wifag//polytype group

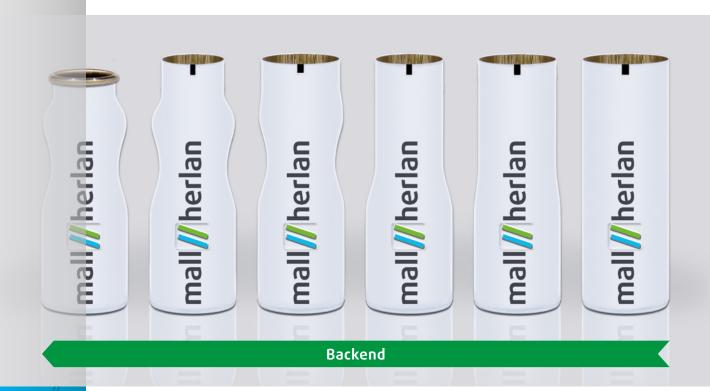
# CMX - 250 cpm



The new high-speed line for impact extruded monoblock aerosol cans

mall//herlan

# CMX - 250 cpm High-speed production lines for monoblock aerosol cans

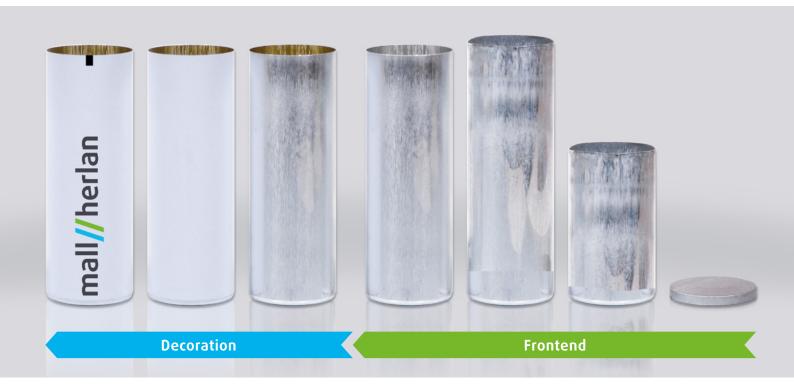


mall//herlan is one of the world's leading producers of machines and complete production lines for monoblock metal packagings such as aerosol cans, bottles and tubes made from aluminium or steel.

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.

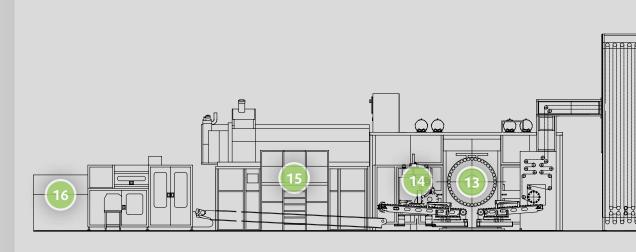
As a reliable partner and innovative trendsetter, mall//herlan is only interested to make our customers the most successful players in the industry. The company is more than happy to go that extra mile in order to ensure that their customers enjoy this success.

- // Production machines for can body forming, decoration, shaping and necking
- // Unrivalled machine technology for a speed of 250 cpm
- // Full process knowledge with more than 100 years of experience
- // Highest reliability by best product quality and production efficiency
- // Overall tooling competence in all forming processes
- // 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 lacquers 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 to the very end of the line, runs perfectly.

# Customised high-speed production lines from A to Z at 250 cpm















Cans may be bundled or palletised in several ways, as requested by our customers.

# Post washer + dryer

Multiple chambers for washing and rinsing cans or 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

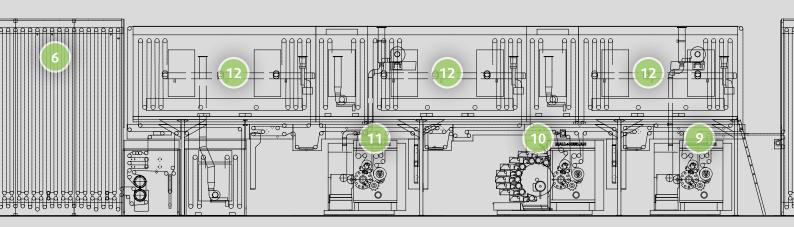
ensure the can or bottle integrity:
The photocell detects when rays of light fall into the cans. 100% quality-control.

#### 13 No

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 embossing and debossing to match the brand owner's design. There is also the possibility of implementing quality control systems at 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 and providing special effects like matt, semi matt, gloss and even 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 control printing quality.



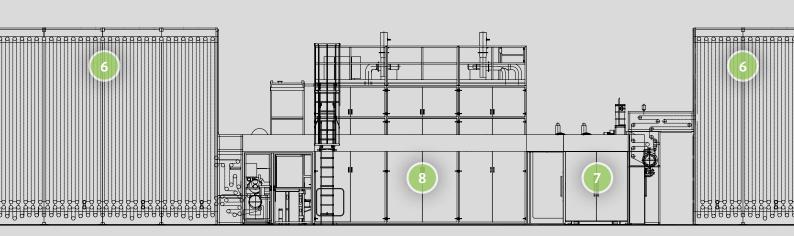
#### Base coater

The cylinder receives 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 product safety.















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



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

## 5 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.

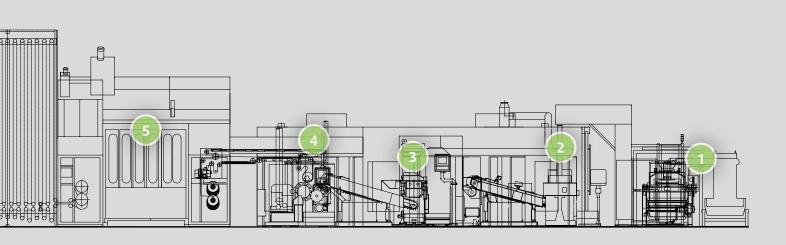
#### 4 Trimmer + brusher

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

#### Ironer

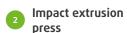
The cylinder wall thickness is optimised and the bottom is formed. This leads to constant geometrical features and light weight cans.

The new CMX Impact Extrusion Line of mall//herlan with a production speed of 250 cpm exceeds limits. The machine technology to produce shaped aerosol cans at this speed is unrivalled worldwide. The increase of speed has been made possible for example by new transfer units and the optimisation of infeed drums in the frontend and decoration area. Even the production of shaped cans is possible at a speed of 250 cpm with our 40 station or even bigger necking systems. A valuable side effect of the new designed line is a smaller machine width and the possibility to deactivate the vacuum transfer for a lot of can designs to save energy.









The press turns the slugs into cylinders by an extrusion die.

# Slug infeed system

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

Can data		
Can diameter mm:	35 - 59	45-66
Max. extruded can length mm	275	275
Max. trimmed can length mm	260	260
Finished can length mm	110 - 250	110 - 250
Max. production speed cpm	250	250

