

YUTECH Brix Analyzer



YUTECH

YU Technologies Pvt. Ltd.

Registered Office:

315, A1, 22, Manishanagar, Off Sahyadrinagar,
Sangli – 416 416, Maharashtra, India.

HO & Works:

B 8/5, MIDC, Miraj, 416 410, Distt: Sangli,
Maharashtra, India.

T: + 91 233 6451803 – 6; F: +91 233 2644042

E: info@yutech.in

W: www.yutech.in



**Serving the Sugar Industry
since 1978**

www.yutech.in; sale@yutech.in

YUTECH Brix Analyzer

YUTECH Auto Cleaning Self Retractable Brix Sensor:



Brix Analyzer with Auto Purity Compensation
Product Code:
YU-ASD-BA-1005-CO-V02 For Continuous Operation
YU-ASD-BA-1005-BO-V02 For Batch Operation

Brix Analyzer New Model



**Brix Analyzer
Outgoing Model**



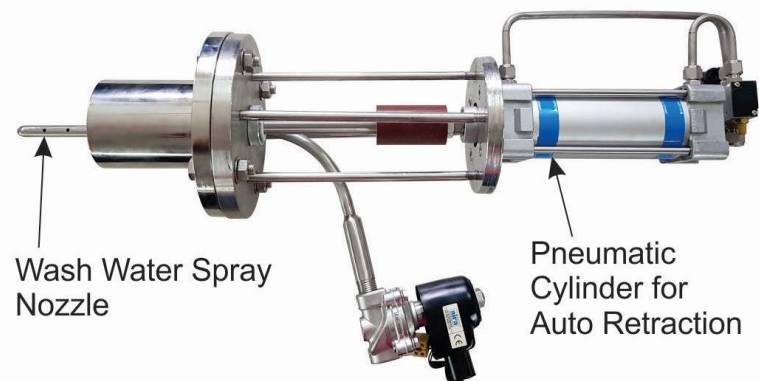
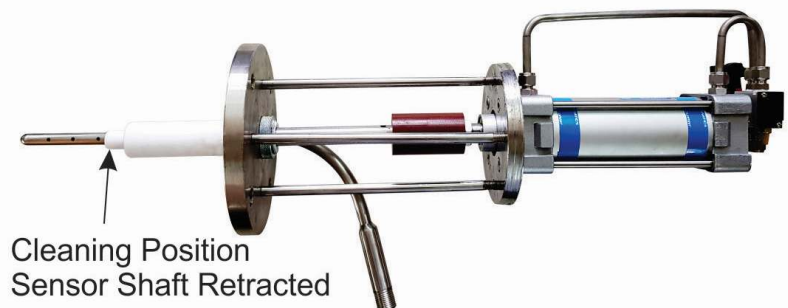
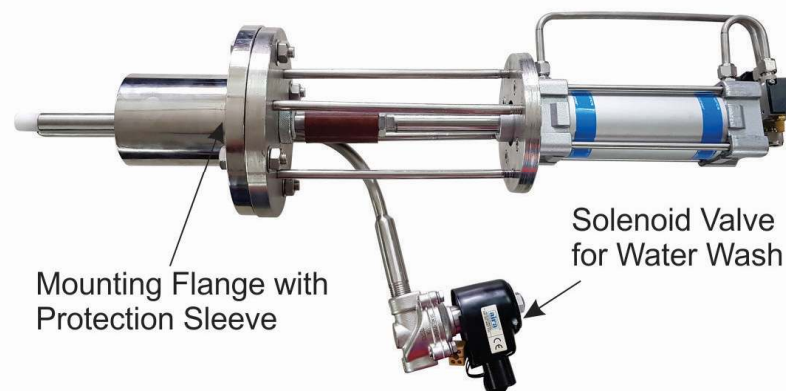
www.yutech.in; sale@yutech.in

YUTECH Brix Analyzer

YUTECH Auto Cleaning Self Retractable Brix Sensor:



