

# SUGAR MILL ROLLER LIFT AND CANE BLANKET LEVEL SENSORS

## HALL'S EFFECT TYPE DISPLACEMENT SENSING AND TRANSMISSION SYSTEM



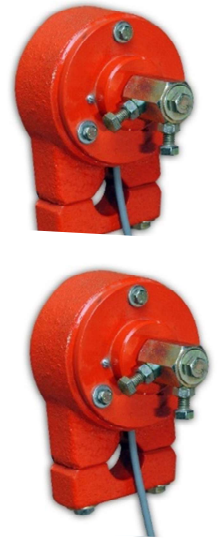
**TOP ROLLER LIFT SENSORS**



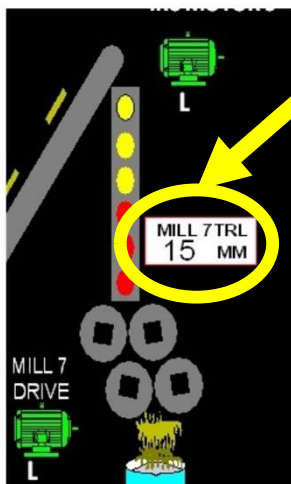
**TOP ROLLER LIFT INDICATOR CUM TRANSMITTER**



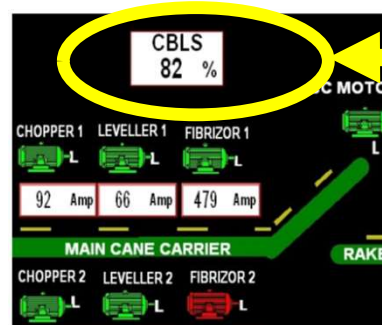
**CANE BLANKET LEVEL INDICATOR CUM TRANSMITTER**



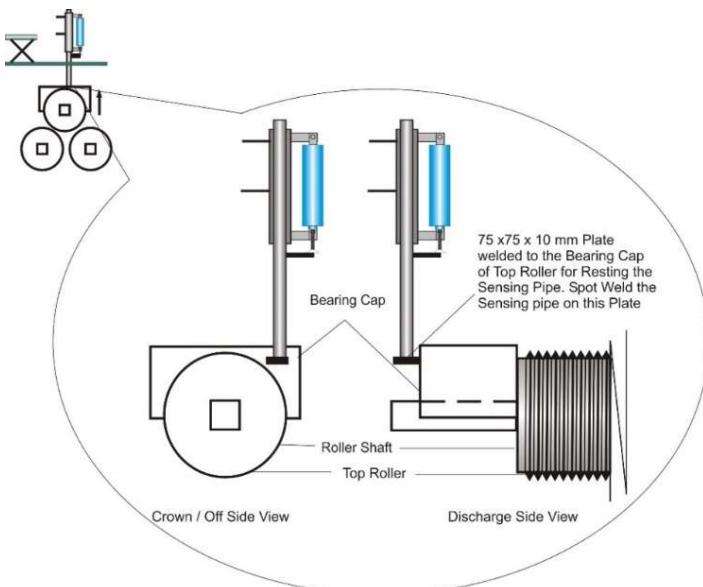
**CANE BLANKET LEVEL SENSORS**



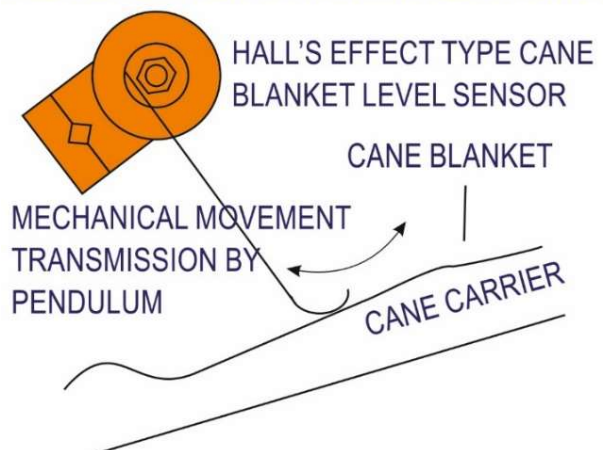
Mill Top Roller Lift Sensed is used for Monitoring Top Roller Float Balance



