YUTECH BRIX ANALYZER (HIGH-FREQUENCY BRIX ANALYZER) AND AUTO-RETRACTABLE SELF-CLEANING BRIX SENSOR

Servicing the Sugar Industry since 1978

YU Technologies Pvt. Ltd.

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YUTECH BRIX ANALYZER AND AUTO CLEANING SELF RETRACTABLE BRIX SENSOR

BASED ON YUTECH'S A15 INTELLIGENT ANALYZERS AND SYSTEMS PLATFORM

BRIX ANALYZER

BRIX ANALYZER

PRODUCT CODE:
BASE MODELS: A15BAACBSRC1D4R2FM,
CONTROLLER MODEL: A15BAACBSRC2D4R4FMC
CONTROLLER WITH ETHERNET MODEL:
A15BAACBSRC2D4R4FMCEM (Modbus TCPIP)

AUTO-RETRACTABLE SELF-CLEANING BRIX SENSOR

PRODUCT CODE:
ASDBSRSCW1EV03

BRIX ANALYZER CONTROLLER

ELECTRODE IN SENSING POSITION

ELECTRODE IN CLEANING POSITION

YUTECH BRIX ANALYZER AND AUTO-RETRACTABLE SELF-CLEANING BRIX SENSOR

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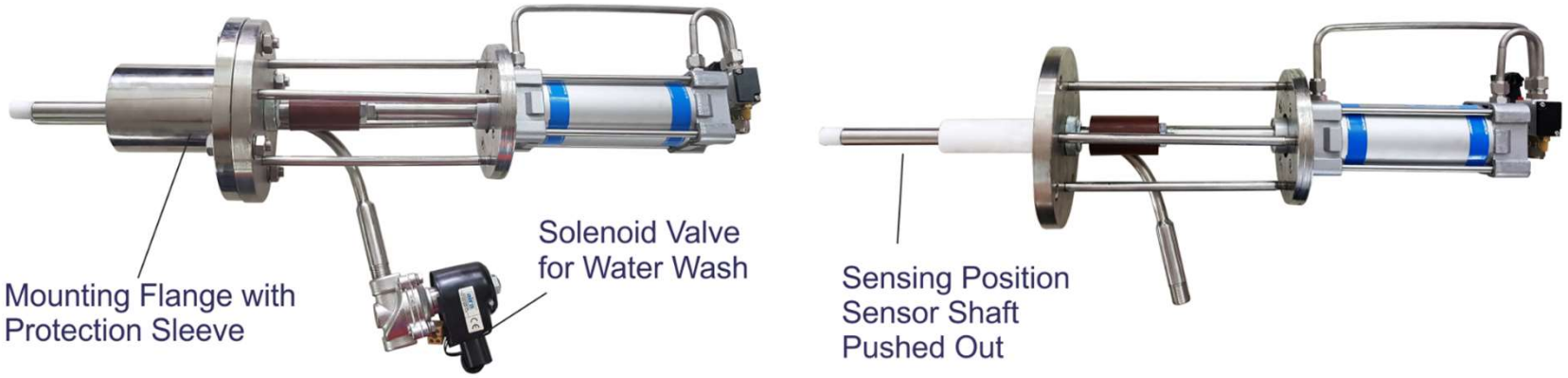
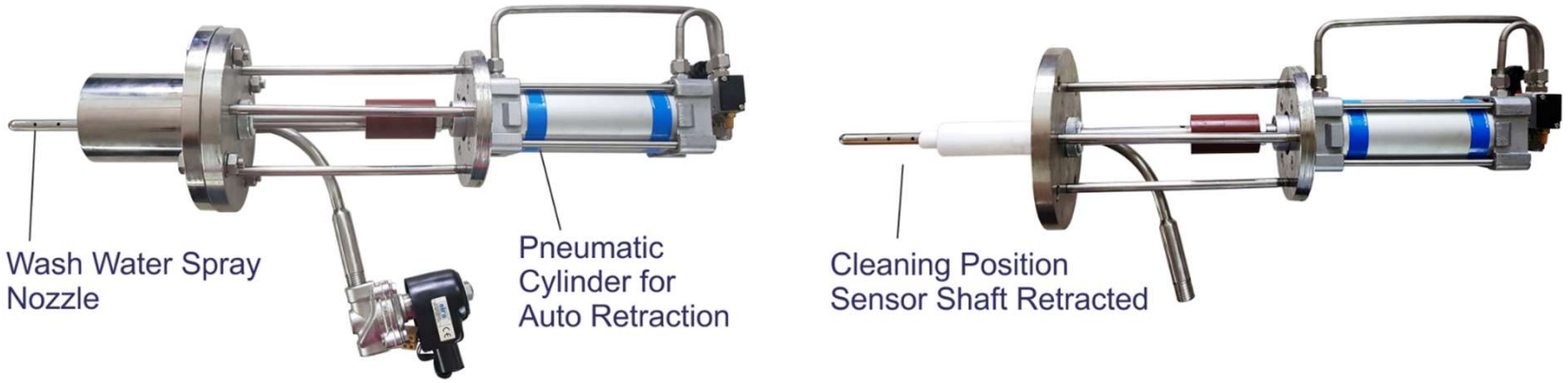


Brix Sensor Pictures with and without Mounting Flange and in Sensing and Cleaning Positions



YUTECH BRIX ANALYZER AND AUTO-RETRACTABLE SELF-CLEANING BRIX SENSOR

BASED ON YUTECH'S A15 INTELLIGENT ANALYZERS AND SYSTEMS PLATFORM

Brix Analyzer and Sensor combination targets sensing of Suspended Solid Content (Brix) in Slurries or Syrups like Sugar Massecuite, Sugar Syrup, Sugar Melt and Molasses. Brix Analyzer plays a crucial role in Sugar Process Automation and helps in Stabilizing the overall Sugar Process.

The YUTECH Intelligent Programmable Brix Analyzer is a State-of-the-Art System having Built-in Fuzzy Logic for Automatic Purity Compensation to Accurately Sense, Analyze, Calculate and Derive Massecuite Brix within a Band of varying Purity with Temperature Compensation. This Logic is called Brix Equation and it results in accurate Brix Sensing.

The YUTECH Brix Sensor is Auto-Retractable Self-Cleaning and Self-Washing Brix Sensor. This technique prevents Media Deposits on Sensor Electrode thus always results in Accurate Readings.

Accurate Brix reading ensures better Process Control and helps to maintain constant Massecuite / Melt / Molasses / Syrup Quality and Steam / Vapour Requirement thus results in Higher Sugar Production Efficiency and Minimum Process Losses.

