

TRANSPORT

CHOICES

SUBPAGES

FILTER - LORRY

COMMAND

CHOICES

SUBPAGES

AUTO

START CYCLE OK

ALARM

ANOMALY RESET

SIREN SILENCE

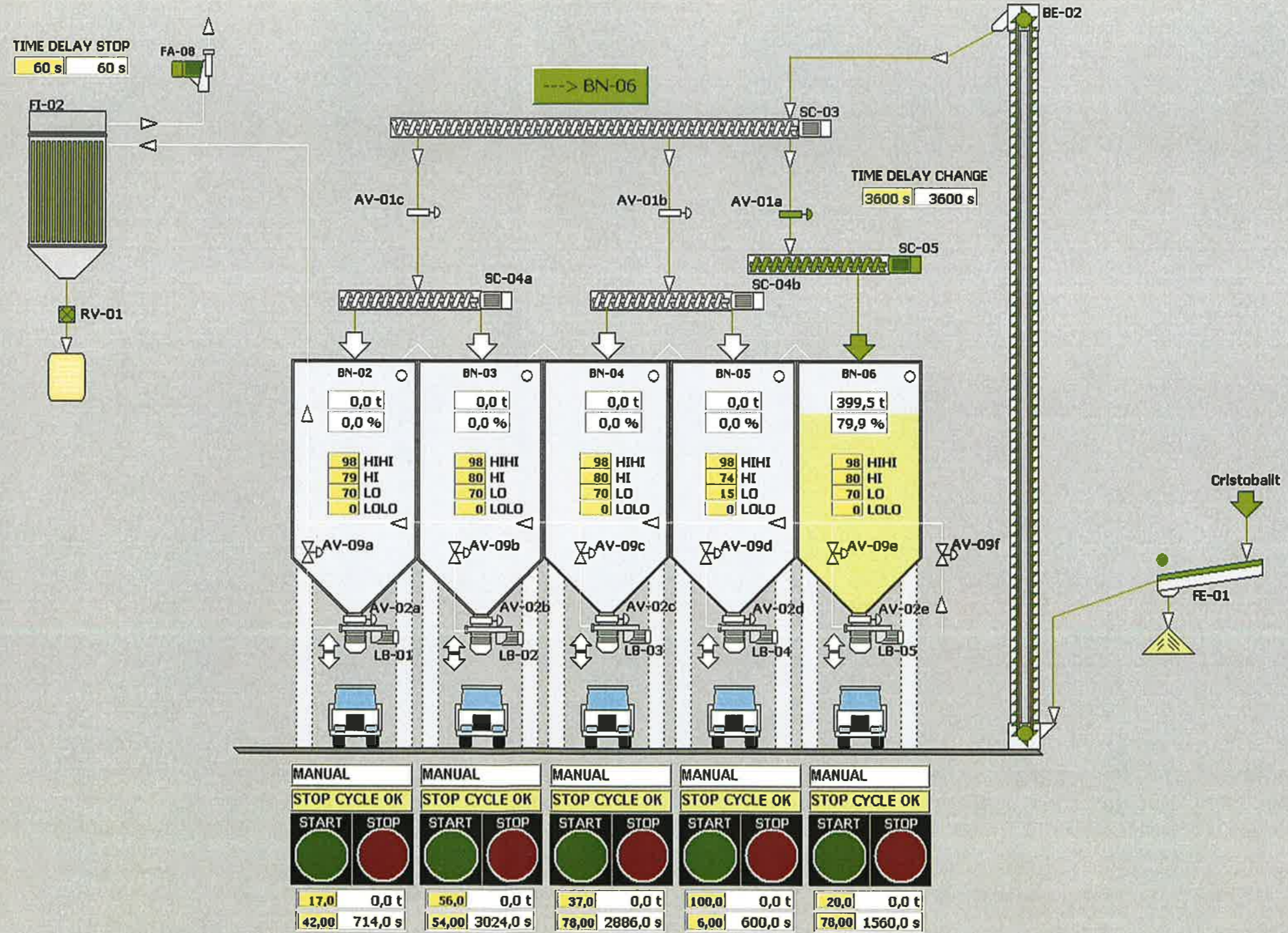
AUTO

START CYCLE OK

ALARM

ANOMALY RESET

SIREN SILENCE



SEQ_CICLI_FAST.grf

FB

FB1- STARTING UP/STOPPING RAW FEED ON 1 2 3 OFF

FB2- STARTING UP CRISTOBALIT PLANT ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 OFF

