

H₂S REMOVAL SYSTEM

①CHELATED-IRON DESULFURIZATION

Direct Sulfur Production

No Claus/Flare Downstream

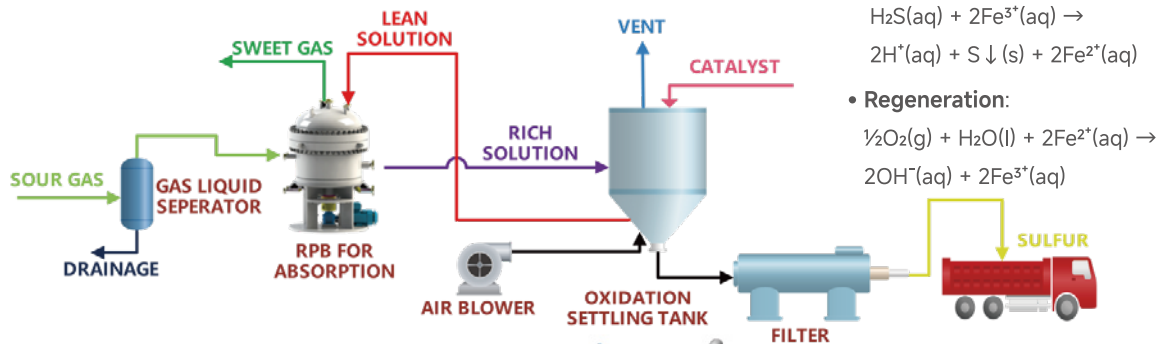
90% Smaller, 50% Lighter

Suitable for Offshore Platform

SUMMARY

Our advanced Chelated-Iron Desulfurization Unit combines our proven chelated-iron catalyst with Rotating Packed Bed (RPB) technology, delivering exceptional performance in H₂S removal. The process directly converts H₂S into elemental sulfur, eliminating the need for downstream Claus units or flare systems.

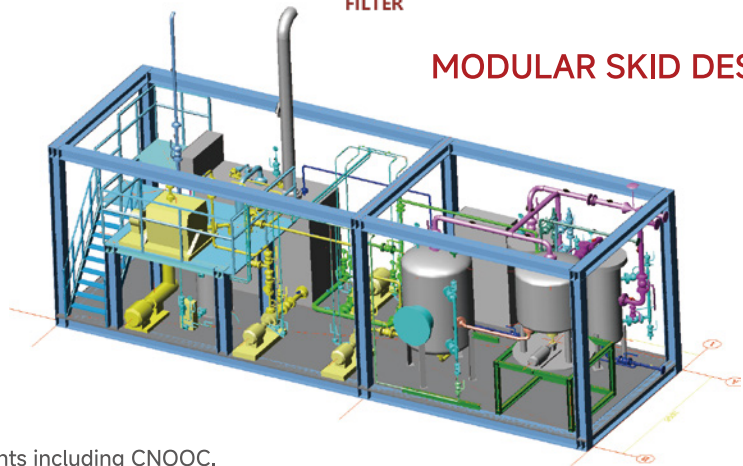
HOW IT WORKS



TECHNICAL ADVANTAGES

- Inlet Flowrate: 100-20,000 Nm³/h
- Sulfur Production: 0.1-30 t/d
- Inlet H₂S Concentration: 20 mg/m³-100%
- Treated Gas H₂S: ≤5-10 ppmv
- Compact—Over 90% footprint reduction
- One-Step Solution—eliminates the need for downstream Claus or flare units

MODULAR SKID DESIGN



TRACK RECORD

Implemented on offshore platforms or FPSOs, with clients including CNOOC.



H₂S REMOVAL SYSTEM

②AMINE GAS TREATING

Removes CO₂ & H₂S

Solvent Recycling

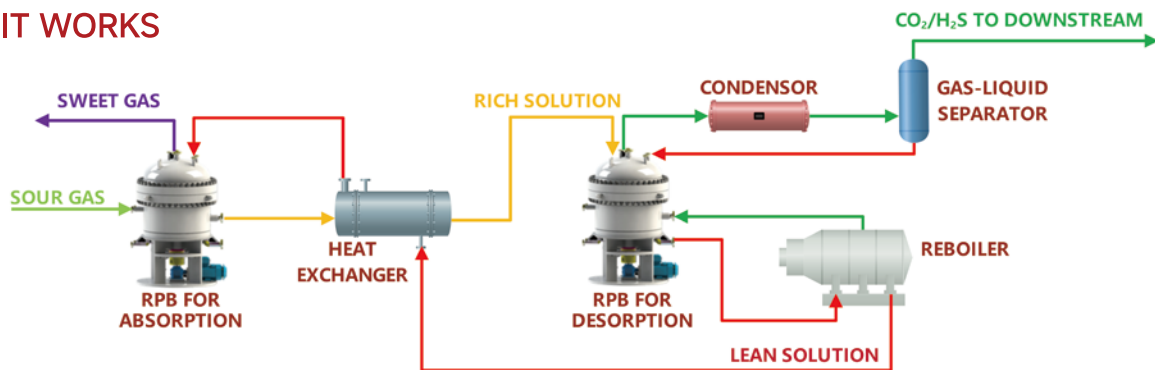
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Flexible Solvent Options

SUMMARY

By replacing conventional absorption and desorption towers with Rotating Packed Beds (RPBs), the amine treating process achieves compact design, faster mass transfer, and reduced energy consumption. The system efficiently removes both CO₂ and H₂S, while the amine solvent is continuously regenerated and recycled. Compared to traditional tower systems, RPB-based amine treating offers up to 90% space reduction, lower CAPEX/OPEX, and enhanced flexibility for onshore and offshore applications.

HOW IT WORKS



TECHNICAL ADVANTAGES

- Inlet Flowrate: 100-250,000 Nm³/h
- Inlet H₂S Concentration: 20 mg/m³-100%
- Treated Gas H₂S: ≤ 5-10 ppmv
- Mature technology suitable for large-scale applications
- Integrated with downstream Claus and incineration units

TRACK RECORD

We have successfully delivered 20+ Rotating Packed Beds (RPBs) for amine gas treating systems in industrial applications, serving clients including CNPC, SINOPEC, SINOCHEN, and more.

