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# Parameters and alarms

# AMKO Transfeed V0200

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# 1) Machineparameters

## 1.1) Overview machine parameters

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98 Waiting distance feeding prog change  
99 Waiting distance folding prog change

## **1.2) Machine parameters details**

### **01 Standby time**

When the machine is in automatic mode, it will go into standby mode when no clamps enter the machine for the time adjusted here. Time is in seconds.

### **06 Push time cylinder extra gate**

The time the cylinder of the extra full clamp gate is activated to send a new pair of clamps to the machine. Value is in ms (0,001s).

### **11 Maximum width**

The maximum width of a piece during spreading. Pieces wider than this width, will be dropped. Value is in mm.

### **16 Repositioning step at feed-in lift**

This parameter is used to adjust where the spreading stops to receive new clamps. A higher value means the 'teeth' will stop later. Value is in ms from the moment the spreading counting wheel is detected.

### **17 Delay start release arms**

The delay between the moment the release cycle starts and the moment the release arms are opened. Value is in ms (0,001s). Take care when changing this value!

### **18 Release time**

The time the cylinder of the release arms is activated to open the clamps. Value is in ms (0,001s).

### **19 Release position fast pick-up**

The position of the laydown beam of a Transfeed Super when the release cycle starts, in case the beam picks up at high speed. Value is in ms (0,001s) from the rest position.

### **20 Release position slow pick-up**

The position of the laydown beam of a Transfeed Super when the release cycle starts, in case the beam picks up at low speed. Value is in ms (0,001s) from the rest position.

### **21 Release position with stop laydown**

The position of the laydown system of a Transfeed II when the release cycle starts after a stop of the laydown system. Value is in ms (0,001s) from the rest position.

### **22 Release position without stop laydown**

The position of the laydown system of a Transfeed II when the release cycle starts when the laydown system didn't make a stop. Value is in ms (0,001s) from the rest position.

### **23 Reverse moment laydown beam**

The moment the laydown beam reverses after laying down a piece. Value is in ms (0,001s) from the moment the rear position sensor is detected. Is only used in Transfeed Super machines.

### **25 Delay start blow-over**

The delay between the moment the release cycle starts and the moment the blowpipes at the release arms start. Value is in ms (0,001s). Take care when changing this value!

### **26 Delay start blow-over movement**

The delay between the moment the release cycle starts and the moment the movement of the blowpipes at the release arms start. Value is in ms (0,001s). Take care when changing this value!

### **27 Time blow-over movement**

The time the blow-over pipes stay in the front position after blowing-over a piece. Value is in ms (0,001s). Take care when changing this value!

**28 Delay start clips outside**

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

**31 Maximum times release 1-point clipped**

The allowed maximum number of times a piece may be released because it's only in 1 clamp. After reaching this number, feeding of new pieces is blocked. Value 0 disables this function.

**36 Correction stopmoment laydown system**

The correction which is used to let the laydown system always stop in the same position, independant of the speed. Take care when changing this value! Is only used in Transfeed II machines.

**37 Correction release moment laydown system**

The correction which is used to let the release cycle always start at the same position, independant of the speed. Take care when changing this value! Is only used in Transfeed II machines.

**41 Delay blow-in piece after previous gone**

The distance the trailing edge of the previous piece must be out of the suction box (photocell free) before the next piece is blown in. Value is in mm.

**46 Moment brushes at ironer up**

The moment the brushes at the ironer are sent up when the leading edge of a new piece arrives. Value is in mm.

**47 Time brushes at ironer up**

The time/distance the brushes at the ironer stay up when the leading edge of a new piece passes. Value is in mm.

**48 Moment flaps at ironer up**

The moment the flaps at the ironer are sent up when the leading edge of a new piece arrives. Value is in mm.

**49 Time flaps at ironer up**

The time/distance the flaps at the ironer stay up when the leading edge of a new piece passes. Value is in mm.

**51 Waxprogram for folding machine**

The program which is sent to the folding machine when the machine is put into manual mode. For example for waxing. Value 0 means no program will be sent.

**52 Program i.c.o. unknown customer/article**

In case a customer separation system is present and there is no valid customer/article available, this feeding program will be used.

**53 Ironer speed when machine in standby**

When the feeder goes into standby, this speed will be sent to the ironer (m/min). Can be used to save energy and is also the speed used in manual mode.

**56 Waittime startup after ironer stop**

When the ironer starts after a stop, this is the time the feeder waits with starting the laydown belts to let the ironer accelerate. Value is in steps of 0,1s.

