

Project : Amine Regeneration unit
Montreal, (Québec), Canada

Client : Petro-Canada

Project Description :

Petro-Canada's Montreal East Aromatics complex (Parachem) required an increase of its H₂ production capacity from 15 to 21 MMSCFD. The unit was originally built under a Foster Wheeler license and used MEA chemical contact to remove excess CO₂ from the H₂ stream.

Ultragen was given the mandate of revamping the entire hydrogen unit including the amine system. The original MEA design was replaced with an MDEA design and consisted of an amine contactor and an amine regenerator. The contactor ran at 230 psig and the regenerator at about 10 psig. The amine circulation rate was about 600 USGPM.

Ultragen was able to achieve the desired capacity increase with few modifications and without replacing the existing installations. The modifications included, amongst others: increasing the amine regenerator tray capacity, installing a larger surface lean / rich amine exchanger and installing a new rich amine preflash drum upstream of the regenerator to reduce the CO₂ load on the tower reboiler.

Refining

Year of realization : 2004
Project Value : 5 M\$

Services offered by Ultragen :

- Project Management
- Project cost estimation and scheduling
- Process simulation of hydrogen unit
- Equipment design and specification
- 3D modeling and piping system design
- Pre-operative testing and start-up assistance

T +1 (450) 650-0770
F +1 (450) 650-0780
www.ultragen.com

50, Rue de Lauzon, 2^e étage, Boucherville
(Québec) Canada, J4B 1E6