



# Cetie

The technical offer adapts to new market challenges driven by environmental issues

From the FEA neck finish to the Screw neck finish



# Cetie

## Cetie's FLACONNAGE groups

Cetie's glass FLACONNAGE groups have been operating for several years now. Stakeholders join Cetie to set up the working groups that will define the topics: glassmakers, perfumers, manufacturers of distribution systems (pump operators). Depending on the theme, manufacturers of lacquers (FLACONNAGE Decoration) or control tools (Guide du Sertissage published in 2020) are also involved. The FLACONNAGE Geometry group, in charge of the technical data sheets (see next page), has been working for many months on the interchangeability of the FEA finish/ screw finish.



**Cetie**

General data sheet

**DT15.00**

April 2018  
Revision 2

FLACONNAGE  
STANDARD TOLERANCES

**Cetie**

General data sheet

**DT15.01**

April 2018  
Revision 1

FLACONNAGE  
BRIMFUL CAPACITY  
TOLERANCES

**Cetie**

General data sheet

**DT15.02**

April 2018  
Revision 2

FLACONNAGE  
HEIGHT TOLERANCES

**Cetie**

General data sheet

**DT15.03**

April 2018  
Revision 2

FLACONNAGE  
DIAMETER AND WIDTH  
TOLERANCES

**Cetie**

General data sheet

**DT15.04**

April 2018  
Revision 2

FLACONNAGE  
VERTICALITY TOLERANCES

**Cetie**

General data sheet

**DT15.05**

April 2018  
Revision 1

PLANARITY TOLERANCES  
FOR GLASS FINISHES:  
PRACTICAL VALUES IN USE  
IN THE INDUSTRY

**Cetie**

General data sheet

**DT15.53**

April 2018  
Revision 1

FLACONNAGE  
TESTING PROCEDURE:  
LEAKAGE TEST

**Cetie**

General data sheet

**DT15.54**

April 2018  
Revision 1

FLACONNAGE  
TESTING PROCEDURE:  
RESISTANCE TO  
VERTICAL LOAD

**Cetie**

General data sheet

**DT15.55**

February 2021

FLACONNAGE  
TESTING PROCEDURE:  
VERTICALITY

**Série DT15  
Groupe  
FLACONNAGE  
Géométrie**

# New Market's needs

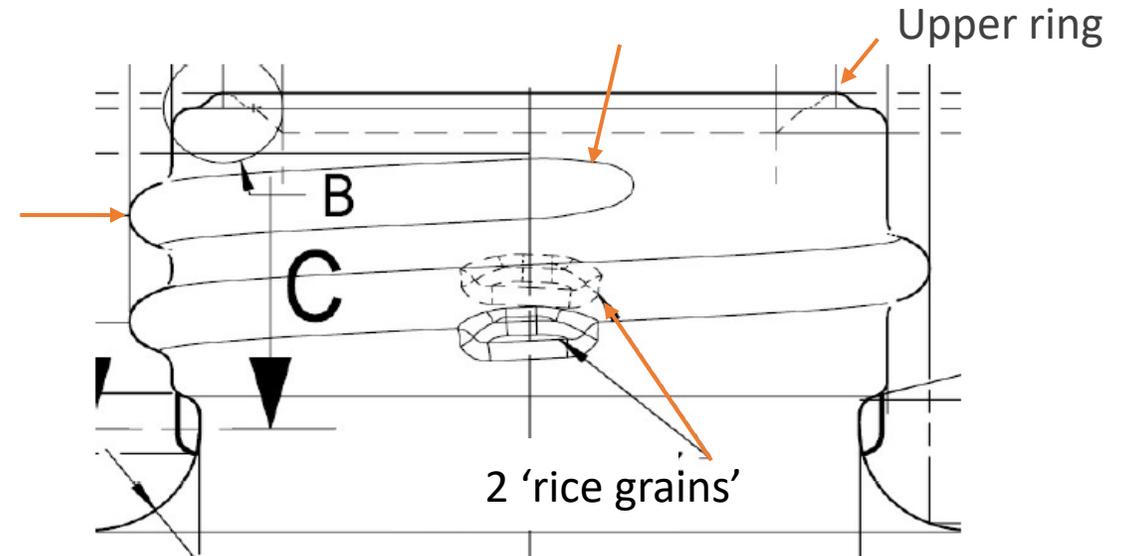
- In order to offer consumers reusable flacons, or at least easy to recycle (i.e. with separable parts), premium perfumers are increasingly turning to screw finish flacons, instead of the traditional crimp finishes or 'FEA' finishes.
- In order to stay within the codes of existing bottles, perfumers try to keep the space required for the crimp finish accessory. They therefore need finishes with the lowest possible height, allowing them to use the same pump covers as their crimped counterparts, while guaranteeing the consumer optimum unscrewing and screwing comfort.