**57 Run without ironer stop contact**

When testing, this parameter can be set to 1. The laydown belts of the machine will run, regardless from if the ironer is running or not. In normal operation, value of this parameter should be 0.

**58 Timer ironer 0-speed when folder stops**

If the ironer stop signal is coming from the folder, and the folder stops, this is the time the ironer is stopped (seconds).

**61 Length of extra buffer in front machine**

The length of the extra rail after the railsystem. Is the time a clamp pair needs to get from the rail system to the extra full clamp gate. Value in steps of 0,1s.

**62 Lengte buffer in front of machine**

The time a clamp pair needs to get from the last gate to the feed-in gate in the machine. Value in steps of 0,1s.

**63 Delay full clips buffer full**

The time the sensors for buffer full must be covered before the buffer is really considered to be full. Value is in steps of 0,1s.

**64 Delay full clips buffer not full**

The time the sensors for buffer full must be uncovered before the buffer is really considered to not be full anymore. Value is in steps of 0,1s.

**66 Ironer length**

The length of the ironer in centimeters. Is used to change speed and folding program.

**67 Maximum speed 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.

**68 Minimum speed 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.

**69 Maximum speed ironer**

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

**70 Maximum speed 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.

**76 Pulse size main countwheel**

The size of a pulse of the main countwheel in steps of 0,01mm. ATTENTION!!! Changing this parameter can cause a complete machine stop.

**77 Pulse size ironer countwheel**

The size of a pulse of the ironer countwheel in steps of 0,01mm ATTENTION!!! Changing this parameter can cause a complete machine stop.

**81 Function of call-clamps stop button**

The buttonfunction to stop calling clamps:

0 = Stop new clamps from railsystem.

1 = Stop new clamps from extra gate.

**82 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.

**83 Customer separation system enabled**

1 means a the customer separation system is enabled. Value 0 disables the system.

**84 Customer/article database from PC**

Value 1 means that the database for customer/articles is coming from a PC. Value 0 means the database is managed in this PLC. Don't set to 0 in case of a PC.

**86 CAN-bus stationnumber this PLC**

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

**87 CAN-bus baudrate**

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

**88 Folder with CAN-bus online**

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

**89 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).

**96 Waiting distance customer change**

In case of a new customer, the machine will wait with feeding in until the previous piece is gone for the here adjusted distance. Steps of centimeters.

**97 Waiting distance article change**

In case of a new article, the machine will wait with feeding in until the previous piece is gone for the here adjusted distance. Steps of centimeters.

**98 Waiting distance feeding prog change**

In case of a new feeding program, the machine will wait with feeding in until the previous piece is gone for the here adjusted distance. Steps of centimeters.

**99 Waiting distance folding prog change**

In case of a new folding program, the machine will wait with feeding in until the previous piece is gone for the here adjusted distance. Steps of centimeters.



## 2) Program parameters

### 2.1) Overview program parameters

01 Reserved  
02 Reserved  
03 Folding program  
04 Ironer program  
05 Ironer speed  
06 Relative speed feeder (%)  
07 Relative speed folder (%)  
08 Reserved  
09 Reserved  
10 Reserved  
11 Lane to call from railsystem  
12 Reserved  
13 Enable spreading belts motor/cylinder  
14 Maximum time for twist correction  
15 Reserved  
16 Wait function feeding lift  
17 Minimum width fast spreading  
18 Only slow spreading  
19 Spreading speed during slow spreading  
20 Running clean distance after release  
21 Enable lifting  
22 Time lift piece with roll/venturi  
23 Reserved  
24 Reserved  
25 Reserved  
26 Debounce time end of spreading pc.  
27 Pick-up piece with slow speed  
28 Action before releasing piece  
29 Time action before releasing piece  
30 Reserved  
31 Number of blow-on pulses  
32 Time of one blow-on pulse  
33 Time between two blow-on pulses  
34 Stoptime laydown beam at release  
35 Offset on release position  
36 Reserved  
37 Reserved  
38 Reserved  
39 Reserved  
40 Reserved  
41 Position laydown beam when blowing in  
42 Number of blow-in pulses  
43 Waiting function piece in suction box  
44 Wait time piece in suction box  
45 Reserved  
46 Time between two venturi pulses  
47 Maximum number of venturi pulses  
48 Delay stop venturi after piece in box  
49 Reserved  
50 Reserved  
51 Minimum distance between pieces  
52 Maximum length of the pieces  
53 Stoptime belts during laydown

- 54 Close suction during laydown
- 55 Reserved
- 56 Moment stop stopbelts
- 57 Time/distance stop stopbelts
- 58 Reserved
- 59 Reserved
- 60 Reserved
- 61 Enable brushes at ironer
- 62 Enable flaps at ironer
- 63 Reserved
- 64 Reserved
- 65 Reserved
- 66 Reserved
- 67 Reserved
- 68 Reserved
- 69 Reserved
- 70 Reserved

## **2.2) Program parameters details**

### **03 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.

### **04 Ironer program**

When the machine can change the program of the ironer, this is the program sent to the ironer.

