NX SulphuRec™

Our solution for the purification of crude oil and gas

NEXTCHEM
MAIRE Sustainable Technology Solutions

About NEXTCHEM

NEXTCHEM is MAIRE's company dedicated to Sustainable Technology Solutions. Leveraging our deep expertise in nitrogen, hydrogen, carbon capture, fuels, chemicals, and polymers, we deliver groundbreaking solutions and processes that fully enable the energy transition.

Building on the rich legacy of our group for over 70 years, we are dedicated to developing and offering technology solutions, processes, basic engineering designs, as well as proprietary equipment and catalysts, to drive global decarbonization efforts forward.

Committed to environmental excellence

To reduce the environmental impact of crude oil refining and sour natural gas, industries need sulfur purification technologies. NX SulphuRec™ and NX SulphuRec S.O.A.P.™ represent best-in-class sulphur treatment technologies. NX SulphuRec™ is a comprehensive portfolio of Sulphur Recovery Technologies (SRT), based on Modified Claus and Tail Gas Treatment, constituting the most widely sulphur recovery processes worldwide. These solutions are aimed at reducing the environmental impact of sour gases and, in some applications, they can be properly upgraded for decarbonization.

Our solution to reduce your environmental emissions

NEXTCHEM offers license, feasibility studies (FS), process design package (PDP), basic engineering design package (BEDP), front-end engineering design (FEED), digital & post-PDP services such as Digital Process Monitoring (DPM) and Operator Training Simulator (OTS).

NEXTCHEM SRT[1] is the right solution to tackle the higher demand in Oil & Gas desulphurization and the more stringent regulations in terms of sulphur emissions to the atmosphere. With RAR[2] and RAR[2] Multipurpose technologies, the SO_2 emissions can be easily lowered below 150 mg/Nm^3.

1. Sulphur Recovery Technologies;
2. Reduction, Absorption & Recycle (RAR)

NX SulphuRec™

Reducing the environmental emissions associated to petroleum refinery and natural gas processing

Applications

Gas fields
purification of sour gases from gas & oil reservoir

Petroleum refining
purification of sour gases and liquid effluent from refining of crude oil

Your benefits

1. **Flexibility**
   Low level oxygen enrichment, RAR[1] Process and RAR[1] Multipurpose allow treating different type of sour gas feedstocks

2. **Efficiency**
   RAR[1] tail gas treatment Technology able to achieve 99.9%+ sulphur recovery efficiency with less than 150 mg/Nm^3 SO_2 emitted to the atmosphere

3. **Robustness**
   Established track records with more than 90 projects for sulphur recovery units in gas fields and refineries[2]

1. Reduction, Absorption & Recycle (RAR)
2. Executed as Licensor among FS, PDP, BEDP, FEED

Technical overview

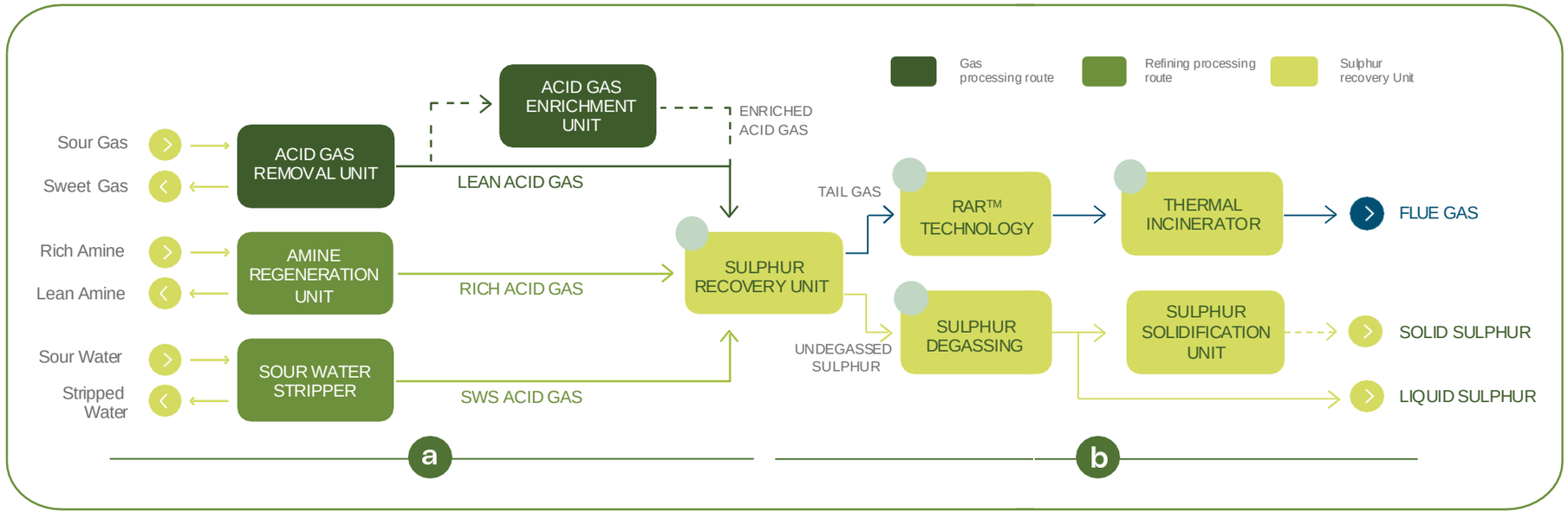
a

Sour gas streams containing H_2S and other sulphur compounds are captured from gas fields, petroleum refineries, coal power plant processes and fed to SRU.

b

Sulphur Recovery & Tail Gas Treatment recover Sulphur from sour gas streams to reduce harmful emissions and to produce marketable sulphur as by product.

NEXTCHEM
Know-how and proprietary technology



NEXTCHEM sulphur recovery portfolio

- Modified Claus Process
- Oxygen Enrichment
- RAR™ Technology
- RAR Multipurpose™
- Liquid Sulphur Degassing Sub-Dewpoint CBA Process
- Acid Gas Removal
- Acid Gas Enrichment
- Amine Regeneration Unit
- Sour Water Stripping Unit
- S.O.A.P.™

Key Figures for NEXTCHEM SRT References

- > 50 years experience in Sulphur Recovery
- ~90 projects executed as Licensor among: FS, PDP, BEDP, FEED
- Largest license[1]: 1100 t/d
- Smallest license[1]: 8 t/d

1. Single train capacity