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



Auto Retractable Self Cleaning Brix Sensor Product Code: ASD-BS-SCW-1E-V02

www.yutech.in; sale@yutech.in

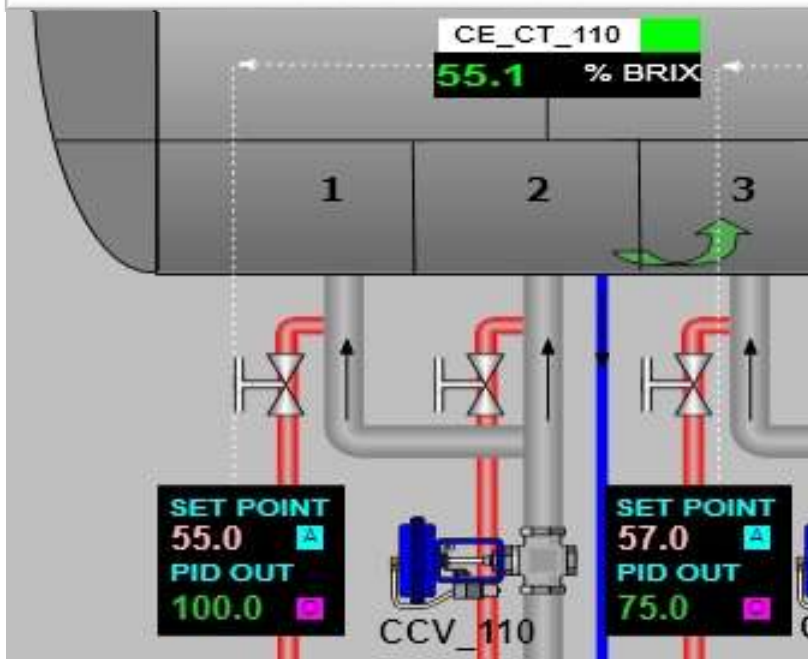
YUTECH Brix Sensor

Self Cleaning Auto Retractable Brix Sensor in Operation



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

**Partial Screen Shot of Brix Reading
on SCADA**



**Auto Retracting Self
Cleaning Brix Sensor
installed on Batch Type
Vacuum Pan**

Auto Retractable Self Cleaning Brix Sensor:

Product Code: **ASD-BS-SCW-1E-V02**



Brix Sensor Detects Signal variation with respect to change in Brix.

PT 100 RTD provided for Massequite Temperature Sensing

Auto Retraction and Self Cleaning using Pneumatic Cylinder

Sensor is sheathed in PTFE Bar with Leak Proofing cum Cleaning Arrangement

Sensor Material: Stainless Steel

Sensor Washing Arrangement provided with ½" Solenoid Valve for Hot Water Spraying

Wash Water Spray Tube Material: Stainless Steel

Salient Features of YUTECH Brix Analyzer cum Transmitter with On-line Calibration Software “YUTECH-AccessApp-BA”:



- Brix Sensor Detects Signal Deviation with respect to Solution Brix
- This Signal Deviation is then Processed in Analyzer to obtain Brix Reading
- YUTECH Brix Analyzer is equipped with Intelligent Auto Purity Compensation Algorithm to derive the Brix accurately in Masseccutes 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-BA” provides Remote Access to Brix Analyzer for Calibration, Compensation and Trouble Shooting.

Brix Analyzer Specifications:



Brix Analyzer:

- Power Supply: 85 - 265 VAC, 50 – 60Hz
- Analyzer Enclosure: Field Mounted Dust and Moisture Proof
- Input:
 - Brix Sensor Signal
 - RTD PT 100 Signal
- Calibration: From Keyboard / Remote PC through YUTECH-AccessApp-BA
- Display: 4 Digit LED Dual 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
 - Communication: Brix Direct Value Output on Modbus RTU on RS485, Ethernet on Modbus TCP/IP Protocol
- Optional PID Control Output: 4-20mA with Built-in Auto/Manual Station
- Calibration Range: Selectable as per Model and Application. To be specified during ordering.