### **05 Ironer speed**

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

### **06 Relative speed feeder (%)**

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

### **07 Relative speed folder (%)**

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

### **11 Lane to call from railsystem**

The lane to call from the railsystem.

0 = Automatic with program change.

1.8 = Lane nr 1..8

9 = Automatic, no program change.

### **13 Enable spreading belts motor/cylinder**

Usage of the spreading belts:

0 = To front, motor off

1 = To rear, motor on

2 = To front, motor on

### **14 Maximum time for twist correction**

The maximum time a piece has to cover the photocells below the spreading belts. If the photocells are not covered within this time, the sheet will be dropped as 'twisted'. Value 0 means twist correction is disabled.

### **16 Wait function feeding lift**

The position where the feed-in lift waits until the previous piece is outside the suction box:

0 = Don't wait, do 1st step

1 = Lift waits halfway

2 = Lift waits at feed-in gate

### **17 Minimum width fast spreading**

Always spread fast for the width in this parameter, regardless from if the photocell slow spreading is covered or the value in parameter 18. Value is in mm.

### **18 Only slow spreading**

Value 0 is slow spreading, depending on photocell slow spreading. Value 1 is always slow spreading.

### **19 Spreading speed during slow spreading**

The spreading speed during slow spreading. Value is a percentage from the maximum speed.

### **20 Running clean distance after release**

With this parameter is adjustable how long the spreading continues after releasing a piece. Is used to get the clamps out of the machine before the next clamps are fed into the machine. Value is in mm.

**21 Enable lifting**

Lift piece when it is spread:

- 0 = Off
- 1 = Lifting short on\*
- 2 = Lifting long on\*
- 3 = Lift with roll\*
- 4 = Lift with roll and lifter

**22 Time lift piece with roll/venturi**

This is the time the roll and the venturi are activated when the sheet has to be lifted with the roll. Time is in steps of 10ms (0,01s).

**26 Debounce time end of spreading pc.**

The time the photocell end of spreading has to be covered before the laydown system is started to pick-up the piece. Value is in ms (0,001s).

**27 Pick-up piece with slow speed**

With a Transfeed Super it is possible to pick-up the piece slowly. If this parameter is set to 1, the beam will pick-up slowly. Value 0 means a fast pick-up.

**28 Action before releasing piece**

Action before releasing:

- 0 = No action
- 1 = Disconnect clutches
- 2 = Extra spreading step

**29 Time action before releasing piece**

The time the extra action adjusted in parameter 28 is activated. Value is in ms (0,001s).

**31 Number of blow-on pulses**

The number of times the blowpipe at the release is activated when releasing a piece.

**32 Time of one blow-on pulse**

The time the blowpipe at the release is activated when releasing a piece. Value is in ms (0,001s).

**33 Time between two blow-on pulses**

The time between 2 pulses of the blowpipe at the release arms when releasing a piece. Value is in ms (0,001s).

**34 Stoptime laydown beam at release**

The time the laydown beam is stopped at the release position when releasing a piece. Value is in ms (0,001s).

**35 Offset on release position**

With this parameter the release moment can be fine-tuned. The higher the value, the later the release cycle starts. Value is in ms (0,001s).

**41 Position laydown beam when blowing in**

The position of the laydown system when blowing a piece into the suction box or where the system waits before the suction box is ready for the next piece. In a Transfeed II the value is in countwheel pulses, in a Transfeed Super the value is in ms (0,001s).

**42 Number of blow-in pulses**

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

**43 Waiting function piece in suction box**

Startmoment parameter 44:

0 = Don't wait

1 = When suction box starts

2 = When photocell in box covered

3 = When front photocel uncovered

**44 Wait time piece in suction box**

The time the laydown system waits with laying down until the sheet is into the suction box. Time starts according to adjustment in parameter 43.

**46 Time between two venturi pulses**

The time between 2 venturi pulses when blowing a piece into the suction box. Value is in ms (0,001s).

