



S. P. SYSTEMS

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Purified Water Generation and Distribution System

for

HETRO LABS LIMITED,
HYDERABAD.

M/S HETRO LABS LIMITED, HYDERABAD.
PURIFIED WATER GENERATION & DISTRIBUTION SYSTEMS

24/02/2009 10:25:24

RO+EDI:
SANITISATN CHEM: ???

DISTRIBUTION 1:

DISTRIBUTION 2:

⚠️ 24/02/2009 10:25:18 .High conductivity RO II Outlet

PURIFIED WATER GENERATION & DISTRIBUTION SYSTEMS
M/S HETRO LABS LIMITED, HYDERABAD.

Login

Logout

User Admin

Exit



User Level 100
User Name

M/S HYDROPURE SYSTEMS

RO+EDI

DISTRIBUTION1

DISTRIBUTION2

SYSTEM
SETTING

REPORTS

ALARM
REPORTS

AUDIT
TRAIL

MIMIC

I/O
SETTINGS

START
UP

Picture 1

M/S HETRO LABS LIMITED, HYDERABAD.
PURIFIED WATER GENERATION & DISTRIBUTION SYSTEMS

24/02/2009 10:29:42

RO+EDI:
SANITISATION H WTR: ???

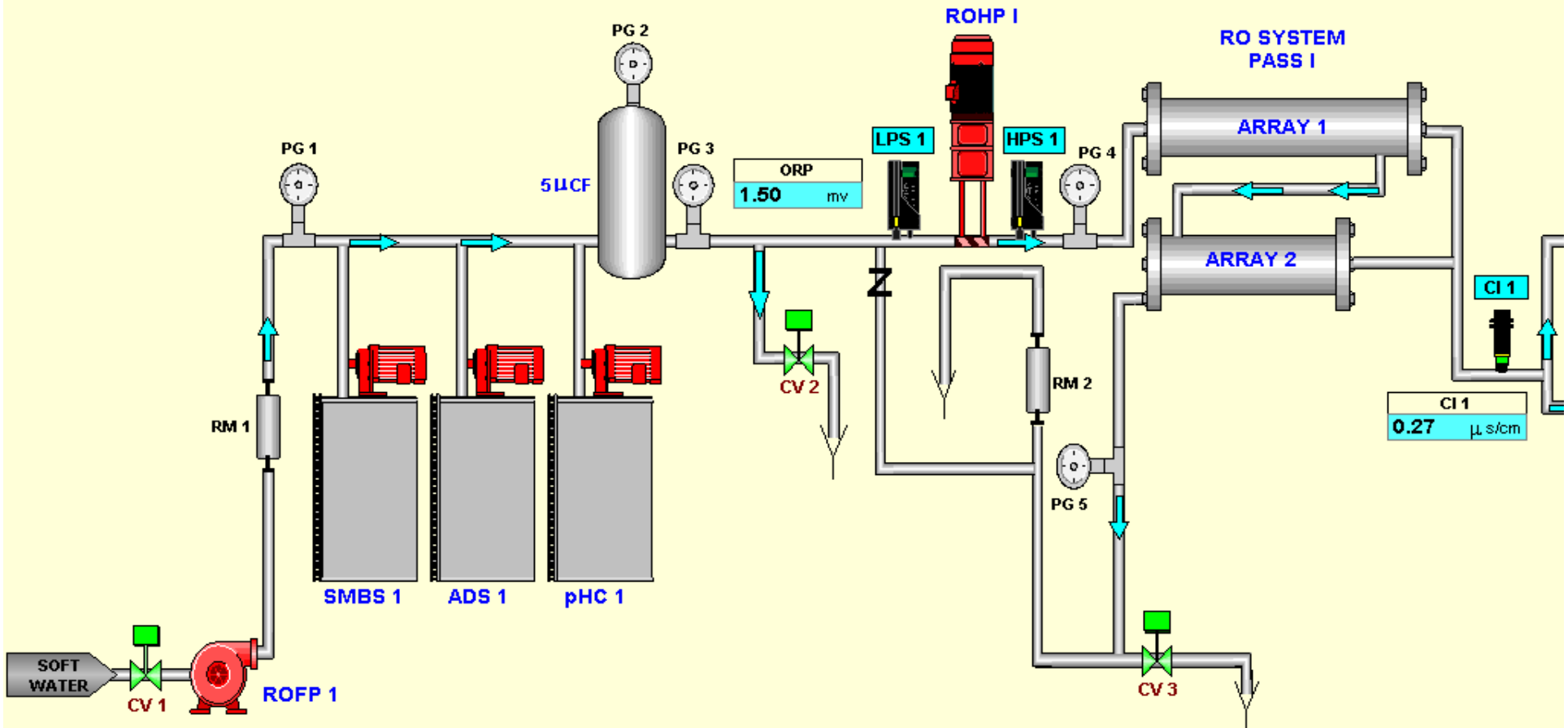
DISTRIBUTION 1:

DISTRIBUTION 2:

24/02/2009 10:29:38 High ORP

MANUAL

RO+EDI SYSTEM



- AUTO
- AUTO FLUSHING
- MANUAL
- SANITISATION HOT WATER
- SANITISATION CHEMICAL
- SETTTABLE PARA
- MAIN MENU

Picture 1

M/S HETRO LABS LIMITED, HYDERABAD.

PURIFIED WATER GENERATION & DISTRIBUTION SYSTEMS

24/02/2009 10:30:44

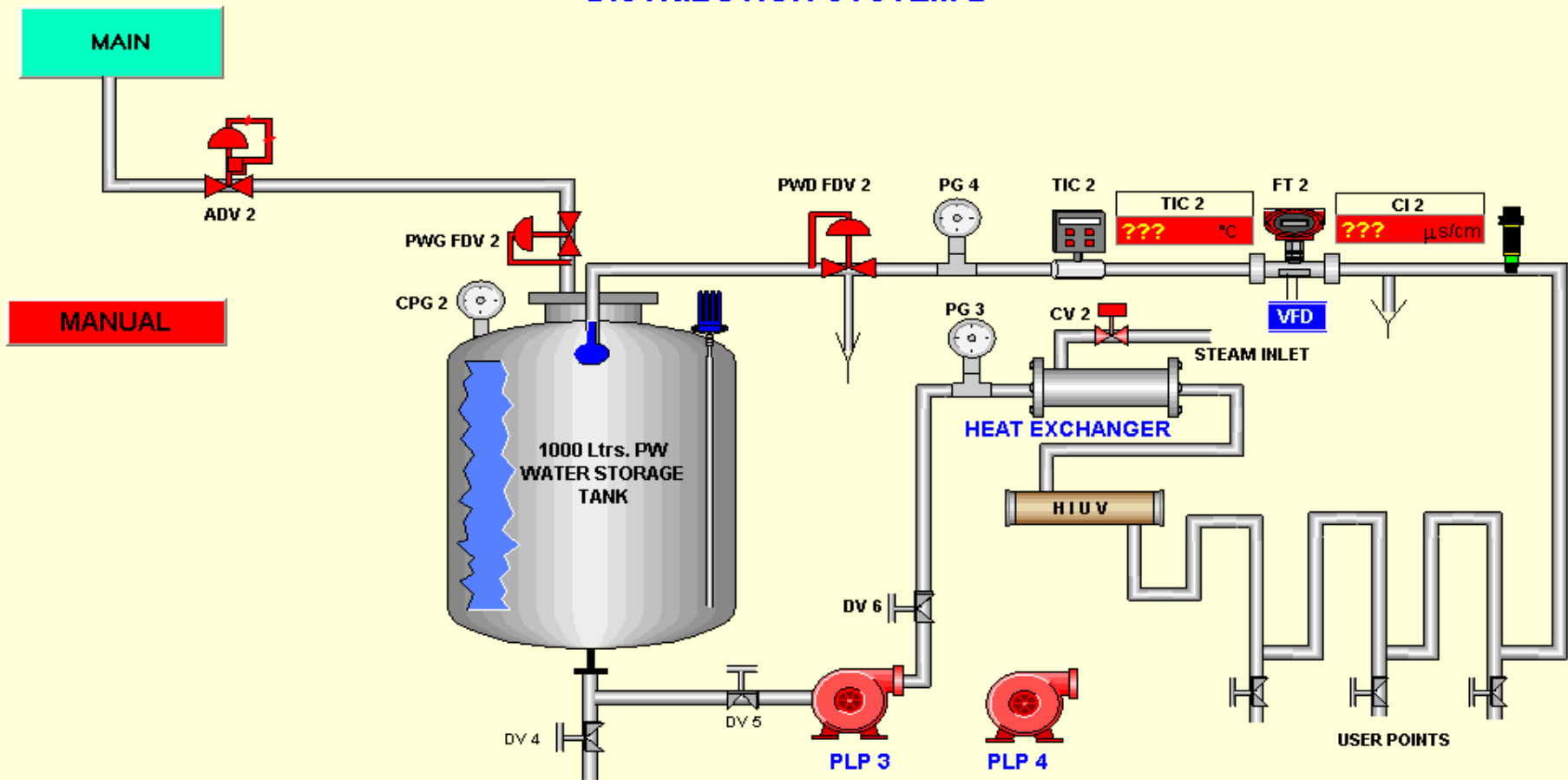
R0+EDI:
SANITISATION H WTR: ???

