



SUBJECT...

Alexandria Sanitation Authority
in Alexandria, Virginia.

CASE HISTORY #5:

Smart Elbow® prevents wear through in **waste water treatment** plant's lime conveying lines.

SITUATION...

As the city's primary sewage treatment facility, this plant treats an average of 40 to 45 million gallons a day. At peak, the volume can exceed 80 million gallons a day, as the plant operates 24 hours a day, seven days a week. In addition to Alexandria, the plant also serves Fairfax County.

The operation uses about 500,000 pounds of pelletized lime per month for pH control. This powdery mix is pneumatically conveyed from trucks to 70' silos through twin four-inch lines.

THE "GLITCH"...

Initially fitted with 4" sweep elbows, the lime conveying system started experiencing leaks in the sweeps after about six months of operation. The sweep elbows were swapped for sweeps fitted with wear-backs. Those lasted a bit longer. "Then we were probably losing an elbow every nine months," according to Bob Devereaux, Lead Mechanic.

The dust was a problem—and so was the downtime.

Plant Process Manager Tom Tyler sent Devereaux a post-card featuring a different kind of elbow offering a free trial. He checked out the Web site and then contacted HammerTek for the name of a local representative.

THE SMART SOLUTION...

In April 1998, Alexandria Sanitation Authority began replacing sweeps in the lime lines with 4" HammerLoy™ Smart Elbows. By June 2000, there were five Smart Elbows in service. According to Devereaux, two years later they pulled a couple Smart Elbows out of the line and inspected them for wear—and there wasn't any they could see.

Since 1998, the HammerTek Smart Elbows have steadily replaced sweeps and consistently resisted any hint of wear. According to Devereaux, the switch to the Smart Elbows has more than paid for itself. In fact, 14 more Smart Elbows have been specified for a plant expansion planned for later in the year 2000.

INTELLIGENT ENGINEERING...

SMART ELBOWS® rely on DEFLECTION, NOT IMPACT, to change flow direction, thereby eliminating the impact-related problems associated with virtually every other conveying elbow design. At system start-up, a gently rotating ball of suspended materials forms in the patented vortex chamber of the SMART ELBOW. As the main flow of material passes this ball, it is "deflected" through the desired change of direction without impact, friction or wear to the elbow's interior surfaces.

SUBSTANTIAL ENVIRONMENTAL IMPACTS...

HammerTek SMART ELBOWS can save your company time, expense, and reduce regulatory paperwork by not failing in the first place. Truly an intelligent "ounce-of-prevention" for conveying systems where any incidence of sweep elbow failure has environmentally sensitive consequences.

Fact: The patented SMART ELBOW design provides maximum environmental protection by eliminating elbow wear due to abrasive impact and friction.

Fact: The SMART ELBOW eliminates/reduces: plugging, surging, turbulence, noise, product degradation, and streamer formation.

HAMMERTEK SMART ELBOWS

FOR ENVIRONMENTALLY SENSITIVE, ABRASIVE, TURBULENT, STICKY OR TRICKY MATERIAL CONVEYING...

- American-made
- Reliable delivery
- Competent technical support
- 60/120 day free trial offer on normally stocked items
 - 45° and 90°
- Socket Weld and Flanged
 - Aluminum
 - Cast Iron
- Ductile - regular and hard
 - Carbon Steel
- Stainless Steel 304 and 316
 - HammerLast™ Series 300 and 400
 - HammerLoy™
- Alloys and coatings available to your specifications

HAMMERTEK FACTS...

HammerTek Corporation has established a solid reputation as an innovative U.S. manufacturer of "problem-solving" conveying elbows. The design and flow characteristics of the SMART ELBOW are patented in the United States and 15 other countries.

Worldwide distribution is conducted through a network of manufacturers representatives, distributors, and licensees.

SMART ELBOW®

FROM THE ENVIRONMENTALLY INTELLIGENT FOLKS AT...



For more information and the name of your nearest distributor contact:

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