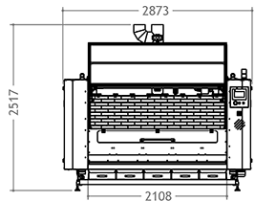
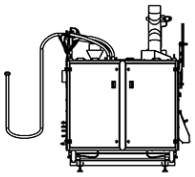
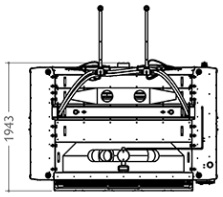
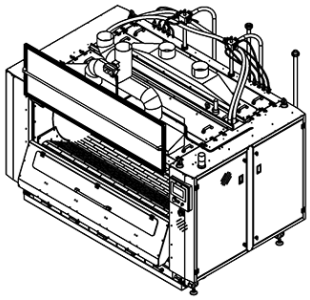
RESİM ÜZERİNDEN ÖLÇÜ ALMAYINIZ / DO NOT SCALE DRAWING
AKSİ BELİRTİLMEDİĞİ SÜRECE BÜTÜN ÖLÇÜLER MİLİMETREDİR / UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS









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e-mail: info@akaygam.com

AÇIKLAMA / DESCRIPTION			ADET PCS	MALZEME / Material :	TEDARİKÇİ / Supplier :
				AĞIRLIK / Weight: 1562.00	
			1	RESİM NO / DWG NO.: BTC2000v5	
	İSİM / NAME	İMZA / SIGNATURE	TARİH / DATE	KONFİGÜRASYON / Conf.: Default	
ÇİZEN / DRAWN				KAPLAMA / Coating:	A4
KONTROL EDEN / CHK'D			5/31/2021	TAVLAMA / Heat tread:	SCALE: 1:100
ONAYLAYAN / APP'VD				ÜRÜN KODU / PROD. Code:	SHEET: 1 OF 1

1- PRODUCER's INFORMATION

Company name : Akay gıda ambalaj makina san. ve tic. ltd. şti.

Brand : AkayGAM

Production area :

Bakır ve pirinç san. koop. Mustafa Kurtoğlu cad. No 5 kat 2 Beylikdüzü / IST / TR

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COUNTRY: TÜRKİYE

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2- TECHNICAL INFORMATION

2.1 USED FOR

Coating cabins are dragee-type chocolate panning machines. They are used to cover various centers with chocolate, yogurt, fat based syrup or chocolate-flavored compounds. A reversible, variable-speed main drive to the polypropylene belt provides easy product discharge. Belt speed can be set by changing a variable on HMI (Don't set it less then 10, in case stop of belt is required use 1-0-2 switch on control board.).

2.2 WORKING PRINCIPLE

Be sure that arround coating cabin is clean. Rotation speed of modular belt is adjustable by variable added on HMI. Select the automatic mode in touch screen and start the belt rotation motor and make speed adjustment by variable parameter on HMI. While loading or unloading be sure that machine is stopped.

To get max. productivity of coating cabin, the area where the coating process is executed must be air and humidity conditioned place. Coating room temperature & humidity must be stable.

Acceleration time & deceleration time can be tuned by using some settings of the VFD. Value of P109 is for acceleration time. Value of P110 is for deceleration time. These setting are already tuned by AkayGAM. Lower value of P109 & P110 can damage gearbox as sudden speed-up can break gears inside it. For more information you can use user manual of the VFD.

2.3 TECHNICAL INFORMATION

Model	:	BTC2000
Capacity	:	400lt. (ARTICLE + COATING)
Height	:	2520 mm
Depth	:	1950 mm
Width	:	2880 mm
Weight	:	1570 kg
Total power	:	4.8 kw
Production date	:	2021
Frequency	:	50 Hz
Voltage	:	380 V

3- SAFETY INSTALLATION START-UP

3.1 SAFETY INSTRUCTIONS

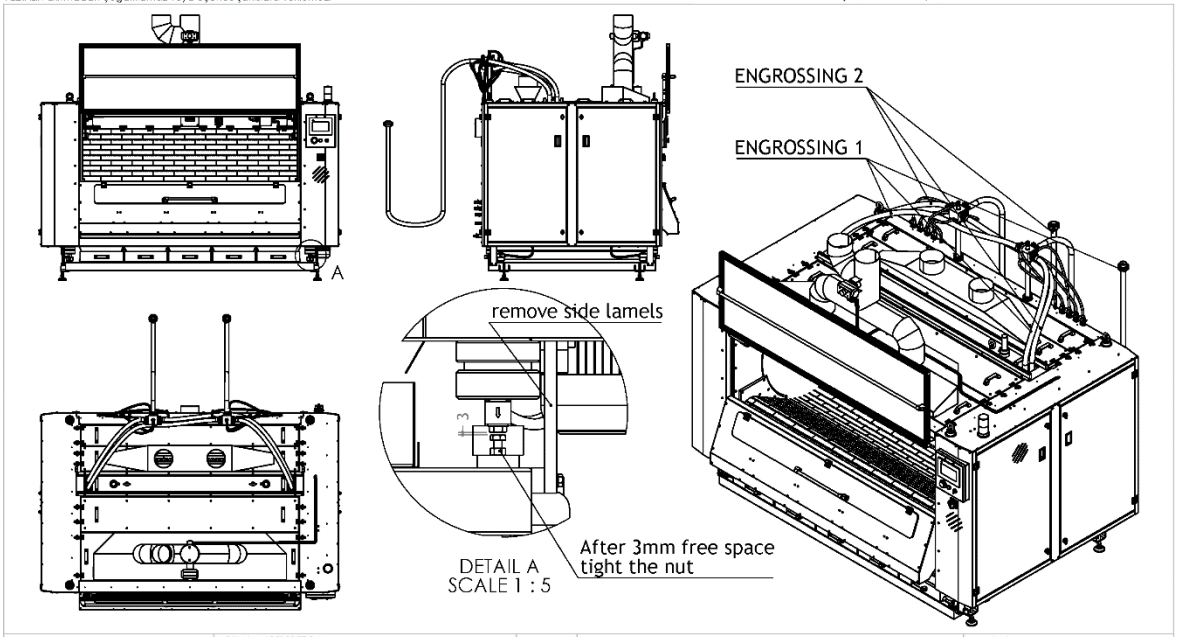
1- Staff which is certified by AkayGAM can work with this machine
2- Cut off the electricity while cleaning, repairing or making adjustments
3- Machine must be repaired by qualified staff. If repairing is made by unqualified staff this can cause accidents
4- Use only original spearparts or parts adviced by the producer. Using of other spearparts can cause damage of machine in which situation producer can not be held responsible
5- Don't make any changes without producer's permission. Use only approved by producer accesories.
6- Don't remove and don't make unusable fixed or movable shields
7- Before start the machine be sure that all shields are closed
8- Don't start machine until dissasembled parts are mounted back to their places
9- Machine electrical parameters are 380VAC, 50Hz. Other voltages or voltage change at net can cause damage of electrical parts
10- Machine must be connected to plug with ground. Never remove ground connection
11- Using of unsuitable materails or overloading machine can effect machines working
12- Use filters to prevent unknown materials entering the dripping body
13- Ignoring the instructions above may cause injury of staff and/or damage of machine in this situation producer cannot be held responsible
14- Don't lower vales of acceleration & deceleration time (P109 & P110)

3.2 INSTALLATION INSTRUCTION

Machine must be installed by qualified staff. Wrong assemblies can cause injury of stuff and/or damage of machine. While moving or lifting take due precautions.

1- Machine must be installed in flat surface.
2- Because of loadcells are very sensitive elements they were stabilized by screws and side lamels. Please see figure 1.1. Each loadcell is with 1000kg. loading capacity. While removing lamels and adjusting the screws with aproximately 3mm free distance be careful to not apply any shock or vibration on loadcells.
3- Install machine with free surface aproximatelly 1000mm at its back and side and also free space at its front more then 1000mm
4- Make electrical connections, test the machine if necessery to reverse rotation direction then change phase. Machine is phase protected so it may not work until the correction is made.
5- Machine works in 380V 50Hz electricity.
6- Connect the dripping device to storage tank with pump, pressured air to machinery, blower of chiller to machinery. After compressed air is connected to machine check the position of the valve at the hood. Please see figure 1.2.
7- Connect flexible hoses to dripping body and distribution bodies. FIG 1.1

RESİM ÜZERİNDEN ÖLÇÜ ALMAYINIZ / DO NOT SCALE DRAWING
AKSİ BELİRTİLMEDİĞİ SÜRECE BÜTÜN ÖLÇÜLER MİLİMETREDİR / UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS



akaygam	AÇIKLAMA / DESCRIPTION			ADET PCS	MALZEME / Material :	TEDARİKÇİ / Supplier :	
				1	AĞIRLIK / Weight: 1562000.14		
					RESİM NO / DWG NO.: BTC2000v5-DESCRIPTION	DİŞ SAYISI / Nr. of teeth :	
		İSİM / NAME	İMZA / SIGNATURE	TARİH / DATE	KONFİGÜRASYON / Conf.: Default	MODULE / Chain pitch : m = /Z =	
AkayGAM Ltd. tel: +90 505 298 17 41 web: www.akaygam.com e-mail: info@akaygam.com	ÇİZEN / DRAWN			6/2/2021	KAPLAMA / Coating:		A4
	KONTROL EDEN / CHKD				TAVLAMA / Heat tread:		SCALE: 1:100
	ONAYLAYAN / APP'D				ÜRÜN KODU / PROD. Code:		SHEET: 1 OF 2

Fig.1.1

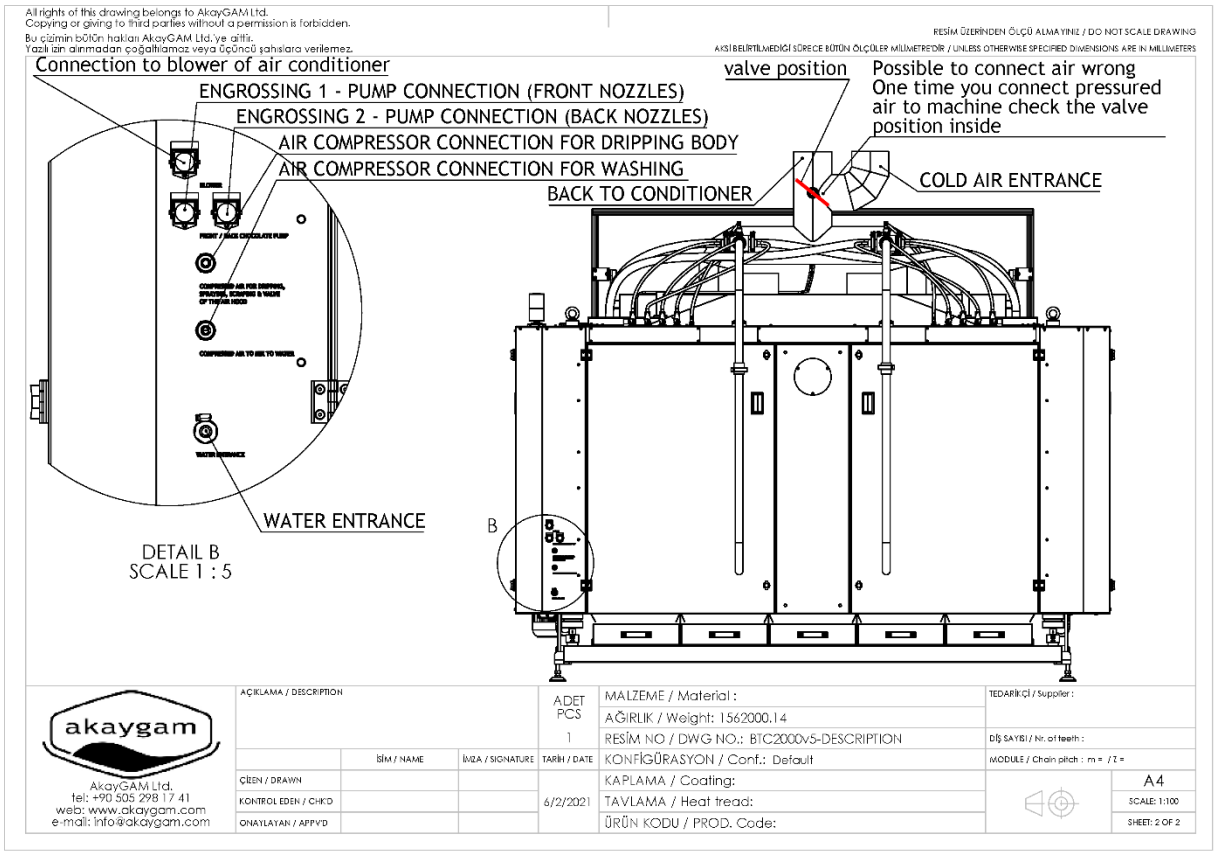


Fig.1.2

3.3 START-UP INSTRUCTIONS

Educated and approved by certificate for using of BTC2000 can start-up the machine. On HMI we use blue, red, green & orange cells.

Blue cell is a passive button (information is written inside cell)
(when activated will become red)

Red cell is an activated button (information is written inside cell)
(when passivated will become blue)

Green cell is an information cell (information is written inside cell)
(this can be read value of sensors or some extra information)

Orange cell is a variable parameter (entered number will be shown)
(this can be counter, temperature, frequency, time, weight)
(inside cells type of variable and its scale is informed)
(time values are in seconds)
(gr, kg, °C, number, seconds, miliseconds etc.)

Coating cabin (BTC2000) (FLAG > CUSTOMER SETUP)

1- Be sure that around machine is clean
2- Be sure that all guards are on place
3- Open main switch
4- One loadcell protection lamels are removed & the screws are freed
5- Go to customer setup screen
6- Adjust the pressure sensor (pressure which will stop pump and protect machine) (RECOMMENDED VALUE IS 2 BARS)
7- If machine is empty but loadcells are showing different then 0 (or shows *** which means negative weight) then Reset the loadcell devices (see fig. 1.3) Please read information written on “CUSTOMER SETUP” page
8- Write “actual measured temperature” in orange cell (same as showing value in green cell), write same vale to “external thermometer” in orange cell so somehow DIFFERENCE to be “0”. In case difference in showing temperatures you can adjust later.
9- While operating machine you may need to pause equipment. “Allow belt run while pause button is active” when is activated it will become red and when you click pause button belt will not stop.
10- While operating machine you may need to pause equipment. “Allow cool air while pause button is active” when is activated it will become red and when you click pause button cold air will continue to work.
11- LEFT BOTTOM CORNER PARAMETERS ARE FOR AIR CONDITIONER. NOT RELATED FOR YOUR MACHINE.
12- Blower image is blue which means that it is an on/off button. When you click the blower image machine will switch on the blower of the air compressor.

