

ELGIN SEPARATION SOLUTIONS CASE STUDY

Retrofit of Vertical Traveling Screens

Industry	Chemical
Problem	High maintenance and debris handling costs, long outages, frequent replacement of vertical traveling screens.
Solution	Retrofit to passive screen system with wedge wire screens. System was mounted on a bulkhead to slide into existing traveling screen canal.
Result	Improved water quality at intake. Reduction of operating and maintenance cost. Eliminate need for outages every 5-7 years.

Retrofit of Vertical Traveling Screens

There is often a significant value of retrofitting vertical traveling screens with Elgin type screens. In one instance, three chemical processing locations retrofit their vertical traveling screens. The vertical traveling screens at these locations required significant annual maintenance and rework. Every 5 – 7 years the vertical traveling screen machines had to be totally replaced. Working with the facilities engineers and consultants, Elgin designed the screens and bulkheads to drop into the concrete slots for the vertical traveling screen machines. The vertical traveling screens were pulled and replaced with the new passive intake screens. The process of retrofit of the screens was dramatically faster than previous experience in the removal and re-installing the vertical traveling screens. Operating and maintenance requirements of the intake system have been eliminated. This includes power to run the screens, consumables, screen maintenance, and debris handling requirements. The need for replacement every 5-7 years has been eliminated. In addition, the reduction in time related to the retrofit allowed the facilities to come back to full production days earlier than they had with the vertical traveling screens. Engineers for the facilities report that because of the increased productivity and shortened time out of service the payback period for the retrofit was instantaneous.