FB3- SHUTTING DOWN CRISTOBALIT PLANT ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 OFF

FB4- INTERLOCKS CRISTOBALIT PLANT ON 1 2 3 OFF

UP

UP1- SR FILTER PROTECTION

ON 1 2 3 OFF

UP2- SR TEMPERATURE FILTER

ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 OFF

UP3- SR COOLING WATER PUMPS

ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 OFF

UP4- SR DRIVE ROTARY DRUM DRIER

ON 1 2 3 4 5 6 7 8 9 10 11 12 13 OFF

UP5- SR DRIVE ROTARY KILN

ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 OFF

UP6- SR LUBRIFICATION DRUM DRIER

ON 1 2 3 4 5 6 7 8 9 10 OFF

UP7- SR LUBRIFICATION ROTARY KILN

ON 1 2 3 4 5 6 7 8 9 10 OFF

UP8- SR HEATING RATE

ON 1 2 3 4 5 6 OFF

UP9- SR FILLING LEVEL MOVING BED COOLER

UP10- SR INTEL ROTARY DRUM DRIER

ON 1 2 3 4 5 6 7 OFF

UP11- SR EXTRACTION FILTER DUST

ON 1 2 3 4 5 6 7 OFF

UP12- SR INTEL ROTARY KILN

ON 1 2 3 4 5 6 7 OFF

UP13- SR EXTRACTION COARSE GRAIN

ON 1 2 3 4 5 OFF

UP14- SR HYDRO ZWOLF

ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 OFF

UP15- SR KEEPING-WARM OPERATION 1

ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 OFF

UP16- SR KEEPING-WARM OPERATION 2

ON 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 OFF

UP17- SR OPERATION OIL

ON 1 2 3 OFF

UP18- SR OPERATION GAS

ON 1 2 3 OFF

UP19- SR DIESEL OIL PURGING

ON 1 2 3 OFF

UP20- SR SHUTTING DOWN OPERATION OIL

ON 1 2 3 OFF

UP21- SR SHUTTING DOWN OPERATION GAS

ON 1 2 3 OFF

UP22- SR GREASE SUPPLY

ON 1 2 3 4 5 6 7 8 9 10 11 OFF

UP23- SR EMERGENCY POWER

ON 1 2 3 OFF



DUTTO
A SIBELCO COMPANY

RAW



CRISTOBALIT



TRANSPORT



LORRY



COOLING WATER



SODA



ALL PLANTS



SEQ_CYCLE.grf

FB2	START CYCLE	AUTO		STOP IN PROGRESS	IN COND
FB3	STOP CYCLE				
UP15	START	STOP Restart FB2	STOP Shut down FB3		
UP16	START	STOP Restart FB2	STOP Shut down FB3		
RAW	START CYCLE	STOP CYCLE	START CYCLE OK		
MAIN	START CYCLE	STOP CYCLE	STOP CYCLE OK		
TRANSPORT	START CYCLE	STOP CYCLE	START CYCLE OK		
FILTER	START CYCLE	STOP CYCLE	START CYCLE OK		
STEP	TIME	UP 2	---> BN-06		

