

Technical News Bulletin

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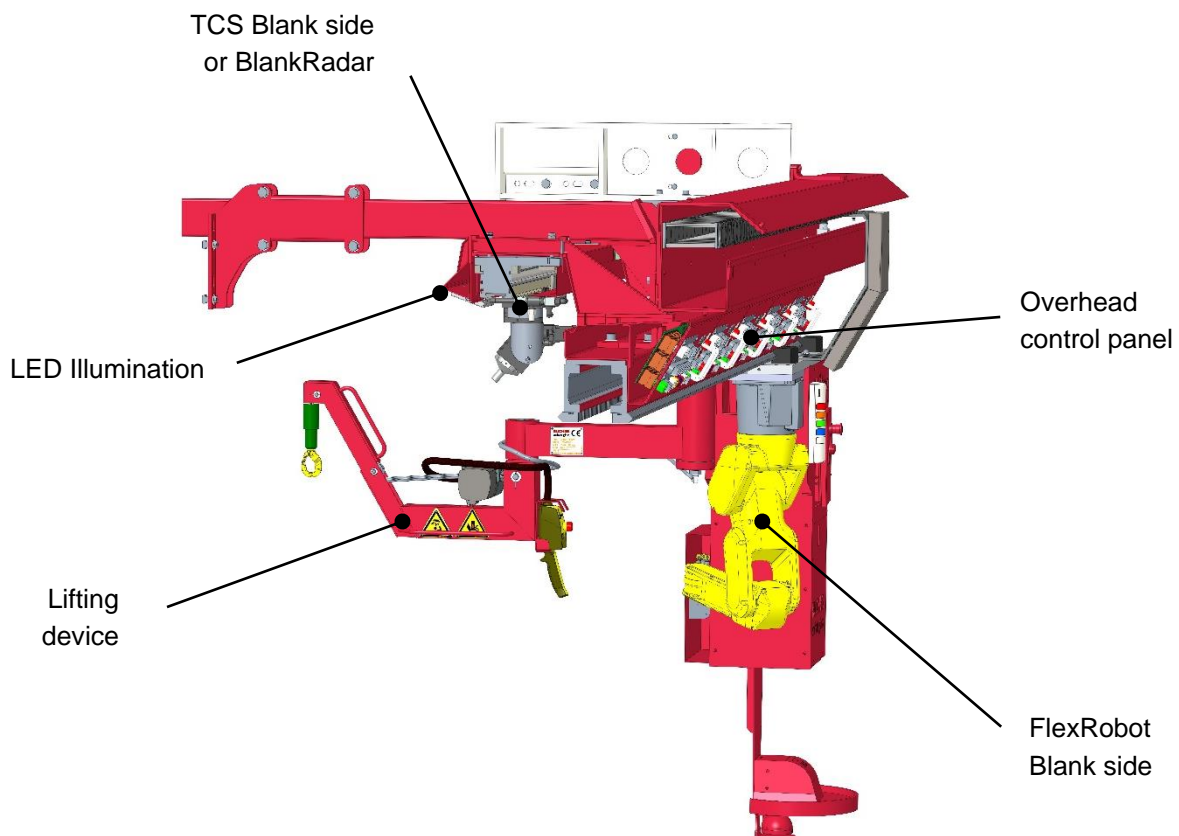


Blank Side Overhead Panel

- Ergonomic operator interface to the section controls
- Modular design makes it easy for the customer to customize additional equipment
- Spill liquid collector, overhead cover plates, etc.

Introduction

The Blank side overhead panel is designed to provide an ergonomic operator interphase to the section controls. The panel is prepared for integration of lifting equipment, temperature and vision sensor system and FlexRobot for autonomous swabbing.



Features

The Blank side overhead panel is prepared for mounting of equipment such as:

- Front plates, overhead control panel
- TCS Blank side: Temperature Control System
- BlankRadar: Temperature and visualization system
- LED lights: Lamp panel to illuminate the sections
- Lifting device: Crane system to support heavy lift in the section
- FlexRobot Blank side (optional)

Ergonomic overhead control panel

The fully integrated and robust overhead control panels are ergonomically positioned at the ideal height and intuitive to operate. Cable harnesses are fully integrated and well protected from oil and water.

