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Parameters and alarms

ObiFold V0201

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1.2) Machine parameters details

06 Standby time
When the machine isn't used for this time, it will automatically switch off. Time is in seconds. A value of 0 disables the standby time.

11 Minimum ski width
The ski width in case the proximity switch of the minimum position is covered. Value is in millimeters.

12 Maximum ski width
The ski width in case the proximity switch of the maximum position is covered. Value is in millimeters.

15 Photocell filter time
The filter time of the photocells in milliseconds (0,001s). If a photocell is (un)covered for a time shorter than this time, the software will ignore the signal.

21 Speed of lengthfold belts
The speed of the lengthfold conveyor in steps of 0,1 meters/minute.

22 Measurement stop correction
In case of a stop on the backside when feeding, the measured length is corrected with this value (millimeters). The standard value of this parameter is 100.

23 Maximum total lengthfold blow time
The maximum blowtime on one side in the lengthfold in milliseconds (0,001s). After this time, the blowing cycle is stopped, even if the photocell is still covered.

25 Maximum length at feed-in photocell
The maximum allowed length of a piece at the feed-in photocell in millimeters. When a piece is detected which is longer than this distance, the machine is stopped and an alarm is displayed.

26 Distance to begin of blowpipes
The distance between the feed-in photocell and the beginning of the blowpipes of the lengthfold in millimeters.

27 Position of left lengthfold photocell
The distance between the feed-in photocell and the left photocell in the lengthfold section in millimeters.

28 Position of right lengthfold photocell
The distance between the feed-in photocell and the right photocell in the lengthfold section in millimeters.

29 Waiting position for left blowpipe
The distance between the feed-in photocell and the position where the piece will wait until the left lengthfold is made. Distance is in millimeters.

30 Waiting position for right blowpipe
The distance between the feed-in photocell and the position where the piece will wait until the right lengthfold is made. Distance is in millimeters.

31 Maximum waiting position in lengthfold
The distance between the feed-in photocell and the position where the piece will wait until the crossfold is ready and the lengthfold is finished. Distance is in millimeters.

32 Time-out distance crossfold photocell
The maximum distance between the feed-in photocell and the moment the piece has to be detected by the crossfold photocell. Distance is in millimeters.

36 Distance photocell to 1st crossfold
The distance between the crossfold photocell and the folding point of the 1st crossfold. Distance is in millimeters.

37 Distance 1st crossfold to 2nd crossfold
The distance between the 1st crossfold photocell and the 2nd crossfold. Distance is in millimeters.

38 Waiting position in crossfold
The distance between the 2nd crossfold and the position where the piece waits until the stacker is ready for a new piece. Distance is in millimeters. Value 0 means don't wait in the crossfold.

39 Time-out distance stacker photocell
The maximum distance between the 2nd crossfold and the moment the piece has to be detected by the stacker photocell. Distance is in millimeters.

40 Maximum length at stacker photocell
The maximum allowed length of a piece at the stacker photocell in millimeters. When a piece is detected which is longer than this distance, the machine is stopped and an alarm is displayed.

51 Stack position stacker 1
The distance between the stacker photocell and the stack position of stacker 1. Distance is in millimeters.

52 Stack position stacker 2
The distance between the stacker photocell and the stack position of stacker 2. Distance is in millimeters.

53 Stack position stacker 3
The distance between the stacker photocell and the stack position of stacker 3. Distance is in millimeters.

54 Maximum piecelength for stacker
The maximum length of a piece in millimeters which the stacker is allowed to stack. Pieces longer than this length will no be stacked but thrown out after the stacker.

55 Stacker throw out distance
When a piece has to be rejected, this is the distance in millimeters the stacker continues running to throw out the piece.

56 Delay stop stackermotor / open flaps
The delay between stopping the stacker conveyor and opening the flaps. Is used to make sure the conveyor is completely stopped before the flaps are opened. Time is in milliseconds.

57 Time open stacker flaps
The time the stacker flaps are opened when a piece is stacked. Time is in milliseconds.

61 Delay start conveyor after stacking
When the stacker flaps open to stack the last piece of a stack, the conveyor will wait for this time before the stack is shifted. Time is in milliseconds.

62 Conveyor shift time
The time the cylinder of a conveyor is activated to put a stack onto the central conveyor. Time is in milliseconds.

63 Delay conveyor cylinder back
The time the cylinder of a stacker needs to return to rest position after putting a stack onto the central conveyor. Time is in milliseconds.

64 Direction of central conveyor
The direction of the central conveyor. Value 0 means the conveyor runs from the first to the last stacker (towards the operator). Value 1 means the other way around (away from the operator).

65 Speed of central conveyor
The speed of the central conveyor in dm/minute (0,1 meters/minute).

66 Width of one stacker
The width of a stacker conveyor in millimeters.

67 Standby time central conveyor
When a stack is put onto the central conveyor, the conveyor continues running for this time. Time is in seconds. A value of 0 means that the conveyor will not go into standby.

