than happy to go that extra mile in order to ensure that their customers enjoy this success.

- // Production machines for can body forming, decoration, shaping and necking
- // Full process knowledge with more than 100 years of experience
- // Overall tooling competence in all forming processes
- // Highest reliability by best product quality and production efficiency
- // More than 60 installations delivered worldwide in the last five years
- // Customised line designs according to production site layout
- // Wide decoration variety, huge range of product shapes and finishes



An aluminium slug enters at the front, and cans ready to be filled are the finished product at the end of the line – in a single continuous process. The line consists of three modules: The front end produces the cylinder. In the decoration the laquers and the print artworks are applied to the can. The backend consists of necking and quality checks, including post-washing. mall//herlan owns the whole expertise to ensure that each single step of the production process, from the very beginning right through the very end of the line, runs perfectly.

Customised production lines from A to Z















Cans may be packed, bundled or palletised in several ways. Post washer + dryer

Multiple chambers for washing and rinsing the bottles with water. The cleaning can be done with or without detergents. The patented nozzle injection system ensures optimum cleaning. The postwasher is eco-friendly and of

food-grade standard.

14 Leak detector

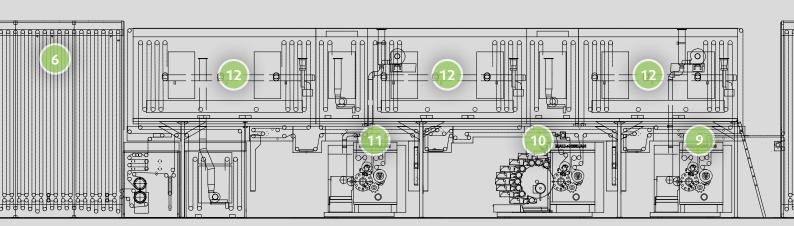
Detects microholes to ensure the can or bottle integrity: The lacquer is removed by compressed air.

by compressed air.
The photocell detects
when rays of light fall
into the cans. 100%
quality-control.

13 Necker

The cylindrical can body is necked and shaped by necking dies up to the final can design. Several forming processes are possible: Threading, curling, beading, registered em- and debossing to contribute matching the brand owner's design. There is also the possibility of implementing quality control systems on the necker.

- // Strong and stable extrusion process
- // Precise trimming and brilliant brushing
- // Reliable transfer systems
- // Energy-saving features
- // High-quality premium decoration
- // Huge necking and shaping varieties create unique shapes and designs
- # Easy access for quick size changes and maintenance













0ven + cooling zone

Lacquers and inks are hardened in drying ovens, which gives them their perfect optical appearance and makes them resistant to environmental influences.



Overvarnisher

Applies the overvarnish for protecting the inks of the printer and providing special effects like matt, semi matt, gloss and haptic.



Decorator

The printing unit, which can apply up to 9 colours, ensures the widest possible decoration variety for monoblock packagings. The decorator can be optionally equipped with a QC system to guarantee printing quality.



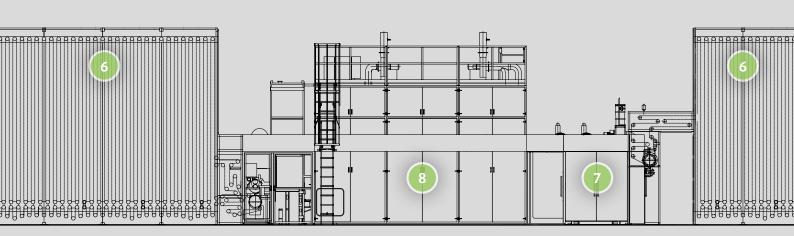
Base coater

The cylinder receive the base coat which is important for the stain resistance and excellent print quality.



Oven + cooling zone

Cures and hardens the inside lacquer to guarantee the product safety.















Applies a functional lacquer to seal the inside of the cylinder using moveable spray lances.



Ensures non-stop production operations by synchronising the line speed and emptying the preceding machine in the event of a machine stop.

Washer + dryer

The cylinder is cleaned from lubricant and dust in washing and rinsing cabins.
The nozzle injection

system ensures optimum cleaning.
The cylinders are completely dried in the integrated oven.

4 Trimmer + brusher

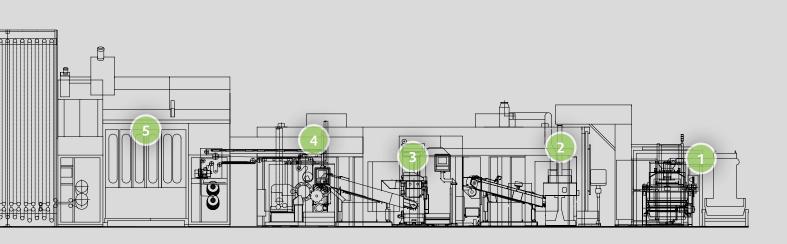
The can is trimmed burr-free to a specific length and brushed. Optional bottom forming is available.

Ironer

The cylinder wall thickness is optimised and the bottom is formed. This leads to constant geometrical features and light weight cans.

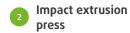
The mall//herlan production line CMC 200 produces up to 200 aluminium cans per minute in a continuous process. The extremely effective production means that the impressive production volume of 60 to 70 million individual containers is produced annually. Since many years the CMC can line is known as the most remarkable workhorse in the industry. It consists of machines with proven technology, is

well-engineered and built for the highest possible efficiency.
mall//herlan's expertise is underlined by over 100 years of experience in the field of mechanical engineering and manufacturing of machines.









The press turns the slugs into cylinders by pressing the slugs into a die.



Slug infeed system

The aluminium slugs are lubricated, separated, aligned and fed into the extrusion press.

Can data

Diameter range:	20 - 45 mm	35 - 66 mm	53 - 80 mm
Extruded length:	max. 275 mm	max. 275 mm	max. 290 mm
Trimmed length:	max. 260 mm	max. 260 mm	max. 280 mm
Finished length:	max. 250 mm	max. 250 mm	max. 275 mm

Production speed