DISTRIBUTION 1:

DISTRIBUTION 2:
MANUAL: ???

24/02/2009 10:30:38 Low level pH tank

DISTRIBUTION SYSTEM 2



MANUAL

AUTO

MANUAL

SANITISATION HOT WATER

SETTTABLE PARA

MAIN MENU

Picture

M/S HETRO LABS LIMITED, HYDERABAD.
PURIFIED WATER GENERATION & DISTRIBUTION SYSTEMS

24/02/2009 10:32:41

RO+EDI:
SANITISATION H WTR: ???

DISTRIBUTION 1:

DISTRIBUTION 2:
MANUAL: ???

24/02/2009 10:32:38 .Low pressure at ROHP inlet

Audit Trail Report

InTime	Message	ActorID
20/02/09 13:19:03	System Exit	
20/02/09 14:53:26	System Exit	
20/02/09 14:55:49	System Exit	
20/02/09 15:08:00	System Exit	
20/02/09 15:21:16	System Exit	
20/02/09 15:22:44	Comport setting changed from 1 To 5555	
20/02/09 15:22:49	Comport setting changed from 1 To 0	
20/02/09 15:23:07	Comport setting changed from 1 To 0	
20/02/09 15:23:09	Comport setting changed from 1 To 0	
20/02/09 15:23:10	Comport setting changed from 1 To 0	
20/02/09 15:23:12	Comport setting changed from 1 To 0	
20/02/09 15:23:15	Comport setting changed from 1 To 0	
20/02/09 15:23:16	Comport setting changed from 1 To 0	
20/02/09 15:23:46	Comport setting changed from 1 To 1	
20/02/09 15:23:48	Comport setting changed from 1 To 1	
20/02/09 15:23:49	Comport setting changed from 1 To 1	
20/02/09 15:23:50	Comport setting changed from 1 To 1	
20/02/09 15:23:51	Comport setting changed from 1 To 1	
20/02/09 15:23:51	Comport setting changed from 1 To 1	
20/02/09 15:23:52	Comport setting changed from 1 To 1	
20/02/09 15:23:53	Comport setting changed from 1 To 1	
20/02/09 15:26:28	New User Login	a
20/02/09 15:23:00	System Exit	

Record: 1 of 345

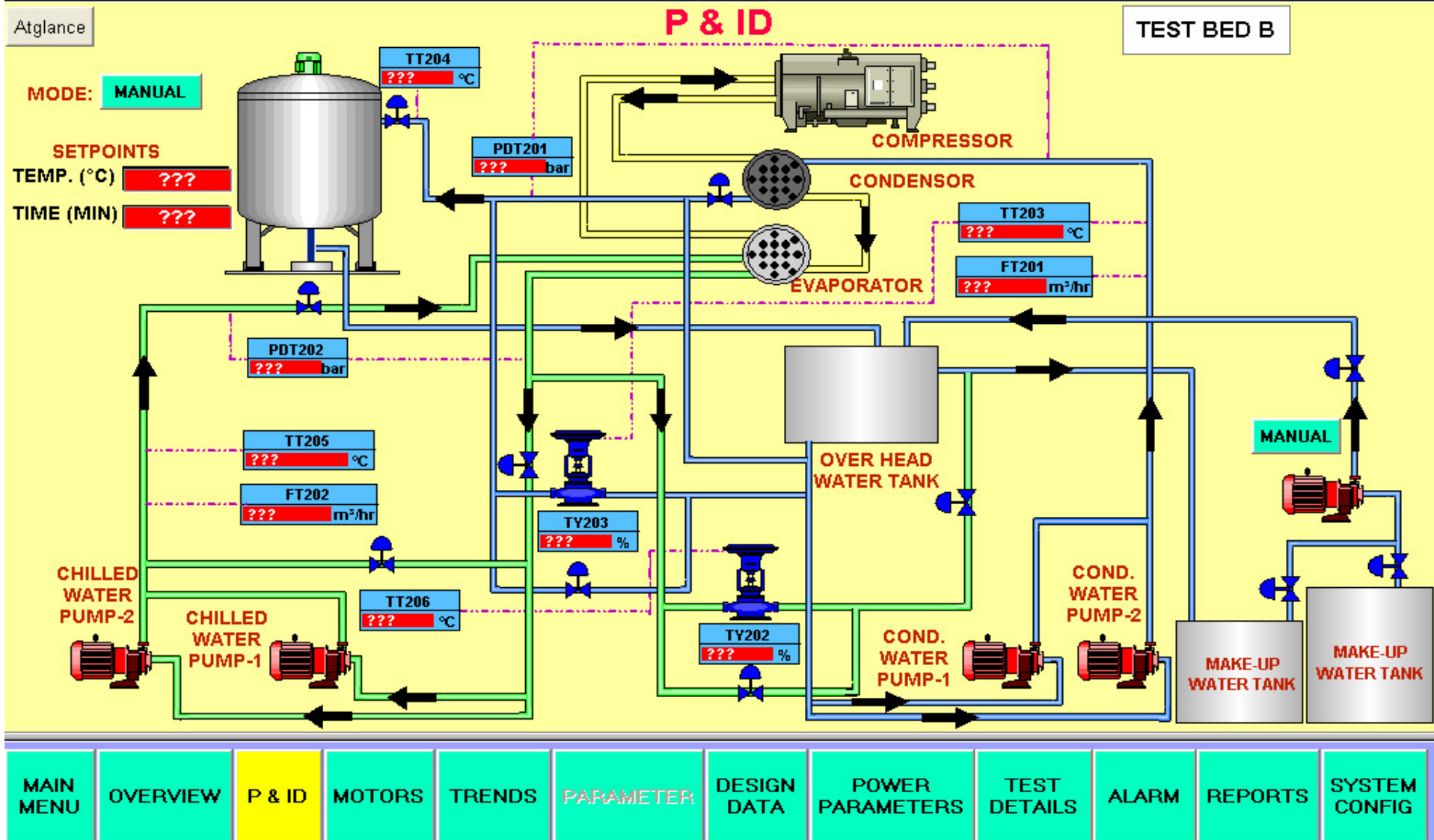
All : Last : Hour Date Time : Initial : End :

Picture

Purified Water Generation and Distribution System

- We have supplied our Software solution to Hetro Labs, Hyderabad, AP.
- There are 3 parts 1 Generation and other two are Distribution1 and 2
- Generation (RO+EDI) are having 4 processes in them each like Auto, Auto Flushing, Manual, Sanitization Hot water and Sanitization chemical. Distribution 1 and 2 are having 4 processes in each of them as Auto, Manual, Sanitization Hot water.
- Currently which process is carried out in each of these three parts is shown on screen for operator understanding.
- The displays are also shown to Indicate the Actual values. The Valves and Pumps are made on off directly clicking on them and making them on/off. The indications are also shown as per trip, on off etc.
- The process is carried in Auto/Manual Mode.
- Step Timings are given for each processes & are used when system is in Auto Mode
- There are three types of reports generated and Detailed report, Audit trail report (as shown in picture), Alarms report.
- Detailed report contains all present values of the parameters. Excel report is also generated.
- Before implementing this system the operator has to do all the process manually but by using this system the operator can operate it in Auto Mode. The valves and pumps are opened and closed by just clicking on the symbols shown on screen.

