

Gravabelt®
Gravity Belt Thickener

Komline-Sanderson's Gravabelt® gravity belt thickener is designed to obtain high volume reduction and high hydraulic throughput at a low polymer dose. The design provides for low maintenance costs and long operational life in the highly corrosive environment of sludge thickening.

The Gravabelt delivers pumpable thickened sludge. Our flatbed design provides high capture rates using less polymer than rotary designs.



A fully enclosed Gravabelt, pictured right, is also available.

## **Gravabelt: Gravity Belt Thickener**



1 Feed Section - Polymer is injected through a multiport ring and mixed with the sludge via a non-clog variable orifice mixer in the feed line prior to entering the flocculation tank. Coagulated solids form in the flocculation tank and overflow onto the dewatering belt in a smooth, gentle stream, minimizing floc shear.



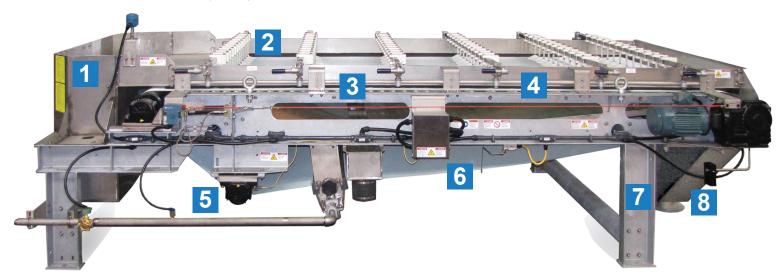
Roto-Kone® Elements Roto-Kone elements lift and
decelerate incoming sludge
creating a head which turns the
sludge to enhance separation.
Roto-Kone stations are placed in
several locations along the entire
length of the belt. The elements
rotate, reducing rag hang-up, and
self adjust to maintain contact with
the belt. They can be lifted to
precisely control final cake solids.



3 Belt Support/Wiper Bars - The dewatering belt is supported on abrasion-resistant, replaceable polyethylene wipers to enhance dewatering by constantly breaking the liquid surface tension. Wipers can be rotated providing multiple wear surfaces.



4 Side Seals - Replaceable rubber side seals prevent sludge from spilling off the sides of the moving drainage belt. A clamp is used to hold these seals in place for easy removal and installation.



5 Bearings - All bearings are a split pillow block, double-row spherical roller design. They lie outboard of the process stream, are regreasable, and are nylon coated. For our standard two meter machine the minimum L-10 life is equivalent to over 135 years of continuous service.

6 Dewatering Belt - Expected belt life is 2000-3000 hours depending upon the feed material being processed. Replacement time is less than an hour and no machine disassembly is required. Frame Construction and Corrosion-Resistant Features - The frame is heavy duty hot-dip galvanized carbon steel channel welded and/or bolted. Stainless steel is also available. All fasteners are stainless steel and the conduit is PVC coated. Cylinders are constructed of composite materials to eliminate corrosion.

8 Discharge Hopper - The discharge hopper can be directly connected to a thickened sludge pump eliminating the need for an intermediate storage tank with level sensors used to operate the thickened sludge pump.

**Pump. Thicken. Dewater. Dry.** 