**47 Maximum number of venturi pulses**

Maximum number of times the venturi is activated. Is used when a piece is not going into the suction box well.

**48 Delay stop venturi after piece in box**

The time the venturi continues after the piece is into the suction box (photocell front side uncovered). Value is in ms (0,001s).

**51 Minimum distance between pieces**

The distance the trailing edge of the previous piece must be outside the suction box before the next piece is allowed to be layed down. Value is in mm.

**52 Maximum length of the pieces**

The maximum length of a piece in this program. Value is in mm and is used when a piece is not going into the suction box.

**53 Stoptime belts during laydown**

The distance/time the belts are stopped when the laydown system starts laying down a piece. Value is in mm.

**54 Close suction during laydown**

Value 1 means the suction of the laydown beam is closed during laydown. Value 0 disables this function. Is only used in case of a Transfeed Super.

**56 Moment stop stopbelts**

The moment the 1st belts stop after laying down a piece. Is used to stretch the leading edge of the piece. Value is in mm.

**57 Time/distance stop stopbelts**

The distance the 1st belts stop after laying down a piece. Is used to stretch the front of the piece. Value is in mm.

**61 Enable brushes at ironer**

Value 1 enables the brushes at the ironer. Value 0 disables them.

**62 Enable flaps at ironer**

Value 1 enables the flaps at the ironer. Value 0 disables them.

### **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.

#### **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 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.

#### **007 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.

#### **031 Alarm inverter laydown beam**

The inverter of the laydown beam gives an alarm. Reset can be done by switching off the inverter with the emergency stop.

#### **032 Beam movement error**

The laydown beam should have moved to the front or rear, but the sensor for detecting the front or rear position hasn't been detected for too long.

#### **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 Manual feeding active**

The machine is not in automatic feeding position.

#### **036 Air pressure too low**

The air pressure switch indicates a too low air pressure. Because of this, feeding is stopped.

#### **037 Thick piece detected**

A too thick piece is detected. This can be because of a piece which is fed wrong. To protect the ironer, the motor is stopped. Use the button to remove the piece.

#### **038 Feed-in roll stuk**

While the feed-in roll should be running, the sensors which detect that the roll is turning, did not give a signal for too long. Reason can be a stuck roll.

#### **040 Time-out extra gate**

The extra full clamp gate is in home position too late. Reason can be a clamp jam or the sensor for home position which is not working properly.

#### **041 1 clamp in gate**

In the extra full clamp gate only 1 clamp is detected. This can be because of an odd number of clamps.

#### **042 Alarm clutch spreading**

The spreading clutch has been on without any pulses detected for too long. Can be because of clamp jam.

#### **043 Overcurrent feed-in lift**

The motor control print P150 of the feed-in lift gives an overcurrent signal. This can be because the lift is jammed.

**044 Feed-in lift movement error**

The feed-in lift is supposed to move but the sensors for detecting the homeposition or spreading position have not been detected.

**045 Empty clamp buffer full**

The buffer for empty clamps behind the feeder is full.

**047 Too many pieces in 1 clamp**

The maximum spreading has been reached too much while the machine has detected that there was a piece in 1 of the clamps. This can be because of an odd number of clamps in the machine.

**049 Feed-in blocked externally**

The input for blocking the feeding in of new clamps gives a signal. This stops the feeding in of new clamps.

**050 Spreading belt photocells covered**

The last piece which was blown into the suction box sill detects the photocells below the spreading belts. New clamps are therefore not allowed to go into the machine.

**052 Maximum spreading left side**

The photocell which checks if there is still a piece in the clamps on the left side was covered. Check if the clamp on the left side is really empty.

**053 Maximum spreading right side**

The photocell which checks if there is still a piece in the clamps on the right side was covered. Check if the clamp on the right side is really empty.

**054 System is being emptied**

The switch for emptying the system is on. This means that the feed-in lift will be sent to the middle position and that the gate will feed clamps to get them out of the system.

**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.

**075 Creating gap**

The machine waits with feeding new pieces to create a gap between the previous piece and the next piece.

**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.

**078 Emptying extra rail**

Because of a program change or a customer/article change, the extra rail must be emptied. As soon as the rail is empty, the message will disappear.

**079 Emptying machine**

Because of a program change or a customer/article change, the machine must be emptied. When the machine is empty, the message will disappear.

**080 Machine in standby**

The machine didn't receive new clamps during the adjusted standby time. When new clamps enter the machine or when the start button is pushed, the machine will restart.

**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.