Navy Chiller Test Bench
System
for
Johnson Controls



Picture 1

Test Sr.No : REV232

TEST DETAILS SCREEN

ID No.	REV232	R134
TEST Sr.No.	52100B90230056	
Job Name	chiller pkg	
Model Name	YEWS170	
Design Name	YEWS170	DATA LOG IN
Product Name	WATER COOLED CHILLER PACKAGE	
HMI Code Version	RHSWSD1/V01.01	DATA LOGOUT
F.F. Chiller	0.00012	
Client Name	YORK	
Test Condition	100% AT 7 DEG	
Test Date	06/02/2009 02:54:14 PM	
LO Board code Version	RMSWSD1/V01.01	
F.F. Condensor	0.12346	
Reading Time 1	06/02/2009 02:55:24	<input type="checkbox"/>
Reading Time 2	06/02/2009 02:54:47	<input type="checkbox"/>
Reading Time 3	06/02/2009 02:55:59	<input type="checkbox"/>
Data Logging Time (min)	1	



INGENUITY WELCOME

Johnson Controls

FACTORY PERFORMANCE TEST

Print Time :
13/02/09 11:49:42

SR No : REV232
 Job Name : chiller pkg
 Model Name : YEWS170
 HMI Code Version : RMSWSD1A/01.01
 F.F. Chiller : 0.00012

Client : YORK
 Test Condition : 100% AT 7 DEG
 Test Date : 13/02/2009 11:23:36 AM
 LO Board code RMSWSD1A/01.01
 F.F. Condensor 0.12346

ITEM	UNIT	DESIGN	READING 1	READING 2	READING 3	AVERAGE
READING TIME			0:00:00	0:00:00	0:00:00	
Capacity Qn	Ton	200.1	0.00	0.00	0.00	0.00
Power Input P	Kw	230.00				0.00
Chilled Water In t1	°C	12.00				0.00
Chilled Water Out t2	°C	7.00				0.00
Condenser Water In t1	°C	32.00				0.00
Condenser Water Out t2	°C	37.00				0.00
Chilled Water Flow	m3/h	100.00				0.00
Condenser Water Flow	m3/h	121.00				0.00
Motor Amps	A	212.00				0.00
Voltage	V	415.00				0.00
Power factor	PF	0.80				0.00
Kw/Kw	Kw/Kw	3.1				
Suction Pressure	KPa					0.00
Suction Temp	°C					0.00
Saturated Suction Temp.	°C					0.00
Discharge Pressure	KPa					0.00
Saturated Discharge Temp.	°C					0.00
Discharge Temperature	°C					0.00
Liquid line temp.	°C					0.00
Discharge Super Heat	°C		0.00	0.00	0.00	0.00
Subcool Temperature	°C		0.00	0.00	0.00	0.00
evap. Sight glass	°C					0.00
Oil level	°C					0.00

Capacity (%) 0.00 Kw/Kw (%) 0.00 Heat Balance (%)

TESTED BY:

APPROVED BY:

Navy Chiller Test Bench System

- ❖ We have supplied our Software solution to Johnson Controls, Chakan, Pune.
- ❖ They are using our system for Chiller testing. The whole system contains Allen Bradley PLC and SCADA(E3).
- ❖ The live values from PLC are taken by using OPC server. The live values also taken from power meter. They are using these meters for measuring current, Voltage, KVA, Temperatures, PF and KWH.
- ❖ The reports generated are different from the common reports as shown in picture. These reports are called Performance test Report. The readings at different three times are locked in history and are shown on reports. We have also generated the reports for the batch reports for respective tests. The reports contains the present readings at every set interval and every test.
- ❖ The reports are the major part of our system.
- ❖ AS shown in pictures the reports are done.

Power Monitoring System

for

Idea Cellular Ltd.

Power Monotoring System

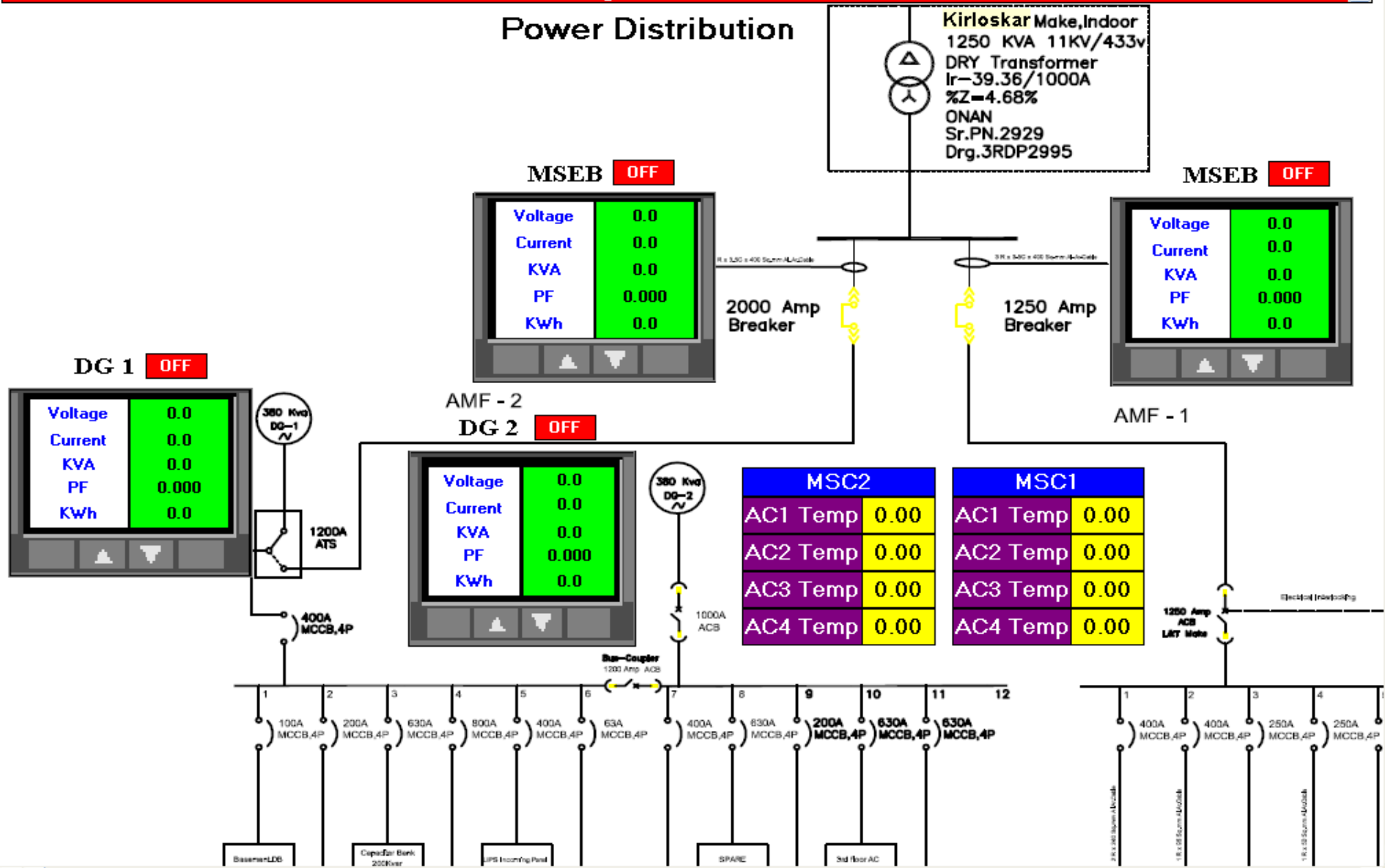
01/12/2008
08:57:18

ComErr: N1:24,N2:1,N3:0,N4:2

Temp Trend Alarms Report Exit

01/12/08 08:57:13 LOW UNACK MSC2 UPS1 Temp Low 0.00 19.00

Power Distribution



Picture

Idea Cellular Ltd.

- ❖ We have supplied our Software solution to Idea Cellular, Pune.
- ❖ They are using our system for power monitoring purpose.
- ❖ There are 6 power meter. They are using these meters for measuring current, Voltage, KVA, Temperatures, PF and KWH.
- ❖ We have generated the reports for the same. The reports contains the present readings for every set time. As per the power meters readings, the graphs also shown on the screen.
- ❖ Also we have provided the High and low thresholds for the parameters. If any value passes these limits the alarm will generate. As soon as the alarm is generated the annunciator shows indication and Hooter starts Ringing. If the acknowledgement is given the Hooter and Annunciate stops indicating.
- ❖ Annunciate and Hooter reduces the work of continuous monitoring each meter.

