

UOP MEROX MERCAPTIDE SENSOR

ELIMINATE MANUAL TESTING AND MODERNIZE YOUR MEROX UNIT

The UOP Merox Mercaptide Sensor solution replaces the shake test by enabling continuous mercaptan data, predictive digital monitoring and practical operational recommendations for your Merox Extraction units.

SHAKE THE SHAKE TEST

The manual shake test is the leading indicator of process health for Merox Extraction units. Conducted once per operator shift, this semi-quantitative test may be interpreted incorrectly due to difficulty identifying color change and variability in operator technique – potentially leading to off-specification product that can take up to a day to correct.

UOP MEROX MERCAPTIDE SENSOR SOLUTION

The UOP Merox Mercaptide Sensor provides continuous insight into the regeneration state of the lean caustic. Inexpensive probes installed in both the lean and rich caustic streams, combined with a next generation data connection to UOP, gives feedback allowing for proactive operating variable adjustments to optimize unit operations and avoid off-spec incidents.

PROCESS FLOW DIAGRAM – SENSOR INSTALLATION AND PROCESS VARIABLES

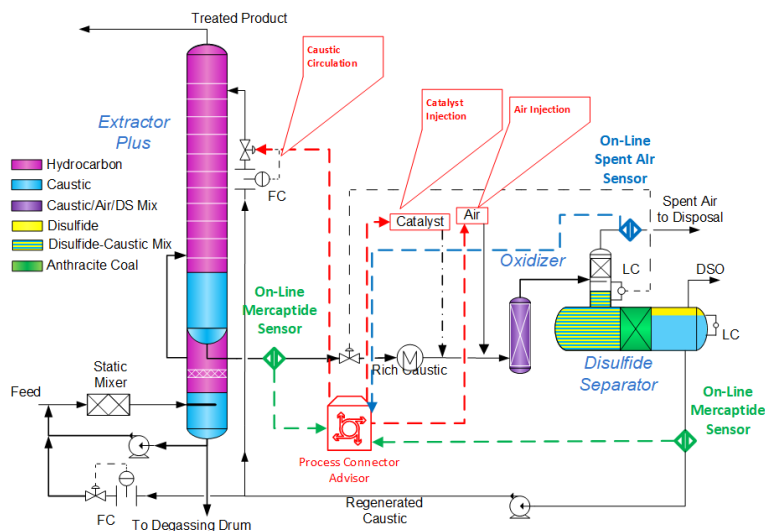


Figure 1. Sensor Installation and Process Variables Process Flow Diagram



FEATURES AND BENEFITS

- Easy online installation
- Clear digital visualization
- Built-in operational recommendations
- Increased data frequency of mercaptide concentration
- Optimize key process variables such as catalyst injection rates, air injection, caustic circulation and water/caustic makeup
- Reduced health risk with no chemical exposure to operators
- Less operator time required in field

EQUIPMENT PACKAGE

- UOP-provided specification and drawings for installation.
- Guidance for required ongoing lab test for recalibration of probes.

UOP PROCESS MONITOR

- Process Monitor visualization of unit performance with process variable guidance (see Figure 2).
- Proprietary UOP algorithm calculates mercaptide concentration from sensor output.

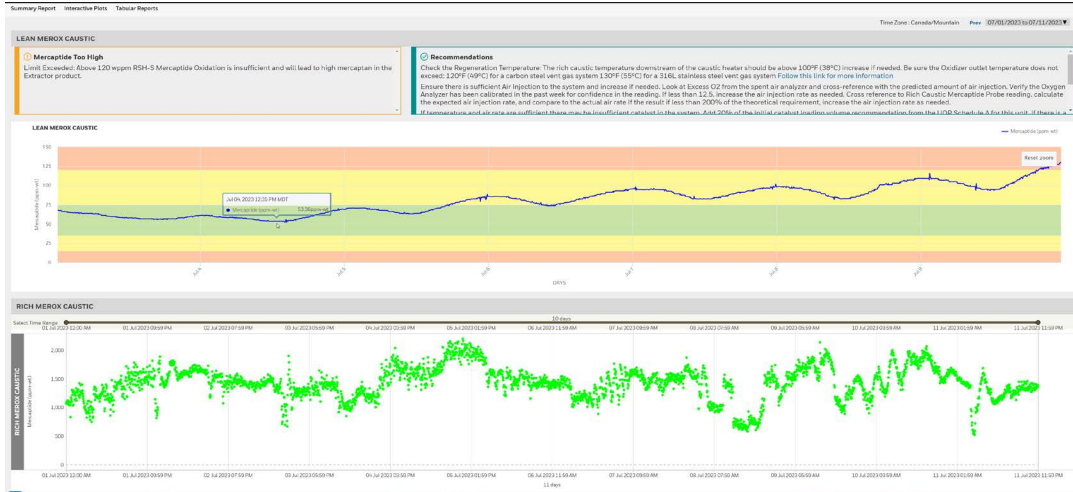


Figure 2. UOP Process Monitor¹

1. "Mercaptide Sensor – Replace the Shake Test!" (publication date estimated: June 6, 2024)

For more information

<https://uop.honeywell.com/en>

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