

**TRACEABILITY APPLIED TO
GLASS PACKAGING CONTAINERS (BOTTLES AND JARS)
(Practical Guidelines)**

I. SCOPE

This industry guideline describes the traceability of glass packaging containers (bottles and jars). It is emphasized that this guideline applies to the traceability of reusable glass packaging containers only on their first delivery from a glassworks.

II. GENERAL INFORMATION

II.1 Associations taken as part of the glass packaging container & bottle group

FEVE European Container Glass Federation

II.2 General information and limitations

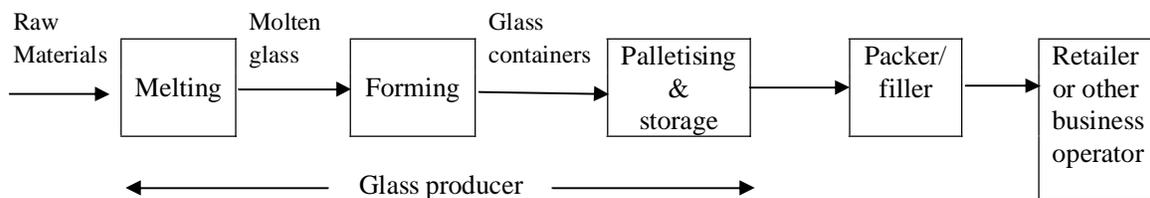
In the vast majority of situations, producers of glass packaging containers are able to assure a high degree of traceability of their products.

There are some practical limitations: these can arise in particular with regard to the tracing of raw materials or when added-value services are provided by operators external to the glass container industry (as described below). However, since the properties of glass (in particular its virtual inertness) are such that food contact issues are extremely rare, these limitations on traceability need to be balanced against the very low risk of problems arising.

The traceability of *materials used for the production* of glass packaging containers cannot be precisely defined by this guideline, for two reasons.

Firstly, raw materials must be stored in large quantities before they are used, so that a definite identification of the individual deliveries or suppliers (if there is more than one supplier for the same raw material) is not possible from information relating to the glass containers produced. This is especially true for the recycled cullet that is, depending on the glass colour and the production site, often the main raw material in the glass melt.

Secondly, glass melting furnaces are continuously operated facilities in which raw materials are introduced on one side, while molten glass is removed on the other side and formed into a product after a thermo-chemical melting process has taken place. This process, in which partial mixing occurs, is another factor inhibiting a definite traceability of the starting materials used to make particular glass containers.



Beside the question of raw materials, should the information on the pallet labels that serve the purpose of traceability be lost, then traceability would be confined to information that can be gathered only from the glass container itself (see point 3). This could happen if the glass packaging containers were later externally depalletised, e.g. for passing through an added-value process, and then received a different pallet label from another operator.

III. INFORMATION ON TRACEABILITY AND “PROPAGATION”

In practice, three identification methods are applied to ensure traceability of glass containers:

III.1 Pallet labels

Pallet labelling is essential for the traceability of glass containers. Should any defects be detected in the most critical stage, which is the filling of the glass containers, a detailed traceability is only ensured with the help of pallet labels. Information on pallets applies to fillers, intermediaries (e.g. decorators) etc. The labels themselves are usually disposed of at the customer’s premises, at the latest when filling the containers, and are no longer available at the retailer or consumer stages.

Pallet labels usually indicate at least the date of manufacture, line of manufacture, shift, pallet number and article number. In some cases a batch number is attached that allows retrieval of the date of manufacture from an internal database.

Pallet labels can also reveal information on the number of containers per pallet, glass colour etc. Some may have bar codes that relate to the glass manufacturer or customer codes.

The customer is able to use the pallet information in his production data acquisition to ensure traceability back to the original manufacturer.

III.2 Engraving marks

Engraving marks serve as a source of information throughout the complete supply chain “from manufacturer to end user”. Company engraving symbols enable consumers’ traceability back to the original manufacturer.

Engraved mould numbers are an essential characteristic of traceability already during the manufacturing process. In this way it is possible to check glass containers one by one when passing through automatic inspection devices and to reject individual containers as necessary.

Engraving marks that can deliver information on date of manufacture, runtime of moulds etc. by means of coding systems are within the manufacturer’s discretion and not mandatory. These marks cannot be applied limitlessly, especially to single trip glass containers, without diminishing the functional qualities (the strength) of the container. Moreover, it may not be practicable to apply them to non-round containers.

III.3 External marks

Where specifically requested by a customer, it is also possible to equip a production line with a means of applying external marks. They are much less commonly used than pallet labels and engraving marks; they complement, and in no way obviate, the need for pallet label information.

These marks are mostly applied by ink jets, laser or U.V.

The marks contain information on the exact date of manufacture (date, time) in optical character or encoded.

This information can always be traced back to the filler or intermediary (e.g. decorator). It is, however, only of limited value to the end user, due to technical particularities of the marks.

IV. RECALL

In general, containers that satisfy all quality-relevant criteria faultlessly are delivered to the customers.

Nevertheless, should any defects be detected on delivered products during intermediate processing (e. g. decorating) or filling or when being traded, the size of the defective production has to be limited according to the traceability characteristics defined in point 3.