YUTECH BRIX ANALYZER AND AUTO-RETRACTABLE SELF-CLEANING BRIX SENSOR

BASED ON YUTECH'S A15 INTELLIGENT ANALYZERS AND SYSTEMS PLATFORM

SALIENT FEATURES

- The Brix Sensor Detects Deviation in Electric Signal with respect to changes in the Brix of a Solution whose Brix is to be measured
- This Signal Deviation is then Processed in the Analyzer to obtain a Brix Reading
- YUTECH Brix Analyzer is equipped with Intelligent Auto Purity Compensation Algorithm to derive the Brix accurately in Massecuites of varying Purity
- Very Easy Calibration and Online Brix Compensation Recalibration
- In-Built Automatic Temperature Compensation
- In-Built Self Cleaning and Washing of Sensor with pre-adjustable timing cycle
- 4-20 mA Output, Separate Modbus and Ethernet Communications
- On-line Calibration Software "YUTECH-AccessApp" provides Remote Access to the Brix Analyzer for Calibration, Compensation, and Trouble Shooting.

SALIENT FEATURES

Innovative Features for Ease of Operation and to save on Installation Cost and Materials:

- **Built-in Brix Equation for Purity Compensation**: to Accurately Sense, Analyze, Calculate and Derive Brix within a Band of varying Slurry, Massecuite or Syrup Media Purity.
- **Built-in Temperature Compensation**: to Accurately Sense, Analyze, Calculate and Derive Brix within a Band of varying Temperature.
- **Built-in PID Controller and Ethernet Communication for Controller Models:**
  - Highly Accurate Fuzzy Logic PID Controller developed especially for Process Control and Flow Control Applications.
  - CVP Pan Chamber Control Logic built especially for Continuous Vacuum Pan Operations
  - Sugar Melter and Molasses Conditioner Control Logic
  - Remote Set Variable Facility
- **Built-in 3-Point Auto/Manual Station to Select Control Output from:**
  a. Selector Switch for Local PID Output or DCS/PLC PID Output
  b. Manual Output for Trouble Shooting

  This feature simplifies installation by eliminating need for installing a Junction Box and Extra wiring.

SALIENT FEATURES

Innovative Features for Ease of Operation and to save on Installation Cost and Materials:

- **Built-in Communication Links: See Product Code to select desired protocol**

  Ethernet:

  a. Modbus TCPIP Ethernet Communication Protocols
  b. External PID Controller Calibration Facility from DCS / PLC- SCADA / HMI System via Ethernet. Control Variables can be accessed and changed from DCS / PLC- SCADA / HMI.
  c. Brix Data is Communicated for Data Acquisition and Data Storage within DCS / PLC- SCADA / HMI.

  RS485: Modbus RTU on request in Base Model.

  USB Communication Facility: For Calibration from PC or Android using System's USB Port. (This facility is available only in Controller with Ethernet Models).
  YUTECH Access App: Calibration Software can be installed in a PC or Android.

YUTECH BRIX ANALYZER:

TECHNICAL SPECIFICATIONS

- **Power Supply:** 85 - 265 VAC, 50 – 60Hz
- **Analyzer Enclosure:** IP67 Field Mounted Dust and Moisture Proof
- **Input:**
  - Brix Sensor Signal
  - RTD PT 100 Temperature Signal
- **Calibration:**
  - From Keyboard
  - USB Port for Windows / Android-based YUTECH-AccessApp-BA
- **Display:**
  - **Base Model:** 4 Digit LED Dual Display
  - **Controller and Controller with Ethernet Model:** 4 Digit LED Quad Display
  - **Sensor Cleaning and Washing Output:** In-Built Potential Free Relay
- **Sensor Cleaning Timing Cycle:** Adjustable from Keyboard, default 15 Minutes
- **Signal Output:**
  - 4 - 20 mA Temperature Compensated Brix Output
  - 4 - 20 mA PID Output (Controller, Controller with Ethernet Models)
  - 2 Potential-Free Relay Outputs for High – Low Alarm
- **Communications:**
  - Ethernet Communication Protocol: Modbus-TCPIP

YUTECH BRIX ANALYZER:

TECHNICAL SPECIFICATIONS

Product Code:

- A15BAACBSRC1D4R2FM – A15BA means Brix Analyzer Products of A15 Product Family
- A15BAACBSRC1D4R2FM – AC Power Supply
- A15BAACBSRC1D4R2FM – Analog Inputs and Outputs
  - AI: (BSR) Brix Sensor and RTD PT100;
  - AO: (C1) 1 Ch. 4-20mA (Brix)
  - AO: (C2) 2 Ch. 4-20mA (Ch. 1: Brix and Ch. 2: PID)
- A15BAACBSRC1D4R2FM
  - DI: (D4) 4 Digital Inputs (24VDC)
  - DO: (R2) 2 or 4 Relay Outputs (24VDC, 1A)
- A15BAACBSRC2D4R4FM1 – Digital Inputs and Outputs
  - DO: (R4) 4 Relay Outputs (24VDC, 1A)
- A15BAACBSRC2D4R2FM – FM: Field Mounted Enclosure
- A15BAACBSRC2D4R4FMC – C: Controller Model with 2 AOs Ch-2 is for PID / PI Controls
- A15BAACBSRC2D4R4FMCEM – CEM: Controller with Ethernet (Modbus TCPIP) Model

- **Calibration:**
  - Please mention the application for factory calibration as illustrated below:
    - Horizontal Continuous Vacuum Pan
    - Molasses Conditioner
    - Sugar Melter

YUTECH AUTO CLEANING SELF RETRACTABLE BRIX SENSOR:

MODEL: ASDBSRSCW1EV03

SALIENT FEATURES

Auto Retractable Self-Cleaning Brix Sensor Assembly:

- Stainless Steel (SS316) Brix Sensor Electrode
- Stainless Steel Wash Water Spray Tube forms the Reference Electrode
- Wash Water Spray Tube is connected to a Solenoid Valve for Automatic Washing of the Sensor Electrode
- Sensor Electrode is sheathed in a Solid PTFE Bar with Leak Proof Cleaning Arrangement
- RTD PT 100 Temperature Sensor with Thermowell constructed out of Solid SS Bar
- Sensor Electrode is coupled to a Pneumatic Cylinder for Automated Self-Cleaning
- Sensor Mounting Flange with Protection Sleeve is provided which is to be welded to the vessel to seal off the vacuum and protect the Sensor Sheath
- Periodic Cleaning Cycle is initiated by a signal from the Brix Analyzer

APPLICATIONS IN SUGAR PROCESS OR SUGAR REFINERY:

