**Introduction**

FlexIS Blank Cooling Control is a control loop available in the FlexIS Timing using information from the TCS (Temperature Control System) or the BlankRadar. It gets the measured temperature values of the mold surfaces and adjusts automatically the duration of the mold cooling.

Depending on the machine type and configuration, up to 72 mold halves are permanently monitored and adjusted to slow changes of surrounding parameters. This leads to more stable production runs and also prevents quality problems like leaners, for example.
Application
FlexIS Blank Cooling Control is very beneficial for all types of production.

Setting Description
FlexIS Blank Cooling Control is fully integrated into the FlexIS controls (FlexIS 1, 2 and 3). All settings are done on the User Console and are stored as job data. The configuration setup can be done according to the number of available cooling valves and according to the locations measured.

Settings (all per closed loop)
- FlexIS Blank Cooling Control on / off
- Setpoint value for temperature
- Upper and lower limits

Feedback to the user (all per closed loop)
- Actual (measured) temperatures
- FlexIS Blank Cooling Control on / off (status)
- Cooling duration (event OFF-ON)
- Cooling duration reached a limit (status)

FlexIS 1 user interface: Setpoint values and measured values with colored status indication shown in the Settings Section page (sample values).
FlexIS 2 and 3 user interface: Setpoint values and measured values with colored status indication shown in the Closed Loop Adjustment page (sample values).

**Functions**
- See all values per section or grouped in an overview
- Fill values to all closed loops or to all sections

**Remote Access Extension**
- Due to the communication with the FlexIS, the TCS or BlankRadar gets accessible through the FlexIS remote access system.

**Installation Requirements**
FlexIS Blank Cooling Control can be ordered for any forming machine having:
- FlexIS 1 Timing Control - Software Version 1.07.03.033 or higher
- TCS Temperature Control System or BlankRadar
- Basic Closed Loop Equipment (TNB248)
Order Information
FlexIS Blank Cooling Control includes:

- 601-20001-4  Software License FlexIS Blank Cooling Control
- 601-217-3  Communication Kit for TCS / BlankRadar (specify cable length to FlexIS MC cabinet)
- 1 day  Service engineer for installation
- 2 days  Production specialist for commissioning and on site training

Documentation
H11104_EN is the English manual of FlexIS Blank Cooling Control for UC 1
H11108_EN is the English manual of FlexIS Blank Cooling Control for UC 2

Feature/Benefits

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<th>Features</th>
<th>Benefit</th>
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| FlexIS Blank Cooling Control is fully integrated into the FlexIS controls, stored in the job file | Reduced complexity / better ease of use  
  - Improved start up after job change |
| No additional cabling or sensors in the machine | Accessibility and mold change procedure stay as before |
| Automatically adjusts temperatures of mold halves | Keeps process steady / less variation  
  - over time  
  - between cavity halves  
  - less stops  
  ⇒ higher quality / pack rate |
| TCS or BlankRadar remote access through the FlexIS remote access system | Optimal addition to FlexIS remote service.  
  Experts can support remotely auditing real time TCS and Blank Cooling closed loop. |