13- Near to the blower image 

You can select how the blower will work in case blower works continuous then machine will switch the air flow from the pneumatic actuator (valve position at FIG1.2). In case blower works on/off then machine will open gate once (valve position at FIG1.2) and allow air flow to machine but when no need then will switch off the blower.
14- Click save button

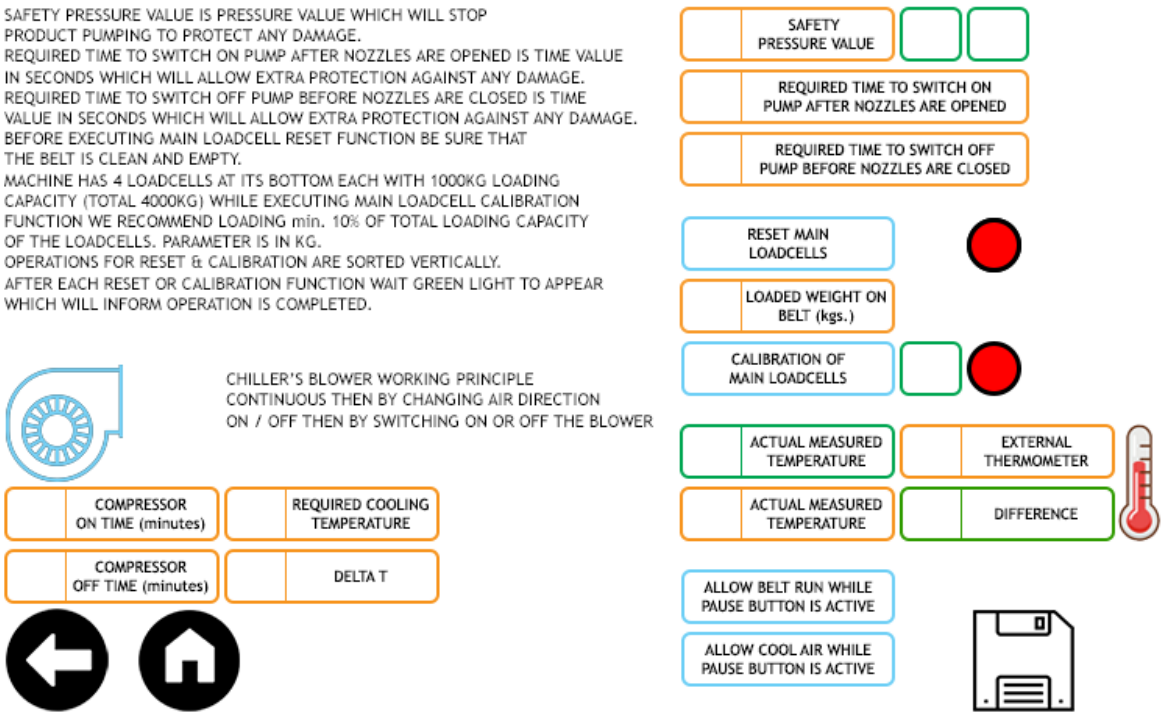


FIG1.3 (to enter to this page follow FLAG > CUSTOMER SETUP)

Coating cabin (BTC2000) (FLAG > WORK)

1- Select the work type (LOADCELLS ARE ENABLED is the standard working selection) In case any of loadcell is damaged to allow machine to be able to work you can switch off LOADCELLS then you will be redirect to the suitable for this selection work page. (FIG1.4)
2- Click save button and click “finger” button. (FIG1.4)
3- In case LOADCELLS ARE ENABLED is selected > “finger” button is pressed work screen will be as FIG1.5 otherwise as FIG1.6

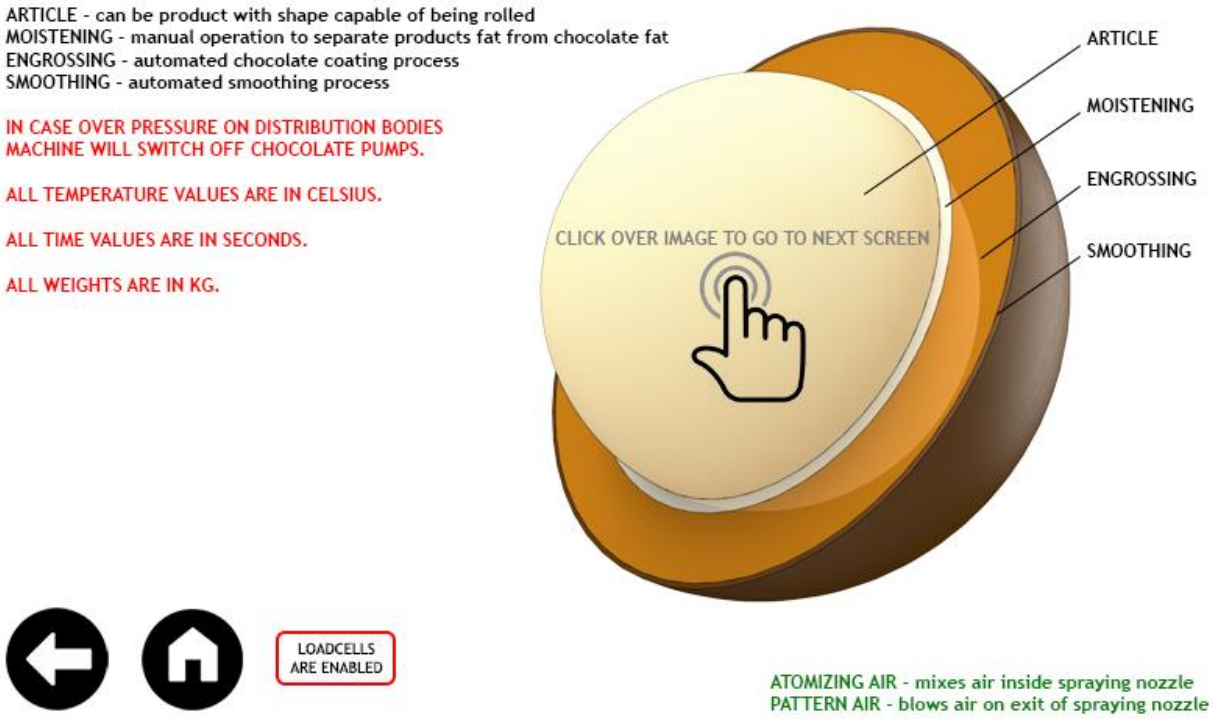


FIG1.4

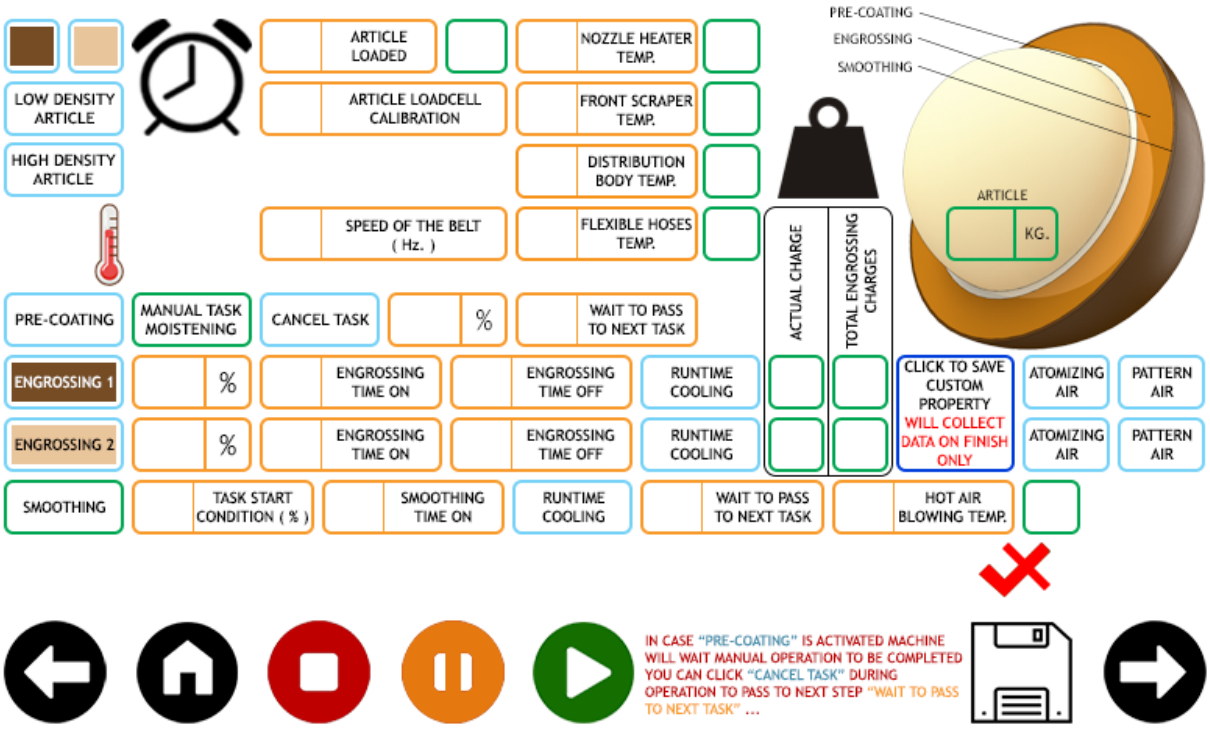


FIG1.5

1- Select which nozzle side will work
2- Select density of article (in case low density selected then sprayers will be activated in case high density is activated then dripping will be activated)
3- Write loaded article to orange cell (value in kg.). In case at the green cell shows different then loaded article write the difference to article loadcell calibration so green cell and article loaded to be equal.
4- Write heating values (in °C) next to these values in green cells shows the actual temperatures.
5- Adjust speed of belt from "SPEED OF THE BELT" orange cell
6- Pre-coating is a manual operation, in case separation of centers' oil with chocolate fat is required you can use to seal the centers before coating process. Write the percentage of the sealing (in case you load 100kg product and selected 10% this will mean that machine will switch to next task after total weight is 100 + 100 * 10 / 100 = 110KG) Be aware that if you don't feed manually a sealing material then machine will never pass to next task. (If button PRE-COATING is left passive and WAIT TIME TO PASS TO NEXT TASK is 0 then machine will continue directly with coating)
7- In case you think sealing is enough you can click "CANCEL TASK" and without waiting the percentage to be reached machine will pass to next step. "WAIT TO PASS TO NEXT TASK" value in seconds.
8- After this time is completed machine will pass to coating process. Write the coating percentage (in case 100% and 100kg loaded then machine will finish coating on 100 + 100 * 100 / 100 = 200KG)
9- Select time for coating in seconds, select time for not coating in seconds.
10- In case RUNTIME COOLING is activated machine will blow cold air inside cabin continuously otherwise will feed cold air only at not-coating interval.

11- Smoothing is the operation which switchs hot air blowing so to product to become smooth. It can be switched on at any stage of coating process. İn case 100% then after all coating charges are finished smoothing will start in case 80% then machine will switch on hot air at 180KG (DATA VALID FOR OPTION AT POINT 8)

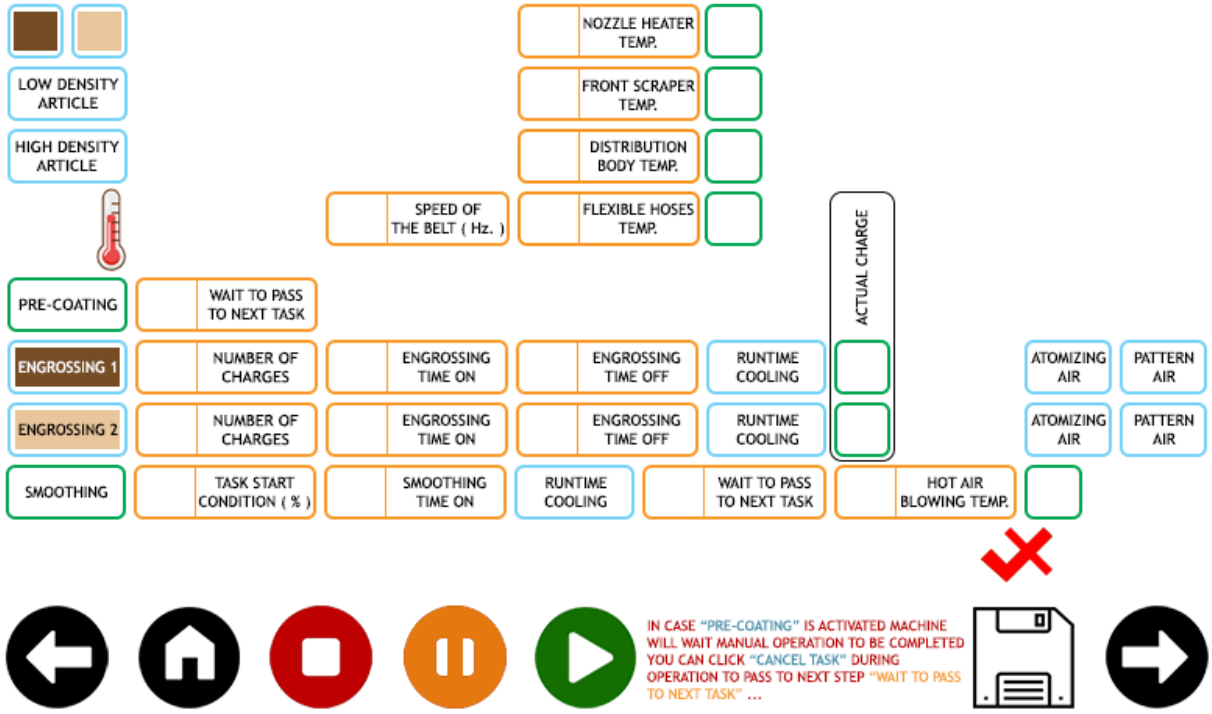


FIG1.6

WORKING PRINCIPLE OF WORK WITHOUT LOADCELLs IS SIMILAR TO FIG1.5 BUT HERE NUMBER OF CHARGES HAS TO BE ADDED.

3.3.1 END OF SHIFT

1. Try to leave less as possible product inside the machine
2. Clean with wet cloth
3. Don’t use hard materials like hummer to clean sugar layer over belt

3.3.2 WEEKEND

1. Close main switch
2. Clean machine
3. Grease the housings

4- MAINTANANCE INSTRUCTION

1. Clean electrical panel with dry air once a year
2. Check the cable connections inside the panel once a year
3. Grease housings every 6 months

5- STORE

If machine is going to be stored for over 3 months, don’t remove ambalague. If ambalague is removed wrap machine with plastick material. Store machine at dry and cool place. Protect machine from dust and wet. Don’t store machine at cold place. If machine is not going to be used for a long time remove all chocolate inside it, empty water, clean machine and wrap with plastic material

6- WARRANTY

This limited warranty is valid 12 months strating from the date of buying against construction and mounting errors except for the standard parts.

TERMS OF GUARANTEE

1- Guarantee is valid for 12 months
2- Damages accured because of the user’s mistake are out of guarantee
3- Shortlife parts are out of guarantee
4- Damages accured because of accidents and/or natural disasters are out of quarantee
5- Buyer is responsible of maintenence of machine. Damages accured because of lack of maintenence are out of guarantee
6- This warranty is limited with BTC2000. Damages accured at other units are out of the guarantee
7- AkayGAM is not responsible of loss of profits

This machine is warrantied until 7/2022

7- CERTIFICATE OF TRAINING

CERTIFICATE OF TRAINING

Below indicated stuff was trained between ...../...../..... - ...../...../.....

At the end of training this certificate was given. User manual has been delivered.

Machine name BTC2000 chocolate coating cabin

Model: BTC2000

Operator name:

User manual has been

delivered to

Name – Signature

IMAGE BASED INSTRUCTION

Connect flexible hoses as illustration below

Remove lamels

3mm free distance from screw to loadcell

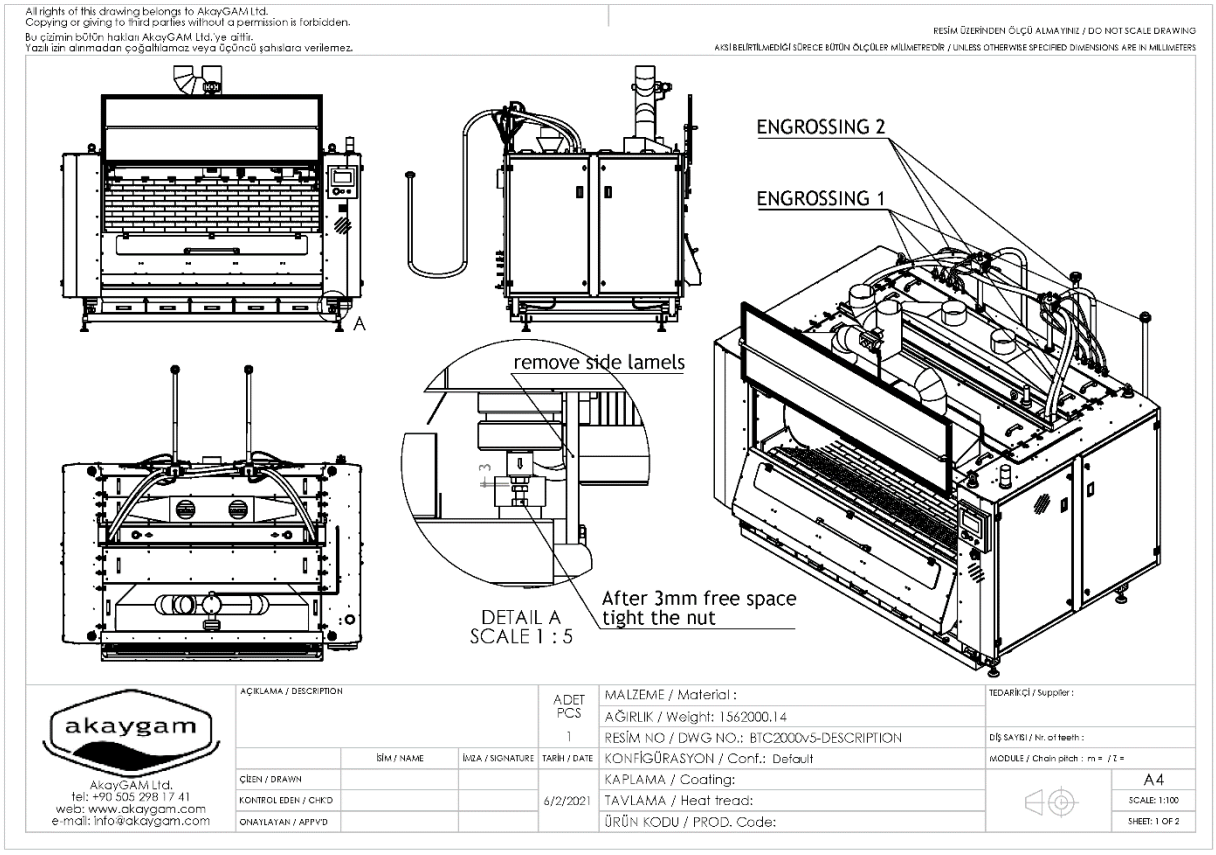


FIG1.7

FIG1.8

Above is the page when you switch on machine. To pass to next screen please click left bottom corner image (GB FLAG)

FIG1.9

Above is page of selection operation type; CUSTOMER SETUP, WORK, CLEANING, ALARMS.

In case machine doesn’t operate (VFD (variable frequency drive failure) or Emergency stop active).