- **HORIZONTAL CONTINUOUS VACUUM PAN**
- **SUGAR MELTERS**
- **MOLASSES CONDITIONERS**

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BASED ON YUTECH'S A15 INTELLIGENT ANALYZERS AND SYSTEMS PLATFORM

PERFORMANCE CERTIFICATES / MINUTES OF THE MEETING / LAB REPORT

Narainghar Sugar Mill Ltd.Ambala,Haryana

25 tph B-Contineous Vacuum Pan

Date: 7.2.2018

Brix Readings

Date	YU TECH Brix sensor Compartment 2 /3		YU TECH Brix sensor Compartment 4 /5		YU TECH Brix sensor Compartment 6 /7		YU TECH Brix sensor Compartment 8 /9		H&K Brix sensor ,Compartment 10/11(Discharge Massicute)	
	Actual at Field	Laboratory	Actual at Field	Laboratory	Actual at Field	Laboratory	Actual at Field	Laboratory	Actual at Field	Laboratory
26.1.2018	89.6	90	86.2	87	87	86.5	87.9	87	94.6	94.5
27.1.2018	86.8	87.2	84.6	84.5	89.5	89.5	90.1	90.5	92.3	91.5
28.1.2018	86	87.5	88.5	88.4	88.1	90.2	91.6	92.5	95.1	94.5
31.1.2018	85.5	85.5	87.8	86.5	87.1	86.5	89.1	90.2	94.5	92.5
1.2.2018	85.3	84	85.2	86	88.5	89.5	89	89.5	92.7	91
2.2.2018	86.1	85.4	84.9	85.8	89	88.5	89.7	90.5	93.2	93
3.2.2018	87.9	88.7	85.9	87	90.2	88.9	90	90.2	94.2	93.9
4.2.2018	85.7	84.9	88.4	88.7	90.1	89.1	90.5	91	93	92.8
5.2.2018	88	88.6	89.3	88.1	91.6	90.5	86.5	88.2	93.7	92

For Global Cane Sugar Services(p) Ltd

For Narainghar Sugar Ltd.

COMPARTMENT 2-9: YUTECH BRIX
COMPARTMENT 10/11: H&K MICROVAWE BRIX

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PERFORMANCE CERTIFICATES / MINUTES OF THE MEETING / LAB REPORT

BISCOM, Inc.
Binalbagan, Negros Occidental

CERTIFICATION

This is to certify that the 6 sets Intelligent Programmable Brix analyzer purchased by BISCOM, Inc. (PO # 05-62-1-2022) from YU Technologies Industries PVT. LTD for Continuous Vacuum Pan (CVP) has a satisfactory performance since it was installed and commissioned.

This Certification is issued upon the request of YU Technologies Inc. PVT. LTD for whatever purpose it may serve them best.

Given this 16th day of November 2022.

ALLAN A. BELLO
Boiling House Dept. Head

ROMEO E. GALANZA
Instrumentation Dept. Head

MINUTES OF MEETING HELD BETWEEN M/S YU TECHNOLOGIES PVT. LTD. (SANGLI) & M/S MERU INDUSTRIES LLP(PUNE) AT PARAG AGRO FOODS AND ALLIED PRODUCTS PVT. LTD. RAVDEWADI,PUNE. DT.22.12.2017.

RAFAT THARA OF YU TECHNOLOGIES VISITED PARAG AGRO SITE ON 18TH DEC.2017 FOR COMMISSIONING OF BRIX ANALYZER OF CONTINUOUS PAN B & C. DURING HIS VISIT FOLLOWING WORK DONE:

1. 230VAC MAINS CHECKED & POWER UP ALL BRIX ANALYZER.
2. ALL SENSORS CHECKED BY AIR & WORKING PROPERLY.
3. ALL BRIX ANALYZER CALIBRATED 85% BRIX TO 100% BRIX.
4. ALL ANALYZERS 4-20mA OUTPUT CHECKED PROPERLY.
5. BRIX ANALYZERS OUTPUT 4-20mA SIGNALS CLEARED IN DCS PANEL.
6. ALL BRIX ANALYZERS ARE CALIBRATED & COMPARED TO LAB READINGS & IT IS WORKING IN ACCURACY OF +/- 1% BRIX.
7. ALL BRIX ANALYZERS ARE WORKING IN AUTO MODE FROM 3PM DT:20TH DEC 2017.
8. AUTO CONTINUOUS PAN TRIAL SUCCESS FULLY COMPLETED.

AFTER ABOVE WORK,IT IS OBSERVED THAT ALL BRIX ANALYZERS ARE WORKING SATISFACTORILY FROM 20TH DEC 2017.OPERATIONS OF THE SYSTEM EXPLAINED TO FACTORY OPERATORS (PAN MAN) & INSTRUMENT ENGINEER.

YUTECH. SERVICE ENGG. HAS COMPLETED WORK & HANDOVERED THE SYSTEM TO PARAG AGRO FOODS & ALLIED PRODUCTS PVT. LTD.

YU TECH	PARAG AGRO	MERU INDUSTRIES
Mr. RAFAT THARA	Mr. VIJAY LAVATE	Mr. HIERAY SIR
(INSTRUMENT MNG.)	(INSTRUMENT ENGG.)	(SITE INCHARGE)
Mr. JOTIRAM KADAM	Mr. CHORAGHE SIR	MR. PARDESHI R. K
(PROJECT MNG.)	(CHIEF ENGG.)	(PAN MAN)
	Mr. JADHAV SIR	DITAP V Ganesh Jadhav (S/W Engg.)
	(CHIEF CHEMIST)	

YUTECH BRIX ANALYZER AND AUTO CLEANING SELF RETRACTABLE BRIX SENSOR

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PERFORMANCE CERTIFICATES / MINUTES OF THE MEETING / LAB REPORT

Date: 06-03-2017

Dalmia Chini Mill Nigohi

Minutes of meeting between Y U Technologies PVT. LTD service Eng. & **Dalmia Chini mill** Nigohi

Service Engineer Milind Soman reached at site on dt.- 26/2/2017.

And worked from-26/2/2017 to 5/3/2017.

I completed works are as follows.

1) All transmitters are calibrated.
2) All transmitters are program upgraded with additional Brix compensation facility.
3) Four days are observed transmitter.
4) All transmitters are calibrated as compare to Lab Readings.
5) Sensors are calibrated 85 to 104 Brix.
6) New solenoid valves fitted for all sensors cleaning are working properly at the time of cleaning.
7) All Brix transmitter reading are with +/- 2 Brix.
8) Lab report is attached below

YU-Tech service Engineer has completed work at **Dalmia Chini Mill** Nigohi.