Clean In Process(C.I.P) System

for

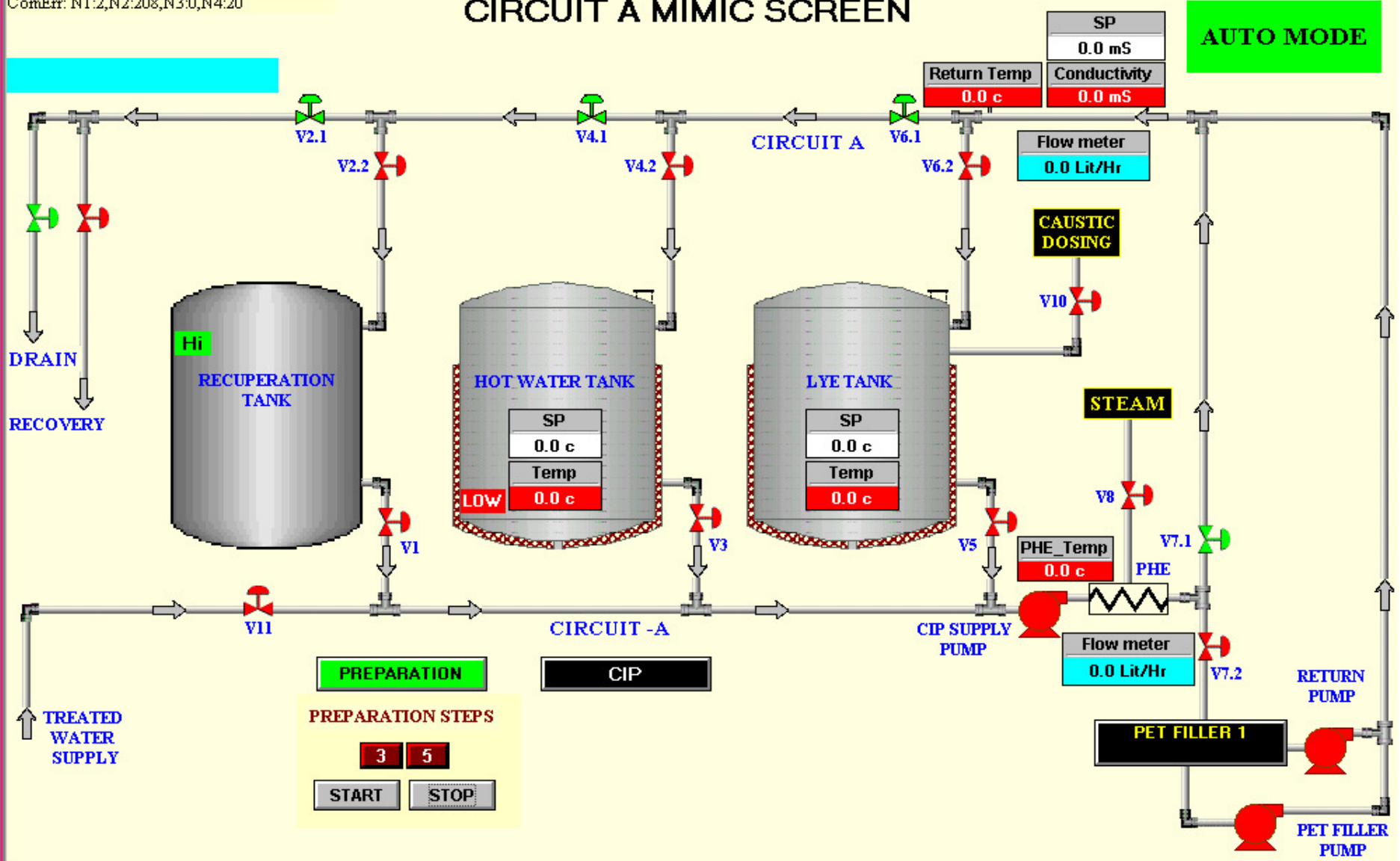
PEPSICO, Palakkad,
Kerala.

CIP SYSTEM, PEPSI PALAKKAD

02/12/2008
10:02:04

ComErr: N1:2,N2:208,N3:0,N4:20

CIRCUIT A MIMIC SCREEN



PREPARATION

PREPARATION STEPS

3 5

START STOP

- Menu Screen
- Parameter Screen
- Step Time Setting
- System & Alarm Setting
- Temp Trend
- Alarms
- Report
- Exit

Picture

CIP SYSTEM OF PEPSI, PALAKKAD

- ❖ Developed software for CIP (Cleaning In Process) System.
- ❖ There are 2 types of processes involved in this viz. Preparation and CIP. Both are having 4 sub types each like 1step, 3step, 5step and 7step. According to our selection on screen the each type and subtype is selected and the process starts.
- ❖ The Set points (In white displays SP) are also given which are essential for the PID controllers. According to which the process continues. The red displays are also shown to Indicate the Actual values.
- ❖ The process is carried in Auto/Manual Mode.
- ❖ Step Timings are given for each sub steps & are used when system is in Auto Mode
- ❖ There are two types of reports generated Summary report and Detailed report. Graphical analysis is also done.
- ❖ Summary report shows the Batch name, Start and stop time, Duration and User name. Excel report is also generated for the same.
- ❖ Detailed report contains all present values of the parameters, Line and current step number and Its description. Excel report is also generated.
- ❖ Graphical analysis contains the comparison between present values and set points.
- ❖ Before implementing this system the operator has to do all the process manually but by using this system the operator can operate it in Auto Mode. The valves and pumps are opened and closed by just clicking on the symbols shown on screen.

Shroud Fan Testing Assembly System

for

PEE ARR EXIM,

Pune.

TEST IDLE

PEE AAR EXIM (P) LTD., INDIA

21/11/2008
15:48:57

ComErr: N1:0,N2:3,N3:2,N4:2

Testing Screen

SHIFT: A

MODEL NAME : Test12V **VOLTAGE** : 12.0 Volts **NO.OF BLADES** : 10 **DIRECTION** : **CLOCKWISE FROM FAN SIDE** **JOB No.** : 0

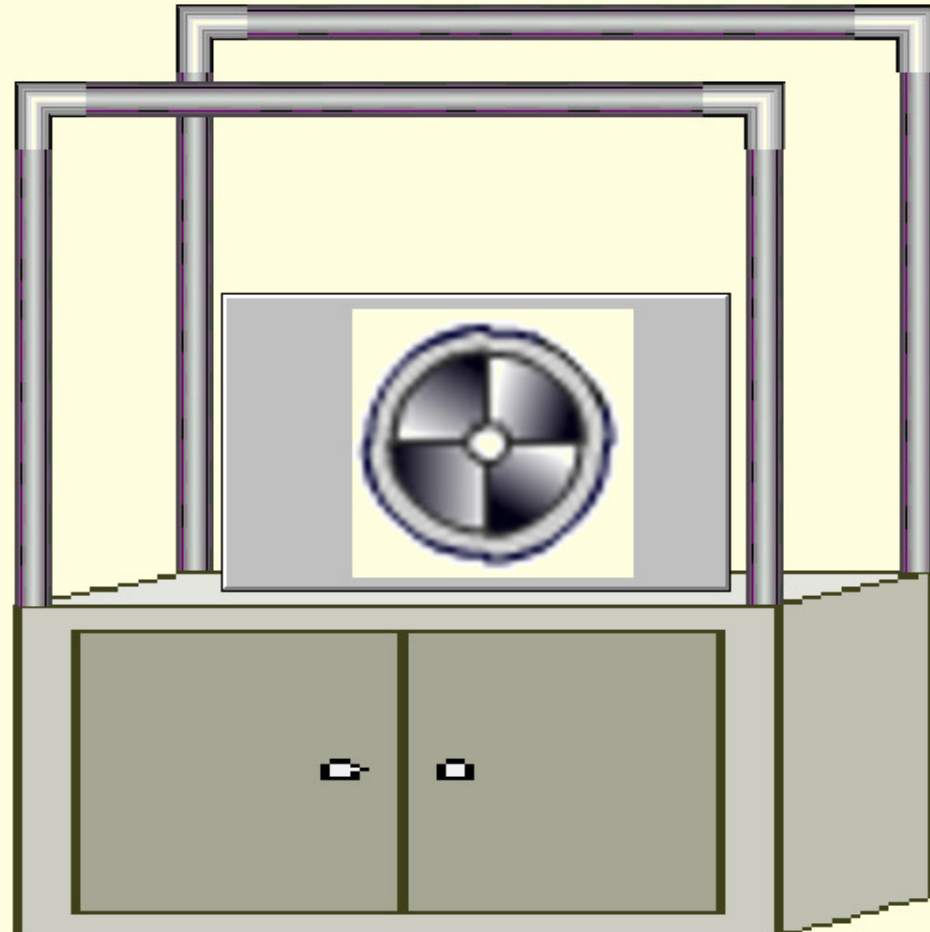
PAEI NO. : 110BYH3610 **BEHR PART NO.** : 70.19526

