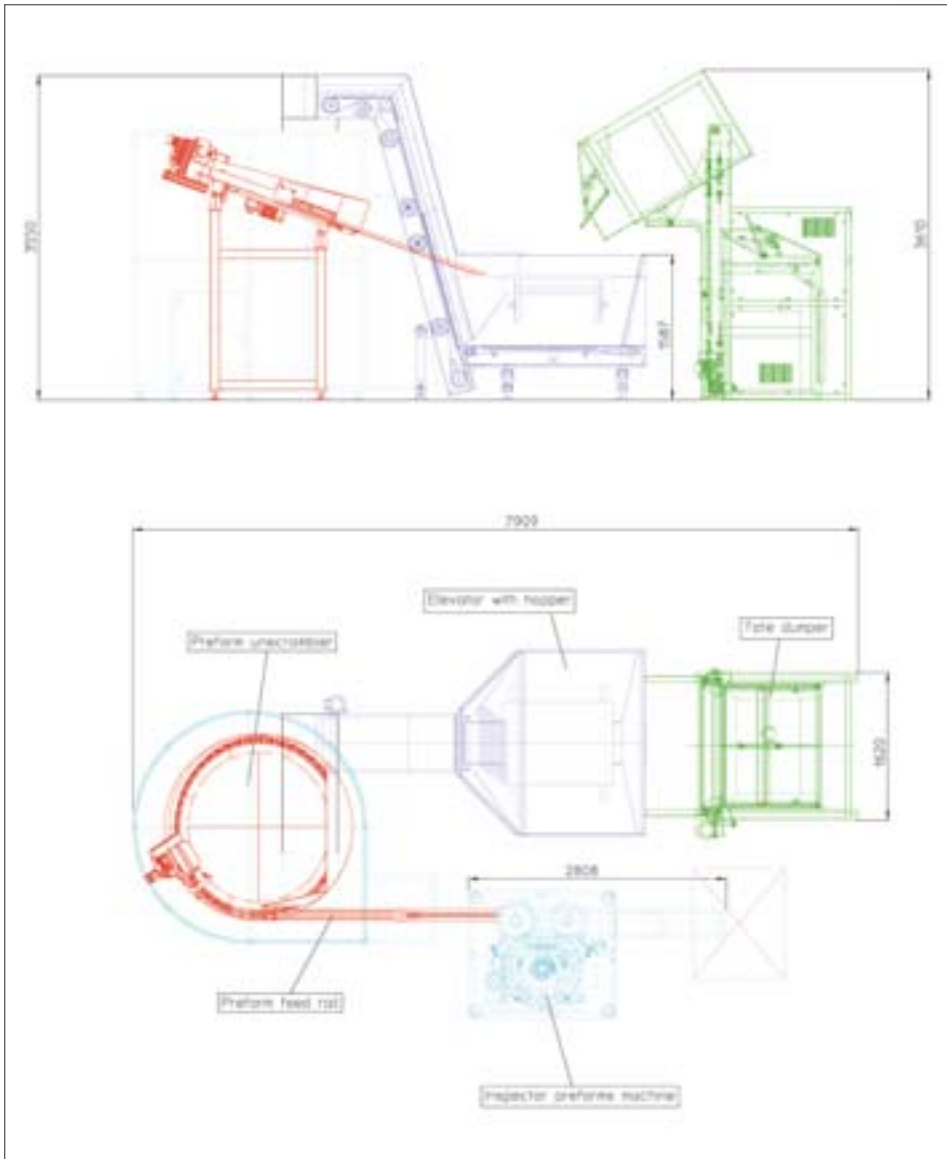




new

# LANFRANCHI

## off-line preform inspection system



Preform Box Loader.



Hopper to collect preforms complete with elevator.



Preform Unscrambler.



Preform descent guides.



Preform Inspection machine.

Truly a high performance system, both in terms of speed and the total number of defects that can be detected, represents a major step in Lanfranchi's evolution in the research and development of new products.

We have been able to develop a high performance system that can inspect 40.000 preforms/hour.



# off-line preform inspection system

## Checking process accomplished:

- Incomplete finish
- Out-of-roundness
- Crushed necks/fractures
- Irregular dimensions
- Material contractions (parts of preform having smaller thickness)
- Production inclusion
- Crystalline aspect
- Problems in the injection point (craters and holes)
- Granule Inclusion
- Not fully melted granules
- Opacity
- Air bubbles
- Not fully dried material
- Degraded material
- Mould marks
- Colour modifications

## Working process

The preforms that are to be checked are discharged from the box loader and conveyed to the feeding hopper, then lifted towards the roller unscrambler. This machine has the function to unscramble all the preforms and to send them to the inspection machine by means of the descent guides.

The preforms are neck handled in the inspection machine and for this reason the change-over can be effected easily and in a short time. All the process is controlled by PLC and through a multifunctional display where the parameters for each kind of preform to be handled are set. A set of cameras having the function to check the defects and send the eject signal to the preforms pincers, is present on the machine.

## Main construction features:

- Maximum power installed: 8 Kw
- Compressed Air consumption: 10 NI/m
- Maximum neck diameter of preform to be handled: 43 mm
- Minimum neck diameter of preform to be handled: 28 mm
- Maximum height of preform to be handled: 160 mm
- Minimum height of preform to be handled: 40 mm



Preform descent guides.



Preform Inspection machine.