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Parameters and alarms

Triofeed V0200

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1) Machineparameters

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1.2) Machine parameters details

01 Centerposition

The middleposition for the left and right station in mm from the centerposition sensors.

10 Maximum width

The maximum width a piece can have in millimeters. If the clamp distance during spreading is bigger, the spreading cycle will stop and the clamps will be opened.

15 Moment slow speed before centerpos.

The moment the clamps go to slow speed just before the center position is reached. Value is in mm before the center position is reached.

20 Delay clamp up / start feed-in

The delay between sending the clamps of an outer station up and the moment the first clamps starts feeding in. Time is in milliseconds (0,001s).

22 Delay start spreading middle station

The delay between the moment the rail of the middle station is in spreading position and the moment spreading starts. Time is in milliseconds (0,001s).

26 Release position with stop

The position of the laydown system at the moment the piece is released in case the laydown system has been stopped. Value is in milliseconds from the stopposition.

27 Release position without stop

The position of the laydown system at the moment the piece is released in case the laydown system has not been stopped in the stopposition. Value is in milliseconds from the stopposition.

29 Delay blow-in next piece after previous

The distance the photocell in the suction box should be free before the next piece is allowed to be blown in into the suction box. Value is in main countwheel pulses.

30 Time activate blow-in blowpipe

The time the blowpipes to blow the piece into the suction box are activated. Value is in milliseconds.

31 Releasetime release arms at release

The time the cylinder of the release arms is activated when opening the clamps. Time is in milliseconds (0,001s).

32 Delay start release arms at release

The delay between the moment the release action starts and the moment the release arms are activated. Time is in milliseconds (0,001s). Take care when changing this value!

33 Delay start clamps outside at release

The delay between the moment the release action starts and the moment the clamps move outside. Time is in milliseconds (0,001s). Take care when changing this value!

34 Delay start venturi blow at release

The delay between the moment the release action starts and the moment the venturi blowpipes underneath the belts are activated. Time is in milliseconds (0,001s). Take care when changing this value!

35 Delay start blowing over at release

The delay between the moment the release action starts and the moment the blowpipes at the release arms are activated. Time is in milliseconds (0,001s). Take care when changing this value!

36 Delay start movement blow-over at rel.

The delay between the moment the release action starts and the moment the blow-over blowpipes will move to the front position. Time is in milliseconds (0,001s). Take care when changing this value!

37 Time movement blow-over blowpipe

The time the moveable blowpipes to blow the piece onto the laydown system stay in the front position. Time is in milliseconds (0,001s). Take care when changing this value!

40 Standby time

When the machine is in automatic feeding mode, it will switch off when no pieces have been fed for the time adjusted in this parameter. Value is in seconds.

41 Ironerspeed when machine in standby

When the feeder has switched into standby mode, the speed of the ironer will be switched to the value of this parameter (m/min). This can be used to save energy.

42 Waittime startup after ironer stop

When the ironer starts up after a stop, this is the time the feeder waits with starting up the main motor. Steps of 0,1s.

43 Run without ironer stop contact

When testing, this parameter can be put to 1. In this case, the machine ignores the ironer stop contact and will run while the ironer is stopped. In normal mode, the value should be 0.

46 Moment suction below belts on

The moment the valve for the suction below the belts opens. Value is a distance from the rest position and is in main countwheel pulses.

47 Distance suction below belts on

The distance the valve for the suction below the belts stays open. Value is a distance in main countwheel pulses.

50 Ironer length

The length of the ironer in centimeters. Is used for changing speed and changing the folding program.

51 Maximum speed of feeding machine

The speed of the feeding machine when 10 Volts is sent to the inverter. Is the maximum speed the feeding machine can run.

52 Minimum speed of ironer

The speed of the ironer when 0V is sent to the inverter. This is the minimum speed the ironer can run when it's operating.

53 Maximum speed of ironer

The speed of the ironer when 10Volts is sent to the inverter. Is the maximum speed the ironer can run.

54 Maximum speed of folding machine

The maximum speed of the folding machine in steps of 0,1 meters/minute. Is used to be able to control the speed of the folder in the right way.

60 Pulse size maincountwheel

The size of a pulse of the main countwheel in micrometers. ATTENTION!!! Changing this parameter can cause a complete machine stop.