71 Position to reject pieces
The location where pieces are rejected when the reject button is pushed.
0 = No reject
1 = At 1st crossfold
2 = At 2nd crossfold
3 = After stacker

72 Shift stacker at program change
The moment the stackers are emptied in case of a program change.
0 = No emptying
1 = When program changes
2 = When first piece arrives at stacker

95 Reset counters without password
When this parameter has a value of 1, counters per program can be reset without the need of a password.

96 Automatic reset of warnings
A value of 1 means that warnings are automatically reset when the next piece doesn't cause the warning. In case of a value of 0, warnings can only be reset with the startbutton on the control panel.

97 First warn in case of lengthfold jam
Value 1 means that when a piece doesn't arrive at the crossfold photocell, first a warning is given. Value 0 means that the machine will stop on the first error.

100 CAN-bus stationnumber this PLC
Stationnumber of this PLC. Every PLC in a CAN network has to have a unique stationnumber.

101 CAN-bus baudrate
Baudrate/communication-speed of this PLC. Every PLC in a CAN network has to be adjusted to the same baudrate.

102 Delay return to home screen
When the main screen is not activated, and the screen isn't used for this time, the main screen will be activated again. Steps of seconds (0=disabled).

2) Program parameters, general adjustments

2.1) Overview program parameters, general adjustments

01 Feeding method
02 Delay start feeding conveyor
03 Run time feeding conveyor
04 Stop piece on backside
05 Lengthlimit piece type A/B
06 Lengthlimit piece type B/C
07 Preset width no photocell covered
08 Preset width 1 photocell covered
09 Preset width 2 photocells covered
10 Use photocell width measurement
11 Hole compensation
12 Ski's smaller after lengthfold
13 Reserved
14 Reserved
15 Reserved
16 Reserved
17 Reserved
18 Reserved
19 Reserved
20 Reserved

2.2) Program parameters, general adjustments details

01 Feeding method
0 = Continuously
1 = Continuously, but stop when lengthfold busy
2 = Start on photocell
3 = Start on button

02 Delay start feeding conveyor
The time the photocell on the feeding conveyor must be covered before the conveyor starts. Time is in milliseconds. Feeding method must be set to 2.

03 Run time feeding conveyor
The time the feeding conveyor runs to bring the piece into the lengthfold section. Time is in milliseconds.

04 Stop piece on backside
Value 1 means that the feeding conveyor makes an extra stop on the back of the piece to be able to make some manual corrections. Value 0 means no stop.

05 Lengthlimit piece type A/B
The limit in millimetres between pieces of type A and type B. Pieces shorter than this limit will be of type A.

06 Lengthlimit piece type B/C
The limit in millimetres between pieces of type B and type C. Pieces longer than this limit will be of type C.

07 Preset width no photocell covered
The preset ski width in case none of the preset photocell(s) are covered. Width is in millimeters.

08 Preset width 1 photocell covered
The preset ski width in case 1 preset photocell is covered. Width is in millimeters.

09 Preset width 2 photocells covered
The preset ski width in case 2 preset photocells are covered. Width is in millimeters.

10 Use photocell width measurement
0 = Don't use photocell
1 = Photocell is limit A/B
2 = Photocell is limit B/C

11 Hole compensation
The maximum size of a hole in a piece which has to be corrected by the software. Size is in millimeters. This parameter reduces the maximum piece length.

12 Ski’s smaller after lengthfold
When this parameter is 1, the ski's will go smaller when the piece is still in the lengthfold. This increases production, but can decrease folding quality.

3) Program parameters, adjustments per piece type

3.1) Overview program parameters, adjustments per piece type

01 Lengthfold type
02 Ski/lengthfold width
03 Reserved
04 No stop in lengthfold
05 Time lengthfold blowpipe on
06 Time lengthfold blowpipe off
07 Extra time blowpipes lengthfold
08 Fast start blowpipes lengthfold
09 High air pressure lengthfold
10 Crossfold type
11 Crossfold fixed format
12 Reverse piece at 1st crossfold
13 Reverse piece at 2nd crossfold
14 Folding point 1st crossfold
15 Folding point 2nd crossfold
16 Blowtime 1st crossfold
17 Blowtime 2nd crossfold
18 Delay blow 1st crossfold
19 Delay blow 2nd crossfold
20 Reserved
21 Stacker number
22 Stacking height
23 Couple stacker 2 with 1
24 Couple stacker 3 with 2
25 Reserved

3.2) Program parameters, adjustments per piece type details

01 Lengthfold type
Lengthfold setting
0 = No lengthfold
1 = 1 lengthfold (left)
2 = French fold

02 Ski/lengthfold width
The width of the ski's in the lengthfold in millimeters.

04 No stop in lengthfold
Value 0 means that the stoptime in the lengthfold is automatically calculated. This can be overruled with a value of 1. In this case, no stop is made, but this can cause jams.

05 Time lengthfold blowpipe on
When the machine makes a lengthfold, the blowpipes will be switched on and off. This parameter is the time in milliseconds, the blowpipe is on.

06 Time lengthfold blowpipe off
When the machine makes a lengthfold, the blowpipes will be switched on and off. This parameter is the time in milliseconds, the blowpipe is off.

07 Extra time blowpipes lengthfold
The time a blowpipe in the lengthfold continues after the photocell is free. Time is in milliseconds.

