



A SOLUTION FOR REFINERIES /

Real-time, accurate H₂S measurement during HDP catalyst activation

Leveraging our expertise in handling H₂S, Careflex[®] Service by Arkema has developed a unique tool that our team incorporates within your process to safely and accurately quantify and measure H₂S in recycled hydrogen. Our patent-pending H₂S Inline IR Analyzer meets the global needs of the industry while providing the optimal balance of safety, reliability, and portability.



Our infrared spectroscopy technology provides multiple benefits

- ❖ **Safe and user-friendly.** A fully enclosed system improves the H₂S exposure risk profile.
- ❖ **Dedicated teams for DMDS injection.** We continuously measure H₂S during the catalyst sulfiding process.
- ❖ **Real-time data.** Arkema provides useful tools to better manage the catalyst sulfiding operation according to catalyst manufacturer procedures and guidelines.
- ❖ **Reliability, selectivity, and excellent accuracy.** Continuous and accurate measurement of H₂S concentration.

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H₂S Inline IR Analyzer provides real-time readings every 2 seconds

0.03-5%

Our technology can measure a wide range of H₂S concentration from 0.03% to 5%



A better alternative

Classic H₂S quantification involving H₂S reactive tubes depends on operator experience for accurate readings, which creates a real risk of toxic gas exposure. Arkema's technology enhances technical accuracy and significantly improves the worker safety profile during your hydrotreating unit startup.

Careflex® Service helps manage DMDS injection

During catalyst activation, Careflex® operators use the H₂S Analyzer to quantify the H₂S in the refinery's recycle or once-through gas during HDP catalyst activation.

Product and user data

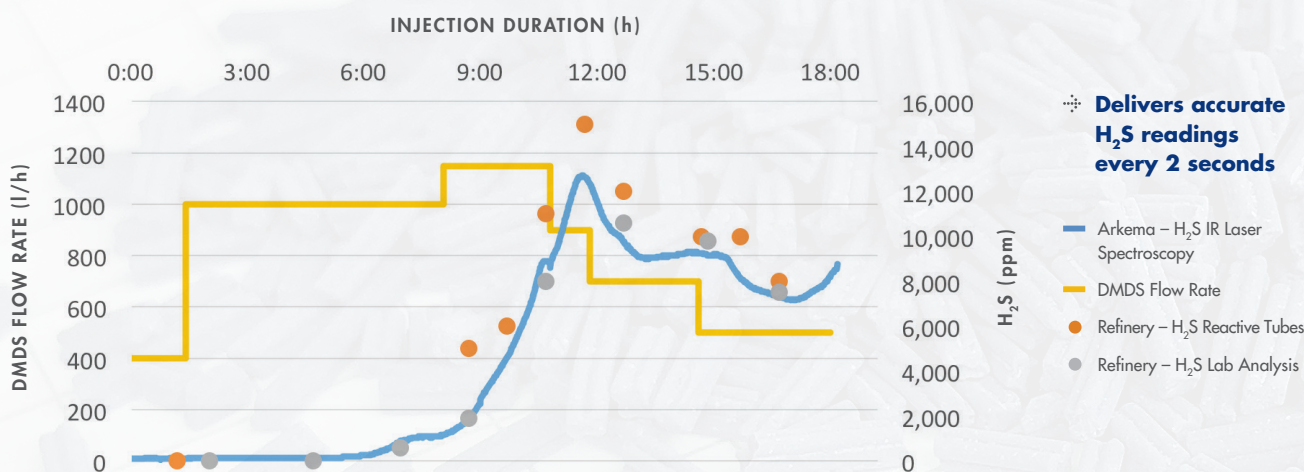
- ✦ Robust design
- ✦ Real-time readings every 2 seconds
- ✦ High selectivity to H₂S
- ✦ From 0.03% to 5% of H₂S
- ✦ No on-site calibration required
- ✦ Patent pending
- ✦ Atex certified (EC II 2 G EExd IIC T4)

Utilities required

- ✦ 220V power
- ✦ Recycle gas sample into analyzer
- ✦ Analyzer outlet to flare-line connection
- ✦ Nitrogen



EUROPEAN REFINERY EXAMPLE



Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <http://www.arkema.com/en/products/product-safety/disclaimer/index.html>
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