seq_alarm_conditions.grf

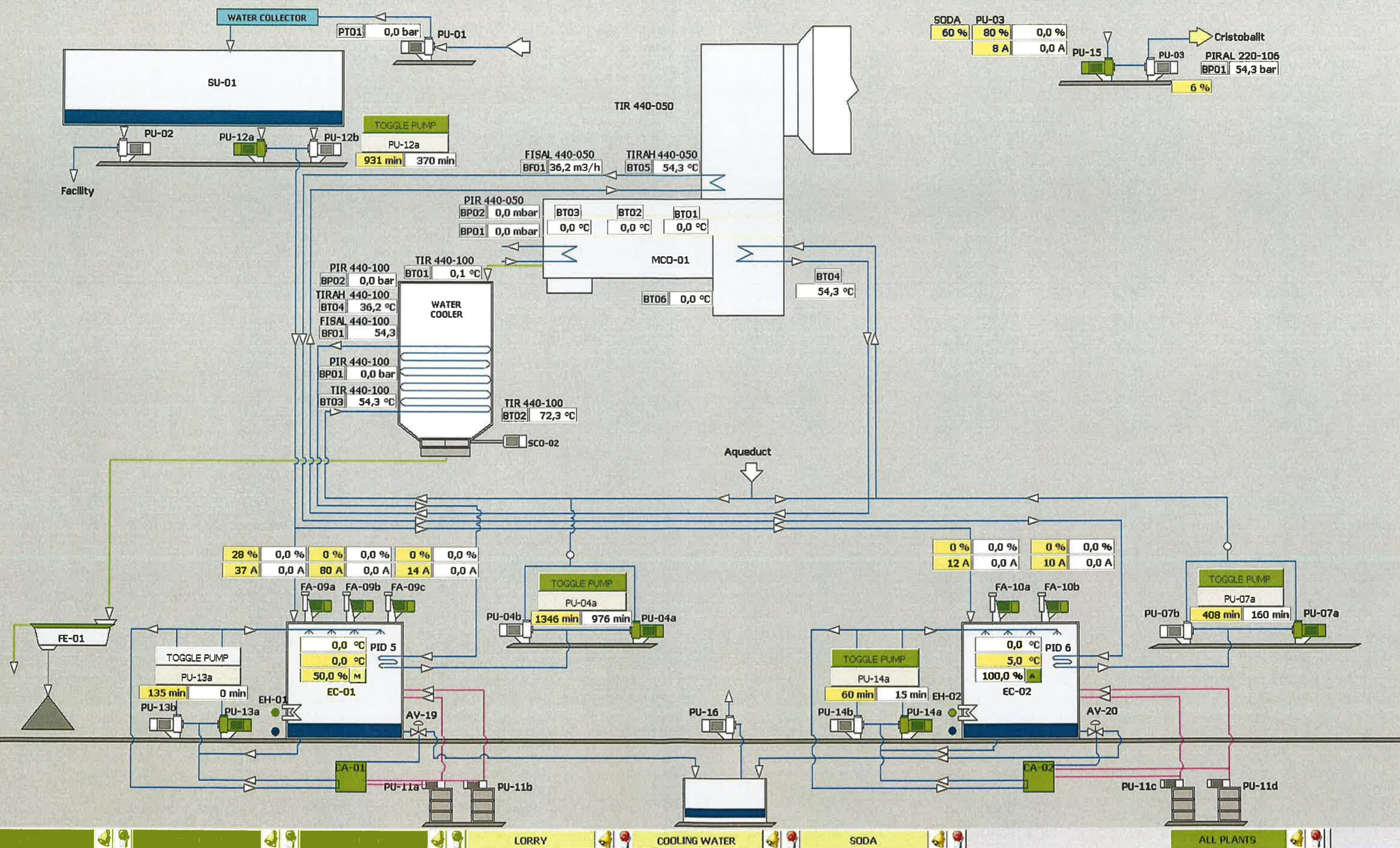
ALM_01 ALARM VOLTAGE AUXILIARY 230		
ALM_02 ALARM VOLTAGE AUXILIARY 24 Vac		
ALM_07 ALARM VOLTAGE 400V BOARD 1		
ALM_08 ALARM VOLTAGE 400V BOARD 2		
PSAL 220-120 BP-02 COMPRESSED AIR OK		
ALARM PU-12 a / b		
ALARM PU-07 a / b		
ALARM PU-04 a / b		
ALARM TRANSPORT		
LSAL 220-100 BL-02 MINIMUM LEVEL GREASE		
LSAL 320-100 BL-02 MINIMUM LEVEL GREASE		
ZSL 220-101 BZ-01 FLAP EMERGENCY CLOSED		
ZSL 220-101 BZ-02 FLAP FILTER PROTECTION CLOSED		
ZSH 220-135 BZ-01 FLAP BEFORE FILTER OPENED		
ZSH 220-140 BZ-01 FLAP AFTER FILTER OPENED		
ZSH 220-155 BZ-01 FLAP BYPASS CLOSED		
ZSL 440-051 BZ-01 FLAP COARSE GRAIN COOLER		
ZSL 440-051 BZ-02 FLAP COARSE GRAIN COOLER		
ZSH 320-100 FN-01 BRAKE KILN RELEASED		

