

Application Bulletin

Steel Mill Credits Lakos Separators for Effective Filtration/Solids Handling System

Utilizing a solids evacuation system to control the removal of separated solids, a manifold of two Industrial Model Lakos Separators continuously filters 3300 U.S. gpm (750 m³/hr) of quench water separating 2,000 lbs. (907 kg) of mill scale per hour. The results: (1) no unwanted solids are allowed to settle or build-up in the mill's pits; (2) spray nozzles and the quench water system are kept free of plugging and abrasive wear; and (3) separated solids are transferred, less loose liquid, to a convenient location for easy handling and removal.

Prior to the design and installation of this Lakos system, the Dong Kuk Steel Mill Company, Ltd. of Inchon, Korea regularly shut down to dredge their quench water pit of mill scale. At a fraction of the cost of all other recommended techniques (estimated at 50% less), the Lakos system now *automatically* keeps their quench water solids-free for cooling fabricated rolled steel ingots.

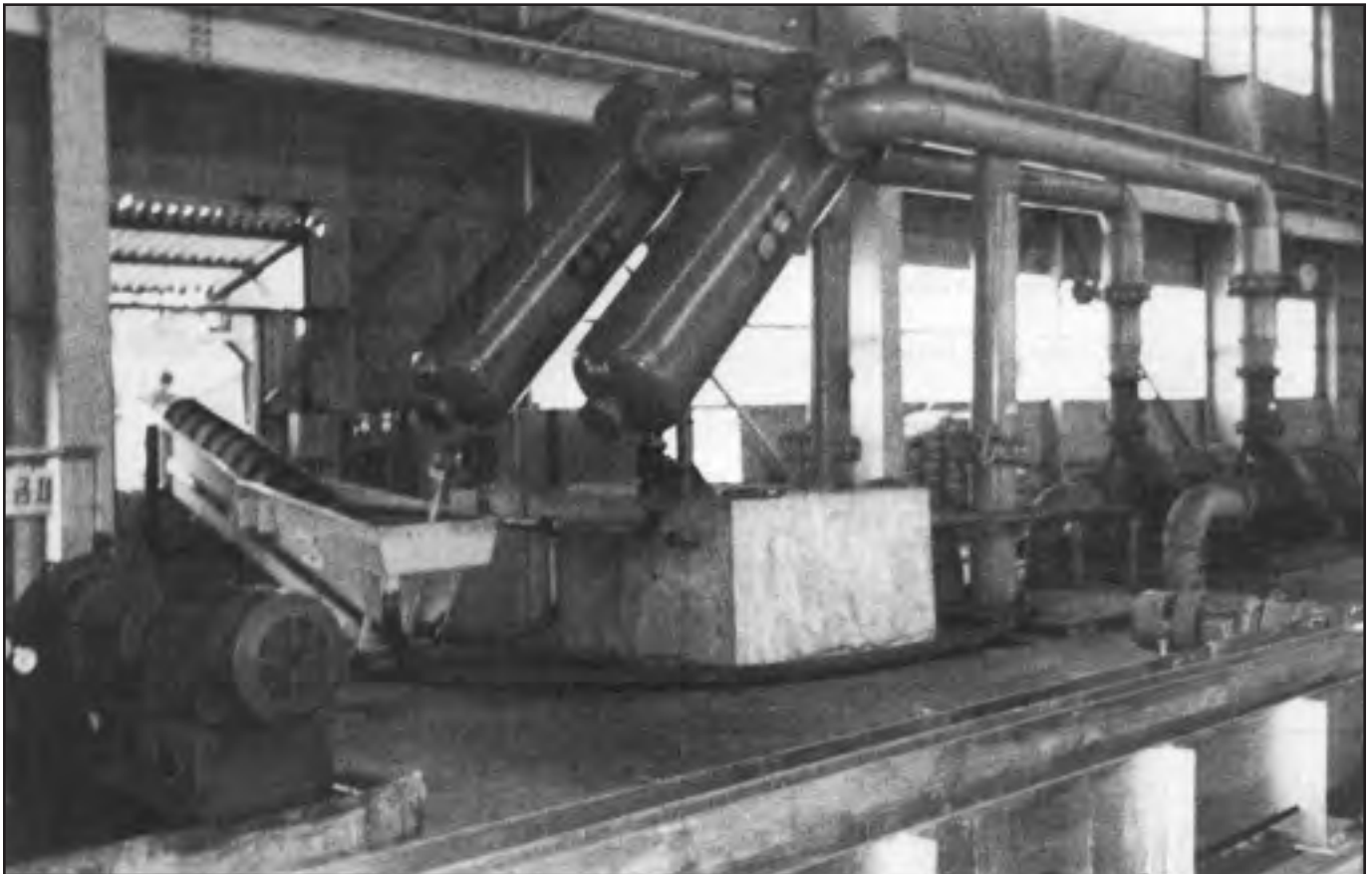


PHOTO A

(continued on reverse)

Pumped directly through the Lakos Separators from a quench water recovery tank, “cleaned” quench water is then discharged into a large pit for eventual re-use. Separated solids are bled from the Lakos units via manual pinch valves into the solids evacuation unit’s receiving tank where the integrated screw auger then carries the solids upward, allowing loose liquid to drain off and return to the system. (See Photo A). These solids are then directly transferred outside the plant for eventual disposal. (See Photo B).

Mr. H. J. Park, Dong Kuk’s Rolling Mill Manager, is very pleased that the Lakos System not only effectively removes unwanted solids but also eliminates significant liquid loss (other than that absorbed in the mill scale). Mr. Park also indicates that the separators’ ability to handle the high flow rate and the high solids content in such a compact, trouble-free system saves both plant space and labor costs.



PHOTO B

Others who have also used Lakos Separators for similar applications:

SEATTLE STEEL - Seattle, WA
 BETHLEHEM STEEL - Bethlehem, PA; Steelton, PA;
 Sparrows Point, MD; Burns Harbor, IN
 LONE STAR STEEL - Lone Star, TX
 CALIFORNIA STEEL (ex-Kaiser Steel) - Fontana,
 California
 U.S. STEEL - Pittsburg, CA; Clairon, PA; Lorain, OH;
 McKessport, PA; Fairfield, AL
 MCCLOUTH STEEL - Trenton, MI
 LTV STEEL - Aliquippa, PA; Campbell, OH; Canton, OH
 WHEELING-PITTSBURGH STEEL - Munson, PA
 THOMAS STEEL - Lemont, IL
 ALLEGHENY-LIDLUM STEEL - Pittsburgh, PA
 ATLANTIC STEEL - Atlanta, GA

CABOT CORPORATION - Kokomo, IN
 NIPPON STEEL - Yawata Works, Japan; Kimuzu Works,
 Japan
 DAIDO STEEL - Nagoya, Japan
 SIDMAR - Geng, Belgium
 DONG KUK STEEL - Busan, Korea; Inchon, Korea
 SOUTHERN IRON & STEEL - Penang, Malaysia
 TAIWAN STEEL - Taipei, Taiwan
 HOESCH @ DORTMAND - West Germany
 KRUPP @ DUIUBURG - West Germany
 FORGES d’ALLEVARD - Gienode, France
 CREUSOT LOIRE - Le Creusot, France
 SKF STEEL - Haellefors, Sweden

CLAUDE LAVAL CORPORATION

Not connected with The DeLaval Separator Company

1365 N. Clovis Avenue • Fresno, California 93727 USA
 Telephone: (559) 255-1601 • Fax: (559) 255-8093
 Toll-Free: (800) 344-7205 (USA, Canada & Mexico)
 www.lakos.com • E-mail: info@lakos.com