

SiYPro™ Case Study

Butadiene Plant-C3 Column Antifoulant



The chemistry of results™

Situation

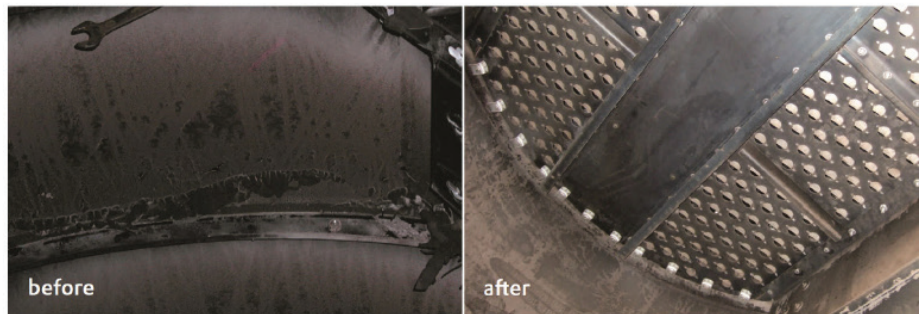
A European producer of butadiene experienced short run lengths with their C3 splitter column and were performing a high number of reboiler cleanings during operation. The target was to minimize the number of reboiler cleanings and to increase the operation time of the column.

Approach

The most common problem in butadiene extraction plants is the negative impact of C-centered radicals and traces of oxygen in the system. The SiYPro™ approach was to eliminate the two main causes of the fouling by choosing the appropriate chemistry.

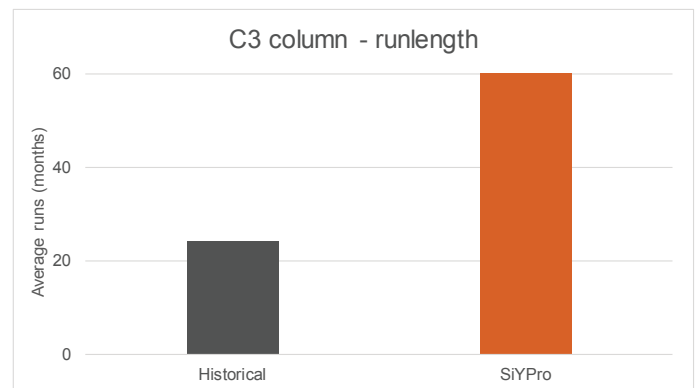
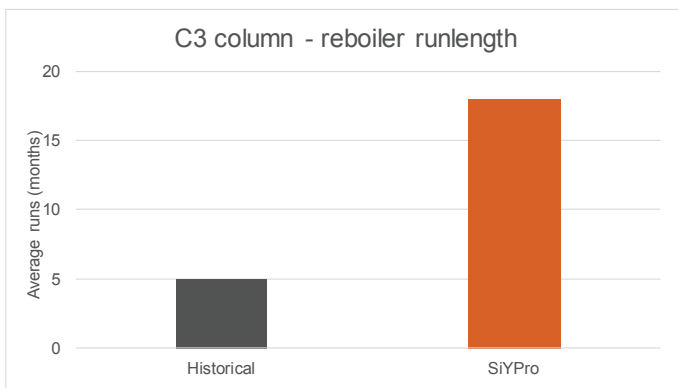
SiYPro™ Program

Based on the study performed by the SiYPro™ Process Team and the customer, SiYPro™ E640 was identified as the best treatment program. The product was added into the feed and the reflux of the column to ensure the optimal performance of the additive. The dosing of SiYPro™ E640 is generally in the range of 15-30 ppm based on incoming C4-cut.



Results

After the application of SiYPro™ E640, the plant observed a step change in reboiler the column performance,



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