61 Pulse size ironercountwheel

The size of a pulse of the ironer countwheel in micrometers. ATTENTION!!! Changing this parameter can cause a complete machine stop.

65 Reset counters without password

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

70 CAN-bus stationnumber this PLC

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

71 CAN-bus baudrate

Baudrate/communicationspeed of this PLC. Every PLC in a CAN network has to be adjusted to the same baudrate.

72 Folder with CAN-bus online

Value of 1 means that a folder with CAN-bus is online. In this case the feeder will start to communicate with the folder regarding programnumber and other data.

73 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).

76 Laydown system way/time correction

The correction used to always get the same stop position of the laydown system, independent of the machine speed. The higher the value, the more the correction, the later the stopposition. Take care when changing this value.

77 Release function way/time correction

The correction used to always get the same release position of the laydown system, independent of the machine speed. The higher the value, the more the correction, the later the release moment. Take care when changing this value.

78 Belt suction valve time/way correction

The correction used so the valve for the belt suction is always opened at the same moment, independent of the machine speed. Is the time the valve needs to open in milliseconds.

2) Program parameters

2.1) Overview program parameters

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- 02 Manual feeding program
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- 04 Reserved
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- 09 Reserved
- 10 Reserved
- 11 Ironer speed
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- 13 Relative speed folder (%)
- 14 Folding program
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- 16 Reserved
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- 25 Reserved
- 26 Moment start feeding in
- 27 Reserved
- 28 Distance between clamps after centering
- 29 Reserved
- 30 Reserved
- 31 Delay start spreading after centering
- 32 Only slow spreading
- 33 Minimum width fast spreading
- 34 Lifting device enabled
- 35 End spreading photocell debounce time
- 36 High spreading speed (%)
- 37 Action before releasing piece
- 38 Time of action before releasing piece
- 39 Offset release position laydown system
- 40 Reserved
- 41 Reserved
- 42 Position laydown system when blowing in
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- 44 Time of one venturi pulse
- 45 Delay between two venturi pulses
- 46 Number of blow-on pulses
- 47 Time of one blow-on pulse
- 48 Delay between two blow-on pulses
- 49 Stoptime belts during release
- 50 Stoptime belts during laydown
- 51 Moment start suction box after release
- 52 Delay stop suction after piece in box
- 53 Overlap / minimum piece distance
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55 Time belts wait for suction box
56 Maximum sheet length
57 Power of fans in suction box
58 Nr of pulses blowpipe blow-in
59 Cycletime blowpipe blow-in
60 Blow-in pulse on backside
61 Moment stop conveyor for stretching
62 Time stop conveyor for stretching
63 Enable brushes at ironer
64 Moment brushes at ironer down
65 Enable flaps at ironer
66 Moment flaps at ironer down
67 Reserved
68 Reserved
69 Reserved
70 Reserved
71 Feeding roll on
72 Suction in suction box on
73 Brushes in suction box on
74 Suction in suction box on
75 Position of moveable knives in box
76 Reserved
77 Reserved
78 Reserved
79 Reserved
80 Reserved

2.2) Program parameters details

01 Head in back position (manual)

This parameter indicates if this is a manual feeding program where the head is in the back position (value 1) or an auto-feeding program (0) where the head is in the front position.

02 Manual feeding program

This parameter indicates if this is a manual feeding program where manual feeding is done (Value 1). Value 0 means automatic feeding with the stations.

11 Ironer speed

When the machine controls the speed of the ironer, this parameter is the speed of the ironer in m/min.

12 Relative speed feeder (%)

The relative speed of the feeding machine in relation to the ironer (%).

13 Relative speed folder (%)

The relative speed of the folding machine in relation to the ironer (%).

14 Folding program

When a folder with CAN-bus is online, the folding program which has to be used can be adjusted with this parameter. When this program is selected, the folder will switch to this folding program.

26 Moment start feeding in

The moment the clamps start feeding in or start spreading with regard to the suction box :

0 = Start when front photocell is free

1 = Start when suction box finished

28 Distance between clamps after centering

This parameter is the distance between the clamps after centering in case of side feeding. Steps of millimeters.

31 Delay start spreading after centering

The delay between the moment the piece is centered and the moment the spreading cycle starts.

Steps of 0,001s.