STEP NO. : 0

VOLTAGE
0.0 Volts

CURRENT
0.0 Amp

No. Of Blades
10



SPEED
0 RPM

VIBRATION
0.0 mm/sec

NOISE
0.0 dB

TAG	DIGITAL INPUT	
DI00	CLOCKWISE FROM FAN SIDE	<input checked="" type="checkbox"/>

TAG	DIGITAL OUTPUT	
DO00	Voltage 12 V	<input checked="" type="checkbox"/> ON
DO01	Test OK	<input type="checkbox"/> OFF
DO02	Test NOT OK	<input type="checkbox"/> OFF

MENU **REPORT** **MODEL ENTRY**

TEST START **Abort**

Picture

Shroud Fan testing Assembly

- ❖ The Whole turnkey project is done by our team. This system is provided to our customer PEE ARR EXIM, Chakan, Pune. They are the manufacturer of the Shroud fans of AC in Cars.
- ❖ We have developed the test bed for testing the Shroud fans.
- ❖ The parameters under consideration are Current, Voltage, RPM, Noise, Vibration & Direction.
- ❖ We have used the PLC, Control panel, Power supply for FAN, Vibration sensor, RPM & Direction Sensor & Noise sensor in our system.
- ❖ The Screen shown in picture3 is Displays actual values of the various parameters, Part no., Serial No., Selection for 12/13.5V, Model name and Test OK/NOK.
- ❖ The test bed checks the actual parameters with the thresholds of each which are given already. If does not fall under its criteria it shows “Test Fail” otherwise “ Test OK”. If Test is OK according to that the Barcode is generated.
- ❖ The report shows the actual values of the parameters, part no, Job ID & Result. Excel Reports are also generated for the same.
- ❖ Before implementing this system the test required more than 2 mins to carry the whole process. But by our system it require just 30 secs to complete whole process.

Mass Flow Measurement System

for

Creative Engineer & Centrifuge
Control Pvt. Ltd.

MAIN SCREEN

Ch No	Tag Name	Description	Process Value	Eng. Unit	Hourly Totaliser	Daily Totaliser	Cumulative Totaliser
0	Juice10	Flow1	70.00	Kg/Hr	61.54	62.60	312.68
1	Juice2	Flow2	80.00	Kg/Min	2062.17	2064.29	2366.17
2	Juice3	Flow3	90.00	Kg/Sec	261.21	264.39	674.51
3	Juice4	Flow4	75.00	Kg/Day	318.70	322.94	1046.62
4	Juice_o1	FlowO1	62.60	kg/hr			
5	Juice_o2	FlowO2	2064.29	kg/hr			
6	Juice_o3	FlowO3	264.39	kg/sec			
7	Juice_o4	FlowO4	322.94	kg/sec			


User :User1
User Administration
Login Logout

Channel Configuration

Trend

Bar Graph

Reports

Exit

Picture

CHANNEL CONFIGURATION

Ch No	Enable/Disable	Tag Name	Description	Scan [ms]	Eng. Unit	DP	H/W Low	H/W High	S/W Low	S/W High	Scaling	Process Value
0	<input checked="" type="checkbox"/> Enable	Juice10	Flow1	1000	Kg/Hr	2	0.00	5.00	0.00	650.00	<input checked="" type="checkbox"/> ON	70.00
1	<input checked="" type="checkbox"/> Enable	Juice2	Flow2	10000	Kg/Min	2	0.00	5.00	0.00	750.00	<input checked="" type="checkbox"/> ON	80.00
2	<input checked="" type="checkbox"/> Enable	Juice3	Flow3	10000	Kg/Sec	2	0.00	5.00	0.00	850.00	<input checked="" type="checkbox"/> ON	90.00
3	<input checked="" type="checkbox"/> Enable	Juice4	Flow4	10000	Kg/Day	2	0.00	5.00	0.00	950.00	<input checked="" type="checkbox"/> ON	75.00
4	<input checked="" type="checkbox"/> Enable	Juice_o1	FlowO1	10000	kg/hr	2	0.50	5.00	0.00	100.00	<input checked="" type="checkbox"/> ON	69.88
5	<input checked="" type="checkbox"/> Enable	Juice_o2	FlowO2	10000	kg/hr	2	0.50	5.00	0.00	101.00	<input checked="" type="checkbox"/> ON	2072.62
6	<input checked="" type="checkbox"/> Enable	Juice_o3	FlowO3	10000	kg/sec	2	0.50	5.00	0.00	102.00	<input checked="" type="checkbox"/> ON	273.76
7	<input checked="" type="checkbox"/> Enable	Juice_o4	FlowO4	10000	kg/sec	2	0.50	5.00	0.00	103.00	<input checked="" type="checkbox"/> ON	330.75

Save

Monitor Screen

Picture

Mass Flow Measurement System

- ❖ The customer having 4 flow meters which are mounted on the flow lines used for the measuring flow of juices etc. There are 4 jumbo displays used for displaying the total value of the liquid in that day.
- ❖ The values of the flow meters are taken by using advantech I/P cards. These values are taken on SCADA and displayed as shown in picture4. The taken value of Daily totalizer is displayed on a jumbo display by using advantech O/P cards.
- ❖ It shows the Tag name i.e. which type of liquid is on line, its description, Process value, Its Unit, Hourly Total, Daily Total & Cumulative total.
- ❖ The Channel configuration screen (picture 5) is used to set the given parameters like enable/disable, Tag name & Its description, H/W high-low, S/W High-low, process value and its unit etc. Enable/Disable is used to enable or disable the i/p &/or o/p channels of the systems.
- ❖ The reports are also generated for various readings as Daily report, Hourly report and Day wise hourly report. The reports given are in formatted type.
- ❖ The Trends are also displayed on screen for observing the actual values against time. Bar graphs are also shown for readings of daily totaliser and present values.

Building Management System (B.M.S)

for

Cipla, Verna,
Goa.

MDLH NO.	AREA		Temp °C	RH %RH
24	Manufacturing PID	PV		
		STATUS		
		LIMITS	19-25	40-55
15	Manufacturing I	PV		
		STATUS		
		LIMITS	19-25	40-55
21	Capsule Filling	PV		
		STATUS		
		LIMITS	19-25	40-55

MDLH NO.	AREA		Temp °C	RH %RH
2	R M Store	PV		
		STATUS		
		LIMITS	15-25	30-60
16	Dispensing Excipient	PV		
		STATUS		
		LIMITS	19-25	40-55
17	Samp/Disp Liquid	PV		
		STATUS		
		LIMITS	19-25	40-55

AHU NO.	AREA NAME	PARA	UNIT	RANGE	VALUE	STATUS
1	Approved RM Stores	Temp.	°C	15-25		
1	Approved RM Stores	Rh	%	50-60		
1	Approved RM Quarantine	Temp.	°C	15-25		
1	Approved RM Quarantine	Rh	%	50-60		
2	Active Sampling Room	Temp.	°C	19-25		
2	Active Sampling Room	Rh	%	45-55		
3	Excipient Sampling Room	Temp.	°C	19-25		
3	Excipient Sampling Room	Rh	%	45-55		
5	Sugar Store	Temp.	°C	15-25		
5	Sugar Store	Rh	%	45-55		
6	Secondary Packing Material Store	Temp.	°C	15-25		
6	Primary Packing Material Store	Temp.	°C	15-25		
7	Rejects Room	Temp.	°C	15-25		
8A	FG Store/BSR	Temp.	°C	15-25		
8A	FG Store/BSR	Rh	%	45-70		
11	Vial Store	Temp.	°C	15-25		
18	Active Dispensing Room	Temp.	°C	19-25		
18	Active Dispensing Room	Rh	%	45-55		
19	Excipient Dispensing Room	Temp.	°C	19-25		
19	Excipient Dispensing Room	Rh	%	45-55		
18	Dispensing Material Store 1	Temp.	°C	19-25		
18	Dispensing Material Store 1	Rh	%	45-55		
20	Dispensing Material Store 2	Temp.	°C	19-25		
20	Dispensing Material Store 2	Rh	%	45-55		

Picture

B.M.S System

- ❖ This system is given to Honeywell and the end customer is CIPLA, Verna, Goa.
- ❖ There is system Called BMS designed by Honeywell which is used to monitor and control the relative humidity, temperature and pressure etc parameters of various units at plant.
- ❖ The parameters measured BMS sends on Excel Sheets and from Excel Sheet we have taken it on SCADA and from SCADA we sent it to LDUs (Local Display Units) placed in each units having different sizes as shown in picture6.The live values are displayed which is sent by BMS.
- ❖ There are 8-9 plants of CIPLA and 8-10 LDUs in each plant. All are having our software in them.
- ❖ Before implementing this software the operator in a room of specific plant has to call the control room for asking the parameters values. But now he can check it out on the LDUs given at each room.