M/s Dalmia Chini Mill Nigohi

1) Mr. Param Singh (GM Prod.)
2) Mr. Shailendra Kumar (GM Engg.)
3) Mr. Anilkumar Gangwar (Mgr Inst)

M/s Y U technologies

Mr. Milind Soman

B pan report after calibration 27.2.2017

comp	field	dcs	lab	time	diff
1	91.1	90.5	91.1	13:17	0
3	89.8	89.5	92.6	15:00	-2.8
5	89.6	89.5	90.3	15:25	-0.7
7	90.1	89.8	89.7	15:40	0.4
9	89.7	0	91.7	15:55	-2
11	90.6	90.5	94.6	16:00	-4
					0
1	90.2	90.2	91.6	17:15	-1.4
3	91.7	91.2	90.5	17:27	1.2
5	90	89.9	91.6	17:45	-1.6
7	90	89.8	94.6	18:04	-4.6
9	92	0	94.6	18:10	-2.6
11	92.6	91.1	95.1	18:50	-2.5

Lab report on 28.2.17

comp	field	dcs	lab	time	diff
1	92	92	90.8	16:00	1.2
3	90.2	90.2	90.6	16:10	-0.4
5	90	90	91	16:25	-1
7	90.5	90.5	90.3	16:40	0.2
9	89.2	89.2	93.6	16:57	-4.4
11	89.6	89.6	93.5	17:25	-3.9
					0
comp	field	dcs	lab	time	diff
1	89.6	89.6	91.9	18:25	-2.3
3	90	90	93	18:30	-3
5	90.1	90.1	89.5	18:35	0.6
7	90.7	90.7	90	18:42	0.7
9	93.1	93.1	91	18:47	2.1
11	93.5	93.6	92	18:50	1.5

After matching field to DCS of comp 1 & 3

Comp	field	DCS
1	90.3	90.4
3	90.3	90.3

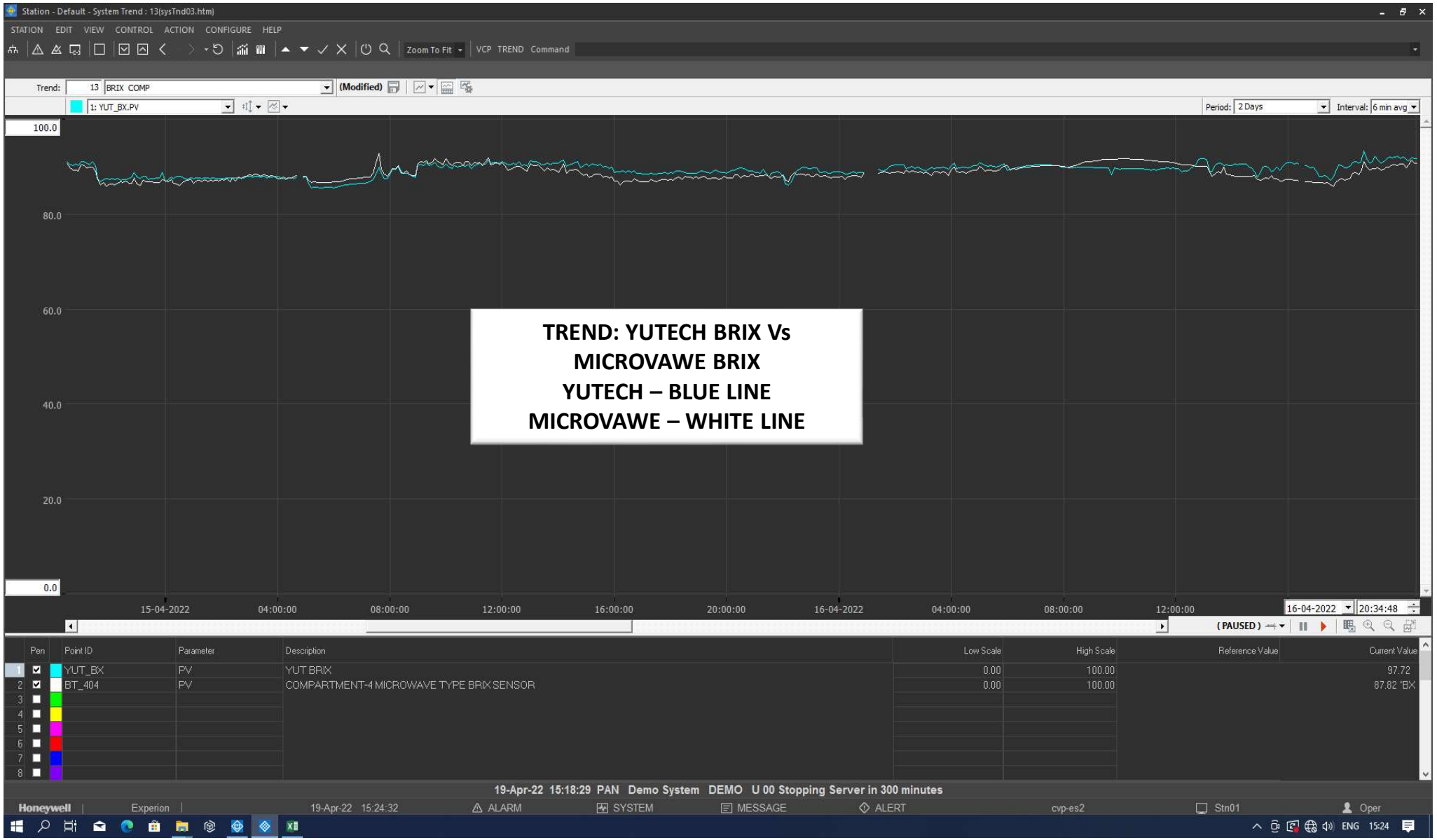
Lab report on 4.3.2017

comp	field	dcs	lab	time	diff
1	90.7	100	89.7	11:40	1
3	90.7	89.4	88.7	11:53	2
5	90.2	90.2	90.5	12:06	-0.3
7	92.2	92.2	90.7	12:20	1.5
9	92.5	92.4	93.7	12:40	-1.2
11	92.2	92.2	93.6	13:55	-1.4
1	89.6	89.7	88.3	15:17	1.3
3	89.5	89.5	88.6	15:32	0.9
5	90.4	90.4	89.6	15:45	0.8
7	91.1	91.1	91.9	15:50	-0.8
9	93.2	93.2	93.6	16:10	-0.4
11	93.3	93.3	93.6	16:25	-0.3
comp	field	dcs	lab	time	diff
1	88.9	88.9	89.3	17:45	-0.4
3	88.8	88.8	89.3	17:50	-0.5
5	90.8	90.8	90.3	17:53	0.5
7	91.4	91.3	92.9	18:10	-1.5
9	93.2	93.3	93.3	18:12	-0.1
11	94.2	94.2	93	18:20	1.2