32 Only slow spreading

Value 1 is only slow spreading without checking the photocell for slow spreading. 0 is slow spreading when photocell is covered.

33 Minimum width fast spreading

Fast spreading is always done for the width adjusted in this parameter, regardless of the slow spreading photocell or parameter 32. Value is in mm.

34 Lifting device enabled

Value 1 is using the lifting device. Value 0 disables the lifting device.

35 End spreading photocell debounce time

The end of spreading photocell has to be covered for this time before the release cycle may start.

Time is in milliseconds (0,001s).

36 High spreading speed (%)

The speed which is used during fast spreading. Value is in % of the maximum speed.

37 Action before releasing piece

Clamp action just before release:

0 = No action

1 = Disconnect clutches

2 = Extra step outside

38 Time of action before releasing piece

The time the clamp action adjusted in parameter 37 is done. Value is in milliseconds (0,001s).

39 Offset release position laydown system

Extra offset on the position of the laydown system when the release starts. A lower value means release starts earlier. Value is in milliseconds.

42 Position laydown system when blowing in

The position of the laydown system when the piece is blown in or where the laydown system waits until the suction box is ready. Value is in main countwheel pulses, counting from the stop position of the laydown system.

43 Number of venturi pulses

The number of pulses the venturi blowpipe underneath the belts is activated in case of releasing a piece.

44 Time of one venturi pulse

The time of one venture pulse of the blowpipe below the belts when releasing a piece. Time is in milliseconds (0,001s).

45 Delay between two venturi pulses

The delay between two pulses of the venture blowpipe below the belts when releasing a piece. Time is in milliseconds (0,001s).

46 Number of blow-on pulses

The number of pulses the release blowpipe is activated in case of releasing a piece.

47 Time of one blow-on pulse

The time of one pulse of the release blowpipe when releasing a piece. Time is in milliseconds (0,001s).

48 Delay between two blow-on pulses

The delay between two pulses of the release blowpipe when releasing a piece. Time is in milliseconds (0,001s).

49 Stoptime belts during release

The time the belts are stopped when a piece is released and layed down onto the belts. Steps of main countwheel pulses.

50 Stoptime belts during laydown

The time/distance the conveyor is stopped when the laydown system lays down a piece. Value is in main countwheel pulses.

51 Moment start suction box after release

The distance the front of the piece has gone into the machine before the suction box starts. Value is in main countwheel pulses.

52 Delay stop suction after piece in box

The delay between the moment the piece has gone into the suction box and the moment the suction box stops. Steps of 0,01s.

53 Overlap / minimum piece distance

The distance the backside of the previous piece has to be out of the suction box before the next piece may be released on the conveyor. Steps of main countwheel pulses.

54 Waitfunction belts wait for suction box

Belts wait until piece is insuction box before restarting.

0 = Don't wait

1 = Delay after box starts

2 = Delay after photocell in box covered

3 = Delay after front photocell not covered.

55 Time belts wait for suction box

The time the belts wait with restarting according to the function adjusted in parameter 54. Value is in 0,01s.

56 Maximum sheet length

The maximum length of the pieces in this program. Can be used to decrease waiting time of pieces which don't cover the photocell in the suction box. Steps of mainwheelpulses.

57 Power of fans in suction box

This parameter is used to adjust the power of the fans in the suction box.

1 = Low power

2 = Full power

58 Nr of pulses blowpipe blow-in

The number of times the blowpipe to blow the piece into the suction box is activated.

59 Cycletime blowpipe blow-in

The time between 2 pulses of the blowpipe to blow the piece into the suction box. Value is in steps of 0,01s.

60 Blow-in pulse on backside

If this parameter is 1, the blowpipe to blow the piece into the suction box, is activated once when the backside of the piece goes into the suction box. Value 0 disables this function.

61 Moment stop conveyor for stretching

The moment the stop conveyor is stopped to stretch the front of the piece. Steps of main countwheel pulses.

62 Time stop conveyor for stretching

The time/distance the stop conveyor is stopped to stretch the front of the piece. Steps of main countwheel pulses.

63 Enable brushes at ironer

Value 1 means that the brushes on the nose will be used. A value of 0 disables these flaps.

64 Moment brushes at ironer down

The moment the brushes at the ironer go down. Steps of main countwheel pulses.