Brix Analyzer:

Batch and Continuous Vacuum Pans:



Brix Analyzers for Batch Type Vacuum Pan:

Brix Analyzers for Batch Type Vacuum Pans come with different Purity Compensation Algorithm and as Batch Pans undergo periodic washings, there is Wash and Pan Drop Compensation Algorithm, with Alarms for Pan Drop.

A, B and C Type:

Accuracy for Brix Sensing of Continuous and Batch Type Pans of B and C Type is 0.5 – 1.5 Brix, mostly working within +/-1 Brix.

Brix of A Type Masecuite can be Measured if material intake is restricted to Only One Type of Material in that particular Pan. The purity of Syrup, AL, AH and Melt is drastically different from each other, so sensing Brix in a Pan with an uncertain mix of these materials is not possible. Reading Accuracy decreases in Pan Cutting Practice.

Brix Analyzers for Horizontal and Vertical Continuous Type Vacuum Pan:

Brix Analyzers for Continuous Type Vacuum come with Algorithm developed for Sensing Brix in a Continuous Process, it is similar to other Continuous Processes like Evaporators, Sugar Melters etc., with different calibrations.

Brix Analyzer: Applications in Sugar, Liquor, Food & Beverages



Brix Calibration Varies for different applications.

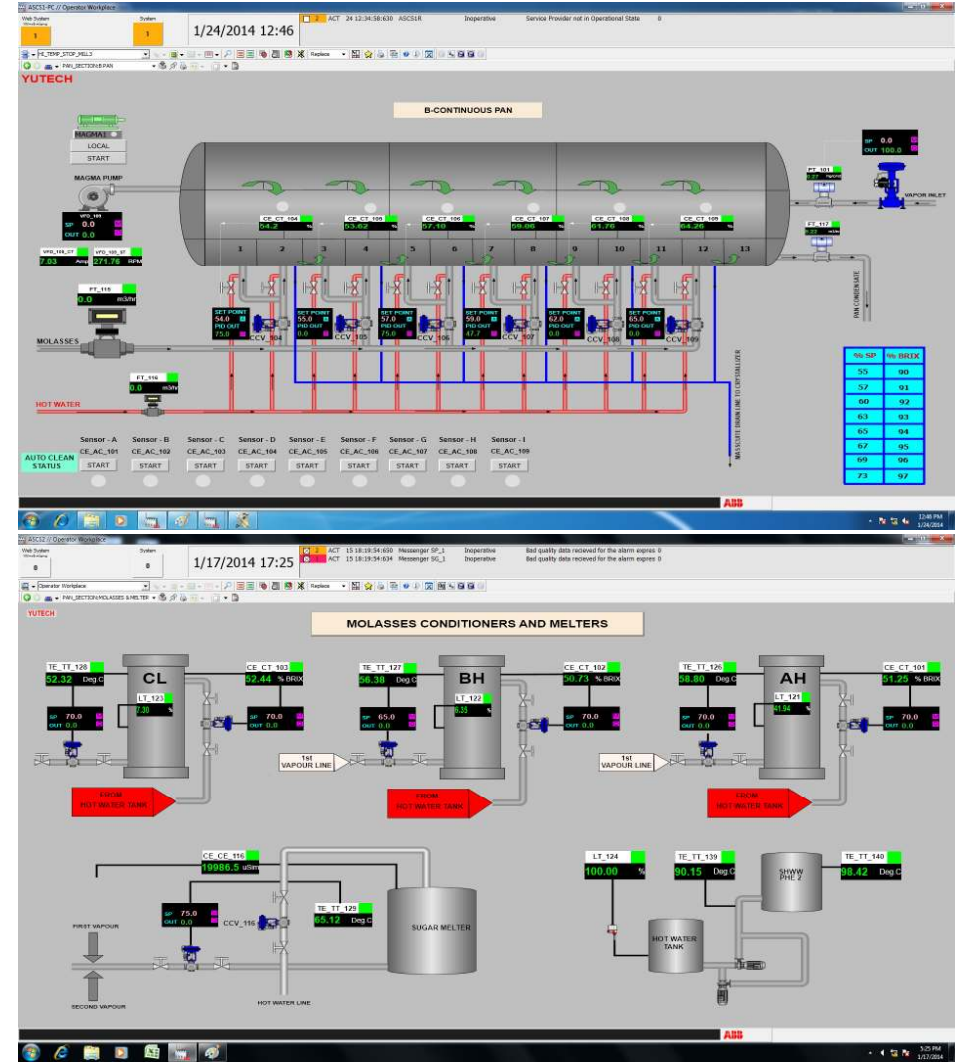
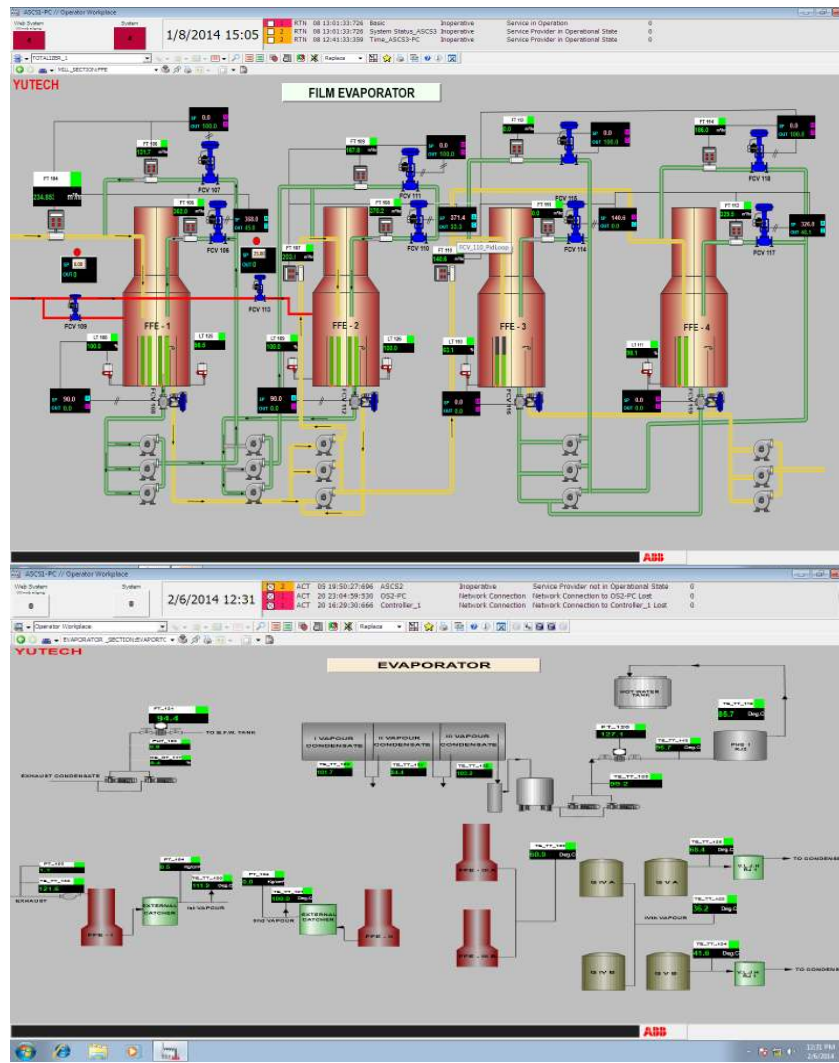
Brix Measurement in following Sugar Process Applications:

- Juice Filtrate, Clarified Juice
- All Bodies of Rising or Falling Film Evaporators
- Batch and Continuous Vacuum Pans, Vertical Continuous Pans
- Molasses Conditioners, Sugar Melters
- Open Pans in Jaggery / Muscovado / Jaggery Powder / Khandsari Units

Brix Measurement in following Liquor, Food & Beverages Plant Applications:

- Molasses or Liquor Fermentation Vessels
- Maturation Tanks
- Thickening Vessels

Automation Screen Shots:



THANK YOU!
For your Time and Presence



SAVE FUEL
REDUCE CARBON FOOTPRINT
MAKE THE WORLD GREENER

AND YET, MAKE MONEY

www.yutech.in; sale@yutech.in