Customer setup will lead you to page FIG1.10

Cleaning button will lead you to belt cleaning page. FIG1.11

Work button will lead you to subpage with some information and buttons. FIG1.12

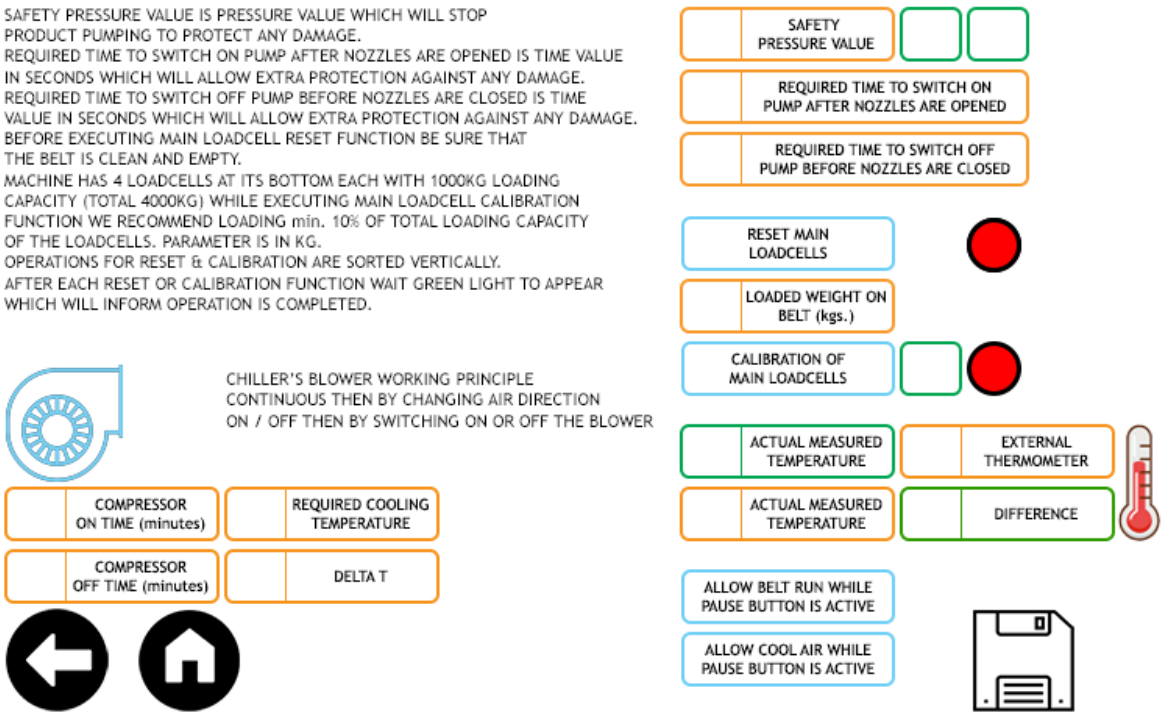

SAFETY PRESSURE VALUE IS PRESSURE VALUE WHICH WILL STOP PRODUCT PUMPING TO PROTECT ANY DAMAGE.
REQUIRED TIME TO SWITCH ON PUMP AFTER NOZZLES ARE OPENED IS TIME VALUE IN SECONDS WHICH WILL ALLOW EXTRA PROTECTION AGAINST ANY DAMAGE.
REQUIRED TIME TO SWITCH OFF PUMP BEFORE NOZZLES ARE CLOSED IS TIME VALUE IN SECONDS WHICH WILL ALLOW EXTRA PROTECTION AGAINST ANY DAMAGE.
BEFORE EXECUTING MAIN LOADCELL RESET FUNCTION BE SURE THAT THE BELT IS CLEAN AND EMPTY.
MACHINE HAS 4 LOADCELLS AT ITS BOTTOM EACH WITH 1000KG LOADING CAPACITY (TOTAL 4000KG) WHILE EXECUTING MAIN LOADCELL CALIBRATION FUNCTION WE RECOMMEND LOADING min. 10% OF TOTAL LOADING CAPACITY OF THE LOADCELLS. PARAMETER IS IN KG.
OPERATIONS FOR RESET & CALIBRATION ARE SORTED VERTICALLY.
AFTER EACH RESET OR CALIBRATION FUNCTION WAIT GREEN LIGHT TO APPEAR WHICH WILL INFORM OPERATION IS COMPLETED.
SAFETY PRESSURE VALUE
REQUIRED TIME TO SWITCH ON PUMP AFTER NOZZLES ARE OPENED
REQUIRED TIME TO SWITCH OFF PUMP BEFORE NOZZLES ARE CLOSED
RESET MAIN LOADCELLS
LOADED WEIGHT ON BELT (kgs.)
CALIBRATION OF MAIN LOADCELLS
CHILLER'S BLOWER WORKING PRINCIPLE
CONTINUOUS THEN BY CHANGING AIR DIRECTION
ON / OFF THEN BY SWITCHING ON OR OFF THE BLOWER
ACTUAL MEASURED TEMPERATURE
EXTERNAL THERMOMETER
ACTUAL MEASURED TEMPERATURE
DIFFERENCE
COMPRESSOR ON TIME (minutes)
REQUIRED COOLING TEMPERATURE
COMPRESSOR OFF TIME (minutes)
DELTA T
ALLOW BELT RUN WHILE PAUSE BUTTON IS ACTIVE
ALLOW COOL AIR WHILE PAUSE BUTTON IS ACTIVE

FIG1.10

FIG1.11

HOT AIR BLOWING TIME will switch on hot air blowing.

SCRAPING TIME will switch on back belt scrapers to clean the belt.

WASHING TME will switch on water gate to wash the belt.

DRYING TIME will switch on blower and heater to dry the belt.

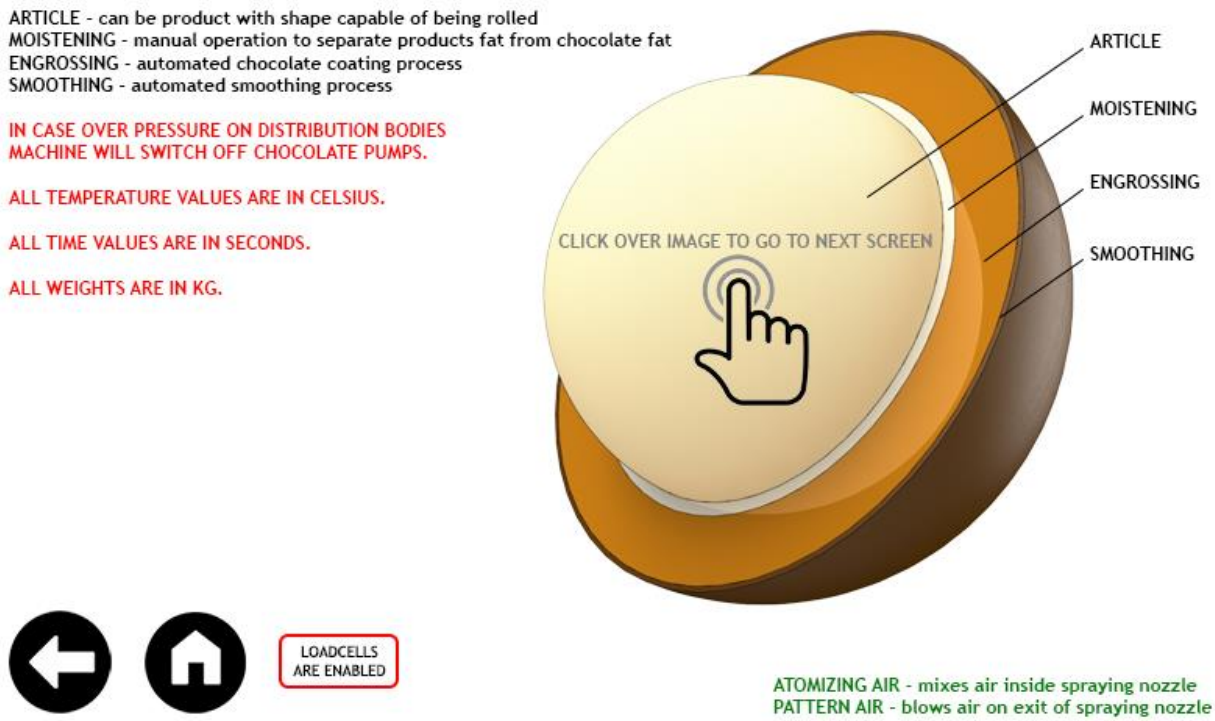


FIG1.12

Some information about the meanings of words we use on engrossing page, please check top right corner. (FIG1.12)

Selection to work with or without wieght control

Right bottom is some information about spraying nozzles. BTC2000 includes these features only PATTERN AIR, ATOMIZING AIR can be switched on or off.

By clicking center of ARTICLE (the finger) HMI will lead you to WORK PAGE (FIG1.13 or FIG1.14)

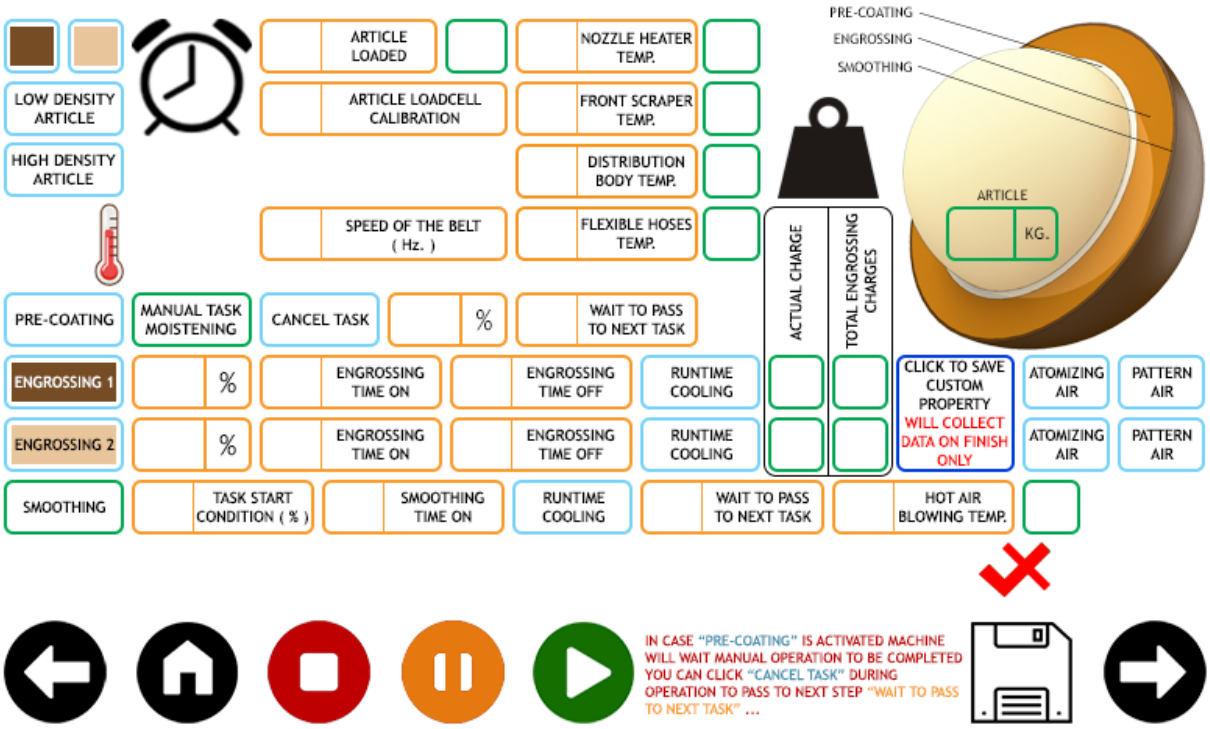


FIG1.14

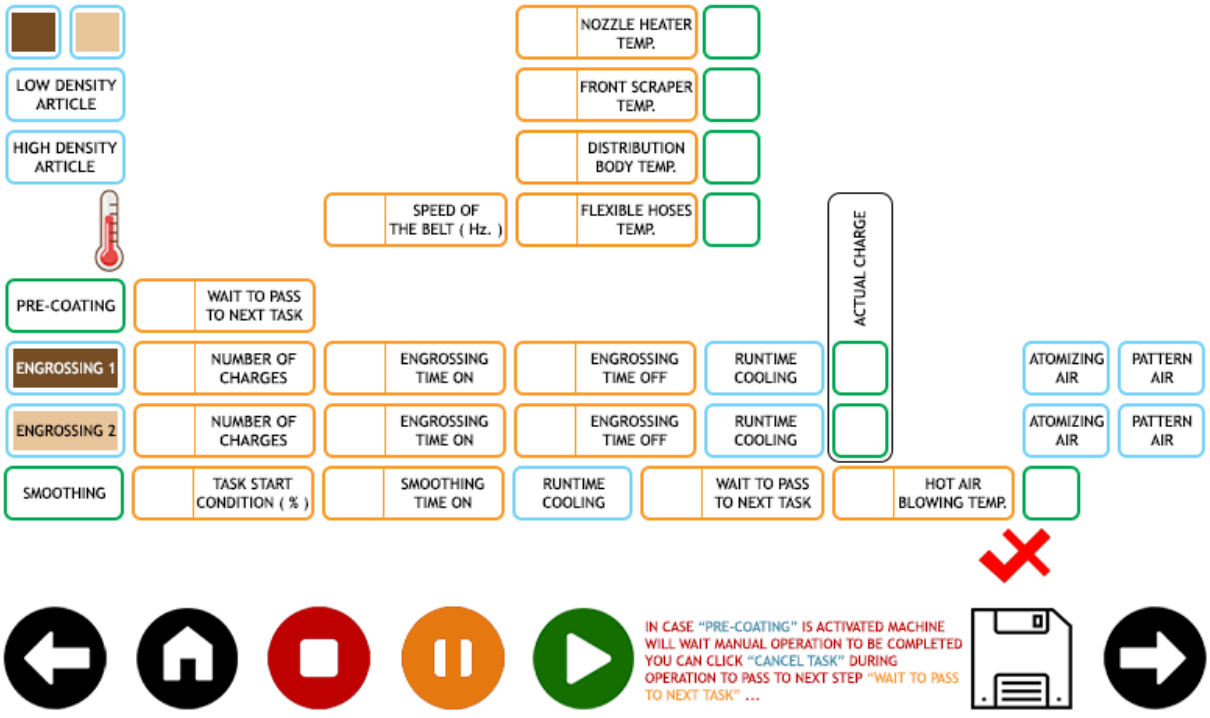


FIG1.15

MAIN INFORMATION

We use BLUE, ORANGE & GREEN CELLS to operate equipment.
The BLUE cells are ON / OFF buttons. When they are OFF they are BLUE, when they are ON they are RED.
The ORANGE cells are variable parameters which can be changed by the user.
The GREEN cells are for information.

DESCRIPTION of ON / OFF Buttons

K0 – Selection of dark or milk chocolate side (Please check FIG1.16 to be familiar which side is)
K1 – Selection of white chocolate side (Please check FIG1.16 to be familiar which side is)
K2 – Combined (Will start with ENGROSSING 1 (dark or milk chocolate) and finish with ENGROSSING 2 (white chocolate))
K3 – Combined (Will start with ENGROSSING 2 (white chocolate) and finish with ENGROSSING 1 (dark or milk chocolate))
K0, K1, K2 & K3 cannot be activated together. Activating one will disable others. Machine will not allow couple of them to be switched on.

K4 – LOW DENSITY ARTICLE – Activating K4 will allow sprayers to execute coating operation.
K5 – HIGH DENSITY ARTICLE – Activating K5 will allow dripping to execute coating operation.
K4 and K5 cannot be activated together. Machine will not allow both to be switched ON.

K19 – Automatically lifting up the powder reservoir. K19 must be RED otherwise machine will not start coating operation. The powder reservoir has to be separated from the main chassis by lifting it up with the grabbers.
K20 – Automatically moving down the powder reservoir. Will not take action while coating is processing

K6 – PRE-COATING – Manual operation to make a thin layer with some starch or liquid over ARTICLE to prevent mixing of ARTICLE's fat with chocolate fat. Some users requires this feature some not. Below on FIG1.6 is shown pre-coating settings. The principle of work is.
- If PRE-COATING button is active (RED COLOR CELL) Machine will not pass to next TASK (ENGROSSING) until D8 is done. If user thinks that the parameter entered on D8 is too high and the layer is enough he/she can click K7 to pass to next step D9, after entered time in sec. is done machine will pass to next TASK (ENGROSSING). Otherwise after D8 is reached the GREEN button (MANUAL TASK MOISTENING) will become BLACK to indicate that this manual operation is completed and next step will be activated (D9).
K7 – CANCEL TASK – In case user decide to cancel the manual pre-coating task he/she can terminate the process.

FIG1.16

K8 – ENGROSSING 1 – Dark or milk chocolate dripping or spraying - K8 is not allowed for click. Switching on K0 will switch on K8 automatically. We disabled K8 to be clickable as this will make a conflict with K2 & K3. Below on FIG1.17 is shown ENGROSSING 1 settings.
K9 – RUNTIME COOLING – Switching on K9 will allows blowing air while dripping or spraying is performing.
K13 – BTC1500v2 doesn't include this feature. Upper versions of machine includes this option. In case K4 (spraying) is selected. Activating K13 will allow ATOMAZING AIR while spraying.
K14 – BTC1500v2 incudes this feature but it is not selectable. Upper versions of machine includes this option to be switched on/off. In case K4 (spraying) is selected. Activating K14 will allow PATTERN AIR while spraying.