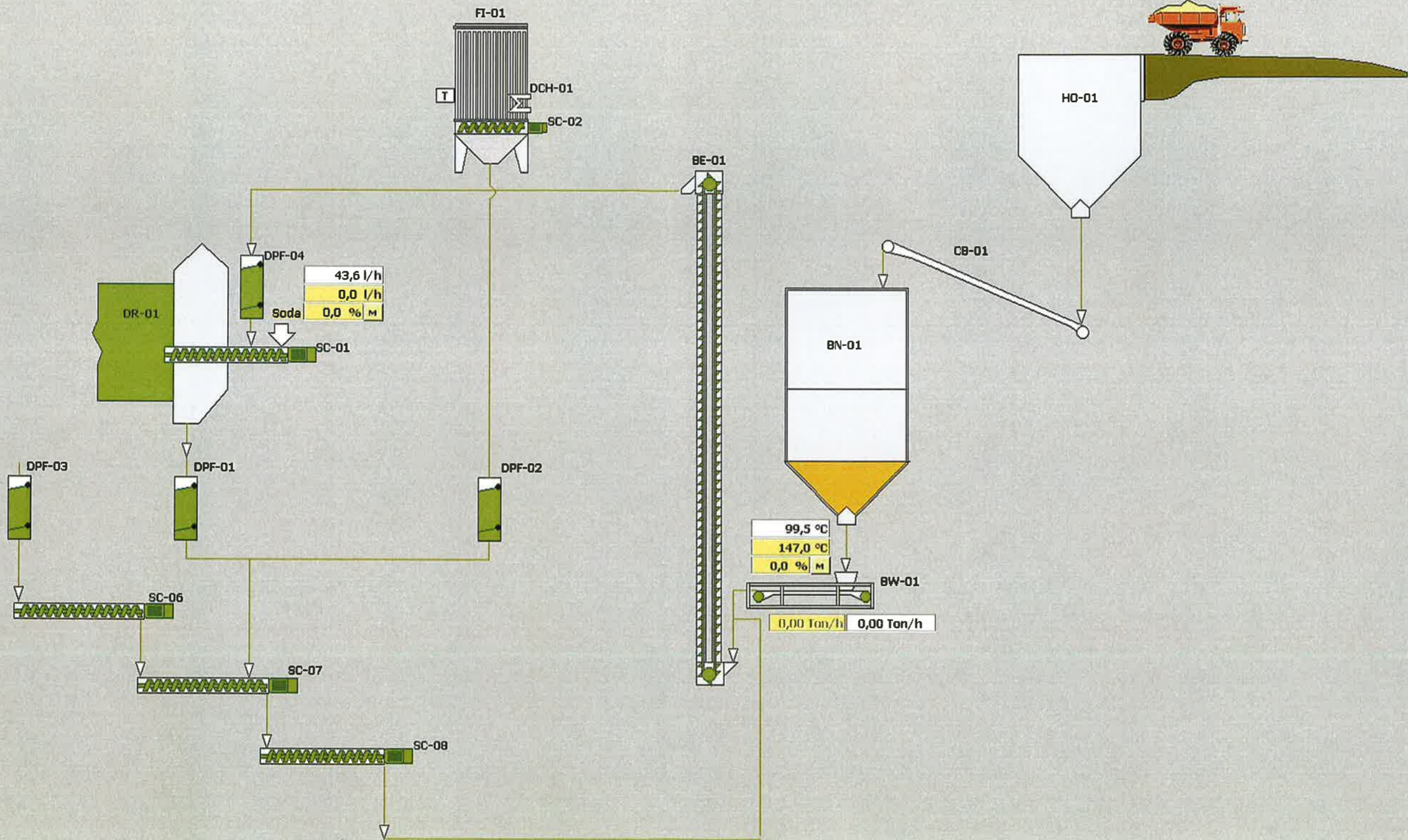
UP2.grf

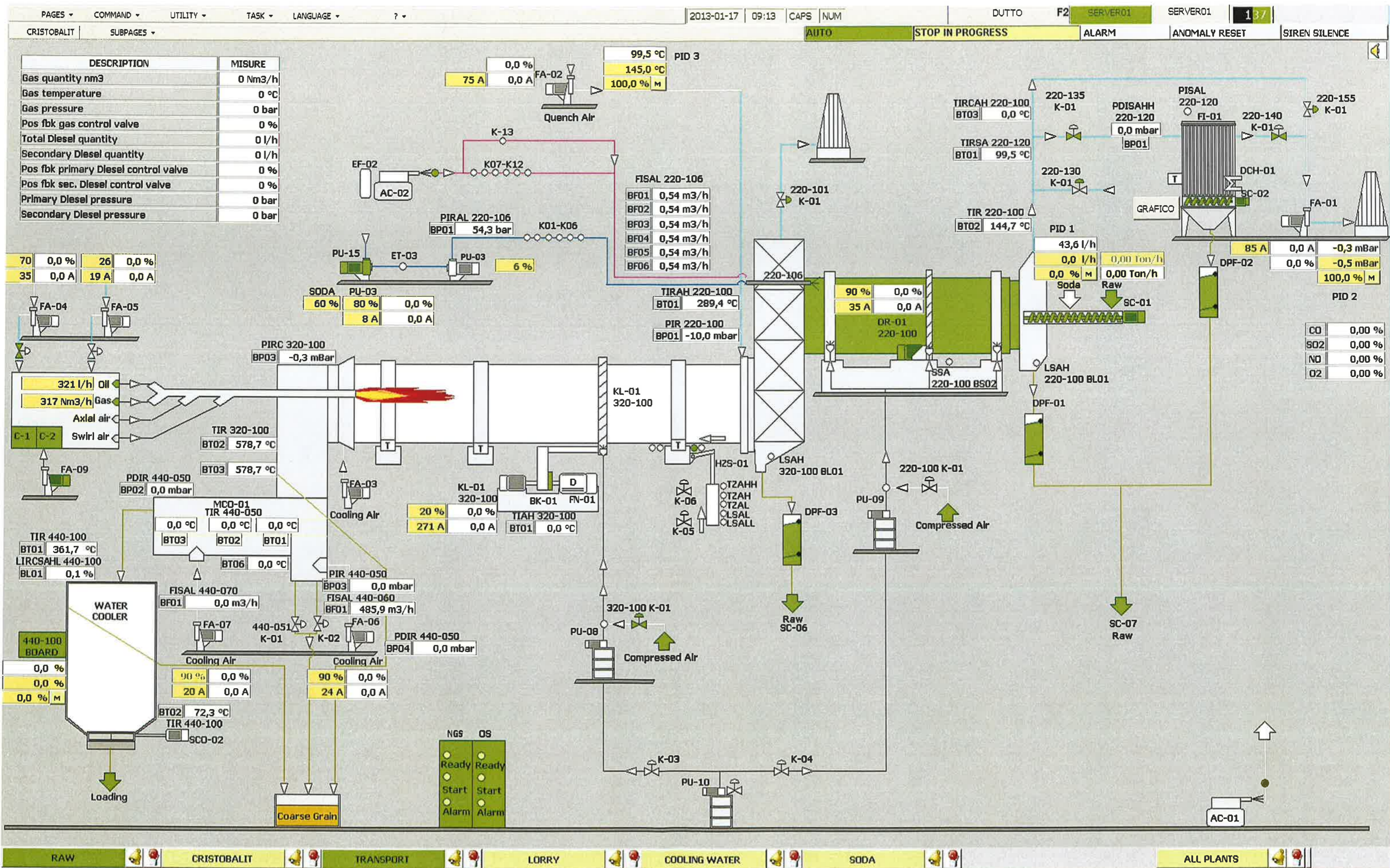
TIRSA 220-120
Spraying pipe No.

1	2	3	4	5	6	
						Close
						Open
						150 151
						151 152
						152 153
						153 154
						154 155
						155 156
						156 157
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						168 169
						169 170









FB 2

FB2 STEP 21 SP PRESSURE FA-01	-0,5 mBar
FB2 STEP 43 SP CAPACITY FEED	5,0 ton/h
FB2 STEP 45 SP RAMP 2 GAS BURNER	570 Nm3/h
FB2 STEP 45 SP RAMP 3 OIL BURNER	620 l/h
FB2 STEP 47 SP FA-07	90 %

UP 2

SP TEMPERATURE 220-105 FA-02	145 °C
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UP 5

UP5 STEP 20 SPEED KL-01	100 %
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BURNER