Cane Blanket Level Sensed in the Cane Carrier is used for Speed Control of: Cane Carrier



### HALL'S EFFECT SENSOR WORKING ILLUSTRATION



**CANE BLANKET LEVEL SENSOR AND TOP ROLLER LIFT SENSOR: SCHEMATIC INSTALLATION AND WORKING DIAGRAM**

# SUGAR MILL ROLLER LIFT AND CANE BLANKET LEVEL SENSORS

## HALL'S EFFECT TYPE DISPLACEMENT SENSING AND TRANSMISSION SYSTEM



### HALL'S EFFECT POSITION SENSOR:

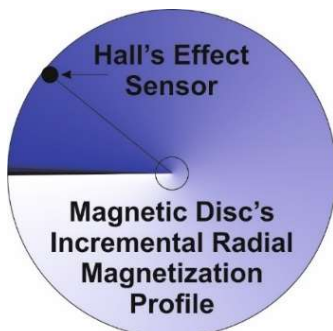
- Hall's Effect Technology is based on the Electromagnetic Principle; this type of Electronic Sensing is essentially Contactless. Where the Sensor's Wiper glides over a Radial Strip of incrementally varying Electro-Magnetism, and this Electro-Magnetism induces the Viper with a Voltage corresponding to its position over the Radial Strip. This induced voltage is the Sensor Output which varies with change in Viper's position.

### YUTECH CANE BLANKET LEVEL SENSING SYSTEM:

- Cane Level in Carrier is Primarily Sensed by a Pendulum riding on Cane Blanket which Mechanically Transmits the actual Blanket Level or Height to a Contact-less Hall's Effect Sensor.
- 100% True Level Detection through Shocks and Vibrations.
- Extremely Rugged, Heavy Duty, Water-Proof, Ingress Protected Enclosure Protects the Sensor against all external abuse of being hit by Flying Cane pieces, Moisture, Dirt, Juice Mist, and Wash Water AND Cane Carrier's Vibrations.
- YUTECH's founder Mr. Arun Dalvi originally invented this Technique way back in 1986 and later upgraded it to Hall's Effect in 2006.
- More than 400 Sugar Mills use YUTECH CBL Sensors and Transmitters in India, Asia Pacific, West Asia, and the African Continent.
- Specs: 230 VAC Power Supply, Input: CBL Sensor Dual Channel, Output: Dual Channel 4-20mA.Contactless

### YUTECH TOP ROLLER LIFT SENSING SYSTEM:

- Mill Top Roller Lift is Sensed by a Primary Telescopic Sensor whose Sensing End Rests on the Mill Pressure Plate, which Mechanically Transmits the actual Lift to a Contactless Hall's Effect Sensor.
- In an Ultra-Sonic Type Sensor, the Primary Sensor's Mechanical Movement is sensed by an Ultrasonic Sensor, which is then transmitted as a Top Roller Lift (4-20mA from the Indicator). Ultrasonic Sensing was added in 2019.
- Very Rugged, Heavy Duty, Water-Proof, Ingress Protected Enclosure provides 100% True Lift Detection even during Shocks and
- The Enclosure is very well capable of Protecting the Sensor against all external abuse of being hit by Cleaning Sticks by Workers trying to remove stuck Bagasse and from Direct Hot Wash Water / Steam Spray during Mill Cleaning / Vibrations generated by Full Load Milling Operation. The heavy-duty enclosure, also Protects the Sensor against Moisture, Dirt, Juice Mist, and Powdered Bagasse Particles.
- YUTECH's founder Mr. Arun Dalvi originally invented this Technique way back in 1992 and upgraded to Hall's Effect in 2006,
- Specs: 85 - 265 VAC, 50 – 60Hz Power Supply, Input: TRL Sensor Dual Channel, Output: Dual Channel 4-20mA.



**HALL'S EFFECT SENSOR  
WORKING SCHEMATIC DIAGRAM:**

**Mill Top  
Roller Lift  
Sensed  
Installation**



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

**CHANNEL PARTNER:**

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