K10 – ENGROSSING 2 – White chocolate dripping or spraying – K10 is not allowed for click. Switching on K1 will switch on K10 automatically. We disabled K10 to be clickable as this will make a conflict with K2 & K3. Below on FIG1.17 is shown ENGROSSING 2 settings.
K11 – RUNTIME COOLING – Switching on K11 will allows blowing air while dripping or spraying is performing.
K15 – BTC1500v2 doesn't include this feature. Upper versions of machine includes this option. In case K4 (spraying) is selected. Activating K15 will allow ATOMAZING AIR while spraying.
K16 – BTC1500v2 incudes this feature but it is not selectable. Upper versions of machine includes this option to be switched on/off. In case K4 (spraying) is selected. Activating K16 will allow PATTERN AIR while spraying.

K12 – Button K12 is to save some parameters which are going to be used for some calculations like to find approximate process time & number of charges on different settings.

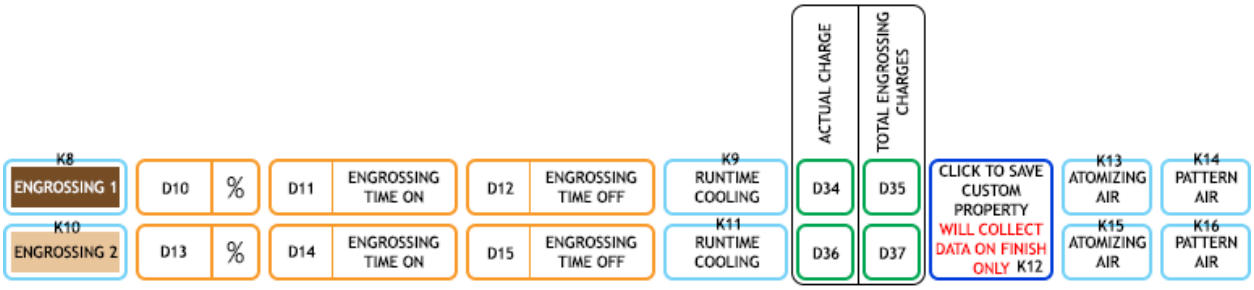


FIG1.17

K17 – Switching ON K17 will allow cold air from hood to be blowed inside cabin while smoothing operation is performing. Below on FIG1.18 is shown SMOOTHING settings.

FIG1.18

After the coating is done  the image will become 

DESCRIPTION of VARIABLE PARAMETERS

As we are already familiar with the arrangement of the cells. We will continue describing variable parameters on single image but still in order.

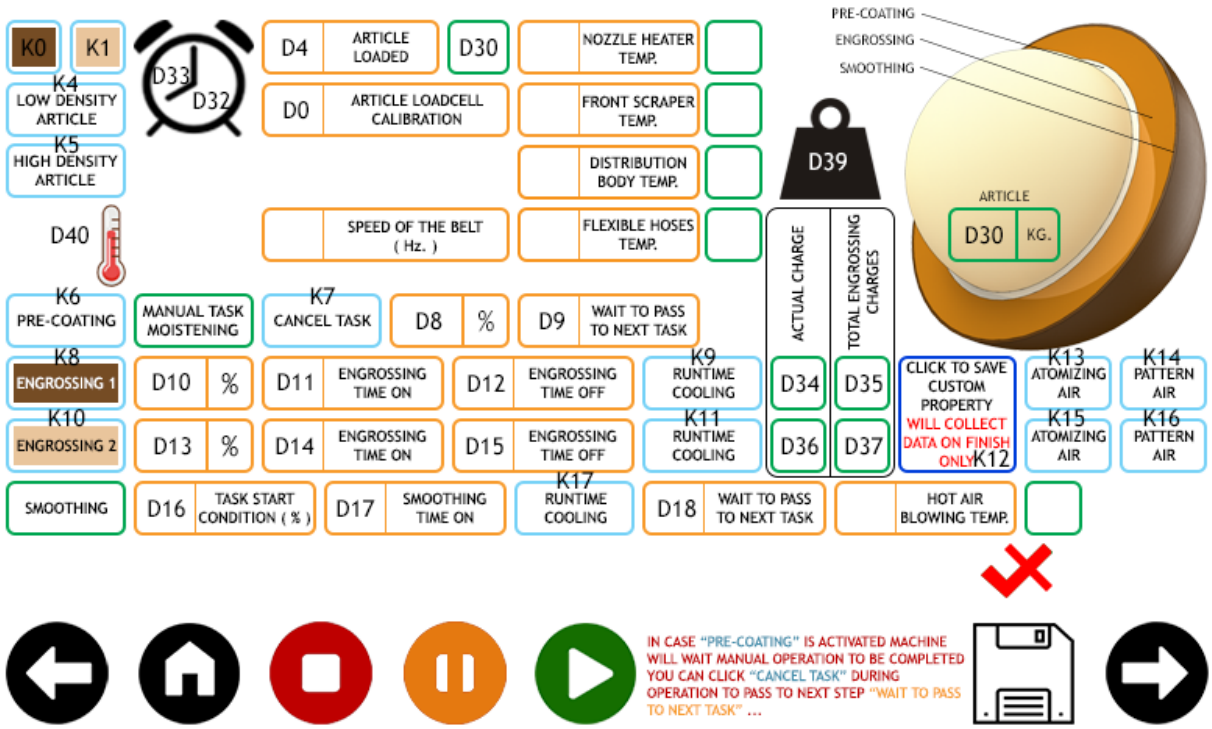


FIG1.5

D4 – ARTICLE LOADED – Max. loading capacity of article should not exceed 200kg. Before loading article to modular belt, get weight on scale and enter to D4.
D0 – ARTICLE LOADCELL CALIBRATION – The variable D0 to be correct powder reservoir should be lifted up. In case D4 is different then D30 enter positive or negative number to make them equal.
Example if D30= 210 and D4=200 then D0 should be 10.
D4 + D0 = D30
200 + D0 = 210

Example if D30= 200 and D4=205 then D0 should be -5.
D4 + D0 = D30
205 + D0 = 200

D8 – PRE-COATING WEIGHT in %. For example if D4=200 and D8=50% machine will make calculation D4 * D8 / 100 = 200 * 50 / 100 = 100. Which will mean when D30 (instant loadcell value) reaches D4 + D8 (200 + 100 = 300) The green button MANUAL TASK MOISTENING will became black to indicate that the required amount is reached.
D9 – WAIT TO PASS TO NEXT TASK. Variable parameter in seconds. Machine will start counting entered variable time in D9 only after K7 is clicked or required amount D8 is reached.

TO execute D8, K6 has to be switched on. Otherwise machine will start counting D9 and pass to next task depending of the selection of K0, K1, K2, K3.

IN CASE K0 IS SELECTED, AFTER D9 IS DONE MACHINE WILL PASS TO NEXT TASK ENGROSSING 1.
IN CASE K1 IS SELECTED, AFTER D9 IS DONE MACHINE WILL PASS TO NEXT TASK ENGROSSING 2.
IN CASE K2 IS SELECTED, AFTER D9 IS DONE MACHINE WILL PASS TO NEXT TASK ENGROSSING 1 AND AFTER THAT ENGROSSING 2.
IN CASE K3 IS SELECTED, AFTER D9 IS DONE MACHINE WILL PASS TO NEXT TASK ENGROSSING 2 AND AFTER THAT ENGROSSING 1.

We accept K0 to be selected.

D10 – ENGROSSING 1 in %. For example if D4=200 and D10=100% machine will make calculation D4 * D10 / 100 = 200 * 100 / 100 = 200. Which will mean that total 200kg dark or milk chocolate is going to be poured over article.
And will pass to next task D4 + D8 + D10 = 200 + 100 + 200 = 500 = D30 = instant loadcell value. Here D8 and D10 converted from % to KG depending of the D4.
D11 – ENGROSSING TIME ON – Variable value in seconds. To switch on (open gate for) outpouring of chocolate.
D12 – ENGROSSING TIME OFF – Variable value in seconds. To switch off (close gate for) outpouring of chocolate.
The working principle for ENGROSSING 1 is going to be; open gate fir D11 seconds close gate for D12 seconds repeat D11, D12 and go to next task if D30 = D4 + D8 + D10.
With other words, open gate for D11 seconds, close gate for D12 seconds and pass to next task if required amount is reached.

Same is for K1, K2, K3 selection, but with proper variables.

D16 – TASK START CONDITION % - Variable parameter to allow when the smoothing operation is going to start performing. 100% will mean that smoothing is going to start when engrossing is completed totally.
Example: in case D16 = 80% this will mean that smoothing will start performing when engrossing reaches its 80%. The calculation that machine makes is as below
D4 + (D8 + D10) * D16 / 100 = 200 + ((100 + 200) * 80 / 100) = 200 + (300 * 80 /100) = 200 + 240 = 440
Smoothing will start operation when D30 (instant loadcell value) reaches 440kg. With other words when 80% of coating is completed.
Example: in case D16 = 100% this will mean that smoothing will start performing when engrossing reaches its 100%. The calculation that machine makes is as below
D4 + (D8 + D10) * D16 / 100 = 200 + ((100 + 200) * 100 / 100) = 200 + (300 * 100 /100) = 200 + 300 = 500
Smoothing will start operation when D30 (instant loadcell value) reaches 500kg. With other words when 100% of coating is completed.
D17 – SMOOTHING TIME ON – This variable time in seconds will start to be counted after engrossing is 100% finished. While this time performs machine will open or close gate of fed cold air depending of the selection of K17
D18 – WAIT TO PASS TO NEXT TASK – After D17 variable time in seconds is completed machine will pass to next stage D18, while counting this time machine will open gate of cold air blowing inside cabin.

DESCRIPTION of INFORMATION VALUES

As we are already familiar with the arrangement of the cells. We will continue describing variable parameters on single image but still in order.

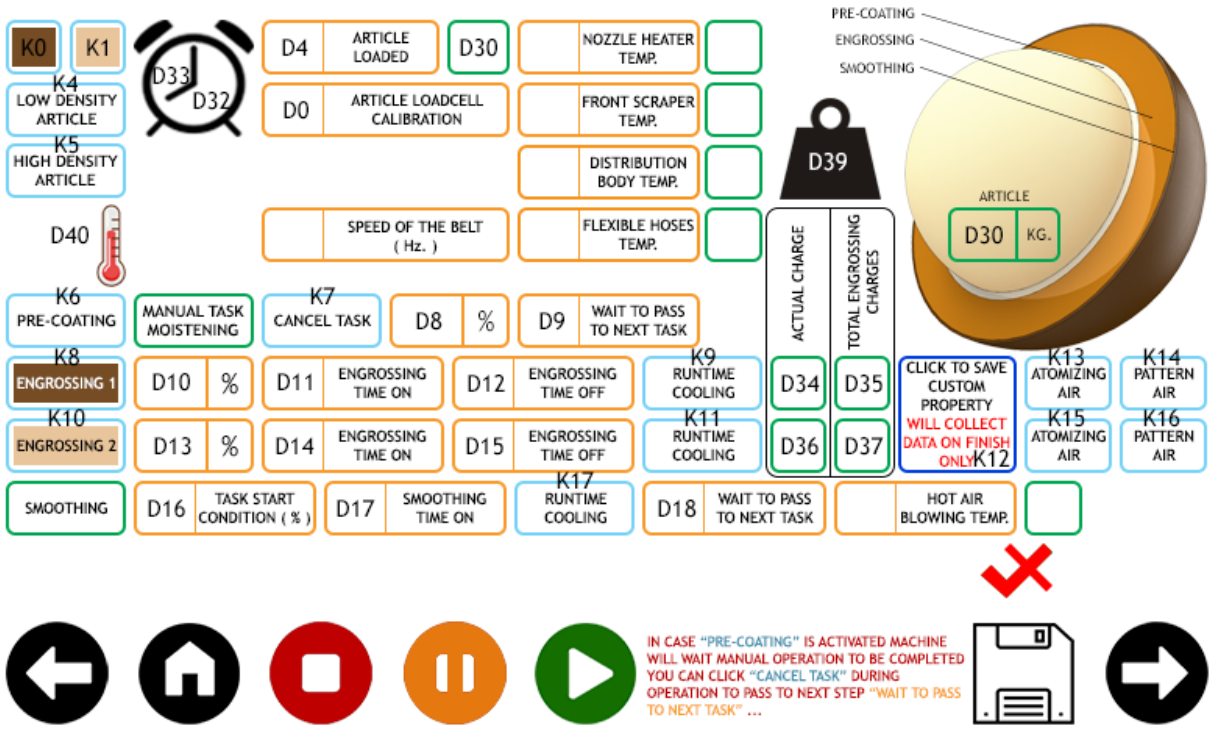


FIG1.5

D30 – MAIN INSTANT LOADCELL VALUE
D39 – CALCULATED TOTAL WEIGHT OF FINISHED PRODUCT
MANUAL TASK MOISTENING – BECOMS BLACK IF D8 AMOUNT IS REACHED
D34 – ACTUAL CHARGE FOR ENGROSSING 1
D35 – TOTAL ENGROSSING CHARGES FOR ENGROSSING 1
D36 – ACTUAL CHARGE FOR ENGROSSING 2
D37 – TOTAL ENGROSSING CHARGES FOR ENGROSSING 2
SMOOTING – ALWAYS EXECUTED (CAN BE DISABLED BY D16=100%, D17=0, D18=0)
D33 – REMAINING TIME TO FINISH PROCESS
D32 – APROXIMATE REQUIRED TIME TO FINISH COATING PROCESS
D40 – TEMPERATURE INSIDE CABIN.

D10, D13 DEPENDS OF TOTAL LOADED ARTICLE WEIGHT D4.

D16 DEPENDS OF SELECTION OF K0,K1,K2,K3 and PROPER WEIGHT COMBINATION.

PRE-COATING IS A MANUAL OPERATION IF SELECTED TO BE ACTIVE AND DOESN'T FEED MANUALLY

MACHINE NEVER WILL PASS TO NEXT STEP.

IF PRE-COATING HAS TO BE TERMINATED CLICK CANCEL TASK TO PASS TO NEXT STEP.

K12 IS REQUIRED TO CALCULATE D32,D33,D34,D35,D36,D37. AFTER PROCESS IS COMPLETED CLICK K12 TO GET REQUIRED PARAMETERS.

SMOOTHING ALWAYS EXECUTE OPERATION SO IT IS NOT AS A BUTTON, IN CASE NO NEED FOR SMOOTHING (D16=100, D17=0, D18=0).

STANDARD COMPONENTS of BTC2000 chocolate coating cabin.

COLUMN	DESCRIPTION	SUPPLIER	QTY	SPROCKET INFO	DIMENSIONS
1	HEATER 3kw v3 > 3000 WATT > 3" TESISAT BORUSUNA GORE > 3KW BORU TIPI REZISTANS	LIDER REZISTANS	1		
2	BTC2000v5-09-006 > 24V 100W plaka rezistans	LIDER REZISTANS	1		4 X 40 X 1900
3	BTC2000v5-10-003 > 24V 100W plaka rezistans	LIDER REZISTANS	1		4 X 40 X 1960
4	BTC2000v5-05-069 > 1/4" Fisek rezistans > 24V 50-100WATT	LIDER REZISTANS	2		
5	DIN2986 - Manson > R3:4 yarim manson > R3/4 yarim manson	OGUZ PASLANMAZ	2		
6	¾'' kuresel vana > 3/4'' THREADED BALL VALVE	OGUZ PASLANMAZ	2		
7	DIN2986 - Manson > R1:4 yarim manson > R1/4 yarim manson	OGUZ PASLANMAZ	1		
8	Clamp union > DN32 1'' FERRULE	OGUZ PASLANMAZ	10		
9	DIN2982 - Nipel (tek tarafli) > 1'' nipel (tek tarafli) > 1'' nipel (tek tarafli)	OGUZ PASLANMAZ	6		
10	1 ¼'' SMS union DN40 > 1 1/4'' SMS union DN40	OGUZ PASLANMAZ	2		
11	DIN2986 - Manson > R1:2 manson > R1/2 manson	OGUZ PASLANMAZ	1		
12	BTC2000v5-10-010 > ADIM:2.5MM oDIS:6.5 TEL CAPI:1 BOY:15 PASLANMAZ BASKI YAYI	YAYCI.NET	124		
13	30x30 sigma profil kapagi > 2 3.001.3030.01 > 30 x 30 sigma profil kapagi	DOGUS KALIP	4		
14	Sigma profile nut - channel 8 > M6 > 2.1.006.08.06 > Sigma profil somun	DOGUS KALIP	10		
15	SHF30	SAHIN RULMAN	2		
16	IRKM 63-100 L > 2.2KW 104RPM - 1.70SF TORQUE=194	IMAK REDUKTOR	1		
17	IRK 63 TORK KOLU > Varsayilan > IRK 63 TORK KOLU	IMAK REDUKTOR	1		
18	Makina kapak kulpu > 706-122	OSKAR KILIT	23		
19	Rivet nut > M6 rivet nut > 1032	OSKAR KILIT	156		
20	Rivet nut > M5 rivet nut > 1031	OSKAR KILIT	160		
21	Gizli pano mentese > 308.V2.0	OSKAR KILIT	2		
22	Yaprak mentese 50x50 > 318.V1.1.2	OSKAR KILIT	16		
23	Gecme kapak tutamagi - OSKAR > 703	OSKAR KILIT	6		
24	Yayli pano kilidi > 205.07 > Ceyrek donuslu (Kelebek)	OSKAR KILIT	8		
25	Yayli pano kilidi > 205.08 > Ceyrek donuslu (Kelebek)	OSKAR KILIT	6		
26	M16 Mapa > 709.V5	OSKAR KILIT	6		
27	Aluminyum profilli kulp > 706.5	OSKAR KILIT	1		
28	Yatakli mentese > 330.10.2	OSKAR KILIT	3		
29	706-A > Side handle	OSKAR KILIT	2		
30	Rivet nut > M4 rivet nut > 1030	OSKAR KILIT	137		
31	Kaput kilidi - OSKAR > Conf-55mm > 721.V3	OSKAR KILIT	17		

32	Pano havalandirma panjuru > 701.V1	OSKAR KILIT	3		
33	Pano fani > 704	OSKAR KILIT	1		
34	Buffer (Pullu cift somunlu) > ø80x40 - M12x12 > 80040-P	OZPAR KAUCUK	4		
35	o80 - M16x160 > SABIT PLASTIK AYAK	SAYGILI	4		
36	BTC2000v5-10-005 > SERIT ORING	SAYGILI	2		4 X 4 X 4100.85
37	Nutring > ø16xø26x6	SAYGILI	24		
38	o-ring > ø2xø20xø24	SAYGILI	16		
39	o-ring > ø4xø52xø60	SAYGILI	4		
40	o-ring > ø1xø35xø37	SAYGILI	4		
41	o-ring > ø2xø12xø16	SAYGILI	12		
42	UCFC207	BEYLIK RULMAN	6		
43	6005	BEYLIK RULMAN	2		
44	o47 DIN472 delik segmani	BEYLIK RULMAN	2		
45	UCFL208	BEYLIK RULMAN	2		
46	UCFC208	BEYLIK RULMAN	4		
47	6201	BEYLIK RULMAN	16		
48	o32 DIN472 delik segmani	BEYLIK RULMAN	8		
49	Hortum kelepcesi > 16-25 hortum kelepcesi > C1-1-04	BEYLIK RULMAN	3		
50	PPRC dis disli oynar baslikli rakor PN25 > PPRC oynar baslikli erkek nipel 3:4'' - 25	ERBOYPLAST	2		
51	PPRC TE PN25 > PPRC 25 TE	ERBOYPLAST	1		
52	PPRC Iç disli TE PN25 > PPRC 25 Iç disli TE 3:4''	ERBOYPLAST	1		
53	PPRC dis disli rakor PN25 > PPRC dis disli rakor 3:4'' - 25	ERBOYPLAST	1		
54	PPRC dirsek 90° PN25 > PPRC 25 dirsek 90°	ERBOYPLAST	2		
55	DIN2990- Hex nipel > 3:4'' hex nipel > 3/4'' hex nipel > PIRINC	ERBOYPLAST	4		
56	DIN2987- Kuyruklu dirsek - ¾'' > 3/4'' IC DISLI 3/4'' DIS DISLI DIRSEK > PIRINC	ERBOYPLAST	2		
57	DIN2990- Hex redüksiyon > 3:4'' - 1:2'' hex redüksiyon > 3/4'' - 1/2'' reduksiyon > PIRINC	ERBOYPLAST	2		
58	Y Strainer - ¾'' > 43935K24 > 3/4'' Y STRAINER > Y PISLIK TUTUCU > PIRINC	ERBOYPLAST	1		
59	Hex hortum uçlu rakor > 1:2'' dis 1:2'' hortum > 1/2'' dis 1/2'' hortum > PIRINC	ERBOYPLAST	3		
60	TOS TKK B ø50x80	KONIKKILIT.COM	8		
61	40x40 kelepce > PCC35100 > MODULER BANT KELEPCESI > 40x40 profile gore	ALHAN CAGRI	60		
62	BTC2000v5-01-047 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 584.08
63	BTC2000v5-01-048 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 523.79
64	BTC2000v5-01-049 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 402.05
65	BTC2000v5-01-050 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 458.8
66	BTC2000v5-01-051 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 266.39
67	BTC2000v5-01-052 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 322.16
68	BTC2000v5-01-053 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 260.69
69	BTC2000v5-01-054 > A16 Surtunme profili	ALHAN CAGRI	9		10.5 X 41 X 265.7
70	Gas Spring o10 x o23 - 150mm strok	TEZPAR	2		

71	M8 gas spring Ball joint > B12 > 01TZ0827	TEZPAR	4		
72	Slimlite floresan (etanj armatur)	BAUHAUS.COM.TR	1		
73	Catal (ø63PP) > M16 Ince dis	MEGA PNOMATIK	1		
74	Pneumatic cylinder ISO6431 > ø63 x 30 > ø63 x 30 ISO6431 Pneumatic cylinder	MEGA PNOMATIK	1		
75	ø63 PP Hareketli baglanti > Eklem yer baglantisi	MEGA PNOMATIK	1		
76	FRL40 > PNOMATIK FILTRE VE YAGLAYICI > 1/2'' sartlandirici	MEGA PNOMATIK	1		
77	½'' ø12 elbow fitting > Somun sikmali > 1/2'' o12 HORTUM REKORU > SOMUN SIKMALI DIRSEK	MEGA PNOMATIK	3		
78	Manifold for 4V210-08 > Manifold 10 for 4V210-08	MEGA PNOMATIK	1		
79	Pneumatic valve (4V210-08) > Conf1 > 4V210-08 PNEUMATIC VALVE > 24VDC	MEGA PNOMATIK	10		
80	¼'' ø12 elbow fitting > Somun sikmali > 1/4'' o12 HORTUM REKORU > SOMUN SIKMALI DIRSEK	MEGA PNOMATIK	1		
81	¼'' susturucu > DUZ > 1/4'' SINTER > SHORT > SUSTURUCU > KISA TIP (TAPA)	MEGA PNOMATIK	2		
82	¼'' kor tapa > 1/4'' KOR TAPA > PIRINC	MEGA PNOMATIK	6		
83	Pressure switch (FOX F4S1) > FOX F4S1 / P3 > PRESSURE SWITCH	MEGA PNOMATIK	1		
84	G¾'' solenoid valve > NC 24V > G3/4'' NC 24V SOLENOID VALVE	MEGA PNOMATIK	2		
85	Kisicili > 3/8'' o8 HORTUM REKORU > KISICILI DIRSEK	MEGA PNOMATIK	2		
86	PA63 (F05) Pneumatic actuator	MEGA PNOMATIK	1		
87	1/8'' o8 HORTUM REKORU > DUZ REKOR	MEGA PNOMATIK	2		
88	Short strok (o32-o100) > 40x20 MAGNETIC > SHORTSTROCK	MEGA PNOMATIK	8		
89	Short strok (o32-o100) > 40x15 MAGNETIC > SHORTSTROCK	MEGA PNOMATIK	16		
90	Kisicili > 1/8'' o4 HORTUM REKORU > KISICILI DIRSEK	MEGA PNOMATIK	32		
91	Kisicili > 1/8'' o6 HORTUM REKORU > KISICILI DIRSEK	MEGA PNOMATIK	16		
92	1/8'' o6 TEE REKOR > TEE	MEGA PNOMATIK	32		
93	ø6 T > TEE	MEGA PNOMATIK	8		
94	ø4 T > TEE	MEGA PNOMATIK	28		
95	¼'' ø6 fitting > 1/4'' o6 HORTUM REKORU > DUZ REKOR	MEGA PNOMATIK	24		
96	¼'' ø4 fitting > 1/4'' o4 HORTUM REKORU > DUZ REKOR	MEGA PNOMATIK	12		
97	¼'' ø8 elbow fitting > Kisicili > 1/4'' o8 HORTUM REKORU > KISICILI DIRSEK	MEGA PNOMATIK	2		
98	¼'' ø8 elbow fitting > 1/4'' o8 HORTUM REKORU > DIRSEK	MEGA PNOMATIK	2		
99	Quick coupling > SF20 + PF20 > SF20 + PF20 Quick disconnect (1/4'' disi govde 1/4'' disi uc)	MEGA PNOMATIK	2		
100	¼'' ø12 fitting > Somun sikmali > 1/4'' o12 HORTUM REKORU > SOMUN SIKMALI DUZ REKOR	MEGA PNOMATIK	2		
101	ABC DIN912 ISO4762 > M6x25 ABC > DIN912 (ISO4762)	UZMAN CIVATA	7		
102	ABC DIN912 ISO4762 > M8x16 ABC > DIN912 (ISO4762)	UZMAN CIVATA	46		
103	AKBC DIN933 ISO4017 > M6x16 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	65		
104	ABC DIN912 ISO4762 > M6x12 ABC > DIN912 (ISO4762)	UZMAN CIVATA	6		
105	Pul > o10 pul	UZMAN CIVATA	32		
106	AKBC DIN933 ISO4017 > M10x45 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	24		
107	ABC DIN912 ISO4762 > M8x30 ABC > DIN912 (ISO4762)	UZMAN CIVATA	4		
108	M10 somun	UZMAN CIVATA	12		
109	ABC DIN912 ISO4762 > M6x16 ABC > DIN912 (ISO4762)	UZMAN CIVATA	44		
110	Pul > o5 pul	UZMAN CIVATA	111		

111	AKBC DIN933 ISO4017 > M5x12 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	67		
112	AKBC DIN933 ISO4017 > M6x12 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	46		
113	Pul > o12 pul	UZMAN CIVATA	28		
114	M12 (emniyetli somun)	UZMAN CIVATA	4		
115	ABC DIN912 ISO4762 > M12x40 ABC > DIN912 (ISO4762)	UZMAN CIVATA	4		
116	Pul > o8 pul	UZMAN CIVATA	87		
117	AKBC DIN933 ISO4017 > M8x30 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	51		
118	ABC DIN912 ISO4762 > M6x45 ABC > DIN912 (ISO4762)	UZMAN CIVATA	1		
119	HBC DIN7991 > M10x35 HBC > DIN7991	UZMAN CIVATA	16		
120	ABC DIN912 ISO4762 > M8x35 ABC > DIN912 (ISO4762)	UZMAN CIVATA	12		
121	ABC DIN912 ISO4762 > M8x20 ABC > DIN912 (ISO4762)	UZMAN CIVATA	6		
122	AKBC DIN933 ISO4017 > M12x45 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	16		
123	ABC DIN912 ISO4762 > M4x35 ABC > DIN912 (ISO4762)	UZMAN CIVATA	4		
124	ABC DIN912 ISO4762 > M4x12 ABC > DIN912 (ISO4762)	UZMAN CIVATA	66		
125	ABC DIN912 ISO4762 > M8x25 ABC > DIN912 (ISO4762)	UZMAN CIVATA	8		
126	AKBC DIN933 ISO4017 > M8x20 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	12		
127	AKBC DIN933 ISO4017 > M5x10 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	4		
128	Pul > o6 pul	UZMAN CIVATA	119		
129	AKBC DIN933 ISO4017 > M10x20 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	8		
130	AKBC DIN933 ISO4017 > M10x40 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	4		
131	AKBC DIN933 ISO4017 > M10x25 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	1		
132	AKBC DIN933 ISO4017 > M10x55 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	1		
133	AKBC DIN933 ISO4017 > M12x80 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	8		
134	AKBC DIN933 ISO4017 > M10x30 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	6		
135	AKBC DIN933 ISO4017 > M12x65 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	4		
136	AKBC DIN933 ISO4017 > M6x30 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	16		
137	M6 (sapkali somun)	UZMAN CIVATA	50		
138	HBC DIN7991 > M5x16 HBC > DIN7991	UZMAN CIVATA	48		
139	AKBC DIN933 ISO4017 > M6x25 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	10		
140	HBC DIN7991 > M5x25 HBC > DIN7991	UZMAN CIVATA	43		
141	M5 (emniyetli somun)	UZMAN CIVATA	6		
142	HBC DIN7991 > M6x30 HBC > DIN7991	UZMAN CIVATA	26		
143	M6 (emniyetli somun)	UZMAN CIVATA	2		
144	AKBC DIN933 ISO4017 > M5x16 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	40		
145	HBC DIN7991 > M6x10 HBC > DIN7991	UZMAN CIVATA	8		
146	HBC DIN7991 > M6x16 HBC > DIN7991	UZMAN CIVATA	50		
147	AKBC DIN933 ISO4017 > M6x20 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	84		
148	M10 (emniyetli somun)	UZMAN CIVATA	4		
149	AKBC DIN933 ISO4017 > M8x16 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	2		
150	ABC DIN912 ISO4762 > M4x16 ABC > DIN912 (ISO4762)	UZMAN CIVATA	68		
151	AKBC DIN933 ISO4017 > M8x45 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	2		

152	M8 (emniyetli somun)	UZMAN CIVATA	4		
153	ABC DIN912 ISO4762 > M8x40 ABC > DIN912 (ISO4762)	UZMAN CIVATA	4		
154	o6 yayli rondela > DIN127	UZMAN CIVATA	40		
155	Pul > o16 pul	UZMAN CIVATA	2		
156	M16 somun	UZMAN CIVATA	2		
157	M4 (emniyetli somun)	UZMAN CIVATA	251		
158	ABC DIN912 ISO4762 > M6x60 ABC > DIN912 (ISO4762)	UZMAN CIVATA	96		
159	ABC DIN912 ISO4762 > M6x35 ABC > DIN912 (ISO4762)	UZMAN CIVATA	16		
160	ABC DIN912 ISO4762 > M3x30 ABC > DIN912 (ISO4762)	UZMAN CIVATA	28		
161	HBC DIN7991 > M12x35 HBC > DIN7991	UZMAN CIVATA	2		
162	ABC DIN912 ISO4762 > M8x50 ABC > DIN912 (ISO4762)	UZMAN CIVATA	2		
163	o8 yayli rondela > DIN127	UZMAN CIVATA	28		
164	M8 somun	UZMAN CIVATA	32		
165	ABC DIN912 ISO4762 > M8x60 ABC > DIN912 (ISO4762)	UZMAN CIVATA	28		
166	ABC DIN912 ISO4762 > M6x30 ABC > DIN912 (ISO4762)	UZMAN CIVATA	10		
167	AKBC DIN933 ISO4017 > M8x25 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	12		
168	HBC DIN7991 > M5x20 HBC > DIN7991	UZMAN CIVATA	16		
169	ABC DIN912 ISO4762 > M3x10 ABC > DIN912 (ISO4762)	UZMAN CIVATA	22		
170	M3 somun	UZMAN CIVATA	38		
171	AKBC DIN933 ISO4017 > M6x55 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	4		
172	Pul > o3 pul	UZMAN CIVATA	2		
173	ABC DIN912 ISO4762 > M3x25 ABC > DIN912 (ISO4762)	UZMAN CIVATA	2		
174	ABC DIN912 ISO4762 > M3x12 ABC > DIN912 (ISO4762)	UZMAN CIVATA	12		
175	Pul > o4 pul	UZMAN CIVATA	15		
176	M4 somun	UZMAN CIVATA	3		
177	ABC DIN912 ISO4762 > M4x30 ABC > DIN912 (ISO4762)	UZMAN CIVATA	3		
178	AKBC DIN933 ISO4017 > M4x12 AKBC > DIN933 (ISO4017)	UZMAN CIVATA	12		
179	MODUTECH EC508SQ40Z12 (Iscimenler) > EC508SQ40Z12 > EC508 MODULAR BELT SPROCKET Z=12	ISCIMENLER	30		
180	ESIT Loadcell (BS type) > BS1000 > BS1000 - LTU1000 > Loadcell max. 1000kg	ESIT	4		
181	termocouple ¼'' > PT100 ¼" o6 (2mt kablo) > B08-Rt (R3B)-030-6P2-gG14.EL02	METRONIK	5		
182	FAGS-T-2-160-90 > FAGS-T-2-160-90 (0°) > 0.37 kw. 1700m3/h	FANEXFAN	1		
183	Vidali krose > VIDALI PLASTIK KROSE > Mutlusan EK.05.1006	ELTES	49		
184	PG13.5 Kablo rakoru (SIKMALI)	ELTES	1		
185	Delta DOP-B07S410 > 7" HMI	ELTES	1		
186	Emergency stop	ELTES	1		
187	potansiyometre	ELTES	1		
188	selectors switch > 2 position (stay put) > 0-1 (KALICI)	ELTES	1		
189	Pushbutton > Start button (spring return) > YESIL (YAYLI)	ELTES	1		
190	Kablo rakoru PG21	ELTES	9		
191	Mucco ikaz lambasi > SNT-7022-SB1-1 ALARM	ELTES	1		
192	Buat kutusu - Cetinkaya > 150 x 100 x 100	ELTES	1		

193	EMAS EBP05PM41	ELTES	20		
194	EMAS EBP05PU30 > 5 KONTAKLI UZATMA PRIZI	ELTES	20		
195	Cable connector > GX16-3 > GX16-3	ELTES	5		
196	Main switch 25A > PAKO SALTER 25A (3 KUTUP)	ELTES	1		
197	Keller pressure transmitter > KELLER PA21Y / 22 - 2155 - 142 > 0-10 bar 4-20mA 8-32VDC	ELTES	2		
198	Cable connector > GX16-5 > GX16-5	ELTES	4		
199	24 pin priz > Mete enerji - 403040S > Housing with female insert	ELTES	3		
200	24 pin fis > Mete enerji - 403043 > Hood with male insert side entry	ELTES	3		
201	16 pin fis > Mete enerji - 403033 > Hood with male insert side entry	ELTES	1		
202	16 pin priz > Mete enerji - 403030S > Housing with female insert	ELTES	1		
203	Cable connector > GX16-8 > GX16-8	ELTES	6		
204	TRAFO - 2KVA - 220VAC-24VAC > 2KVA <> 220V - 24V > ORION ENERJI	OTES TRAFO	1		
205	BOYA TABANCASI MEMESI > Conf1 > NOZZLE > MODIFICATION REQUIRED	ASTRO.COM.TR	16		
206	BOYA TABANCASI MEMESI-02 > SOMUN	ASTRO.COM.TR	16		
207	Duz kama > 10 x 65 Duz kama > 10 x 65 DIN6885 - duz kama	EMEK KAMA	2		
208	Duz kama > 10 x 35 Duz kama > 10 x 35 DIN6885 - duz kama	EMEK KAMA	1		

WELDMENT / ROUTING PARTS of BTC2000 chocolate coating cabin.

COLUMN	DESCRIPTION	LENGTH	QTY
1	40x20x1.5 Kutu profil	230	8
2	40x20x1.5 Kutu profil	1365	4
3	40x20x1.5 Kutu profil	1610	2
4	40x20x1.5 Kutu profil	1610	2
5	40x20x1.5 Kutu profil	210	2
6	40x20x1.5 Kutu profil	1430	2
7	40x20x1.5 Kutu profil	1898	1
8	80x40x1.5 Kutu profil	1430	4
9	80x40x3 Kutu profil	2368	1
10	80x40x3 Kutu profil	1365	1
11	80x40x3 Kutu profil	720	4
12	80x40x3 Kutu profil	445	1
13	80x40x3 Kutu profil	1570	2
14	80x40x3 Kutu profil	2288	2
15	80x40x3 Kutu profil	1570	8
16	80x40x3 Kutu profil	2368	2
17	80x40x3 Kutu profil	1365	3
18	80x40x3 Kutu profil	2368	1
19	80x40x3 Kutu profil	445	1
20	80x40x3 Kutu profil	2368	2
21	80x40x3 Kutu profil	1590	2
22	80x40x3 Kutu profil	1510	2
23	80x40x3 Kutu profil	2208	2
24	40x40x3 Kare profil	2165	2
25	40x40x3 Kare profil	2165	1
26	40x40x3 Kare profil	2208	2
27	ø21.3 X ø18.3	2000	1
28	ø33.7 X ø30.7	100	2
29	ø33.7 X ø29.7	2190	2
30	ø60.3 X ø57.3	2200	1
31	ø60.3 X ø56.3	2110	1

32	ø114.3 X ø110.3	200	1
33	PPRC 25 boru 3:4''	61.5	2
34	PPRC 25 boru 3:4''	40.8	2
35	PPRC 25 boru 3:4''	43	1
36	PPRC 25 boru 3:4''	36.5	1
37	ø4 pneumatic hose	124.07	1
38	ø4 pneumatic hose	147.7	1
39	ø4 pneumatic hose	148.61	1
40	ø4 pneumatic hose	124.06	1
41	ø4 pneumatic hose	126.77	1
42	ø4 pneumatic hose	148.14	1
43	ø4 pneumatic hose	148.91	1
44	ø4 pneumatic hose	122.48	1
45	ø4 pneumatic hose	125.52	1
46	ø4 pneumatic hose	147.67	1
47	ø4 pneumatic hose	149.94	1
48	ø4 pneumatic hose	125.37	1
49	ø4 pneumatic hose	125.84	1
50	ø4 pneumatic hose	149.28	1
51	ø4 pneumatic hose	147.27	1
52	ø4 pneumatic hose	122.17	1
53	ø4 pneumatic hose	267.81	8
54	ø4 pneumatic hose	267.6	8
55	ø4 pneumatic hose	527.39	4
56	ø4 pneumatic hose	525.21	4
57	ø4 pneumatic hose	123.94	1
58	ø4 pneumatic hose	154.36	1
59	ø4 pneumatic hose	150.55	1
60	ø4 pneumatic hose	130.72	1
61	ø4 pneumatic hose	131.01	1
62	ø4 pneumatic hose	149.05	1
63	ø4 pneumatic hose	147.99	1
64	ø4 pneumatic hose	124.63	1
65	ø4 pneumatic hose	131.05	1
66	ø4 pneumatic hose	154.48	1
67	ø4 pneumatic hose	147.91	1
68	ø4 pneumatic hose	124.93	1
69	ø4 pneumatic hose	131.18	1
70	ø4 pneumatic hose	149.71	1
71	ø4 pneumatic hose	154.98	1
72	ø4 pneumatic hose	124.53	1

73	ø6 pneumatic hose	599.1	4
74	ø6 pneumatic hose	598.06	4
75	ø6 pneumatic hose	174.22	1
76	ø6 pneumatic hose	173.29	1
77	ø6 pneumatic hose	174.17	1
78	ø6 pneumatic hose	173.44	1
79	ø6 pneumatic hose	174.18	1
80	ø6 pneumatic hose	172.33	1
81	ø6 pneumatic hose	174.15	1
82	ø6 pneumatic hose	174.75	1
83	ø6 pneumatic hose	235.22	4
84	ø6 pneumatic hose	227.57	4
85	ø6 pneumatic hose	226.5	4
86	ø6 pneumatic hose	226.5	4
87	ø6 pneumatic hose	236.9	4
88	ø6 pneumatic hose	228.68	4
89	ø6 pneumatic hose	104.16	1
90	ø6 pneumatic hose	98.3	1
91	ø6 pneumatic hose	105.57	1
92	ø6 pneumatic hose	98.23	1
93	ø6 pneumatic hose	104.74	1
94	ø6 pneumatic hose	98.25	1
95	ø6 pneumatic hose	104.31	1
96	ø6 pneumatic hose	98.25	1
97	ø8 pneumatic hose	588.66	1
98	ø8 pneumatic hose	622.43	1
99	ø8 pneumatic hose	2744.72	1
100	ø8 pneumatic hose	2748.09	1
101	ø12 pneumatic hose	178.16	1
102	ø12 pneumatic hose	83.19	1
103	ø12 pneumatic hose	773.71	1
104	1:2" water hose	102.08	1
105	1" food hose SPRING D10	1039.86	1
106	1" food hose SPRING D10	2061.61	1
107	1" food hose SPRING D10	924.48	1
108	1" food hose SPRING D10	2004.09	1
109	1" food hose SPRING D10	3112.44	2
110	o13 x o10 spiral el. hose	206.84	1
111	o13 x o10 spiral el. hose	459.14	1
112	o13 x o10 spiral el. hose	253.29	1
113	o13 x o10 spiral el. hose	167.05	1

114	o13 x o10 spiral el. hose	803.77	1
115	o13 x o10 spiral el. hose	1706.11	1
116	o13 x o10 spiral el. hose	466.55	1
117	o13 x o10 spiral el. hose	803.99	1
118	o13 x o10 spiral el. hose	494.26	1
119	o13 x o10 spiral el. hose	1375.96	1
120	o13 x o10 spiral el. hose	1594.68	1
121	o13 x o10 spiral el. hose	1347.23	1
122	o13 x o10 spiral el. hose	692.74	1
123	o13 x o10 spiral el. hose	665.48	1
124	o13 x o10 spiral el. hose	787.81	1
125	o13 x o10 spiral el. hose	1175.61	1
126	o13 x o10 spiral el. hose	1151.33	1
127	o13 x o10 spiral el. hose	1379.33	1
128	o13 x o10 spiral el. hose	1583.47	1
129	o13 x o10 spiral el. hose	1484.51	1
130	o13 x o10 spiral el. hose	316.43	1
131	o13 x o10 spiral el. hose	313.12	1
132	o13 x o10 spiral el. hose	320.71	1
133	o13 x o10 spiral el. hose	318.67	1
134	o13 x o10 spiral el. hose	1279.76	1
135	o13 x o10 spiral el. hose	1273.92	1
136	o13 x o10 spiral el. hose	5315.96	1
137	o13 x o10 spiral el. hose	4481.5	1
138	o13 x o10 spiral el. hose	1165.2	1
139	o13 x o10 spiral el. hose	1163.21	1
140	o13 x o10 spiral el. hose	1177.21	1
141	o21 x o16 spiral el. hose	3592.68	1
142	o21 x o16 spiral el. hose	3390.89	1
143	o21 x o16 spiral el. hose	627.64	1
144	o21 x o16 spiral el. hose	927.3	1
145	o21 x o16 spiral el. hose	5016.07	1
146	o21 x o16 spiral el. hose	488.69	1
147	30x30 sigma profil	595	2
148	30x30 sigma profil	2093	2
149	2.3.006.08.01 - CAM FITIL	610.4	2
150	2.3.006.08.01 - CAM FITIL	2055.4	2
151	2.3.005.08.01 - KANAL FITIL	2093	6
152	2.3.005.08.01 - KANAL FITIL	595	6
153	486 yapiskanli dokme conta	278.4	1
154	486 yapiskanli dokme conta	283.4	2

MANUFACTURING PARTS of BTC2000 chocolate coating cabin.

ERROR CHECK	COLUMN	PART NAME	CONF	MATERIAL	DIMENSIONS	TYPE	QTY		MODULE	NR. OF TEETH	GEARS INFO
	1	BTC2000v5-01-002		AISI 304	ø40 x 2240	MIL	8		0	0	
	2	BTC2000v5-01-005		AISI 304	ø60 x 250	MIL	32		0	0	
	3	BTC2000v5-01-005	Conf1	AISI 304	ø60 x 250	MIL	24		0	0	
	4	BTC2000v5-01-005	Conf2	AISI 304	ø60 x 215	MIL	8		0	0	
	5	BTC2000v5-01-005	Conf3	AISI 304	ø60 x 215	MIL	8		0	0	
	6	BTC2000v5-01-007		AISI 304	ø80 x 29	MIL	16		0	0	
	7	BTC2000v5-01-009		AISI 304	ø25 x 2230	MIL	1		0	0	
	8	BTC2000v5-01-010		AISI 304	ø40 x 250	MIL	4		0	0	
	9	BTC2000v5-01-010	Conf1	AISI 304	ø40 x 250	MIL	3		0	0	
	10	BTC2000v5-01-010	Conf2	AISI 304	ø40 x 215	MIL	1		0	0	
	11	BTC2000v5-01-010	Conf3	AISI 304	ø40 x 215	MIL	1		0	0	
	12	BTC2000v5-01-011		AISI 304	ø65 x 24	MIL	2		0	0	
	13	BTC2000v5-01-014		AISI 304	ø60 x 117	MIL	2		0	0	
	14	BTC2000v5-01-016		AISI 304	ø30 x 29	MIL	2		0	0	
	15	BTC2000v5-01-017		AISI 304	ø90 x 25.1	MIL	2		0	0	
	16	BTC2000v5-01-018		AISI 304	M10 x 105	SAPLAMA	2		0	0	
	17	BTC2000v5-01-021		AISI 304	ø45 x 110	MIL	5		0	0	
	18	BTC2000v5-01-022		AISI 304	ø45 x 280	MIL	1		0	0	
	19	BTC2000v5-01-023		AISI 304	ø40 x 20	MIL	1		0	0	
	20	BTC2000v5-01-026		AISI 304	ø90 x 192	MIL	2		0	0	
	21	BTC2000v5-01-031		AISI 304	ø25 x 64	MIL	4		0	0	
	22	BTC2000v5-01-032		AISI 304	ø30 x 76.4	MIL	1		0	0	
	23	BTC2000v5-01-036		AISI 304	ø20 x 15	MIL	2		0	0	
	24	BTC2000v5-01-037		AISI 304	ø25 x 50	MIL	2		0	0	
	25	BTC2000v5-02-002		AISI 304	ø33 x 30	MIL	2		0	0	
	26	BTC2000v5-03-001		AISI 304	ø90 x 30	MIL	8		0	0	
	27	BTC2000v5-03-003		AISI 304	10 x 40 x 280	LAMA	8		0	0	
	28	BTC2000v5-03-007		AISI 304	20 x 60 x 160	LAMA	1		0	0	
	29	BTC2000v5-05-002		AISI 304	ø100 x 25	MIL	4		0	0	
	30	BTC2000v5-05-003		AISI 304	ø100 x 37	MIL	4		0	0	
	31	BTC2000v5-05-004		AISI 304	ø60 x 35	MIL	4		0	0	

	32	BTC2000v5-05-005		AISI 304	15 x 50 x 133	LAMA	4		0	0	
	33	BTC2000v5-05-007		AISI 304	15 x 30 x 60	LAMA	8		0	0	
	34	BTC2000v5-05-008		AISI 304	15 x 60 x 217	LAMA	4		0	0	
	35	BTC2000v5-05-021		AISI 304	ø20 x 28.8	MIL	4		0	0	
	36	BTC2000v5-05-028		AISI 304	ø60 x 30	MIL	4		0	0	
	37	BTC2000v5-05-062		AISI 304	ø70 x 25	MIL	2		0	0	
	38	BTC2000v5-05-063		AISI 304	ø60 x 25	MIL	2		0	0	
	39	BTC2000v5-05-064		AISI 304	ø65 x 15	MIL	2		0	0	
	40	BTC2000v5-06-006		AISI 304	10 x 20 x 60	LAMA	4		0	0	
	41	BTC2000v5-06-009		AISI 304	M6 x 95	SAPLAMA	2		0	0	
	42	BTC2000v5-08-005		AISI 304	ø40 x 79.5	MIL	2		0	0	
	43	BTC2000v5-08-006		AISI 304	ø40 x 29	MIL	8		0	0	
	44	BTC2000v5-08-007		AISI 304	ø40 x 44.5	MIL	2		0	0	
	45	BTC2000v5-08-008		AISI 304	hex18 x 53.5	ALTIKOSE	4		0	0	
	46	BTC2000v5-08-009		AISI 304	ø18 x 10.5	MIL	4		0	0	
	47	BTC2000v5-08-010		AISI 304	hex18 x 45.5	ALTIKOSE	4		0	0	
	48	BTC2000v5-08-014		AISI 304	ø40 x 84.5	MIL	2		0	0	
	49	BTC2000v5-09-001		AISI 304	ø30 x 85	MIL	2		0	0	
	50	BTC2000v5-10-004		AISI 304	ø25 x 1977.5	MIL	2		0	0	
	51	BTC2000v5-10-007		AISI 304	ø16 x 75	MIL	8		0	0	
	52	BTC2000v5-10-009		AISI 304	M4 x 60	SAPLAMA	124		0	0	
	53	BTC2000v5-10-014		AISI 304	ø16 x 157	MIL	16		0	0	
	54	BTC2000v5-10-016		AISI 304	ø45 x 45	MIL	4		0	0	
	55	BTC2000v5-10-017		AISI 304	ø40 x 300	MIL	2		0	0	
	56	BTC2000v5-05-051		AISI 420	ø50 x 30	MIL	2		0	0	
	57	BTC2000v5-05-053		AISI 420	ø30 x 265	MIL	1		0	0	
	58	BTC2000v5-05-055		AISI 420	ø30 x 35	MIL	1		0	0	
	59	BTC2000v5-05-067		7075	90 x 90 x 75	LAMA	2		0	0	
	60	BTC2000v5-09-002		7075	27 x 80 x 2020	LAMA	1		0	0	
	61	BTC2000v5-10-001		7075	70 x 170 x 2015	LAMA	1		0	0	
	62	BTC2000v5-10-006		7075	40 x 170 x 2015	LAMA	1		0	0	
	63	BTC2000v5-10-011		7075	135 x 37 x 33	LAMA	8		0	0	
	64	BTC2000v5-04-001		5754	30 x 115 x 120	LAMA	1		0	0	
	65	BTC2000v5-10-020		5754	18 x 60 x 165	LAMA	1		0	0	
	66	BTC2000v5-10-021		5754	18 x 60 x 205	LAMA	1		0	0	
	67	BTC2000v5-10-002		Pirinc	hex15 x 16	ALTIKOSE	124		0	0	
	68	BTC2000v5-10-015		Pirinc	hex17 x 21	ALTIKOSE	16		0	0	
	69	BTC2000v5-03-008		Bronz (kalay)	ø22 x 15	MIL	1		0	0	
	70	BTC2000v5-05-052		Bronz (kalay)	ø38 x 30	MIL	2		0	0	
	71	BTC2000v5-03-009		Kromlu mil	ø50 x 2395	MIL	1		0	0	
	72	BTC2000v5-01-003		PE500	30 x 985 x 985	LAMA	2		0	0	

	73	BTC2000v5-01-004		PE500	15 x 1344 x 970.2	LAMA	1		0	0	
	74	BTC2000v5-01-004	Conf1	PE500	15 x 1344 x 970.2	LAMA	1		0	0	
	75	BTC2000v5-05-036		PE500	10 x 230 x 2060	LAMA	1		0	0	
	76	BTC2000v5-05-038		PE500	10 x 190 x 2060	LAMA	1		0	0	
	77	BTC2000v5-05-056		PE500	10 x 450 x 2060	LAMA	1		0	0	
	78	BTC2000v5-05-058		PE500	10 x 325 x 2060	LAMA	1		0	0	
	79	BTC2000v5-05-061		PE500	15 x 230 x 2065	LAMA	1		0	0	
	80	BTC2000v5-11-002		PE500	10 x 155 x 192	LAMA	1		0	0	
	81	BTC2000v5-01-025		Delrin	20 x 302.66 x 475.03	LAMA	1		0	0	
	82	BTC2000v5-01-025	Conf1	Delrin	20 x 302.66 x 475.03	LAMA	1		0	0	
	83	BTC2000v5-07-003		Plexyglas	10 x 190 x 1820.03	LAMA	1		0	0	
	84	BTC2000v5-08-004		Plexyglas	3 x 610 x 2055	LAMA	1		0	0	
	85	BTC2000v5-03-005		Polyamid	15 x 60 x 280	LAMA	8		0	0	
	86	BTC2000v5-09-003		Polyamid	10 x 90 x 2020	LAMA	1		0	0	

SHEETMETAL PARTS of BTC2000 chocolate coating cabin.