Production Monitoring System

for

Innovative Solutions,
Pune.

INNOVATIVE SOLUTIONS, PUNE Tabular Report

data\y_2008.dat

12/03/2008
09:49:25

Report For Shift - 1 of 04/09/08

Date Time	STATION	MODEL NAME	QTY	RATIO	RESULT
03/09/2008 21:49:00	Unknown	ModelNM1	2.0	3.00	Unknown
03/09/2008 21:49:12	Unknown	ModelNM1	2.0	3.00	NOT OK
03/09/2008 21:49:19	Unknown	ModelNM1	2.0	3.00	OK
03/09/2008 21:50:15	B	ModelNM2	3.0	4.00	OK
04/09/2008 13:05:21	A	ModelNM5	55.0	65.00	OK
04/09/2008 13:29:58	B	ModelNM6	56.0	75.00	OK
22/09/2008 17:52:23	B	a	65537.0	12.00	OK
22/09/2008 21:47:56	A	ModelNM2	30.0	12.00	OK

Select Report ✖

[01] Shift Report

[02] Daily Report

[03] Weekly Repo

[04] Monthly Repc

[05] Yearly Report

Query

Excel Export

Filters

Printer

Print

Close



Production Monitoring System

- ❖ This system is implemented in Innovative Solutions, Pune.
- ❖ It is the production monitoring system in which test pass test fail signal come from PLC with some additional test parameter. The result is stored in SCADA Software.
- ❖ The reports are also generated in these reports we can observe the parameters like station, Model name, Quantity, Ratio, Result. There is also provision is given to filter the reports as per the Day, Shift, Month or Year. The reports are also given in Excel format.
- ❖ These reports are taken for analysis also to compare the previous and present values.

Process Control System

for

SAP Engineers & Consultants,
Pune.

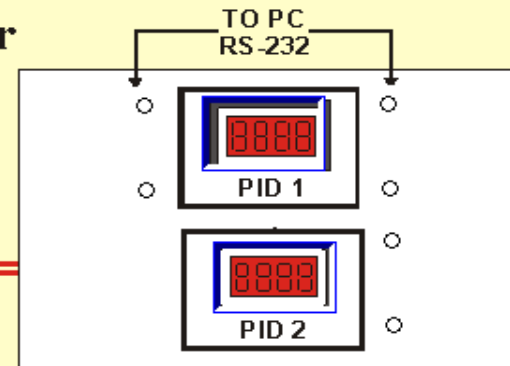


Process Control Trainer

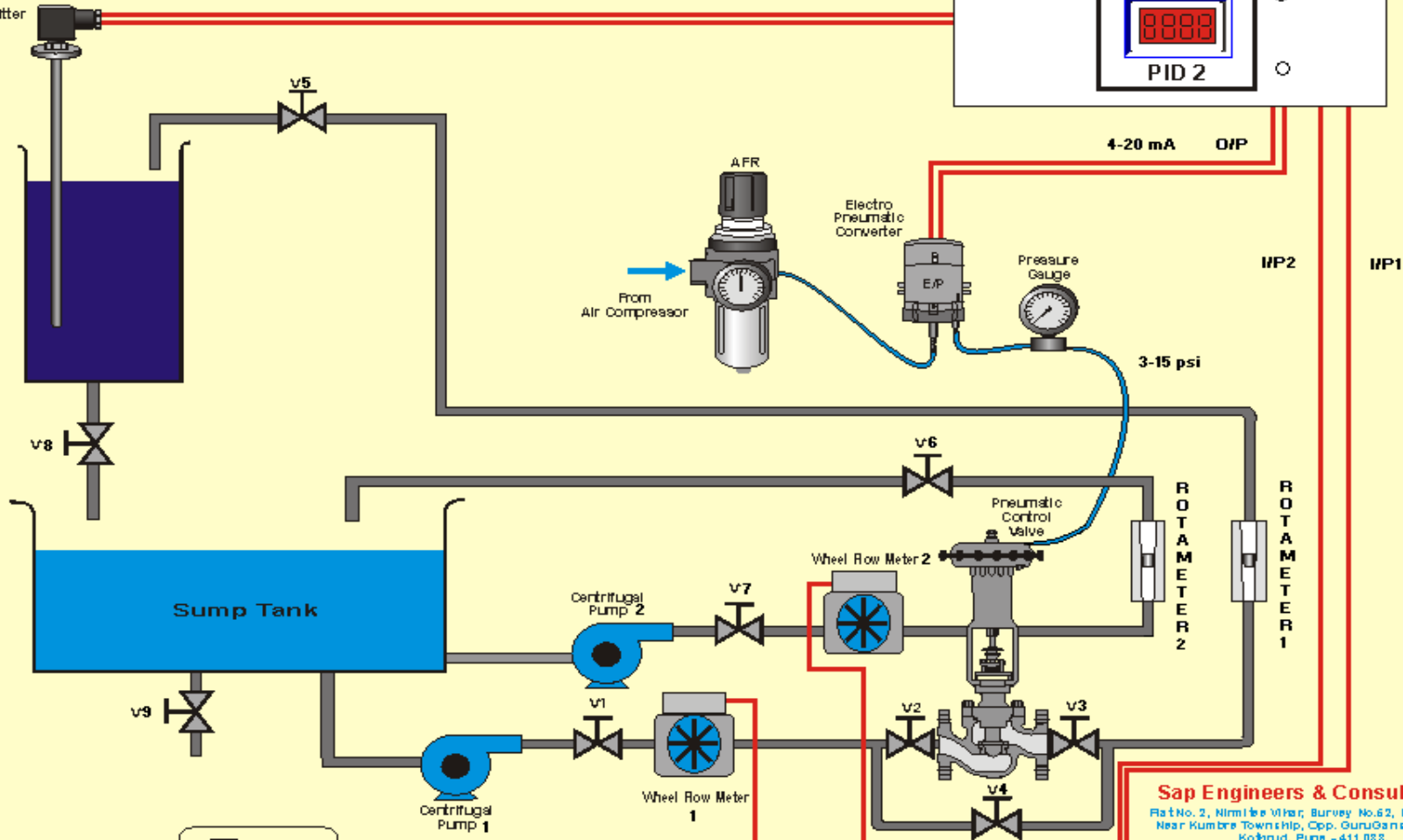
Feedback, Cascade, Ratio Control Trainer

Flow & Level Loop

NO EXPERIMENT



Level Transmitter (4-20mA)



Trend 1 Trend 2 Report Exit

Sap Engineers & Consultants
Flat No. 2, Nirmala Vihar, Survey No.62, Plot No.26/2,
Near Kumbhe Township, Opp. GuruGanesh Nagar,
Kothrud, Pune - 411 033.
Tel No : 020 26284880 Mobile : 9422032848
e-mail : pravin@deode@vsnl.net

Picture

Process Control System

- ❖ Se&C are the manufacturer of training kits required for practical for Eggs. Colleges. The Software part is done by our team.
- ❖ The system is having two PID (Proportional Integral Derivative) Loop. There are various parameters which has to be monitored viz. Pressure, Level, Rotation, Flow.
- ❖ The PID compares the present value with set values and these all values given in and taken out by SCADA.
- ❖ For each PID loop there is a different trends, reports and analysis is also done to compare the set points and present values.
- ❖ College students are using these Kits for getting practical knowledge. Such system is implemented in various colleges in Pune.

End Of Line (E.O.L)

System

for

BEHR India Ltd,

Pune.

Test Screen

JOB TYPE : Scorpio MANL BEHR

MODEL NAME : EOL JOB CODE : 0 JOB No. : 100

MODEL DESCRIPTION : EOL

STEP NO. : 0



DIGITAL INPUTS	DIGITAL OUTPUTS	ANALOG INPUTS	ACTUAL
Spare	CB Clamp cylinder	Ch0-FACE TOP DUCT LH (mtr/sec)	0.0
Cycle on P.B.	Cylinder defrost ducts	Ch1-FACE TOP DUCTRH	0.0
Cycle stop P.B.	Cylinder face ducts	Ch11-SIDE FACE DUCT LH	0.0
Heater leak ok	Vertical side duct face	Ch12-SIDE FACE DUCT RH	0.0
Spare	Leak test cylinder FWD	Ch5-FOOT SIDE DUCT LH	0.0
Evaporation leak ok	Horizontal duct face cylinder	Ch6-FOOT SIDE DUCTRH	0.0
Clamp-Declamp foot switch	Leak Connector Clamp/Declamp	Ch9-BLOWER CURRENT	0.0
Spare	LPC Start	Ch8-VIBRATION	0.0
Bed up pos ok reed switch	LPC Stop	Ch10-BLOWER VOLTAGE	0.0
AC clutch on	Spare	Ch2-DEFROST1+2+3	0.0
Bed down pos ok read switch	Spare	Ch7-REAR CONSOLE DUCT	0.0
spare	connector declamp		
spare	Spare		
Fr/Recirc On/Off	Table up/down cylinder		
spare			
spare			

MENU REPORT Model entry TEST START Abort

Picture

Model Data Entry

MODEL NAME :

MODEL DESCRIPTION :

DATA\EOL.MDL

STEP NUMBER	STEP DESCRIPTION	Analog Input No.	LOW	HIGH	Delay in seconds	DIGITAL INPUTS (0-7)	DIGITAL INPUTS (8-15)	DIGITAL I
1	ROTORY TABLE LIFT SOL	0	0.00	0.00	0.10	0	0	
2	LPC STOP/RESET	0	0.00	0.00	0.50	0	0	
3	ROTORY TABLE LIFT SOL	0	0.00	0.00	0.10	0	0	
4	DEF MODE CYL	0	0.00	0.00	1.50	0	0	
5	Face duc CYL	0	0.00	0.00	1.50	0	0	
6	LPC STOP/RESET O/P OFF	0	0.00	0.00	0.50	0	0	
7	VERT.SIDE DUCT LEFT FACE CYL on	0	0.00	0.00	1.50	0	0	
8	Horizontal duct face cylinder on	0	0.00	0.00	1.50	0	0	
9	Leak cyclender fow	0	0.00	0.00	1.00	0	0	
10	FR/REC PB CYL on	0	0.00	0.00	2.00	0	0	
11	FR/REC PB CYL OFF	0	0.00	0.00	0.10	0	0	
12	Rotate the blower switch upto the 1st speed	0	0.00	0.00	0.10	0	0	
13	LEAK CONNECTOR CLAMP ON	0	0.00	0.00	0.50	0	0	
14	Measure Blower current	7	3.00	8.00	2.00	0	0	
15	LPC START ON	0	0.00	0.00	0.50	0	0	
16	Rotate the blower switch upto the 2nd speed	0	0.00	0.00	0.10	0	0	

1	ROTORY TABLE LIFT SOL	0.0	0.00	0.00	0.1	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 0	<input type="checkbox"/>
						<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15	<input type="checkbox"/> 4	<input type="checkbox"/>

NO

REPORT VIEW

LABEL PRINT HW00094

All As On : 06/07/2008 11:14:26

Date Time	Job ID	Description	SW	Shift	Result	Vibration	Evaporation Leak	Heater Leak
09/10/2008 13:47					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:47					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:47					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:46					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:45					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:39					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:31					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:27					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:26					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:26					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:25					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:23					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:22					BORTED	N.A.	N.A.	N.A.
09/10/2008 13:21					BORTED	N.A.	N.A.	N.A.
08/10/2008 22:00					BORTED	N.A.	N.A.	N.A.
08/10/2008 21:58					BORTED	N.A.	N.A.	N.A.
08/10/2008 21:57					BORTED	N.A.	N.A.	N.A.
08/10/2008 21:57					BORTED	N.A.	N.A.	N.A.
08/10/2008 21:53					BORTED	N.A.	N.A.	N.A.
08/10/2008 21:34:33	HW00280	EOL	SW99881	A	ABORTED	N.A.	N.A.	N.A.
08/10/2008 21:34:26	HW00280	EOL	SW99881	A	ABORTED	N.A.	N.A.	N.A.

SPC Screen ✕

03/12/2008 11:10:38

Select Model: BehrV2 SPC

Set Query: Parameter (01) Blower Current

All As On : 03/12/2008 11:10:23

Date - Time	Parameter Value

Execute SPC Result Print Average Graph Print Dispersion Graph Print Histogram Graph Print CLOSE

data\y_2008.dat

QUERY DAILY REPORT EXCEL REPORT PRINTER PRINT TEST SCREEN SPC MENU

End Of Line System

- ❖ This system is given to BEHR India, Pune. They are using this system for testing the AC.
- ❖ There are various no. of Digital inputs and outputs involved in this process which can be forced ON/OFF. Analog inputs like Current, Voltage, Vibration, Torque, Max airflow are all measured by the system.
- ❖ The steps for testing is carried out which are entered in the model data entry screen (picture 10). Also modifications can be done in that steps and one can save them. Same for New Model.
- ❖ The knobs & buttons also checked through these steps.
- ❖ If the above parameters are within the set range and the all steps are OK then the TEST OK signal is generated and the barcode is given out for particular AC otherwise the TEST NOK signal is generated.
- ❖ The reports are also generated by considering the above and also the following parameters like sift, AC ON, AC OFF, Recirculation ON/OFF & Vibration.
- ❖ The SPC Screen shows the values of parameters as per the model selected in the screen. The details of all the parameter of same Model are seen by this(Picture11).

Flow Measuring System

for

Godrej & Boyce Manufacturing
Company.

Flow Metering System

WEST SIDE

Plant No.	Flow	Pressure	Temperature	Totaliser
Main DG	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
1	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
4	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
7	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
8 A	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
8 B	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
9	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
19 A	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
19 B	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3
Total West Side	0.0 m3/hr	0.0 bar	0.0 o	0.0 m3



WEST SIDE	EAST SIDE	WEST CUMMULATIVE	EAST CUMMULATIVE	WEST DEMAND & SUPPLY	EAST DEMAND & SUPPLY	WEST HISTORICAL	EAST HISTORICAL	Exit
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Picture

Flow Metering System

HISTORICAL WEST SIDE

Month	Main DG			Plant1			Plant4			Plant7		
	Y2005_2006	Y2006_2007	Y2007_2008	Y2005_2006	Y2006_2007	Y2007_2008	Y2005_2006	Y2006_2007	Y2007_2008	Y2005_2006	Y2006_2007	Y2007_2008
April	0	0	0	0	0	0	0	0	0	0	0	0
May	20	20000	9989	21	20000	9988	22	20000	9987	23	20000	9986
Jun	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0	0	0
Sept	0	0	0	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0	0	0	0	0
Jan	0	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0

WEST SIDE	EAST SIDE	WEST CUMMULATIVE	EAST CUMMULATIVE	WEST DEMAND & SUPPLY	EAST DEMAND & SUPPLY	WEST HISTORICAL	EAST HISTORICAL	Exit
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Picture

Flow Measuring System

- ❖ This system is given to Forbes Marshal and the end customer is Godrej & Boyce Mfg. Co. They are using this system for monitoring Flow.
- ❖ There are various measuring instruments for Pressure, Temperature and Flow etc. The all readings taken by these instrument are taken on SCADA. And total is shown on the tantalizer. (Picture12).Same is for East side.
- ❖ Cumulative, Demand Vs Supply, Monthly and for last three years monthly report is generated for each plant. The 3 years report for each plant is shown in picture13.

Rubber Vulcanizing System

for

Load Star Pvt. Ltd.

Monitor Screen

Oven No. 1 Cycle Status: OFF STOP Tyre Sr No: a11 Tyre Size: 650x105 Curing Time: 00:09:00 Start Time: 19/06/07 23:15:38 Remain Time: 00:00:00 Stop Time: 19/06/07 23:21:11 SP: 0.0 Mould Temp: 0.0 Soft Temp: 80.0 Heal Temp: 70.0	Oven No. 2 Cycle Status: OFF STOP Tyre Sr No: 12345 Tyre Size: 650x105 Curing Time: 01:01:00 Start Time: 19/06/07 23:16:07 Remain Time: 00:00:00 Stop Time: 19/06/07 23:21:26 SP: 0.0 Mould Temp: 0.0 Soft Temp: 75.0 Heal Temp: 60.0	Oven No. 3 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 600x91 Curing Time: 04:10:00 Start Time: 19/06/07 23:24:53 Remain Time: 00:00:00 Stop Time: 19/06/07 23:29:56 SP: 0.0 Mould Temp: 0.0 Soft Temp: 70.0 Heal Temp: 65.0	Oven No. 4 Cycle Status: OFF STOP Tyre Sr No: 44 Tyre Size: 650x105 Curing Time: 00:30:00 Start Time: 19/06/07 23:21:47 Remain Time: 00:21:45 Stop Time: 19/06/07 23:30:02 SP: 0.0 Mould Temp: 0.0 Soft Temp: 70.0 Heal Temp: 75.0	Oven No. 5 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 650x105 Curing Time: 00:05:06 Start Time: 19/06/07 23:30:10 Remain Time: 00:05:00 Stop Time: 19/06/07 23:30:16 SP: 0.0 Mould Temp: 0.0 Soft Temp: 70.0 Heal Temp: 65.0	Oven No. 6 Cycle Status: OFF STOP Tyre Sr No: 11 Tyre Size: 650x105 Curing Time: 00:00:10 Start Time: 19/06/07 23:30:37 Remain Time: 00:00:05 Stop Time: 19/06/07 23:30:42 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp
Oven No. 7 Cycle Status: OFF STOP Tyre Sr No: 123 Tyre Size: 650x105 Curing Time: 00:30:00 Start Time: 19/06/07 23:22:31 Remain Time: 00:21:41 Stop Time: 19/06/07 23:30:50 SP: 0.0 Mould Temp: 0.0 Soft Temp: 70.0 Heal Temp: 70.0	Oven No. 8 Cycle Status: OFF STOP Tyre Sr No: 88 Tyre Size: 600x91 Curing Time: 00:01:00 Start Time: 19/06/07 23:38:55 Remain Time: 00:00:50 Stop Time: 19/06/07 23:39:05 SP: 0.0 Mould Temp: 0.0 Soft Temp: 65.0 Heal Temp: 66.0	Oven No. 9 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 600x91 Curing Time: 00:01:00 Start Time: 19/06/07 23:40:42 Remain Time: 00:00:00 Stop Time: 19/06/07 23:40:45 SP: 0.0 Mould Temp: 0.0 Soft Temp: 65.0 Heal Temp: 66.0	Oven No. 10 Cycle Status: OFF STOP Tyre Sr No: 10 Tyre Size: 650x105 Curing Time: 00:48:00 Start Time: 18/06/07 01:23:20 Stop Time: 18/06/07 01:23:20 SP: 0.0 Mould Temp: 0.0 Soft Temp: 80.0 Heal Temp: 41.0	Oven No. 11 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 600x91 Curing Time: 00:01:00 Start Time: 19/06/07 23:30:37 Remain Time: 00:00:05 Stop Time: 19/06/07 23:30:42 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 12 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 600x91 Curing Time: 04:10:00 Start Time: 19/06/07 20:03:51 Remain Time: 01:23:20 Stop Time: 05/07 23:45:42 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp
Oven No. 13 Cycle Status: OFF STOP Tyre Sr No: 133 Tyre Size: 650x105 Curing Time: 00:00:30 Start Time: 01/06/07 00:22:07 Stop Time: 01/06/07 00:22:37 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 14 Cycle Status: OFF STOP Tyre Sr No: 11 Tyre Size: 650x105 Curing Time: 00:00:10 Start Time: 31/05/07 20:09:35 Stop Time: 31/05/07 20:09:45 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 15 Cycle Status: OFF STOP Tyre Sr No: 11 Tyre Size: 600x91 Curing Time: 00:01:00 Start Time: 19/06/07 00:22:55 Stop Time: 19/06/07 00:23:55 SP: 0.0 Mould Temp: 0.0 Soft Temp: 65.0 Heal Temp: 66.0	Oven No. 16 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 650x105 Curing Time: 00:00:10 Start Time: 30/05/07 01:23:20 Stop Time: 30/05/07 01:23:20 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 17 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 650x105 Curing Time: 00:00:10 Start Time: 01/06/07 00:16:23 Stop Time: 01/06/07 00:16:33 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 18 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 650x105 Curing Time: 00:00:10 Start Time: 19/06/07 00:17:01 Stop Time: 19/06/07 00:17:50 SP: 0.0 Mould Temp: 0.0 Soft Temp: 70.0 Heal Temp: 65.0
Oven No. 19 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 600x91 Curing Time: 04:10:00 Start Time: 19/06/07 23:32:01 Stop Time: 19/06/07 23:32:05 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 20 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 600x91 Curing Time: 04:10:00 Start Time: 19/06/07 23:31:29 Stop Time: 19/06/07 23:31:32 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 21 Cycle Status: OFF STOP Tyre Sr No: 12345 Tyre Size: 650x105 Curing Time: 00:30:00 Start Time: 19/06/07 00:23:25 Stop Time: 19/06/07 00:23:55 SP: 0.0 Mould Temp: 0.0 Soft Temp: 70.0 Heal Temp: 75.0	Oven No. 22 Cycle Status: OFF STOP Tyre Sr No: TyreSrNo Tyre Size: 600x91 Curing Time: 04:10:00 Start Time: 19/06/07 23:31:48 Stop Time: 19/06/07 23:31:51 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 23 Cycle Status: OFF STOP Tyre Sr No: 23 Tyre Size: 650x105 Curing Time: 00:00:10 Start Time: 01/06/07 00:16:23 Stop Time: 01/06/07 00:16:33 SP: 0.0 Mould Temp: 0.0 Soft Temp: SoftTemp Heal Temp: HealTemp	Oven No. 24 Cycle Status: OFF STOP Tyre Sr No: 1122 Tyre Size: 650x105 Curing Time: 00:05:06 Start Time: 19/06/07 00:17:01 Stop Time: 19/06/07 00:17:50 SP: 0.0 Mould Temp: 0.0 Soft Temp: 70.0 Heal Temp: 65.0

Cycle Details X

OVEN NO : 1

Cycle Status: **STOP**

Tyre Sr No: a11

Tyre Size: 650x105

Curing Time: 00:09:00

Start Time: 19/06/07 23:15:38

Stop Time: 19/06/07 23:21:11

SP: 0.0

Rubber Vulcanizing System

- ❖ This system is given to Forbes Marshal and the end customer is LoadStar Pvt Ltd. They are the Tyre manufacturers. They are using this system for rubber Vulcanizing.
- ❖ The company having 24 Ovens for processing on tyre. As shown in picture13 the parameters considered are oven status, current time, given time, remaining time, mould temp, heal temp and Set points. Same for all 24 ovens.
- ❖ The little window shown in picture13 is required to give tyre no., Size, Curing time, Start and Stop time, Set point and processes of particular Oven.
- ❖ As per the tyre type the recipe is made considering temperatures required for process.
- ❖ The reports are made considering the parameters like tyre sr. no., tyre size, start time, stop time, SP, Curing time, Soft temp, Heal Temp and Mould temp.
- ❖ The excel reports for the same is also generated.

Circuit Breaker Testing System

for


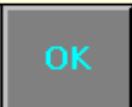

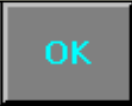
Schneider Electric (I) Pvt. Ltd.

TEST SCREEN

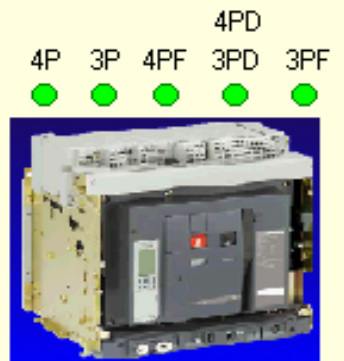
HIGH CURRENT TEST MASTERPACT NW & NT ACB

ORDER NO.		TYPE	
SR.NO.	2007_002824	POLES	

AIR PRESSURE 

- NW / NT .. ?
- FIXED / DRAWOUT .. ? 
- CHECK "OF" CONTACT INSERTION 
- BREAKER CLOSED
- SET NEUTRAL SWITCH TO 4P 4D
- MICROLOGIC TYPE..? 
- 

TEST START



TEST STOP

REFRESH



Menu

Circuit Breaker Testing System

- ❖ This system is given to Schneider Electric (I) Pvt. Ltd. They are using our software for testing the circuit breakers.
- ❖ Test Start/Test Stop buttons ,NW/NT selection, Fixed/Drawout selection, Micrologic type and No. of poles are all settable parameters shown in picture15.
- ❖ Test Report is also generated for the same showing order no, serial no, type, rework, pole no and finally result. The Excel reports are also generated for the same.

Report Generated

for

Rockwell Automation,

Pune.

Rockwell Automation, Pune.

- ❖ Reports are generated from “**Access Database**” files. All reports are filtered as shift wise, day wise etc.

Thank You