YUTECH BRIX ANALYZER AND AUTO CLEANING SELF RETRACTABLE BRIX SENSOR

BASED ON YUTECH'S A15 INTELLIGENT ANALYZERS AND SYSTEMS PLATFORM

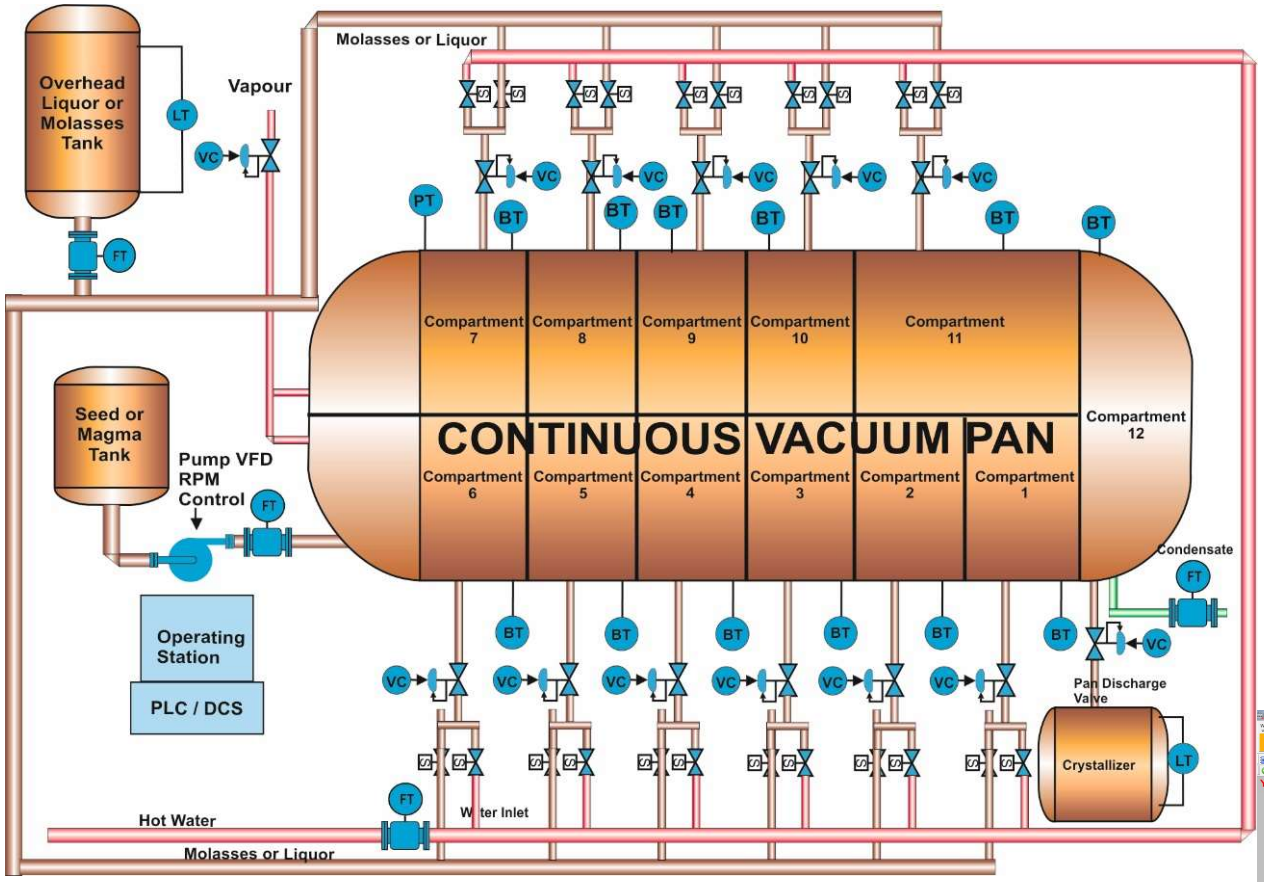
AUTOMATION SCREEN SHOTS



YUTECH BRIX ANALYZER CUM CONTROL SYSTEM AND SELF-CLEANING SENSOR

CONTINUOUS VACUUM PAN AUTOMATION

CVP CONTROL SCHEMATIC AND SCREENSHOT

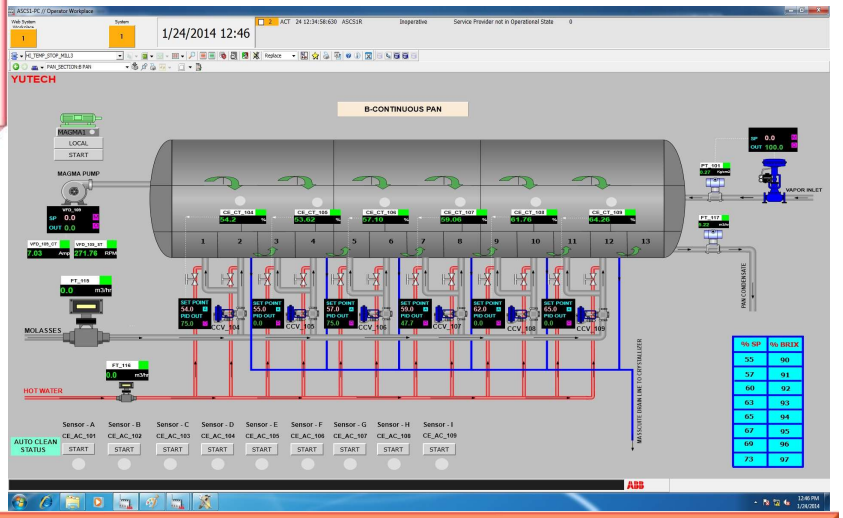


CONTINUOUS VACUUM PAN AUTOMATION:

- CALENDRIA VAPOUR PRESSURE CONTROL
- STANDALONE SYSTEM FOR PAN CHAMBER AND COMMUNICATION WITH MAIN VCP PLC / DCS SYSTEM
- SEED OR MAGMA FLOW CONTROL WITH RESPECT TO MOLASSES OR LIQUOR FLOW

CONTINUOUS VACUUM PAN AUTOMATION:

- YUTECH FLUID-DENSITY-BRIX OR YUTECH BRIX SENSING AND MOLASSES / WATER INTAKE CONTROL FOR EACH COMPARTMENT
- VFD SPEED CONTROL AS PER PAN CHAMBER LEVEL FOR LAST CHAMBER IF INSTALLED
- TEMPERATURE SENSING THROUGHOUT THE PAN CHAMBERTO ENSURE UNIFORM TEMPERATURE INSIDE PAN CHAMBER BODY
- SEED FLOW CONTROL MAINTAINING MOLASSES TO SEED RATIO