ERROR CHECK	REPEATING PART	COLUMN	PART ID	CONF	MODULE	NUMBER OF TEETH	QTY	THICKNESS	MATERIAL
		1	BTC2000v5-01-019				2	1.2	AISI 304
		2	BTC2000v5-04-008				1	1.2	AISI 304
		3	BTC2000v5-04-009				1	1.2	AISI 304
		4	BTC2000v5-04-011				1	1.2	AISI 304
		5	BTC2000v5-04-003				1	1.2	AISI 304
	●	6	BTC2000v5-01-033				4	1.2	AISI 304
		7	BTC2000v5-05-011				4	1.2	AISI 304
		8	BTC2000v5-05-012				5	1.2	AISI 304
		9	BTC2000v5-05-010				8	1.2	AISI 304
		10	BTC2000v5-05-013				1	1.2	AISI 304
		11	BTC2000v5-05-014				2	1.2	AISI 304
	●	12	BTC2000v5-05-015				1	1.2	AISI 304
	●	13	BTC2000v5-05-015	Conf1			2	1.2	AISI 304
	●	14	BTC2000v5-05-015	Conf2			1	1.2	AISI 304
		15	BTC2000v5-05-017				1	1.2	AISI 304
	●	16	BTC2000v5-05-016				1	1.2	AISI 304
	●	17	BTC2000v5-05-016	Conf1			1	1.2	AISI 304
		18	BTC2000v5-05-018				1	1.2	AISI 304

		19	BTC2000v5-05-019				1	1.2	AISI 304
		20	BTC2000v5-05-020				1	1.2	AISI 304
		21	BTC2000v5-06-007				1	1.2	AISI 304
		22	BTC2000v5-06-008				1	1.2	AISI 304
		23	BTC2000v5-05-022				1	1.2	AISI 304
		24	BTC2000v5-05-023				1	1.2	AISI 304
	●	25	BTC2000v5-05-024				1	1.2	AISI 304
	●	26	BTC2000v5-05-024	Conf1			1	1.2	AISI 304
		27	BTC2000v5-05-025				4	1.2	AISI 304
		28	BTC2000v5-05-026				8	1.2	AISI 304
	●	29	BTC2000v5-05-027				1	1.2	AISI 304
	●	30	BTC2000v5-05-027	Conf1			1	1.2	AISI 304
		31	BTC2000v5-07-001				1	1.2	AISI 304
		32	BTC2000v5-07-002				1	1.2	AISI 304
		33	BTC2000v5-07-004				4	1.2	AISI 304
		34	BTC2000v5-05-029				2	1.2	AISI 304
		35	BTC2000v5-01-030				2	1.2	AISI 304
		36	BTC2000v5-05-030				1	1.2	AISI 304
	●	37	BTC2000v5-01-033				2	1.2	AISI 304
		38	BTC2000v5-09-005				1	1.2	AISI 304
		39	BTC2000v5-05-031				1	1.2	AISI 304
		40	BTC2000v5-05-032				1	1.2	AISI 304
		41	BTC2000v5-05-033				1	1.2	AISI 304

		42	BTC2000v5-05-035				2	1.2	AISI 304
		43	BTC2000v5-05-034				2	1.2	AISI 304
		44	BTC2000v5-05-037				1	1.2	AISI 304
		45	BTC2000v5-05-039				1	1.2	AISI 304
		46	BTC2000v5-05-040				1	1.2	AISI 304
		47	BTC2000v5-05-041				1	1.2	AISI 304
		48	BTC2000v5-05-057				1	1.2	AISI 304
		49	BTC2000v5-10-008				1	1.2	AISI 304
		50	BTC2000v5-10-012				1	1.2	AISI 304
		51	BTC2000v5-10-013				7	1.2	AISI 304
		52	BTC2000v5-10-019				1	1.2	AISI 304
		53	BTC2000v5-11-003				1	1.2	AISI 304
		54	BTC2000v5-05-071				1	1.2	AISI 304
		55	BTC2000v5-05-072				1	1.2	AISI 304
		56	BTC2000v5-05-074				1	1.2	AISI 304
		57	BTC2000v5-05-075				1	1.2	AISI 304
		58	BTC2000v5-05-076				1	1.2	AISI 304
		59	BTC2000v5-05-077				3	1.2	AISI 304
		60	BTC2000v5-06-001				1	1.5	AISI 304
	●	61	BTC2000v5-06-002	Conf1			1	1.5	AISI 304
	●	62	BTC2000v5-06-002				1	1.5	AISI 304
		63	BTC2000v5-06-003				1	1.5	AISI 304
		64	BTC2000v5-11-001				1	1.5	AISI 304

		65	BTC2000v5-01-029				1	2	AISI 304
		66	BTC2000v5-05-044				1	2	AISI 304
		67	BTC2000v5-05-043				1	2	AISI 304
	●	68	BTC2000v5-05-045	Conf1			1	2	AISI 304
	●	69	BTC2000v5-05-045				1	2	AISI 304
		70	BTC2000v5-05-047				1	2	AISI 304
		71	BTC2000v5-05-048				1	2	AISI 304
		72	BTC2000v5-05-049				1	2	AISI 304
		73	BTC2000v5-05-046				4	2	AISI 304
	●	74	BTC2000v5-05-059				2	2	AISI 304
	●	75	BTC2000v5-05-059	Conf1			1	2	AISI 304
		76	BTC2000v5-05-060				1	2	AISI 304
		77	BTC2000v5-05-070				1	2	AISI 304
		78	BTC2000v5-05-073				4	2	AISI 304
		79	BTC2000v5-01-008				16	3	AISI 304
		80	BTC2000v5-01-012				2	3	AISI 304
		81	BTC2000v5-02-003				2	3	AISI 304
		82	BTC2000v5-04-005				1	3	AISI 304
		83	BTC2000v5-04-010				1	3	AISI 304
		84	BTC2000v5-04-004				1	3	AISI 304
		85	BTC2000v5-08-013				6	3	AISI 304
		86	BTC2000v5-01-039				9	3	AISI 304
		87	BTC2000v5-01-040				9	3	AISI 304

		88	BTC2000v5-01-041				9	3	AISI 304
		89	BTC2000v5-01-042				9	3	AISI 304
		90	BTC2000v5-01-043				9	3	AISI 304
		91	BTC2000v5-01-044				9	3	AISI 304
		92	BTC2000v5-01-045				9	3	AISI 304
		93	BTC2000v5-01-046				9	3	AISI 304
		94	BTC2000v5-08-011				2	3	AISI 304
		95	BTC2000v5-08-012				2	3	AISI 304
		96	BTC2000v5-05-054				1	3	AISI 304
		97	BTC2000v5-05-050				1	3	AISI 304
		98	BTC2000v5-06-005				4	3	AISI 304
	●	99	BTC2000v5-01-006				1	4	AISI 304
	●	100	BTC2000v5-01-006	Conf1			1	4	AISI 304
		101	BTC2000v5-04-006				1	4	AISI 304
		102	BTC2000v5-01-035				2	4	AISI 304
		103	BTC2000v5-01-038				2	4	AISI 304
		104	BTC2000v5-01-015				2	5	AISI 304
	●	105	BTC2000v5-03-004				4	5	AISI 304
	●	106	BTC2000v5-03-004				4	5	AISI 304
		107	BTC2000v5-08-018				2	5	AISI 304
		108	BTC2000v5-09-004				1	5	AISI 304
	●	109	BTC2000v5-01-001				9	8	AISI 304
	●	110	BTC2000v5-01-001	Conf1			9	8	AISI 304

	●	111	BTC2000v5-01-001	Conf2			9	8	AISI 304
	●	112	BTC2000v5-01-001	Conf3			9	8	AISI 304
	●	113	BTC2000v5-03-002				4	8	AISI 304
	●	114	BTC2000v5-03-006				4	8	AISI 304
	●	115	BTC2000v5-03-002	Conf1			4	8	AISI 304
	●	116	BTC2000v5-03-006				4	8	AISI 304
		117	BTC2000v5-05-009				4	8	AISI 304
		118	BTC2000v5-08-001				2	8	AISI 304
		119	BTC2000v5-08-002				2	8	AISI 304
		120	BTC2000v5-05-065				2	8	AISI 304
		121	BTC2000v5-05-068				2	8	AISI 304
		122	BTC2000v5-01-027				2	10	AISI 304
	●	123	BTC2000v5-01-028	conf1			2	10	AISI 304
	●	124	BTC2000v5-01-028				2	10	AISI 304
		125	BTC2000v5-03-010				1	10	AISI 304
		126	BTC2000v5-01-034				2	10	AISI 304
		127	BTC2000v5-10-018				2	10	AISI 304
		128	BTC2000v5-01-024				6	12	AISI 304
		129	BTC2000v5-06-004				1	1.2	ST37

BUILDIN CALCULATIONS

BUTTONS

K0 – DARK CHOOCLATE ACTIVATION

K1 – MILK CHOCOLATE ACTIVATION

K4 – LOW DENSITY ARTICLE SELECTION

K5 – HIGH DENSITY ARTICLE SELECTION

K6 – PRE-COATING ACTIVATION

K7 – CANCEL TASK PRE-COATING

K8 – ENGROSSING 1 ACTIVATION

K9 – ACTIVATE COOLING WHEN ENGROSSING 1 DRIPS OR SPRAYS

K10 – ENGROSSING 2 ACTIVATION

K11 – ACTIVATE COOLING WHEN ENGROSSING 2 DRIPS OR SPRAYS

K12 – CLICK TO SAVE CUSTOM PROPERTY

K13 – ATOMIZING AIR OF ENGROSSING 1

K14 – PATTERN AIR OF ENGROSSING 1

K15 – ATOMIZING AIR OF ENGROSSING 2

K16 – PATTERN AIR OF ENGROSSING 2

K17 – ACTIVATE COOLING WHEN SMOOTHING ON ACTION

VARIABLE PARAMETERS

D0 – ARTICLE LOADCELL CALIBRATION (+- NUMBER) = D105

D4 – ARTICLE LOADED AT THE WHOLE BEGINNING (ALL CALCULATIONS ARE GOING TO BE MADE WITH THIS PARAMETER) (KG.) = D135

D8 – MANUAL TASK (MOISTENING) % (% IS GOING TO BE CALCULATED WITH VARIABLE D4) (NUMBER) = D130

D9 – WAIT TIME TO PASS TO NEXT TASK (PRE-COATING - ENGROSSING) (SECONDS)

D10 – ENGROSSING 1 % (% IS GOING TO BE CALCULATED WITH VARIABLE D4) (NUMBER) = D150

D11 – ENGROSSING 1 TIME ON (SECONDS) = D280

D12 – ENGROSSING 1 TIME OFF (SECONDS) = D285

D13 – ENGROSSING 2 % (% IS GOING TO BE CALCULATED WITH VARIABLE D4) (NUMBER) = D165

D14 – ENGROSSING 2 TIME ON (SECONDS) = D290

D15 – ENGROSSING 2 TIME OFF (SECONDS) = D295

D16 – TASK START CONDITION (SMOOTHING STARTING CONDITION) (NUMBER) = D225

D17 – SMOOTHING TIME ON AFTER ALL ENGROSSING TASKS ARE COMPLETED (SECONDS) = D300

D18 – WAIT TO PASS TO NEXT TASK (SMOOTHING - DUSTING) (SECONDS) = D305

D30 – CALCULATION VALUE (CALIBRATED ARTICLE LOADCELL VALUE) = D2036

D32 – CALCULATION VALUE (START-TO-FINISH TIME (MINUTES) K12 MUST BE PRESSED TO RECEIVE REAL VARIABLES WHICH ARE USED FOR THE CALCULATION) = D365

D33 – CALCULATION VALUE (REMAINING TIME (MINUTES) K12 MUST BE PRESSED TO RECEIVE REAL VARIABLES WHICH ARE USED FOR THE CALCULATION) = D375

D34 – CALCULATION VALUE (WILL INCREASE BY 1 EACH CHARGE OF ENGROSSING 1)

D35 – CALCULATION VALUE (APPROXIMATE TOTAL CHARGES TO FINISH PROCESS) K12 MUST BE PRESSED TO RECEIVE REAL VARIABLES WHICH ARE USED FOR THE CALCULATION)

D36 – CALCULATION VALUE (WILL INCREASE BY 1 EACH CHARGE OF ENGROSSING 2)

D37 – CALCULATION VALUE (APPROXIMATE TOTAL CHARGES TO FINISH PROCESS) K12 MUST BE PRESSED TO RECEIVE REAL VARIABLES WHICH ARE USED FOR THE CALCULATION)

D39 – CALCULATION VALUE (FINISHED PRODUCT TOTAL WEIGHT) = D220

D40 – TEMPERATURE INSIDE COATING CABIN

D2030 – ARTICLE LOADCELL VALUE = D100

D2016 –DUST LOADCELL VALUE = D115

D60 – D34 AFTER K12 PRESSED DATA SAVE ADDRESS = D260 (CONDITION K5 ACTIVE)

D61 – D36 AFTER K12 PRESSED DATA SAVE ADDRESS = D270 (CONDITION K5 ACTIVE)

D62 – D34 AFTER K12 PRESSED DATA SAVE ADDRESS (CONDITION K4 ACTIVE)

D63 – D36 AFTER K12 PRESSED DATA SAVE ADDRESS (CONDITION K4 ACTIVE)

D64 – D11 AFTER K12 PRESSED DATA SAVE ADDRESS (CONDITION K5 ACTIVE)

D65 – D14 AFTER K12 PRESSED DATA SAVE ADDRESS (CONDITION K5 ACTIVE)

D66 – D11 AFTER K12 PRESSED DATA SAVE ADDRESS (CONDITION K4 ACTIVE)

D67 - D14 AFTER K12 PRESSED DATA SAVE ADDRESS (CONDITION K4 ACTIVE)

D68 – D160 AFTER K12 PRESSED DATA SAVE ADDRESS

D69 – D175 AFTER K12 PRESSED DATA SAVE ADDRESS

D70 – CONVERT D8 TO GR. = D145

D71 – CONVERT D10 TO GR. (ENGROSSING 1) = D160

D72 – CONVERT D13 TO GR. (ENGROSSING 2) = D175

D73 – FIND THE LIMIT OF D16 TO START SMOOTHING = D240

D80 – EACH CHARGE GR. FOR ENGROSSING 1 = D265 (IN CASE K5 ACTIVE)

D81 – EACH CHARGE GR. FOR ENGROSSING 2 = D275 (IN CASE K5 ACTIVE)

D82 – EACH CHARGE GR. FOR ENGROSSING 1 = (IN CASE K4 ACTIVE)

D83 – EACH CHARGE GR. FOR ENGROSSING 2 = (IN CASE K4 ACTIVE)

D370 – TIMER (WILL START WITH PRESS START BUTTON END WITH PROCESS COMPLETED) (MINUTES) = D370

WORKING PRINCIPLE - CONDITIONS

K0 – K1 – WHEN ONE IS ACTIVATED OTHER SHOULD BECOME PASSIVE, CANNOT BE CHANGED WHEN PROCEEDING

K4 – K5 – BOTH CANNOT BE ACTIVE AT SAME TIME. IF ONE OF THEM ACTIVATED OTHER SHOULD BECOME PASSIVE, CANNOT BE CHANGED WHEN PROCEEDING

IN CASE K6 IS ACTIVE MACHINE WILL PERFORM PRE-COATING TASK WHICH IS MANUAL FEEDING OPERATION. CANNOT BE CHANGED WHEN PERFORMING OPERATION.

IN CASE K7 IS ACTIVATED EVEN AT THE MIDDLE OF OPERATION MANUAL TASK – MOISTENING , ACTIVATING IT WILL MEAN THAT MACHINE WILL PASS TO D9 DIRECTLY. IF K6 IS PASSIVE K7 IS DISABLED. IN THIS VARIANT K7 WILL NOT TAKE ACTION.

