

Technical News Bulletin

Sundsvall, February 2026



- Enables full traceability of the production from the hot end to the cold end.
- High performance of the laser system.
- Smart cabinet design for easy operation and less maintenance.

Introduction

The ID Mark+ is the latest generation of the Bucher Emhart Glass laser marking system, designed to print a unique code on containers at the hot end. Printing at the hot end is the only way to achieve permanent marking while preserving the integrity of the glass. It also enables full global traceability, data-driven analysis, and closed loop control between the cold end and the hot end, in particular allowing for precise and short-time identification of defective containers.

Building on the proven success of the original ID Mark, this generation features higher printing power and smart solutions to simplify operation, reduce maintenance, and extend system lifetime.

Code specification

Two types of markings can be selected or combined depending on the application, with each type offering different benefits.

Data Matrix Code

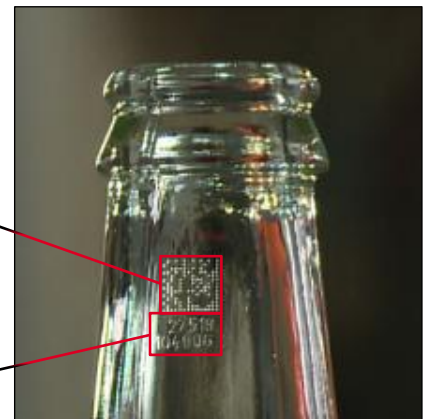
- Real production time, section, and cavity data
- Conforms to CETIE standard DT40.00
- Can substitute cold end marking
- Machine-readable

Additional benefits of machine readability:

- Production information for each individual container can be linked to the code in a database
- Enables data driven analysis
- Enables closed loop control between the cold end and hot end

Alphanumeric Code

- Real production time, section, and cavity data
- Can substitute cold end marking
- Human-readable



Data Matrix and Alphanumeric code combined

Laser system design

The compact design of the laser system now includes the scanning head mounted directly onto the laser unit (there is no more articulated arm). This results in a steady and reliable system with

- less adjustments and maintenance
- more powerful printing capability
- extension of the focus range to ± 8 mm for container alignment on the conveyor
- optimized system lifetime as the laser unit operates at 60% of its maximum power capacity

The cooling of the laser system is now provided by the external chiller unit (there is no longer a closed loop internal cooling system). The ID Mark+ unit constantly monitors the water temperature and stops the printing process if the water temperature is out of range.

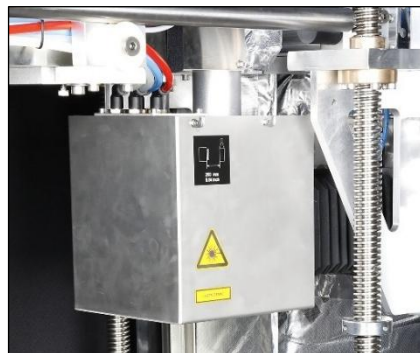
Cabinet design

All components inside the cabinet are arranged to provide easy access for maintenance and better protection from the harsh production environment.

The pneumatic components and the electrical connections are mounted in a junction box that is easily accessible from the front of the ID Mark+.



The container printing area is protected by a tunnel positioned across the conveyor and attached to the back of the cabinet. An air knife and a bellows prevent dust generated by the printing process from entering the cabinet through the opening used for the trigger sensor and the laser beam. Additionally, a tube mounted on top of the tunnel uses the natural chimney effect to efficiently extract the dust from the printing area.



