BUCHER
emhart glass

Technical News Bulletin

Steinhausen, January 2025

Blank side Barrier for NIS, AIS, IS

- Designed to prevent the unvoluntary operator contact with the section mechanisms
- Section status indicator
- Reliable and smooth motion with enhanced pneumatics
- Compatible with FlexRobot

Introduction

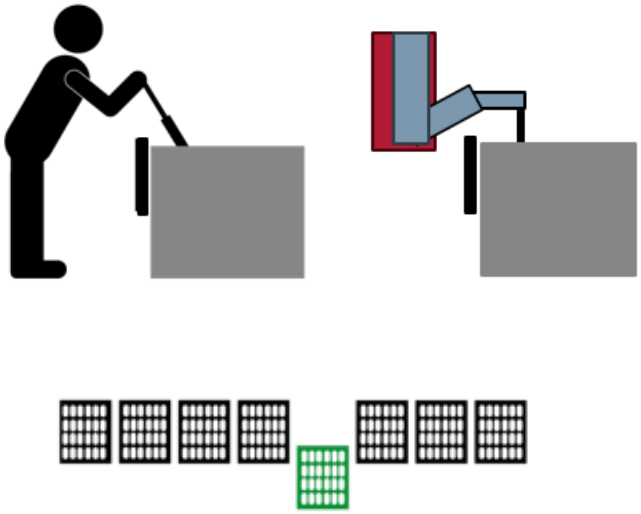
The Blank side Barrier (BsB) is designed to protect machine operator from unintended access to the blank side during automatic operation of the forming sections and contributes to reduce the human error.
At swab cycle, the BsB moves automatically down and gives access for the manual swab intervention as well as for the FlexRobot blankside operation.
During Maintenance Stop, the BsB is in down position and allows access to the specific section.

System Description

The BsB consists of a movable guard, operated by two high-temperature resistant pneumatic cylinders controlled by a valve which is triggered by the section safety relay (MS) and the Swab output from the FlexIS section controller.
The up and down position of each barrier cylinder are monitored by a sensor.
In supervision mode, this prevents the startup of the section if the BsB is not in up position.

During automatic operation, the BsB prevents the operator from unintended access to any blankside mechanisms in operation.

*Blank side Barrier in **UP** position*

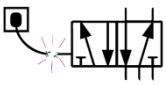


*Blank side Barrier in **DOWN** position*

The Blank side Barrier allows to visualize the section “status”:

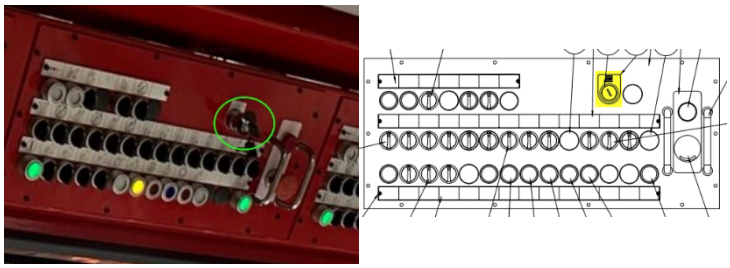
- The **UP** position clearly indicates the section is in automatic operation.
- The **DOWN** position indicates the section is either:
    - In **Maintenance Stop**, allowing safe access to the section mechanisms

      OR
    - In **Swab Cycle**, allowing the FlexRobot or the operator to swab the molds in safe conditions.

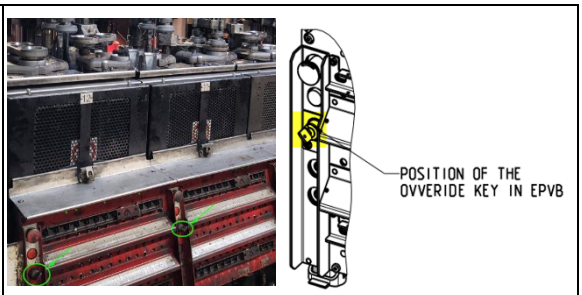


NOTE: In case of an electric or pneumatic shut down, the BsB will stay in **DOWN** position.

During a startup after a job change, where final section settings and close observation are necessary, the BsB can be temporarily forced in the down position by means of an override key, while the section is in automatic operation. This feature can also be used on demand for specific needs.



NIS override key switch



IS/AIS override key switch located in the EPVB

The meshed cover design of the barrier allows for a good visibility of the operation of the section.

Specification

AIS	New	900-100-1
	Retrofit	900-100-2
NIS	New	900-100-3
	Retrofit	900-100-4
IS (Small Frames 4 ¼" and 5")	New	900-100-7
	Retrofit	900-100-8
IS (Large Frames 5 ½" and 6 ¼")	New	900-100-9
	Retrofit	900-100-10

Availability

The Blank side Barrier is available for all Bucher Emhart Glass Machines.

Installation Requirements

The Blank side Barrier is a standard equipment for all new Bucher Emhart Glass Machines.
Contact Emhart Glass, for a retrofit installation.

Features	Benefits
Physical barrier	Prevent unintended access to the section in operation
	Clear indication of the section status
Automatic interaction with FlexRobot	Fully autonomous operation
New pneumatics	Reliable and smooth UP & DOWN motion