IN CASE D8 = 0% MACHINE SHOULD PASS DIRECTLY TO D9 EVEN K6 IS ACTIVE

K8 – K10 – ARE INDICATION BUTTONS, THEY WILL BECOME ACTIVE OR PASSIVE DEPENDING OF K0, K1, K2, K3 CONDITION.

IN CASE K8 & K10 PRESSED THE SORTING OF ENGROSSING 1 & ENGROSSING 2 IS GOING TO BE AS K2. SO K2 IS GOING TO BE ACTIVATED AUTOMATICALLY. TO INDICATE THE COATING SORTING.

EVEN K8 IS ACTIVATED IF D10 = 0 MACHINE SHOULD PASS TO NEXT TASK

IN CASE K9 IS ACTIVATED / PASSIVATED THIS WILL MEAN THAT MACHINE WILL OPEN / CLOSE GATE TO BLOW AIR INSIDE CABIN WHEN ENGROSSING 1 DRIPS OR SPRAYS CHOCOLATE. WHILE WAITING FOR NEXT CHARGE MACHINE WILL BLOW AIR INSIDE CABIN. BUT OTHER CONDITION IS K8 TO BE ACTIVATED.

EVEN K10 IS ACTIVATED IF D13 = 0 MACHINE SHOULD PASS TO NEXT TASK

IN CASE K11 IS ACTIVATED / PASSIVATED THIS WILL MEAN THAT MACHINE WILL OPEN / CLOSE GATE TO BLOW AIR INSIDE CABIN WHEN ENGROSSING 2 DRIPS OR SPRAYS CHOCOLATE. WHILE WAITING FOR NEXT CHARGE MACHINE WILL BLOW AIR INSIDE CABIN. BUT OTHER CONDITION IS K10 TO BE ACTIVATED.

K12 – IS BUTTON WHICH WILL COLLECT INFORMATION OF THE FIRST RUN. IT WILL COLLECT CURRENT SETTINGS AND TOTAL ENGROSSING CHARGES WHICH ARE GOING TO BE USED FOR CALCULATION OF APPROXIMATE TOTAL ENGROSSING CHARGES & APPROXIMATE TIME TO FINISH THE BATCH WHEN PARAMETERS ARE CHANGED.

K13 – ACTIVATION OF ENGROSSING 1 ATOMIZING AIR IN CASE K8 & K4 ARE ACTIVE

K14 - ACTIVATION OF ENGROSSING 1 PATTERN AIR IN CASE K8 & K4 ARE ACTIVE

K15 – ACTIVATION OF ENGROSSING 2 ATOMIZING AIR IN CASE K10 & K4 ARE ACTIVE

K16 - ACTIVATION OF ENGROSSING 2 PATTERN AIR IN CASE K10 & K4 ARE ACTIVE

K17 – ACTIVATED K17 WILL ALLOW BLOWING AIR INSIDE CABIN WHEN THE SMOOTHING IS PERFORMING. IF K17 IS PASSIVATED MACHINE WILL CHANGE GATE OF AIR BLOWING TO NOT BLOW INSIDE CABIN.

IF D16 = 100 THEN SMOOTHING WILL START AFTER ALL COATING IS COMPLETED.
IF D16 < 100 THEN SMOOTHING WILL START WHEN COATING REACHES THIS VALUE. FOR EXAMPLE IF D16=80 MACHINE WILL START SMOOTHING ON 80 % LOADED CHOCOLATE.

K18 – DUSTING OPERATION. D19 CANNOT EXCEED MAX. ALLOWED DUST (%) (D38)

CALCULATIONS

D30 = D2030 + D0 = “D2036” IN CALCULATIONS

MOV D2030 D100
MOV D0 D105
ADD D100 D105 D110
MOV D110 D2036

ORNEK: YUKLENEN KURUYEMIS LOADCELL DEGERI = D50 = 200KG. KALIBRASYON DEGERI -5KG.
200 + (-5) = 195KG = D30 = D110

D31 = D2016 + D2 = “D125” IN CALCULATIONS

MOV D2016 D115
MOV D2 D120
ADD D115 D120 D125

ORNEK: YUKLENEN TOZ LOADCELL DEGERI = D51 = 50KG. KALIBRASYON DEGERI 5KG.
50 + (5) = 55KG = D31 = D120

D70 = (D8 * D4) * 1000 / 100 = (D8 * D4) * 10 = “D145” IN CALCULATIONS

MOV D8 D130
MOV D4 D135
MUL D130 D135 D140
DMUL D140 10 D145

MUL D130 1000 D380
MUL D145 1000 D385
ADD D389 D385 D455 (TOTAL WEIGHT RAW MATERIAL + MOISTENING LIMIT IN GR.)
DIV D455 1000 D460 (TOTAL WEIGHT RAW MATERIAL + MOISTENING LIMIT IN KG.)

ORNEK: ON KAPLAMA YAPILMAK ISTENEN ORAN = D8 = 50%
KALIBRE EDILMIS YUKLU KURUYEMIS BASLANGIC AGIRLIGI = D4 = 200KG
200 * 50 = 10.000
10.000 * 10 = 100.000 GR.

D71 = (D10 * D4) * 1000 / 100 = (D10 * D4) * 10 = “D160” IN CALCULATIONS

MOV D10 D150
DMUL D150 D135 D155
DMUL D155 10 D160

IN CASE K0, K2 SELECTED LIMIT OF ENGROSSING 1
ADD D385 D160 D390 (TOTAL WEIGHT RAW MATERIAL + MOISTENING + ENGROSSING 1 LIMIT)

IN CASE K3 SELECTED LIMIT OF ENGROSSING 1

ADD D395 D160 D400 (TOTAL WEIGHT RAW MATERIAL + MOISTENING + ENGROSSING 2 + ENGROSSING 1 LIMIT)

ORNEK: ENGROSSING 1 YAPILMAK ISTENEN ORAN = D10 = 150%
KALIBRE EDILMIS YUKLU KURUYEMIS BASLANGIC AGIRLIGI = D4 = 200KG

200 * 150 = 30.000
30.000 * 10 = 300.000 GR.

D72 = (D13 * D4) * 1000 / 100 = (D13 * D4) * 10 = “D175” IN CALCULATIONS

MOV D13 D165
DMUL D165 D135 D170
DMUL D170 10 D175

IN CASE K1 OR K3 SELECTED LIMIT OF ENGROSSING 2
ADD D385 D175 D395 (TOTAL WEIGHT RAW MATERIAL + MOISTENING + ENGROSSING 2 LIMIT)

IN CASE K2 SELECTED LIMIT OF ENGROSSING 2
ADD D390 D175 D405

ORNEK: ENGROSSING 2 YAPILMAK ISTENEN ORAN = D13 = 200%
KALIBRE EDILMIS YUKLU KURUYEMIS BASLANGIC AGIRLIGI = D4 = 400KG
400 * 200 = 80.000
80.000 * 10 = 800.000 GR.

D74 = (D19 * D4) * 1000 / 100 = (D19 * D4) * 10 = D190

MOV D19 D180
MUL D180 D135 D185
MUL D185 10 D190

ORNEK: TOZLAMA YAPILMAK ISTENEN ORAN = D19 = 50%
KALIBRE EDILMIS YUKLU TOZ BASLANGIC AGIRLIGI = D6 = 100KG
100 * 50 = 5.000
5.000 * 10 = 50.000 GR.

D39 – K0 – K1 – K2 – K3 – K6 ve K18’e GORE AYRI FORMUL OLACAK

(K2 VEYA K3 SECILI, K6 SECILI, K18 SECILI ISE) (HEPSI AKTIF)
D39 = (D135 * 1000 + D145 + D160 + D175 + D190) / 1000 = D220

MUL D135 1000 D195
ADD D195 D145 D200
ADD D200 D160 D205
ADD D205 D175 D210
ADD D210 D190 D215
DIV D215 1000 D220

K0 SECILI ISE - D175 HESAPLAMA DISI KALIR = 0
K1 SECILI ISE – D160 HESAPLAMA DISI KALIP = 0
K6 SECILI DEGIL ISE – D145 HESAPLAMA DISI KALIR = 0
K18 SECILI DEGIL ISE – D190 HESAPLAMA DISI KALIR = 0

D73 = (D220 – D135) * D225 / 100= D240

MOV D16 D225
SUB D220 D135 D230
MUL D230 D225 D235
DIV D235 100 D240

ADD D240 D135 D450
DIV D190 1000 D470
SUB D450 D470 D465

IF D465 >= D225 START TASK SMOOTHING D225 = D16
IN CASE K18 ACTIVE D190=0

D75 = (D6 * 100) / D4 = D255

MOV D6 D245
MUL D245 100 D250
DIV D250 D135 D255

D19 CANNOT BE GREATER THEN D255 (= D38, = D75)

D80 = D160 / D60 (ENGROSSING 1 DOKECEGI GR./SN) = D265 (IN CASE K5 ACTIVE)

MOV D60 D260
DIV D160 D260 D265

D81 = D175 / D61 (ENGROSSING 1 DOKECEGI GR./SN) = D275 (IN CASE K5 ACTIVE)

MOV D61 D270
DIV D175 D270 D275

D82 = D160 / D62 (ENGROSSING 1 DOKECEGI GR./SN) = D480 (IN CASE K4 ACTIVE)

MOV D62 D475
DIV D160 D475 D480

D83 = D175 / D63 (ENGROSSING 1 DOKECEGI GR./SN) = D490 (IN CASE K4 ACTIVE)

MOV D63 D485
DIV D175 D485 D490

D32 – K0 – K1 – K2 – K3'e GORE AYRI FORMUL OLACAK

D32 = ((D60 * D11) + ((D60 – 1) * D12) + (D61 * D14) + ((D61 – 1) * D15) + D17 + D18) / 60 = D365
TOTAL PROCESS IN MINUTES

MOV D11 D280
MOV D12 D285
MOV D14 D290
MOV D15 D295
MOV D17 D300
MOV D18 D305
MUL D260 D280 D310
SUB D260 1 D315
MUL D315 D285 D320
ADD D310 D320 **D325**
MUL D270 D290 D330
SUB D270 1 D335
MUL D335 D295 D340

ADD D330 D340 **D345**
ADD D325 D345 D350
ADD D350 D300 D355
ADD D355 D305 D360
DIV D360 60 D365

K0 SECILI ISE - D345 HESAPLAMA DISI KALIR = 0
K1 SECILI ISE – D325 HESAPLAMA DISI KALIP = 0

D33 = D90 – D32 = D375

MOV D90 D370
SUB D365 D370 D375

D35 = (D160 * D11) / D265 / (D64 * D66) = ENGROSSING 1 TOPLAM YUKLEME ADEDI HESABI (IF K4 ACTIVE D64 = 1 IF K5 ACTIVE D66 = 1)

MUL D160 D11 D410
DIV D410 D265 D415
MUL D64 D66 D420
DIV D415 D420 D425

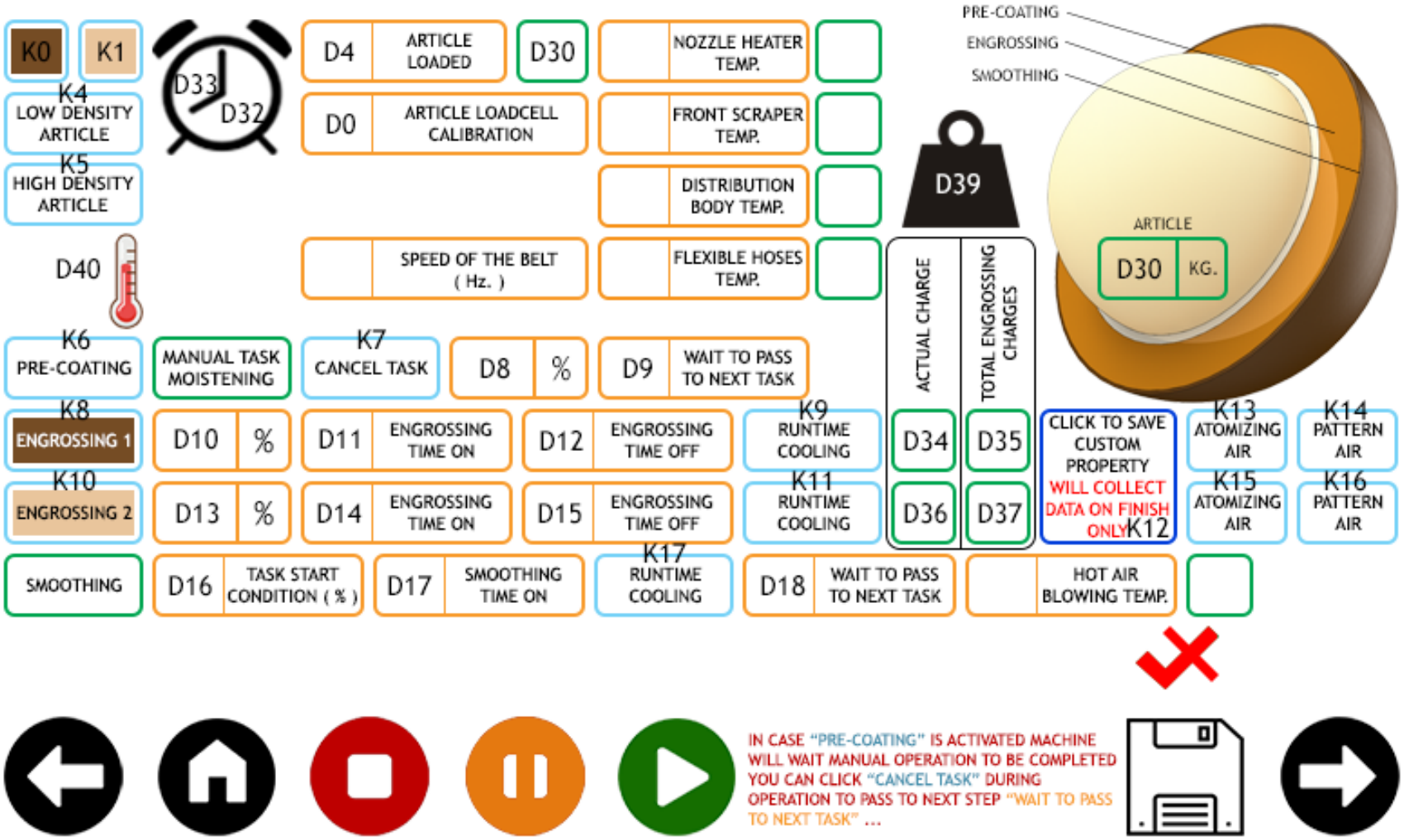
K1 SECILI ISE D425 = 0 KABUL EDILIR
K4 SECILI ISE D64 = 1 KABUL EDILIR
K5 SECILI ISE D66 = 1 KABUL EDILIR

D37 = (D175 * D14) / D275 / (D65 * D67) = ENGROSSING 2 TOPLAM YUKLEME ADEDI HESABI (IF K4 ACTIVE D65 = 1 IF K5 ACTIVE D67 = 1)

MUL D175 D14 D430
DIV D430 D275 D435
MUL D65 D67 D440
DIV D435 D440 D445

K0 SECILI ISE D455 = 0 KABUL EDILIR
K4 SECILI ISE D65 = 1 KABUL EDILIR
K5 SECILI ISE D67 = 1 KABUL EDILIR

MAIN OPERATION SCREEN


K0
K1
K4
LOW DENSITY ARTICLE
K5
HIGH DENSITY ARTICLE
D40
K6
PRE-COATING
K8
ENGROSSING 1
K10
ENGROSSING 2
SMOOTHING
D33
D32
D4
ARTICLE LOADED
D30
D0
ARTICLE LOADCELL CALIBRATION
SPEED OF THE BELT (Hz.)
MANUAL TASK MOISTENING
K7
CANCEL TASK
D8
%
D9
WAIT TO PASS TO NEXT TASK
D10
%
D11
ENGROSSING TIME ON
D12
ENGROSSING TIME OFF
K9
RUNTIME COOLING
D13
%
D14
ENGROSSING TIME ON
D15
ENGROSSING TIME OFF
K11
RUNTIME COOLING
D16
TASK START CONDITION (%)
D17
SMOOTHING TIME ON
K17
RUNTIME COOLING
D18
WAIT TO PASS TO NEXT TASK
NOZZLE HEATER TEMP.
FRONT SCRAPER TEMP.
DISTRIBUTION BODY TEMP.
FLEXIBLE HOSES TEMP.
D39
ACTUAL CHARGE
TOTAL ENGROSSING CHARGES
D34
D35
D36
D37
CLICK TO SAVE CUSTOM PROPERTY WILL COLLECT DATA ON FINISH ONLY
K12
HOT AIR BLOWING TEMP.
K13
ATOMIZING AIR
K14
PATTERN AIR
K15
ATOMIZING AIR
K16
PATTERN AIR
PRE-COATING
ENGROSSING
SMOOTHING
ARTICLE
D30
KG.
IN CASE "PRE-COATING" IS ACTIVATED MACHINE WILL WAIT MANUAL OPERATION TO BE COMPLETED YOU CAN CLICK "CANCEL TASK" DURING OPERATION TO PASS TO NEXT STEP "WAIT TO PASS TO NEXT TASK" ...