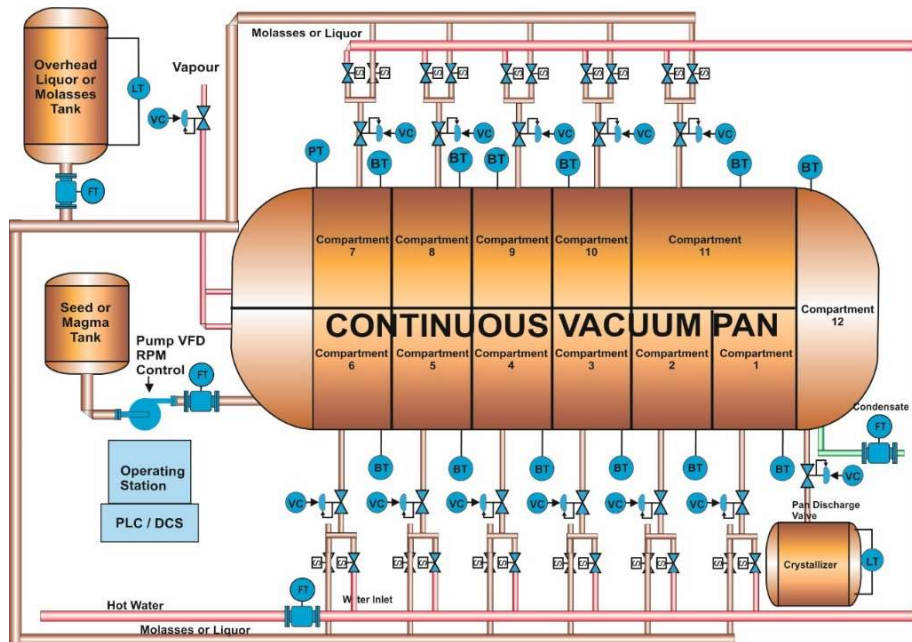
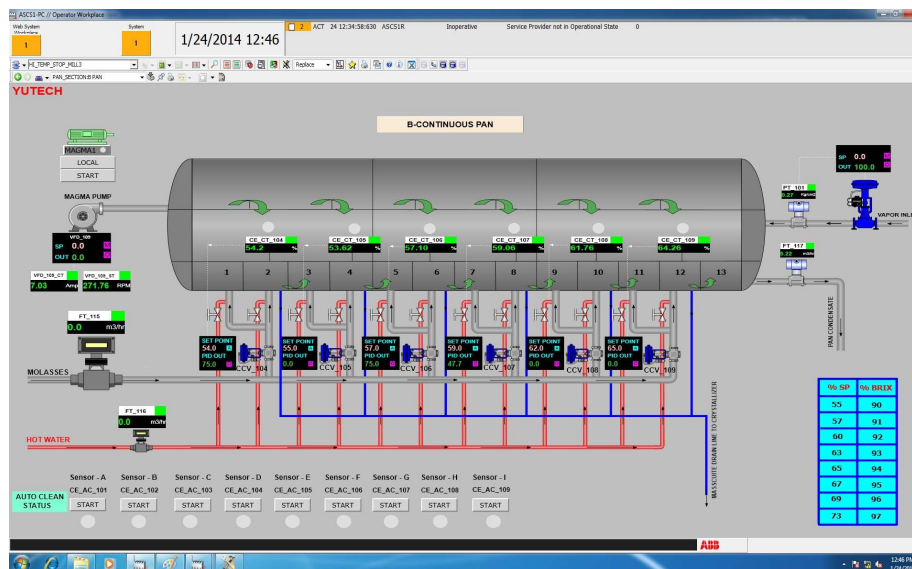


# CONTINUOUS VACUUM PAN (CVP) AUTOMATION WITH BRUX ANALYZER AND DENSITY BRUX SENSOR



## CONTINUOUS PAN AUTOMATION FEATURES:

- ACCURATE COMPARTMENT BRUX SENSING USING FLUID DENSITY BRUX SENSOR A24FDSRS2 OR HF BRUX SENSOR
- CONTROLLED INTAKE AS PER SET POINT TO ACCURATELY MAINTAIN COMPARTMENT BRUX
- NO FALSE GRAINS, HENCE LESS WATER AND STEAM CONSUMPTION THUS INCREASED BAGASSE SAVING
- INCREASED SUGAR PRODUCTION
- TEMPERATURE SENSING THROUGHOUT THE CV PAN ENSURES UNIFORM TEMPERATURE INSIDE THE CV PAN BODY
- STANDALONE SYSTEM FOR CV PAN HAVING COMMUNICATION WITH MAIN PLC / DCS SYSTEM



## CONTINUOUS VACUUM PAN AUTOMATION:

### SEED OR MAGMA FLOW CONTROL WITH RESPECT TO MOLASSES OR LIQUOR FLOW:

- MOLASSES AND SEED FLOWMETERS SENSE FLOW.
- THE RATIO OF SEED TO MOLASSES FLOW IS CONTROLLED IN THE REQUIRED PROPORTION BY CONTROLLING SEED / MAGMA PUMP VFD.