System Components

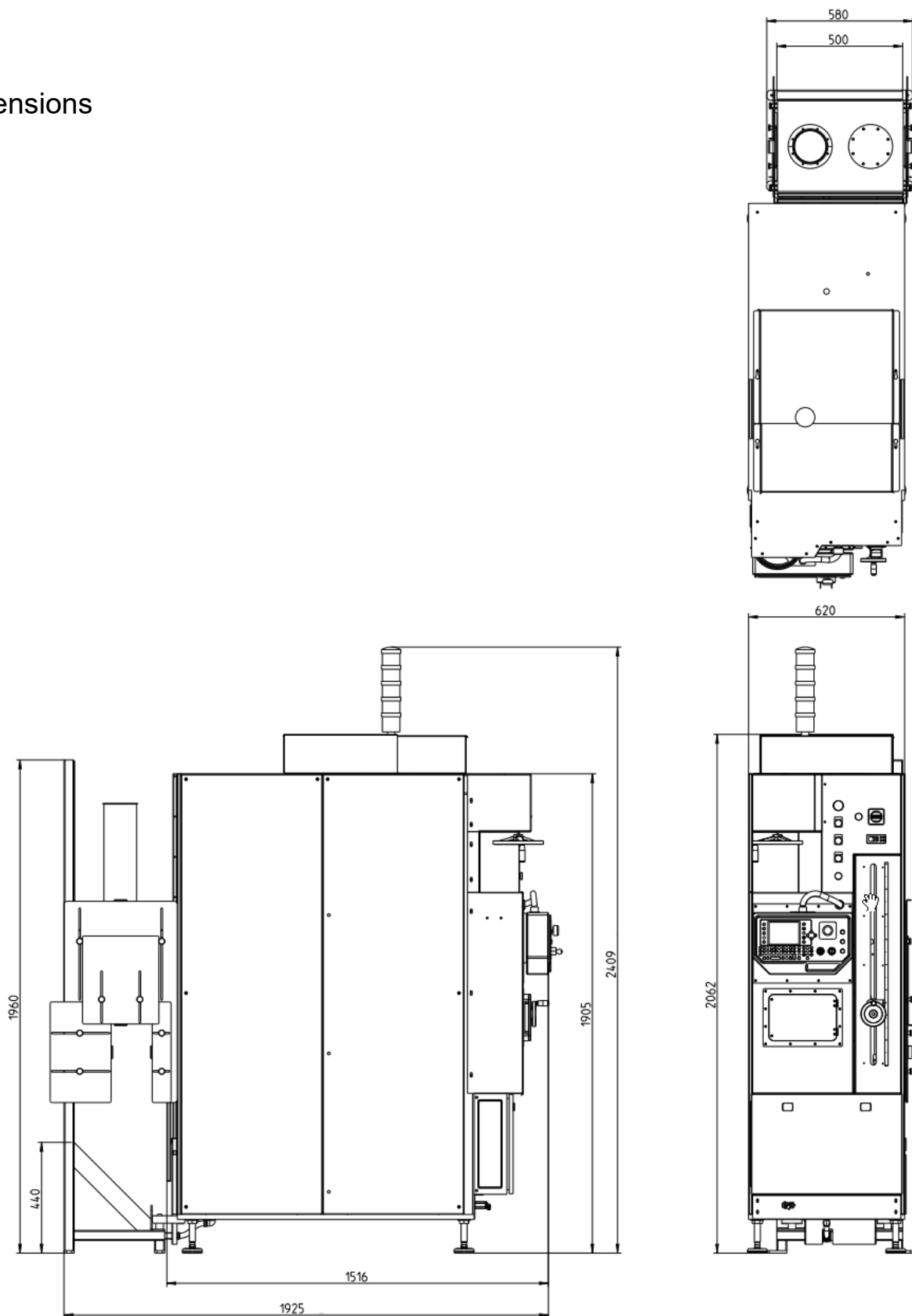
The ID Mark+ Laser Marking System consists of:

- 606-200-1
 - ID Mark+ 606-1012-00
 - Chiller 606-1013-1
 - FlexIS 3 Synchro 606-1004-1
 - Universal Synchro 606-1010-1
 - Precision Reader 606-1015-1
 - Spare Parts 606-1014-00

Installation Requirements

- Container alignment on the conveyor:
 - ± 8 mm
- Container temperature at printing position:
 - Minimum 450°C
- Recommended free space around the equipment:
 - Minimum 600 mm
- Water/water cooling system:
 - 4kW cooling capacity
(A chiller is available as an option)
- Utilities:
 - Power supply to transformer:
 - 400 VAC, 2 phases or 230 VAC + neutral
 - 50/60 Hz
 - 20 A
 - 4 kVA
 - Compressed air (dry and oil-free):
 - Minimum 4 bar
 - Minimum 250 l/min
 - Maximum 25°C

Dimensions



Features / Benefits

Features

Laser technology

Rearranged cabinet design

Compact laser system design

Benefits

Permanent and precise marking

No weakening of the container

Easier maintenance

Reduced OPEX costs

Increased system lifetime

Reduced maintenance

Increased performance stability

Wider focus range

Increased system lifetime