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The most difficult issue is to maintain the diameter of the casing, as the 1 mm thick plastic screw threaded ring reduces the diameter of the glass finish by the same amount, as the glass finish always has to allow the 7.7 mm diameter pump to pass through. The professionals of the sector (Perfumers, pump and bottle manufacturers) have therefore come together at Cetie to design the new screw finish that meets these criteria. This one is based on :

- The external diameter and thread profile of the GPI 415,
- But with a reduced thread length (1.25 turns) to minimise overall height
- With a sealing ring on the top of the finish, and self-unscrewing 'rice grains' on the thread.



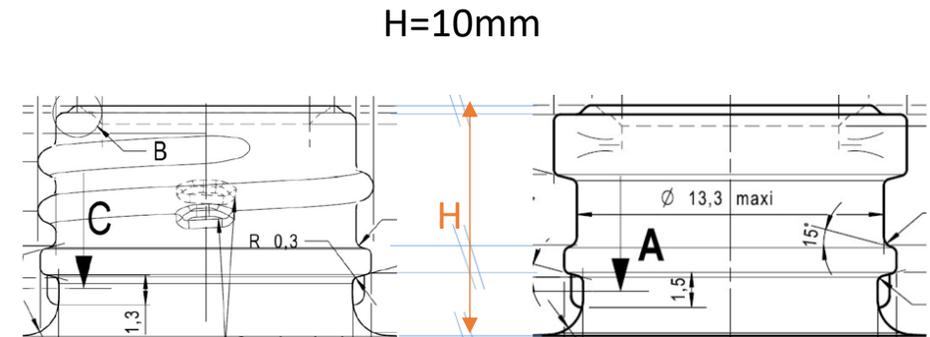
From there on, the perfumer is offered two options:

- Either he wants to keep the possibility of producing both formats (crimp finish and screw finish) on a given model of bottle. In this case, the most interchangeable version is equipped with a counter-bead, and it corresponds to a crimp finish with a counter-bead created for the occasion.

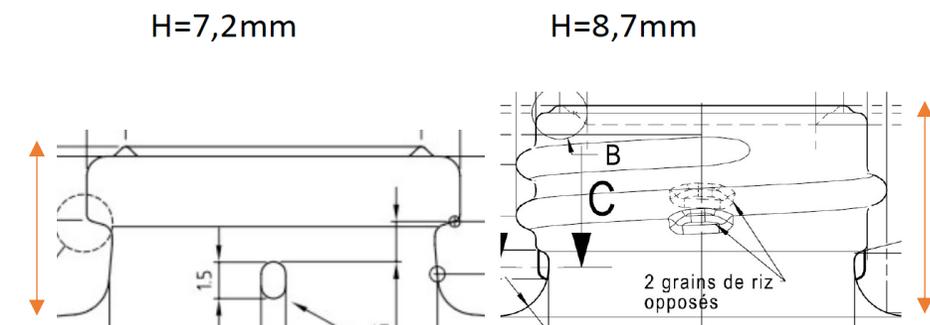
The alignment of the heights of the two rings and the diameters under the ring allow the glassmaker to use a single set of moulds for the body of the bottle, on which he adapts either a screw ring mould or a crimp ring mould. The investment is therefore reduced, and flexibility is optimised.

- Either the perfumer seeks above all to preserve the existing components and to respect the original design (in particular the very low finish of the FEA version). Then he will opt for a screw ring without counter-bead, which allows this finish to be barely 1.5 mm higher than the crimped version.

This option does not allow very heavy vials (above 200/250g) and is just wide enough for the pumps (through bore guaranteed at 7.8 mm, for pump bodies at 7.7).



Option 1 : Complete interchangeability



Option 2 : Height optimisation

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Other options were studied by the members of the Cetie group, which did not meet the needs of the perfumers as well. The different choices defined on these finishes (thread profile, rice grain geometry, etc.) are currently being tested to check that the expected functions and technical characteristics are indeed there.

This study was carried out on the basis of the 15 mm FEA finish, which represents 65% of the crimp finish market. It will then be declined on the other dimensions, mainly  $\varnothing 13$  and  $\varnothing 18$ , then possibly  $\varnothing 17$  and  $\varnothing 20$  according to the needs expressed. The three families of rings thus created will become Cetie standards available to professionals in the sector as soon as they are created:

- Interchangeable Screw Finish with counter-bead
- Interchangeable Crimp Finish with counter-bead
- Screw Finish without counter-bead



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# Cetie

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Cetie is a non-profit association.

All the stakeholders of the interprofession  
can join Cetie's working groups.

All you need to do is make a request on  
[contact@cetie.org](mailto:contact@cetie.org).