### INDIVIDUAL COMPARTMENT BRUX CONTROL BY AUTO-FEEDING MOLASSES OR WATER INTO EACH COMPARTMENT:

- FLUID-DENSITY-BRUX OR BRUX SENSING OF EACH COMPARTMENT BY YUTECH FLUID-DENSITY-BRUX ANALYZER OR YUTECH BRUX ANALYZER
- CONTROL OF MOLASSES INTAKE VALVE WITH BRUX SET POINT, AND FLUID-DENSITY-BRUX AS PROCESS VALUE IN A PID MODE
- ADDITION OF WATER ONLY IF EXTREMELY NECESSARY.

# BRIX ANALYZER AND FLUID DENSITY BRIX SENSOR

SUGAR PROCESS AND REFINERY APPLICATIONS: SENSES BRIX AND DENSITY IN KG/M<sup>3</sup>  
ACCURATELY SENSES BRIX AND DENSITY IN KG/M<sup>3</sup> WITH VACUUM, LEVEL AND TEMPERATURE COMPENSATION



## FLUID DENSITY BRIX ANALYZER TECHNICAL SPECIFICATIONS:

PRODUCT CODE: A15FDACFM1230 / A24FDACFMEM1230

- POWER SUPPLY: 85 - 265 VAC, 50 – 60HZ
- INPUTS:
  - FLUID-DENSITY SENSOR
  - RTD PT100 TEMPERATURE SENSOR
  - 8-POINT LEVEL SENSORS (CONDUCTIVITY-BASED DIGITAL SWITCH TYPE)
  - 4-20MA: INPUT FROM VACUUM TRANSMITTER (OPTIONAL, NOT A PART OF STANDARD SUPPLY)
  - 4-20MA: INPUT FROM DIFFERENTIAL PRESSURE TRANSMITTER WITH EXTENDED DIAPHRAGM WITH CAPILLARY TUBES (OPTIONAL, NOT A PART OF STANDARD SUPPLY)
- OUTPUTS:
  - 4-20MA: BRIX OUTPUT
  - 4-20MA: PID OUTPUT FOR BRIX CONTROL (BRIX AS PV FOR PID CONTROL)
  - 2 POTENTIAL-FREE RELAY OUTPUTS
- DISPLAY:
  - FOR PRODUCT CODE - A15FDACFM1230: 7-SEGMENT LED DISPLAY
  - FOR PRODUCT CODE - A24FDACFMEM1230: 7-SEGMENT LED DISPLAY AND LCD DISPLAY
- ENCLOSURE: FIELD MOUNTED MS POWDER COATED, INGRESS PROTECTION CLASS IP67
- COMMUNICATION:
  - ETHERNET: MODBUS TCP/IP (PRODUCT CODE: A24FDACFMEM1230)

## FLUID DENSITY SENSOR TECHNICAL SPECIFICATIONS:

PRODUCT CODE: A24FDSRS1, A24FDSRS2, A24FDSRS3

- TYPE: MOTORIZED FLUID DENSITY SENSOR
- POWER SUPPLY: 24VDC FROM THE ANALYZER (NOT TO BE CONNECTED TO ANY EXTERNAL SOURCE).
- BUILT-IN THERMOWELL WITH RTD PT100
  - MATERIAL OF CONSTRUCTION: SS304 / SS316L
- PTFE SHEATHED CONDUCTIVITY PROBE 8 NOS.: SS304 / SS316L WITH PTFE SHEATH
  - MATERIAL OF CONSTRUCTION:
- MATERIAL OF CONSTRUCTION:
  - WETTED ROTARY PARTS: SS304 / SS316L
  - WETTED STATIONARY PARTS: MS CHROME PLATED / SS304 / SS316L
- FOR FOOD-GRADE, SS-304 FULL SENSOR BODY: ADD FGSS TO THE PC. EX: A24FDSRS3FGSS
- FOR ACIDIC CHEMICALS, SS-316L FULL SENSOR BODY: ADD SSL TO THE PC. EX: A24FDSRS3SSL

## FLUID DENSITY SENSOR MODEL GUIDANCE FOR VARIOUS APPLICATIONS:

A24FDSRS1: BATCH PAN, HORIZONTAL CONTINUOUS PAN, VERTICAL CONTINUOUS PAN  
A24FDSRS2: EVAPORATOR, FALLING FILM EVAPORATOR, JUICE AND SYRUP MIXING VESSEL  
A24FDSRS3: SUGAR MELT, MOLASSES CONDITIONER, LIME BAUME  
A24FDSRS3FGSS: BREWERIES, FOOD & BEVERAGES, DAIRY  
A24FDSRS3FGSSL: CHEMICALS, DISTILLERY SLOPE / SPENTWASH

**FOR MORE DETAILS ON THE FLUID-DENSITY-BRIX ANALYZER AND CONTROL SYSTEM WITH FLUID-DENSITY SENSOR DOWNLOAD THE BROCHURE FROM OUR WEBSITE.**

PLEASE VISIT OUR WEBSITE [www.yutechautomation.com](http://www.yutechautomation.com).

### YU Technologies Pvt. Ltd.

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

T: +91 233 2644042, +91 916 832 4851, +91 916 832 5127 / 8.

E: [info@yutech.in](mailto:info@yutech.in); [sale@yutech.in](mailto:sale@yutech.in)

W: [www.yutech.in](http://www.yutech.in); [www.yutechautomation.com](http://www.yutechautomation.com)

CHANNEL PARTNER: