

Case Study 13

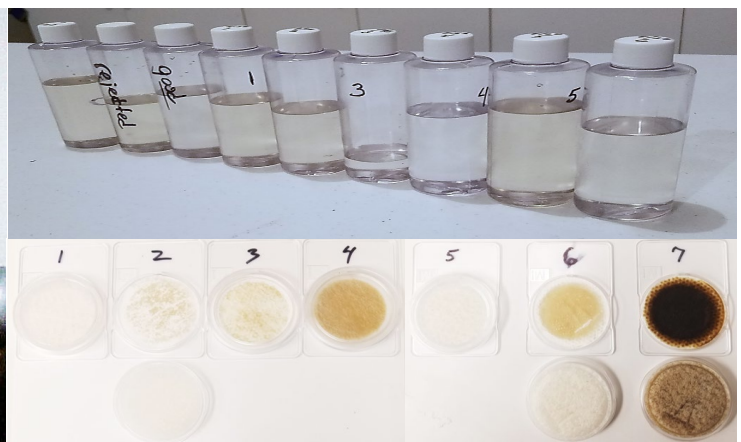
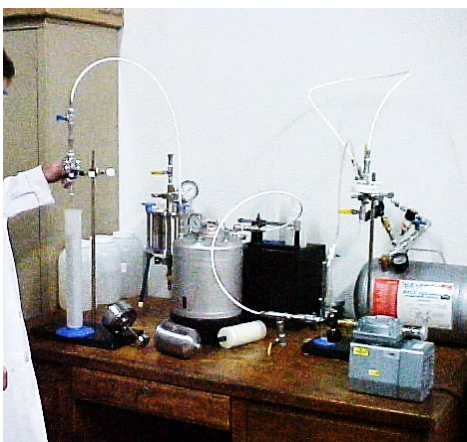
Chemical Plant Off-Spec Product Recovery

Background

An existing customer that produces chemical intermediates was experiencing a high incidence of reject on one of their proprietary lines. The product is a somewhat viscous material that is supposed to be visually water white in color with transparent clarity when a vial is held up against a white background. The current process employs a horizontal leaf filter however it is an old design and replacement parts are getting very difficult to acquire so maintenance is forced to attempt repairs on their own and they realize this is the root cause of the problem. Rejected, off-spec material is stored in 500-gallon totes and attempts are made to recover this product by re-filtering it through a portable bag filter system. They have had marginal success at best in recovering this product and has accumulated over 50 totes of reject material that they would like to sell. Northeast Filter was asked if we could identify a means to affordably recover the reject material.

Solution

Providing a filter element that could be used in their portable bag filter systems was their preference and the only economical option. The VAS team performed on-site filterability testing to qualify filter media that would bring the reject material back into spec. The customer provided acceptable vs reject vials for baseline comparison. They also wanted to get at least (1) totes volume of material through the filter so they didn't have to perform a filter change mid-tote. Northeast Filter was able to meet the quality spec and filter (2) totes with a custom hybrid pleated element that fit their existing portable bag filter system. They are still using this process to recover reject material until they can budget for a new filter system to replace the obsolete horizontal leaf filter.



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