VINVENTIONS

NOMACORC
Pops

Guide to setting up a Pops trial

Protocol for a successful Pops bottling test

Key points:

- The bottleneck profile must be within the following limits:
  - Diameter at 3 mm: between 17 and 18 mm
  - Diameter increase between 3 mm and 25 mm: between 0.1 and 1.8 mm
- The orientator must be adjusted to ensure correct orientation of Pops closures.
- The closure must be held high enough in the jaws to avoid lipping phenomenon.
- Compression of the closure should be 15.5 to 16 mm and no jaw pitching should be visible on the closure after compression.
- Closure insertion should be between 19 and 21 mm, to achieve an insertion between 22 and 26 mm after wiring
- After bottling and 15 days after bottling, manual opening of cold bottles should be evaluated

Introduction

This protocol describes the settings required to test Pops sparkling closure in order to obtain optimum mechanical performance. It is based on our experience of validation trials in Europe, which have taught us that results may vary according to the bottling equipment and bottles used.

Our technical department can support you to set up the test and adjustments. Contact your sales representative to arrange an appointment to carry out this adjustment.

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Pops

BOTTLING INSTRUCTIONS:

Bottleneck inspection

It is strongly recommended to use bottles that are not widening too much, as this increases the difficulty of opening.
We recommend bottles respecting the following tolerances:

- Diameter at 3 mm: between 17 and 18 mm
- Increase in diameter between 3 mm and 25 mm: between 0.1 and 1.8 mm

The majority of bottles respecting European standards give specifications up to 17 or 20 mm only. Nevertheless, bottles following these standards generally comply with the above tolerances.

Jaws

Ideally cylindrical, rather than conical, to avoid piston marks on the top of the closure. Use of a 4-jaw machine is imperative.

Check that the jaws do not pinch the closure, which could result in a gas and/or liquid leakage.

Check also that the closure is held high enough because elongation of the closure out of the jaws will generate lipping.

As far as we know, all types of bottling machines (MBF, Bertolaso, GAI…) can maintain this elongation inside the jaws.
Specific case of AROL machines: In case of severe lipping, it is recommended to adapt the centering cone.

Compression diameter

Between 15.5 and 16 mm.

Piston height

Must be adapted by line maintenance staff to obtain the correct insertion depth, generally higher than when using natural closures.
Ideally, the insertion depth should be:

- 19-21 mm at insertion, before wiring.
- 22-26mm after wiring.

To measure the length of the closure in the bottleneck, the contact of the skin with the glass is to consider

Mushroom shape

Obtained directly when the closure is applied; however, the longer the closure remains in the bottle, the longer the mushroom shape will last after opening.

Headspace pressure

Max. 6.5 bar (at 20°C).

Bottling temperature of closures

Ideally at room temperature.

Orientation

Pops that are not symmetrically chamfered/printed must be oriented either manually or by an orientator during the bottling process. Orientators with chamfer detection (mechanical or optical) are recommended. Gravimetric systems do not allow correct orientation.

POST-SETTING AND BOTTLING CHECKS

To check that the bottling line is correctly adjusted, it is advisable to open at least **6 bottles** directly after bottling, possibly taking photos of the bottles and closures before and after opening, in order to verify the following points:

1) Insertion depth before and after application of wire - homogeneous bottle-to-bottle?
2) is there any lipping?
3) Strong piston marks on the top of the closures?
4) Presence of a physical defect/damage on the closures - the cause of which would come from the jaws and not from the wirehood after opening?
5) Check bottle filling. Overfilling can lead to excess pressure.
6) Orientation?
7) Torque/extraction force during manual opening – direct pop-up, too easy, easy, firm, difficult, impossible.