

TRACERCO studies nitric acid plants



Providing real time measurements to assist with critical decision making

A high pressure (HP) nitric acid plant had performance issues with increased weak acid flow, from the adsorber column, which was a single column with bottom bleach section.

TruScanTM technology from Tracerco used a radioactive source on one side and a detector on the other side was used to 'see through' the column wall to determine performance of the trays on the inside.

The results of the scan showed the levels on the trays to be normal, with no obvious indication of a problem inside the absorber column, although some liquid was shown to be in the bleach air outlet pipe.



As a further investigation technique a **Tracerco Diagnostics**[™] Flow study was used, using a liquid radioisotope tracer, to investigate causes of high weak acid flow. The use of tracer materials offers a rapid and unambiguous online method for detecting leaks and flowpaths.



The tracer flow study indicated that tray 2 was not performing correctly (weeping) and that liquid was being carried out of the bleaching compartment into the bleach air outlet pipe.



The study findings greatly helped reduce plant down time by enabling more focused inspection and repair work.

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