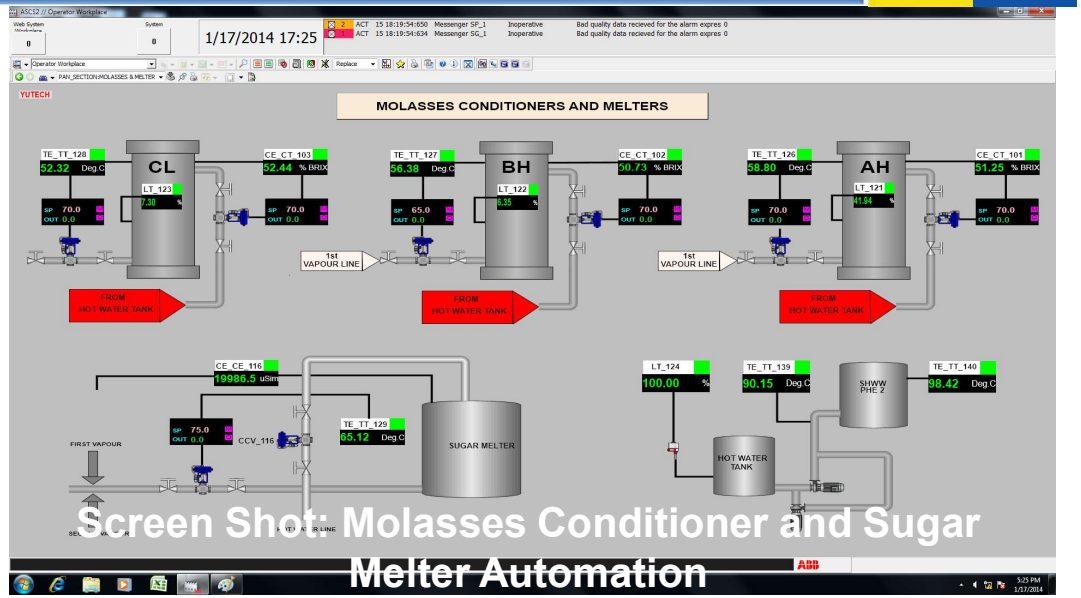


- **Seed or Magma Flow Control with respect to Molasses or Liquor Flow:**
  - Molasses and Seed Flowmeters sense Flow.
  - Ratio Controller delivers exact Flow of Seed wrt Molasses Quantity by Controlling Seed / Magma Pump VFD.
- **Individual Compartment Brix Control by Auto Feeding Molasses or Water into each Compartment:**
  - Consistency-Brix OR Brix Sensing of each Compartment by YUTECH Fluid-Density-Brix Analyzer OR YUTECH Brix Analyzer
  - Control of Molasses Intake Valve w.r.t., Brix Set Point, and Process Value in a PID Mode
  - Addition of Water if required as per Process Dynamics.

YUTECH BRIX ANALYZER CUM CONTROL SYSTEM AND SELF-CLEANING SENSOR

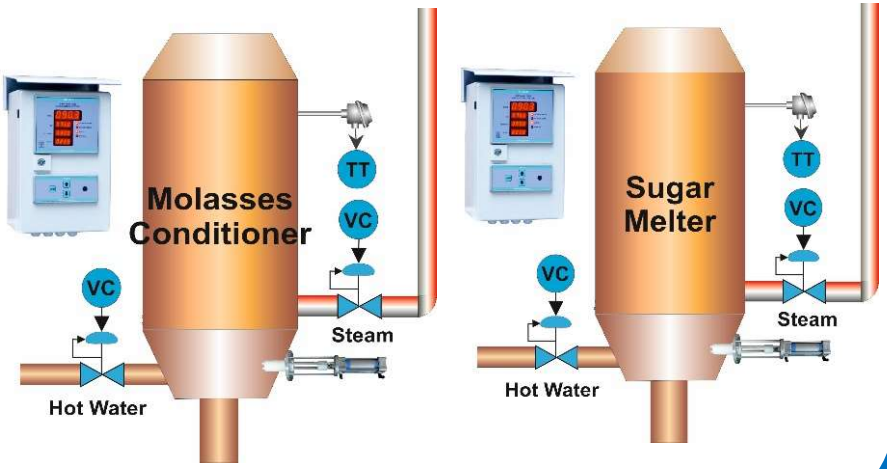
SUGAR MELTER AND MOLASSES CONDITIONER AUTOMATION SCREENSHOT, FIELD MOUNTING PICTURE, AND SCHEMATIC

Field Instruments Installation

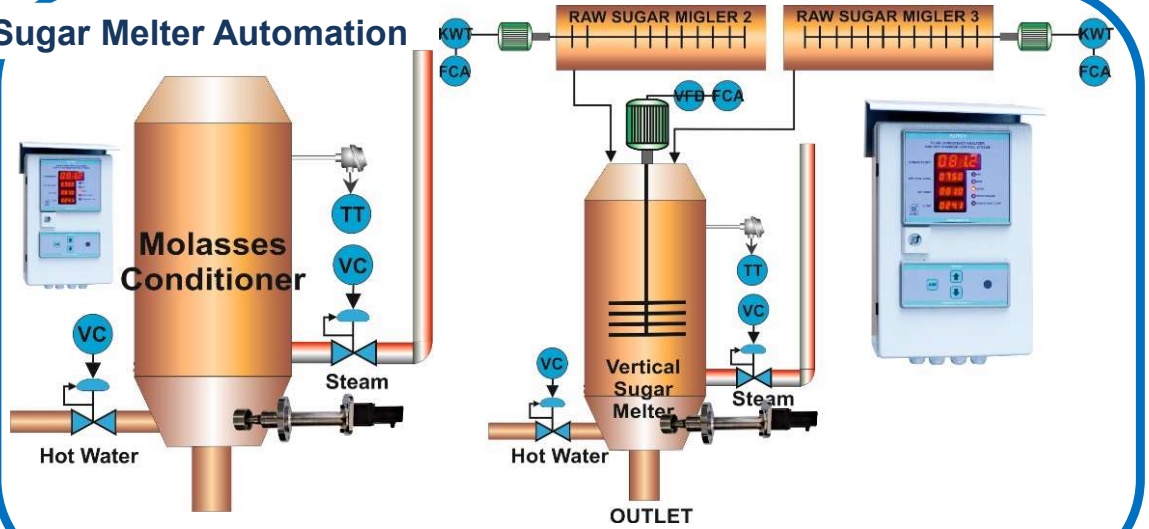


Screen Shot: Molasses Conditioner and Sugar Melter Automation

Schematic Diagrams: Molasses Conditioner and Sugar Melter Automation



Using Brix Analyzer



Using Fluid-Density-Brix Analyzer

YUTECH BRIX ANALYZER CUM CONTROL SYSTEM AND SELF-CLEANING SENSOR
SUGAR MELTER CONDITIONER AUTOMATION

Sugar Melter Automation Advantages:

- Streamlined Process due to Constant and Maintained Outlet Brix and Temperature.
- Ensure Constant Quality of Melt Feed to Pans.
- Reduce Heat Waste, due to Overheating or Under Dilution or Over Steaming.
- Reduce Process Time by avoiding Over Dilution.
- Thus Save Time, Steam, and Water and Ensure more throughput in lesser time.
- Increase Profitability.

Control Loops:

Controlled intake of Heating Media (Steam), and Diluting Media (Water) as per Process Dynamics of Raw Sugar Intake.

Brix Control using Brix or Fluid-Density-Brix Analyzer:

- Sugar Melt Brix are maintained by controlled addition of Hot Water using Control Valve in a PID Loop wrt Sugar Melt Fluid-Density-Brix / Brix sensed by Fluid-Density-Brix Analyzer or High Frequency Brix Analyzer.

Temperature Control:

- Sugar Melt / Molasses Temperature is maintained constant by controlled application of Steam using Control Valve in a PID Loop wrt Sugar Melt / Molasses Temperature.

YUTECH BRIX ANALYZER CUM CONTROL SYSTEM AND SELF-CLEANING SENSOR
MOLASSES CONDITIONER AUTOMATION

Molasses Conditioner Automation Advantages:

- Streamlined Process due to Constant and Maintained Outlet Brix and Temperature.
- Ensure Constant Quality of Melt Feed to Pans.
- Reduce Heat Waste, due to Overheating or Under Dilution or Over Steaming.
- Reduce Process Time by avoiding Over Dilution.
- Thus Save Time, Steam, and Water and Ensure more throughput in lesser time.
- Increase Profitability.

Control Loops:

Controlled intake of Heating Media (Steam), and Diluting Media (Water) as per Process Dynamics of Raw Molasses Intake.

Brix Control using Brix or Fluid-Density-Brix Analyzer:

- Molasses Brix are maintained by controlled addition of Hot Water using Control Valve in a PID Loop wrt Sugar Melt Fluid-Density-Brix / Brix sensed by Fluid-Density-Brix Analyzer or High Frequency Brix Analyzer.

Temperature Control:

- Sugar Melt / Molasses Temperature is maintained constant by controlled application of Steam using Control Valve in a PID Loop wrt Sugar Melt / Molasses Temperature.

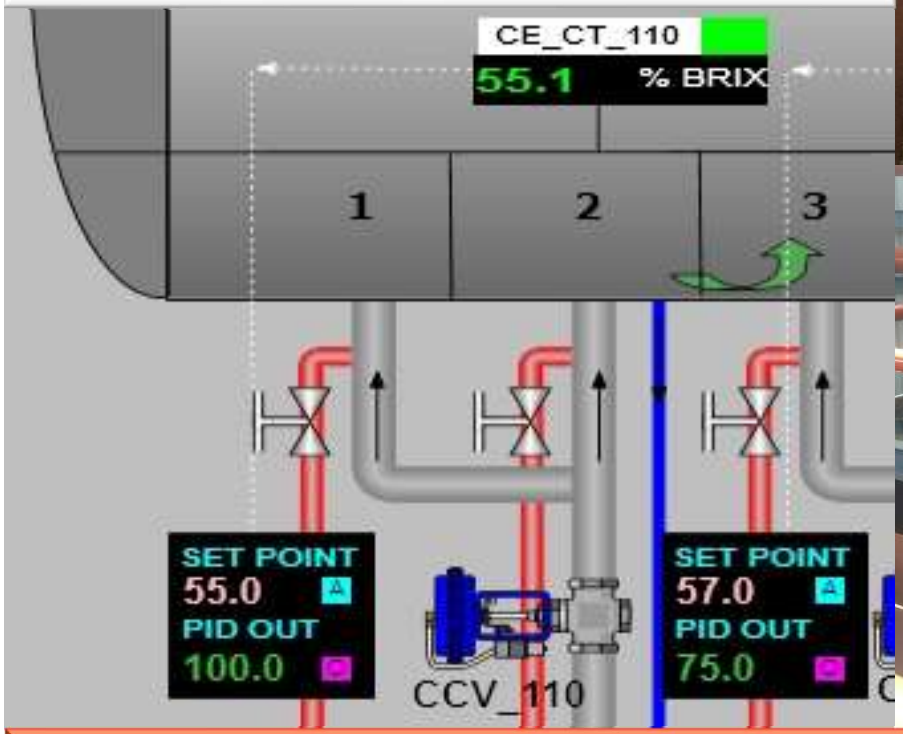
YUTECH BRIX ANALYZER AND AUTO CLEANING SELF RETRACTABLE BRIX SENSOR

BASED ON YUTECH'S A15 INTELLIGENT ANALYZERS AND SYSTEMS PLATFORM

INSTALLATION PICTURES

Auto Retracting Self Cleaning Brix Sensor installed on Continuous Vacuum Pan & Sugar Melter in Picture below

Partial Screen Shot of Brix Reading on SCADA



Brix, Capillary DPT Level, and RTD Temperature Sensor installed on Batch Type Vacuum Pan