FIRST FUEL

SECOND FUEL

GAS

START

G

O

RAW



CRISTOBALIT



TRANSPORT



LORRY



COOLING WATER



SODA



ALL PLANTS



FB2

STEP 20 OUTPUT FA-01	50 %
STEP 23 OUTPUT FA-06	90 %
STEP 25 OUTPUT FA-07	90 %
STEP 28 OUTPUT FA-04	50 %
STEP 31 SP PRIM GAS FA-04	55 %
STEP 31 SP PRIM OIL FA-04	45 %
STEP 32 SP OIL	1478 l/h
STEP 32 SP GAS	458 Nm3/h
STEP 36 SP GAS/OIL FA-04	70 %
STEP 38 SP MIXED GAS	250 Nm3/h
STEP 38 SP MIXED OIL	200 l/h
STEP 41 SP HI 220-100 TIRAH	500,0 °C
STEP 42 RAMP 1 FEED	
SP RAMP 1 CAPACITY FEED START VALUE	2,5 ton/h
STEP 43 SP RAMP 1 FEED STEP	1,50 ton
STEP 43 SP STEP RAMP 1 FEED TIME	60 s
STEP 45 RAMP 2 GAS BURNER	
SP RAMP 2 GAS BURNER FINAL VALUE	570 Nm3/h
SP RAMP 2 GAS STEP	50,00 Nm3
SP STEP RAMP 2 GAS TIME	60 s
STEP 45 RAMP 3 OIL BURNER	
SP RAMP 3 OIL BURNER FINAL VALUE	620 l/h
SP RAMP 3 OIL STEP	50,00 l
SP STEP RAMP 3 OIL TIME	60 s

FB3

		TIME
STEP 2 RAMP 1 GAS BURNER		
SP RAMP 1 GAS BURNER FINAL VALUE	317 Nm3/h	
STEP SP RAMP 1 GAS STEP	80,00 Nm3	
SP STEP RAMP 1 GAS TIME	35 s	
STEP 2 RAMP 2 OIL BURNER		
SP RAMP 2 OIL BURNER	321 l/h	
SP RAMP 2 OIL STEP	102,00 l	
SP STEP RAMP 2 OIL TIME	60 s	
STEP 8 TIRAH 220-100 BT-01	350 °C	
STEP 10 TIRAH 220-100 BT-01	500 °C	
STEP 13 TIRAH 220-100 BT-01	300 °C	
STEP 10 RAMP 3 FEED		
SP RAMP 3 FEED	3,2 ton/h	
SP RAMP 3 FEED STEP	1,50 ton	
SP STEP RAMP 3 FEED TIME	35 s	
STEP 30 TIRAH 220-100 BT-02	140 °C	300 s
STEP 32 TIRAH 220-100 BT-01	100 °C	300 s

UP2

STEP 1 THRESHOLD HI TIRCAH 220-120 BT01	145 °C
STEP 48 OUTPUT FA-02	50 %

UP4

	MAX	MIN
STEP 1 SP MAX/MIN TIRAH 220-100 BT-01	150 °C	150 °C
STEP 1 SP MAX/MIN TIR 220-100 BT-02	150 °C	150 °C
STEP 3 OUTPUT DR-01	40 %	

UP5

STEP 3 OUTPUT KL-01	20 %
STEP 17 OUTPUT KL-01	40 %

UP8

STEP 1 TIRAH 220-100 BT-01 °C/min(MAX 50°C /h)	9,99 °C/min	0,00 °C/min
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UP15

STEP 18 OUTPUT FA-06	75 %
STEP 18 OUTPUT FA-07	59 %
STEP 2 RAMP 1 GAS BURNER	
SP RAMP 1 GAS BURNER FINAL VALUE	308,0 Nm3/h
STEP SP RAMP 1 GAS STEP	128,80 Nm3
SP STEP RAMP 1 GAS TIME	60 s
STEP 2 RAMP 2 OIL BURNER	
SP RAMP 2 OIL BURNER	704,0 l/h
SP RAMP 2 OIL STEP	2,00 l
SP STEP RAMP 2 OIL TIME	64 s
STEP 10 RAMP 3 FEED	
SP RAMP 3 FEED	2,9 ton/h
SP RAMP 3 FEED STEP	0,50 ton
SP STEP RAMP 3 FEED TIME	65 s