**ISX-Special cycles**

**Lubrication cycle for Mould lubrication or to lubricate Moulds:**

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Symbol on the panel:

Description:

Allows to lubricate the moulds in order to make sure the glass does not stick onto the moulds.

Logic:

If the operator presses the push button mould lubrication, the following events occur:

1) The button starts to blink

2) The preparation for the start of the special cycles begins

2.1) The Gobs (molten glass drop) in the section are normally handled and processed. -> for the

next cycle the button is now permanently illuminated.

2.2) The GOB Distributor is not loading and delivering the GOB into the section.

2.3) The cooling for the moulds which are lubricated will be switched off.

2.4) The Invert Mechanism will stand still below the Blank Mould side. Neckring Arms in the 0°

position above the Plunger.

2.5) The Blank Moulds stay open.

2.6) Baffle Mechanism or Blow Head Mechanism, depends if we are on the Blank or Blow

Mould side will be open and in their upper starting position.

2.6.1) In case the Blow Moulds are lubricated also the Take-Out Mechanism will stay open and

in its top upper position.

3) Lubrication of the moulds

        3.1) The operator can adjust and chose, how long the lubrication process shall last. He can type

in min. 1 cycle and max. 4 cycles.

4) End of the lubrication cycle

     4.1) All mechanisms go back into their starting position and start from there again to work

Normally.

    4.2) The Gobs are loaded and delivered again into the section.

    4.3) The Push button lubrication switches off and is no more illuminated.

    4.4) The Hotend reject will blow the first set of bottles or jars after the lubrication cycle out and the bottles or jars fall into the cellar. (\*) + in this moment the Hotend reject button is blinking:



\*: In the program, respectively in the visualization for this cycle the following must be available and displayed: Adjustment of the cycle’s min 1 to max. 4 cycles of delivery we want to overjump without glass Gobs being loaded. And as a second display there need to be visible the Hotend reject and also there a min. and max. display from which the operator can chose to throw away from 0 to 4 cycles. With on On- and Off option for the same.

**Removal of parison in the Blow Mould side**

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Symbol on the panel:

Description:

This function will allow to remove the parison, or glass cullet from the Blow Moulds during production. (for example, if no air is available, or the Plungers do not work, or if the Moulds on the Blank side are too hot or too cold, during jams, etc.)

Attention!!!!!! During this cycle usually glass Gobs are normally loaded into the section.

Logic:

In the case that the switch is in position 1, the following events occur:

1) The button is blinking

2) The preparation for the start of the special cycles begins

2.1) The Gobs (molten glass drop) in the section are normally handled and processed. -> for the

next cycle the button is now permanently illuminated.

3) The Blow Head and the Take Out will stay in the open position on top upper position and the Blow Mould will stop in its open position.

4) The Take Out can stop in a 90°postion above the dead plate or E-Pusher, (and there is an optional field in the visualization to adjust the holding position).

5) The cooling air will be switched off.

6) The Invert Mechanism is working normally and does not stop.

7) E-Pusher and Dead plate cooling and air banana (if available) work normally.

End of cycle:

The switch will be moved to position 0. In this moment the Blow Mould, Blow Head and Take Out will automatically start to work again in regard to the actual recipe and cycle. All this starts from the next production cycle.

The button is not blinking anymore.

**Cooling cycle Moulds**

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Symbol on the panel:

Description:

This function allows to heat up the Moulds to its working temperature – for example if a production is started, or if moulds have been exchanged, etc.

The cooling cycles is on the Blank Mould side and also on the Blow Mould side, but independent of each other. This means if the button is pressed on one side of the machine, the cooling cycle just happens on this side of the machine.

Logic:

If the button Cooling is pressed the following events occur:

1) The button is blinking

2) The preparation for the start of the special cycles begins

2.1) The Gobs (molten glass drop) in the section are normally handled and processed. -> for the

next cycle the button is now permanently illuminated.

3) The complete cooling air will be switched off: - Axial cooling, Radial cooling, Plunger cooling – also depends if the cooling cycles is activated on the Blank or Blow Mould side.

4) If the cooling cycle ends, all the cooling will restart again in regard to the current recipe and product and the button is not illuminated anymore.

5) Also here, it is possible to remove the first few bottles or jars with the Hotend reject system. (This can be adjusted in the visualization system).

Special option for the cooling cycle:

In the Standard modus these cycles are synchronized with the Master control.

But it is possible in the visualization to activate a special synchronization, for example the cooling cycle will be just 50% of an entire master control cycle.