YUTECH CONDENSER CONTROL SYSTEM FOR PANS AND EVAPORATORS

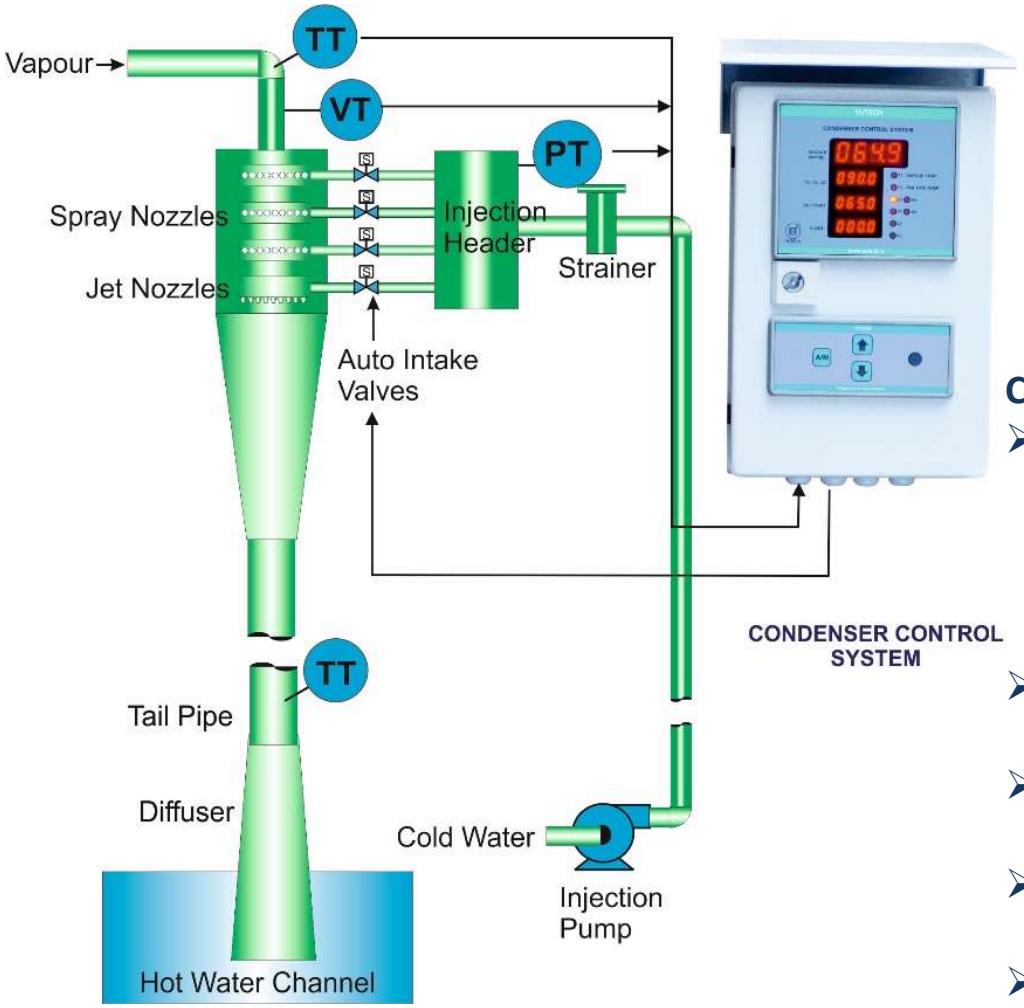
CONDENSER AUTOMATION USING YUTECH CONDENSER CONTROL SYSTEM

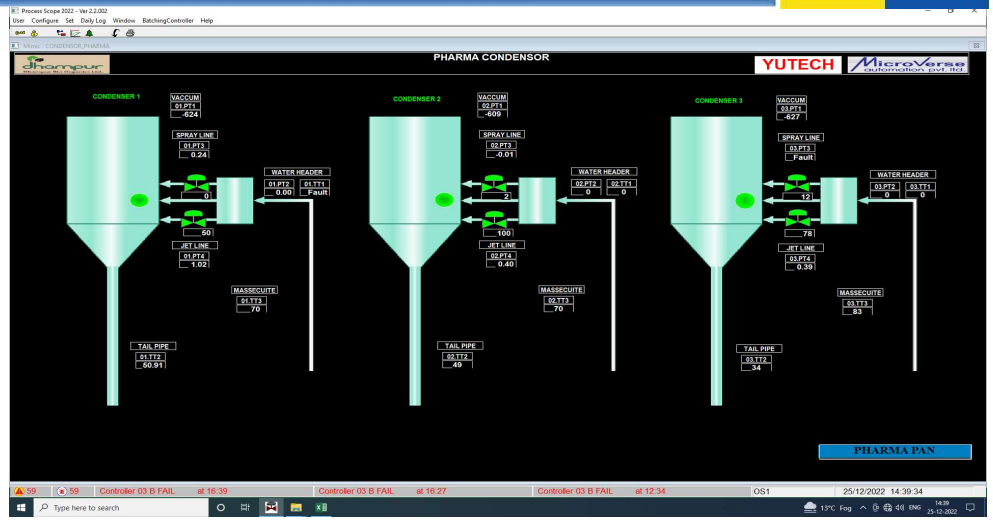
SCREEN SHOT: CONDENSER CONTROL SYSTEM IMPLEMENTED USING DCS / PLC

SINCE 1978

YUTECH

SCHEMATIC DIAGRAM AND SCREENSHOT: CONDENSER CONTROL





CONDENSER AUTOMATION:

- Separate Water Entry for Different Sets of Spray Nozzles and Spray Jet and Water Quantity is Automatically Controlled by ON/OFF Valve for Respective Nozzle Set Valve wrt Vacuum and Temperature difference between the Vapour and Condensate Tail Pipe
- Number of Jets & Nozzles and Jet & Nozzle Diameters designed as per Condenser Capacity
- Complete Stainless-Steel Construction, Strainer provided for each Condenser Header
- Water Pressure in the Common Injection Header maintained by Controlling Injection Pump VFD
- Jet Compartment Controlled by Separate Valve
- Vapour and Tail Pipe Temperature Measured

YUTECH FLUID-DENSITY-BRIX ANALYZER CUM CONTROL SYSTEM AND MOTORIZED FLUID-DENSITY SENSOR

BASED ON YUTECH'S A15 INTELLIGENT ANALYZERS AND SYSTEMS PLATFORM

YUTECH SINCE 1978

PLEASE CHECK OUR NEW PRODUCT

FLUID CONSISTENCY-BRIX ANALYZER AND CONTROL SYSTEM

YUTECH FLUID-DENSITY-BRIX ANALYZER CUM CONTROL SYSTEM

PRODUCT CODE:
ANALYZER MODEL: A15FDAACSCTRC1D4R4FM,
ANALYZER AND CONTROLLER MODEL: A15FDAACSCTRC2D4R4FMC
ANALYZER AND CONTROLLER WITH ETHERNET MODEL:
A15FDAACSCTRC2D4R4FMCEM (Modbus TCPIP)

MOTORIZED FLUID-DENSITY SENSOR

PRODUCT CODE: ASDMFDS24DCC01

MOTORIZED FLUID CONSISTENCY SENSOR

YUTECH'S INTELLIGENT A15 PLATFORM BASED ANALYZERS AND SYSTEMS:

INTELLIGENT & VERY POWERFUL, A15 PLATFORM HAS ANALYTICAL AND HIGHER I/O HANDLING ABILITY WITH COMMUNICATION FACILITY FOR ETHERNET AND WIRELESS PROTOCOLS

YUTECH SINCE 1978

FIELD MOUNTED ANALYZERS AND CONTROL SYSTEMS FOR PROCESS, PHARMA, DAIRY AND SUGAR INDUSTRY:

SUGAR PROCESS ANALYZERS AND CONTROLS:

- **HIGH FREQUENCY BRIX ANALYZER AND BRIX ANALYZER AND AUTO-RETRACTABLE SELF-CLEANING BRIX SENSOR**
- **FLUID-DENSITY-BRIX ANALYZER CUM CONTROL SYSTEM AND MOTORIZED FLUID DENSITY SENSOR**
- **CONDUCTIVITY ANALYZER**
- **PH ANALYZER**
- **CONTINUOUS CENTRIFUGAL MACHINE AUTOMATION SYSTEM USING CONCENTRIC SPLIT DIAPHRAGM CONTROL VALVE ALSO CALLED IRIS VALVE**.
- **CONDENSER CONTROL SYSTEM:** MULTIPLE OR SINGLE WATER SPRAY AND JET ENTRY CONDENSER CONTROLS.

SUGAR MILL AND BOILER ANALYZERS AND CONTROLS:

- **INFRA RED TYPE LEVEL SENSING AND TRANSMISSION SYSTEM:** SUGAR MILL DONNELLY CHUTES.
- **INFRA RED TYPE LEVEL SENSING AND TRANSMISSION SYSTEM:** BOILER BAGASSE SILOS OR CHUTES.
- **CAPACITIVE TYPE LEVEL SENSING AND TRANSMISSION SYSTEM:** SUGAR MILL DONNELLY CHUTES.

DATA ACQUISITION AND COMMUNICATION:

- **FIELD MOUNTED DATA ACQUISITION AND COMMUNICATION SYSTEM:** ETHERNET / WIRELESS COMMUNICATION
- **IOT FIELD MOUNTED DATA ACQUISITION AND COMMUNICATION SYSTEM:** PROCESS DATA TRANSMISSION AND INTERNET COMMUNICATION ON GSM AND WIFI
- **16 CHANNEL SCANNER WITH MODBUS RTU**
- **16 CHANNEL SCANNER WITH MODBUS TCPIP**

SAVE FUEL, REDUCE CARBON FOOTPRINT,
MAKE THE WORLD GREENER
AND YET, MAKE MONEY

THANK YOU