08 Fast start blowpipes lengthfold
Value 1 is that the lengthfold blowpipes don't wait for the ski's to be in position. Value 0 means that the lengthfold will wait for the ski's.

09 High air pressure lengthfold
Value 1 means that the valve for high pressure in the lengthfold section is activated. Value 0 uses normal pressure.

10 Crossfold type
Crossfold setting
0 = No crossfold
1 = 1 cross on 1st fold
2 = 1 cross on 2nd fold
3 = French fold
4 = 2 crossfolds

11 Crossfold fixed format
Value 0 is no fixed format. Other value is the size of the piece at the stacker in mm.

12 Reverse piece at 1st crossfold
When bypassing the 1st crossfold, the piece will be reversed when the value is 1. A value of 0 means a bypass on the front side of the piece.

13 Reverse piece at 2nd crossfold
When bypassing the 2nd crossfold, the piece will be reversed when the value is 1. A value of 0 means a bypass on the front side of the piece.

14 Folding point 1st crossfold
The folding point or overlap of the 1st crossfold in millimeters. The standard value of this parameter is 100.

15 Folding point 2nd crossfold
The folding point or overlap of the 2nd crossfold in millimeters. The standard value of this parameter is 100.

16 Blowtime 1st crossfold
The time the blowpipe at the 1st crossfold are activated. Time is in milliseconds.

17 Blowtime 2nd crossfold
The time the blowpipes at the 2nd crossfold are activated. Time is in milliseconds.

18 Delay blow 1st crossfold
Delay blow/reverse 1st crossfold. Standard value is 100. If value smaller than 100, blowing is earlier than reversing, otherwise blowing is later than reversing. Time is in milliseconds.

19 Delay blow 2nd crossfold
Delay blow/reverse 2nd crossfold. Standard value is 100. If value smaller than 100, blowing is earlier than reversing, otherwise blowing is later than reversing. Time is in milliseconds.

21 Stacker number
The stacker where the pieces are stacked. Stacker 1 is the stacker closest to the crossfold.

22 Stacking height
When a stack reaches this number of pieces, the conveyor is activated and a new stack starts.

23 Couple stacker 2 with 1
Value 1 means that stacker 2 also uses stacker 1. Can be used in case of long pieces. If the value is 0, only stacker 2 is used.

24 Couple stacker 3 with 2
Value 1 means that stacker 3 also uses stacker 2. Can be used in case of long pieces. If the value is 0, only stacker 3 is used.

4) Alarms

001 EMERGENCY STOP
One of the emergency stops on the machine is/has been pushed. When no emergency switch is active anymore, the emergency stop can be reset with the 'reset' button.

002 MOTOR THERMICAL OFF
The thermical protection of one of the motors is active. Check if the concerning motor is jammed and release the protection again.

006 ERROR INVERTER
One of the frequency inverters is in alarm (motor stuck?). Reset can be done by switching off the inverter with the emergency stop and wait for about 20 seconds.

010 OBJECT OVERFLOW
Internal error. Too many pieces in the memory of the PLC. Restart the PLC.

011 SKI ENCODER ERROR
During the movement of the ski's, no encoder pulses have been detected for too long. Can be caused by a malfunction of the encoder of the motor.

015 FEED-IN PHOTOCELL COVERED
When the machine must start, the photocell at the start of the lengthfold section must be free. Remove pieces at this photocell and try again.

016 PIECES TOO CLOSE LENGTHFOLD
A new piece arrived in the lengthfold section while the previous piece wasn't finished. Remove the new piece and restart the machine.

020 ERROR BLOWPIPE LEFT
After the maximum blowtime, the left photocell in the lengthfold is still covered. Remove the piece and restart the machine.

021 ERROR BLOWPIPE RIGHT
After the maximum blowtime, the right photocell in the lengthfold is still covered. Remove the piece and restart the machine.

024 JAM FEED-IN PHOTOCELL
The photocell at the start of the lengthfold section has been covered too long. Remove the piece and restart the machine.

025 JAM IN LENGTHFOLD
A piece didn't arrive at the photocell at the start of the crossfold section. If the piece is jammed, remove it and restart the machine.

026 JAM IN CROSSFOLD
A piece didn't arrive at the photocell at the start of the stacker section. If the piece is jammed, remove it and restart the machine.

027 JAM STACKER PHOTOCELL
The photocell at the start of the stacker section has been covered too long. Remove the piece and restart the machine.

061 Jam in lengthfold
A piece didn't arrive at the photocell at the start of the crossfold section. If this happens twice, the machine will be stopped.

070 Fixed format not possible
The adjusted fixed format can't be reached because the length of the piece doesn't make this possible. Increase the format of the fixed format parameter.

098 Battery almost empty
The battery in the PLC is almost empty. It has to be replaced every year. Replace the battery as soon as possible to prevent loss of data.

099 CPU temperature too high
The temperature of de PLC-processor is too high. Reason can be a broken fan or a too high environment temperature.

128 Waiting for start
The machine is waiting for a start signal to be given by the startbutton.

130 Operating
The machine is running, no alarms or other notifications.