65 Enable flaps at ironer

Value 1 means that the flaps on the nose will be used. A value of 0 disables these flaps.

66 Moment flaps at ironer down

The moment the flaps on the nose go down. Steps of main countwheel pulses.

71 Feeding roll on

A value of 1 means that the feeding roll is on during manual feeding. A value of 0 means that it is off.

72 Suction in suction box on

Suction during manual feeding:

0 = No suction

1 = Suction below belts

2 = Suction in suction box

73 Brushes in suction box on

0 means that brushes at suction box are off, 1 means that they are on during manual feeding.

74 Suction in suction box on

The usage of the suction box (only in case of a Triofeed Super):

0 = No suction box

1 = Suction on, low power

2 = Suction on, high power

75 Position of moveable knives in box

The position of the moveable knives in the suction box:

0 = Knives both down

1 = Use single lane knife

2 = Use multilane knife

3) 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 thermal protection of one of the motors is active. Check if the concerning motor is jammed and release the protection again.

003 VARAN-BUS ERROR

The connection with one or more backplanes on the varan IO-bus is lost. As soon as connection is re-established, message will disappear.

006 ERROR FREQUENCY 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.

007 24VDC POWER SUPPLY FAILURE

The transformer has detected a failure in the 24VDC circuit and switched this circuit off, because it can be caused by a short circuit.

008 NO AIR PRESSURE

The air pressure switch has detected that the air pressure is too low. Check air supply.

010 ERROR SPREADING ENCODER

While the spreading motor was running, no pulses from the encoder have been seen for too long. Check if motor is jammed and if encoder is ok.

011 ERROR CLAMPS MIDDLE

The clamps of the middle station didn't return to home position in time.

012 ERROR CLAMP 1

The left clamp of the left station didn't return to the home position in time.

013 ERROR CLAMP 2

The right clamp of the left station didn't return to the home position in time.

014 ERROR CLAMP 3

The left clamp of the right station didn't return to the home position in time.

015 ERROR CLAMP 4

The right clamp of the right station didn't return to the home position in time.

021 ERROR RAIL IN SPREADPOS.

The rail of the middle station didn't arrive in the spreading position in time. Rail can be jammed or sensor B210 isn't working.

022 ERROR RAIL IN HOMEPOS.

The rail of the middle station didn't arrive in the home position in time. Rail can be jammed or sensor B220 isn't working.

026 ERROR CENTERSENSOR LEFT

One of the clamps of the left station didn't see the sensor for the center position (B130) in time. Clamp can be jammed or sensor isn't ok.

027 ERROR CENTERSENSOR RIGHT

One of the clamps of the right station didn't see the sensor for the center position (B330) in time. Clamp can be jammed or sensor isn't ok.

033 Ironer stopped

The contact that the ironer is stopped isn't made. Because of this contact, the main motor is not allowed to run.

035 Fans overheated

One of the fans in the suction box gives an overheated signal. Check if none of the fans are jammed. Error can be reset when signal is gone.

040 Blocked by folder

The feeding stations are blocked by the folder, because of a speed change. When the speed is changed, the stations will restart.

045 Jam conveyor

A piece arrived at the conveyor photocell too late. This can be caused by a jam or when pieces are on top of each other when laying down.

047 Handprotection station 1

The photocell for the handprotection of the left station (B100) is covered. Therefore, all stations are stopped.

048 Handprotection station 3

The photocell for the handprotection of the right station (B300) is covered. Therefore, all stations are stopped.

050 Prespreading too big

The adjusted pre-spreading (programparameter 28) is too big. Therefore, the pre-spreading is changed to a valid value.

056 CAN-bus send error

An error occurred during sending of data by the CAN-bus. This can be caused by a wrong connection to the other machines.

060 Ironer stop disabled

The ironer stop contact isn't made, so the ironer isn't running, but this contact is disabled by the machine parameter for ignoring the ironer stop.

065 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.

066 CPU temperature too high

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

076 New program in ironer

On the feeding side, a new program has been chosen. This program change is now delayed through the ironer. After the program is switched, this notification will disappear.

083 Waiting for start

The machine is waiting for a start signal to be given by the startbutton on this touchscreen.

085 Operating

The machine is running, no alarms or other notifications.