



Cryogenic Processing Plant Gas Coalescer Cost/Performance Optimization Using Series NGGC PEACH[®] Cartridges

Market Application Publication



BACKGROUND

Customer has 10+ 200 MMscfd cryogenic Natural Gas processing trains inside a plant located in the Marcellus/Utica midstream area. This processing plant gathers wellhead gas and drops out the heavy hydrocarbons (NGL's) via cryogenic towers. Then the NGL's are sold to refineries/petrochemical plants, and the lighter natural gas is compressed and boosted to natural gas transmission pipelines. Each 200 MMscfd train consists of a booster compressor that has a vertical coalescer on the discharge side, followed by mole sieve dehydrator beds with dry gas filters on the outlet of those. The gas then flows through the cryogenic tower. After the tower, there is a vertical coalescer to remove any of the residual NGL's in the gas. The customer has PECO O&G OEM vessels on every train. The competition had displaced OEM cartridges with pleated glass coalescer technology. They were changing the pleated glass coalescer cartridges once every 6 months.

SOLUTION

Parker IPF analyzed current usage and estimated costs that the customer was spending per year on average. Based on this data IPF presented a cost savings solution of extended run time and higher performance over the pleated glass cartridges. The cartridge offered was our upgraded PEACH DynaCeptor NGGC-336 PL-23 model. While the price per cartridge was more than pleated glass, the customer on an annual basis saved costs by getting 18 months of service life out of the NGGC-336 PL-23 cartridges along with better performance.

Benefits to Customer:

- One change-out per 18 months compared to three with competitor.
- Reduced overall operational expenditure costs (OPEX) on cartridges by 37%.
- Less shutdowns to change cartridges results in higher efficiencies and lower maintenance cost.
- Based on lab testing, the expected carryover on pleated glass coalescer cartridges is around 400 ppb, and expected carryover on NGGC PL-23 PEACH cartridges is around 0.35 ppb.

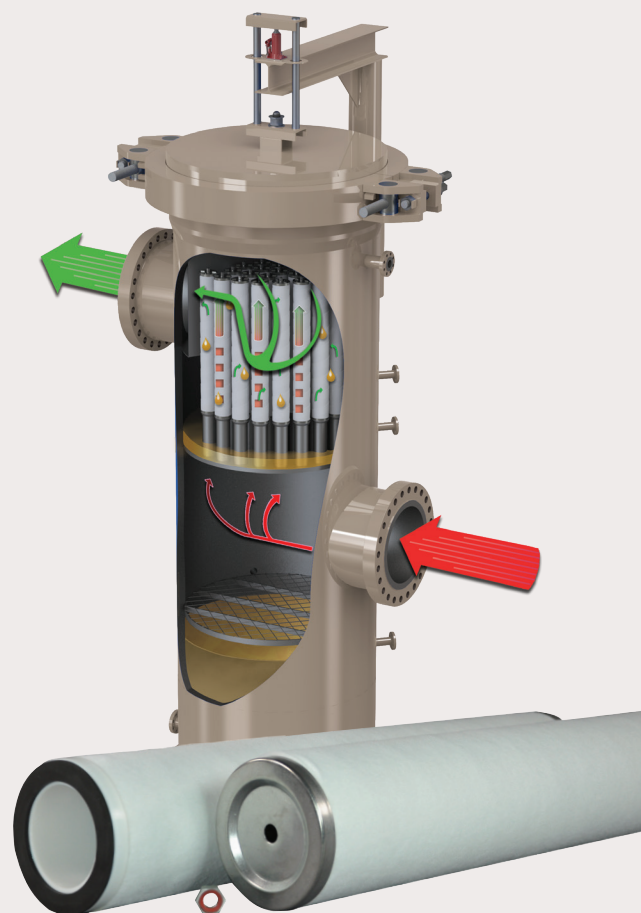
HIGHLIGHTS

Application: Compressor Discharge/
Residue Gas

Location: Marcellus/Utica Shale, USA

Products:

- PEACH®DynaCeptor™
(Series NGGC PL-23) Coalescer Cartridge



Series 77V with
PEACH DynaCeptor™ cartridges

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MAP0002-OG-PEACH NGGC-CRYOGENIC RESIDUE GAS-200429



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