

Packed Bed Tower - Baseline Scans Used for Shutdown Planning

Pre Job Info: Historically, this tower with multiple packed beds was relatively stable in its operation but running over several years between shutdowns it was prone to fouling. Therefore, the customer had TowerScan perform baseline grid scans so that in the future they could minimize the time spent on turnarounds.

TowerScan Results: The adjoining scan profile shows the grid scan performed two years after the baseline scan, as well the profile (black) for one of the four baseline profiles. Each of the six packed beds consisted of a shorter section of structured packing in the top of the bed, with the majority of the bed consisting of dumped packing.

The greatest contrast was between the two beds shown, beds C and D. While all of the beds showed some fouling in the smaller structured packing element at the top, the remainder of the beds, consisting of the dumped packing, were seen to be still operating with a uniform density profile, clear of significant fouling. The exception was bed D below the feed inlet, which showed appreciable fouling throughout the bed. Armed with this knowledge going into the shutdown, the unit engineer was able to minimize the downtime by planning to clean the distributor above each bed, as well as the top structured packing element, while leaving in place all of the dumped packing except for that in bed D which was replaced.


 Phone (888) 724 - 1798
 Packed Beds: Baseline Scans Used for Shutdown Planning 2 Years Later