TCS blank side Temperature Control System

The Temperature Control System (TCS) uses a high-speed pyrometer mounted on an automatic positioning system on the blank side. It measures blank mold, plunger and neck ring temperature. The different temperature readings are displayed and recorded. These temperature readings give the process the transparency needed to reduce blank mold, plunger and neck ring temperature variations and lead to improved process stability.

Measuring range is 300° to 1300° C. Please also refer to our dedicated TNB215 Temperature Control System – TCS.

Availability / Application

IS	8 – 12 section machines
AIS	8 – 12 section machines
NIS	8 – 12 section machines

BlankRadar Gob Loading and Temperature for the Blank Side

The BlankRadar is a gob loading monitoring and temperature measurement solution. The system consists of a camera housing which is moved along the length of the forming machine by a servo electric motor.

The BlankRadar stops in front of each section and takes a user-defined number of consecutive measurements. BlankRadar gives the users the opportunity to find optimal gob loading and maintain this over time. Thus improving the process stability and avoiding defects related to incorrect gob loading. The data from the temperature measurement of the Blank molds, Neckring and Plungers can be used as input signals for the close loop controls for Plunger-, Blank mold- and Neckring-cooling.

LED Illuminations

Good illumination is important to monitor the process and to make accessory exchange, job change etc. easy and safe. The LED lamp panel on the rear side of the blank side overhead panel improves the illumination of the section. The lamps are characterized to have a overlapping light and to prevent the section from being shadowed by the operator when leaning into the section for a job change. The separate LED lamp module is powered by a 24 V integrated power supply.

- LED lights are mounted on a separate module
- Lights are situated between sections to overlap and avoid shadowing

Lifting device

The pneumatically powered lifting device is designed to give the operator support by avoiding heavy lifting when changing mold equipment. The lifting device rail is mounted to the blank side overhead panel. The equipment is

CE certified for a maximum lifting weight of 125 kg. The crane has 2 speeds for up and down movement. If pneumatic power is lost the load is locked at the actual position.

- Lifting range 125 Kg
- Pneumatically driven

FlexRobot Blank Side

The FlexRobot is the Bucher Emhart Glass solution to eliminate manual swabbing of blank molds and neck rings. Fully integrated in the Bucher Emhart Glass IS, AIS, and NIS machines, the FlexRobot is mounted on the blank side panel and incorporated in the FlexIS controls. The compact design of the control hardware and the user interface fit into one single control cabinet. Please also refer to our dedicated TNB281 – FlexRobot.

Structure and layout drawings

Description	Part Number
Blank Side Panel Overview	601-416-00
Blank Side Panel AIS/IS & NIS	200-1964-00
Guide Rail for Lifting Device and FlexRobot BK	200-5116-00
Lamp Bracket for Illumination	200-1980-00
Lifting Device	200-1956-2
TCS Temperature Control System	603-2-00
FlexRobot BK	607-12-1
Layout Dimensions IS/AIS	200-1973-00
Layout Dimensions NIS	400-5377-00
Layout Configurations	200-16259

Installation Requirements

The panel and additional equipment are assembled on the machine structure.

For TCS and Blank Radar the panel is mounted in the outer position and must be installed and operated at the specified height so that the safety requirements are met (smaller machines with lower beams depending on the equipment are not available).

For retrofit see separate manuals for installation requirements. Specified height must be met to fulfill the safety requirements.

Features

Overhead control panel

Modular design

Spill liquid collector

TCS Temperature Control System or
BlankRadar Gob Loading and Temperature for
the Blank Side (option)

Lifting device (option)

Illumination

Indication Lamp Bracket

FlexRobot (option)

Benefits

Height adopted to 95 % of the population

Easy for the customer to customize additional
equipment.

Spill liquids are collected and directed to the end of
the panel for collection and removal

Provide automatic temperature measurement for the
Blank mold temperature system feedback system

Ergonomically help for the operators when there are
heavy lifts

Illuminate the sections for monitoring the process and
when operator manually interacts with the section.

Possibility to illuminate the section for indication
purpose when swab cycle is activated

The FlexRobot swab the blank molds and neck-rings.
The system is attached to Guide Rail system
