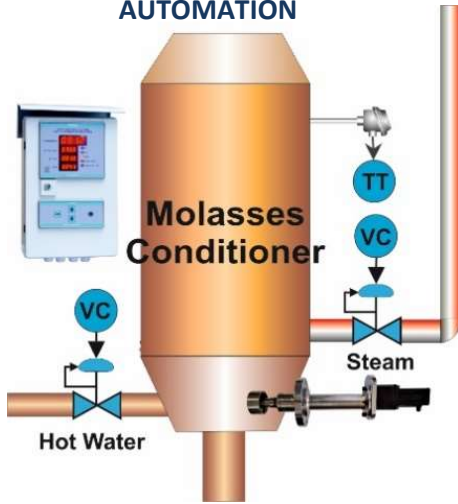
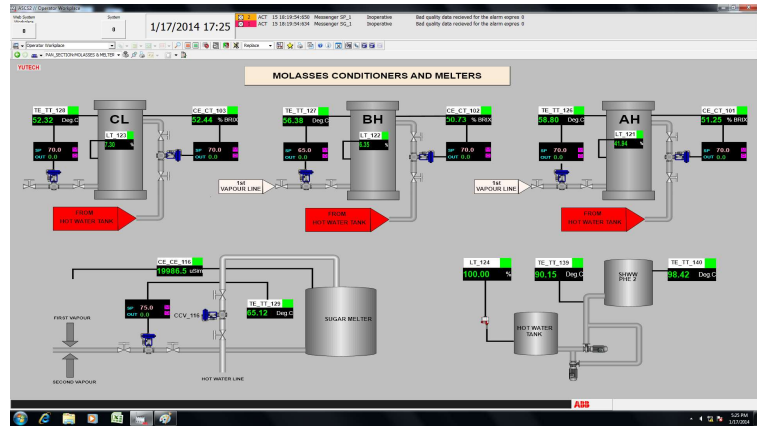


MOLASSES CONDITIONER AUTOMATION



SCREENSHOT: SUGAR MELTER AUTOMATION MOLASSES CONDITIONER AUTOMATION



FLUID-DENSITY-BRIX ANALYZER AND CONTROL SYSTEM WITH FLUID-DENSITY SENSOR



MOLASSES CONDITIONER AUTOMATION ADVANTAGES:

- STREAMLINED PROCESS DUE TO CONSTANT AND MAINTAINED OUTLET BRIX AND TEMPERATURE.
- ENSURE CONSTANT QUALITY OF MOLASSES FEED TO PANS.
- REDUCE HEAT WASTE, DUE TO OVERHEATING OR UNDER DILUTION OR OVER STEAMING.
- REDUCE PROCESS TIME BY AVOIDING EXTRA DILUTION
- THUS SAVE TIME, STEAM, AND WATER AND ENSURE MORE THROUGHPUT IN LESS TIME.
- INCREASE PROFITABILITY

CONTROL LOOPS:

CONTROLLED INTAKE OF HEATING MEDIA (STEAM), AND DILUTING MEDIA (WATER) AS PER PROCESS DYNAMICS LIKE BRIX AND TEMPERATURE OF THE MOLASSES INTAKE.

BRIX CONTROL USING BRIX OR FLUID-DENSITY-BRIX ANALYZER:

- BRIX OF MOLASSES ARE MAINTAINED BY THE CONTROLLED ADDITION OF HOT WATER TO MOLASSES USING A HOT WATER CONTROL VALVE IN A PID LOOP. VALUE OF MOLASSES FLUID-DENSITY-BRIX / BRIX SENSED BY A FLUID-DENSITY-BRIX ANALYZER OR HIGH-FREQUENCY BRIX ANALYZER IS USED AS THE PROCESS VARIABLE FOR THIS PID ACTION..

TEMPERATURE CONTROL:

- MOLASSES TEMPERATURE IS MAINTAINED CONSTANT BY CONTROLLED APPLICATION OF STEAM USING A CONTROL VALVE IN A PID LOOP USING MOLASSES TEMPERATURE VALUE AS THE PROCESS VARIABLE FOR PID ACTION.

BRIX ANALYZER AND FLUID DENSITY BRIX SENSOR

SUGAR PROCESS AND REFINERY APPLICATIONS: SENSES BRIX AND DENSITY IN KG/M³
ACCURATELY SENSES BRIX AND DENSITY IN KG/M³ 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.

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; sale@yutech.in

W: www.yutech.in; www.yutechautomation.com

CHANNEL PARTNER: