



FILTRATION INDUSTRY

SEPARATING SOLIDS FROM LIQUIDS



DRAINAGE BELTS

DISK BELTS

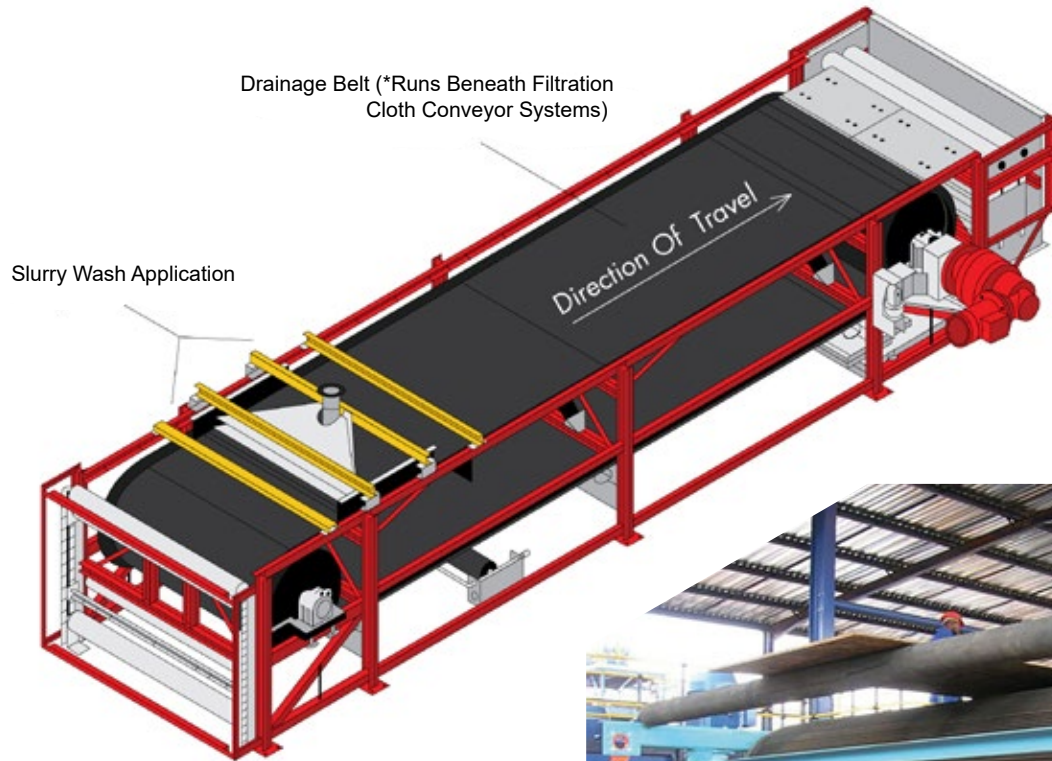
PRESS BELTS



BeltTS
Belt Technical Specialties

BeltTS DRAINAGE BELTS

BeltTS is recognized as the leading international manufacturer of drainage belts and related rubber belt filtration products. Our design and production team have created over 1,000 drainage belt solutions to support global industries requiring an efficient slurry dewatering process.



*Note: Make sure to look under the fabric to see the drainage belt!



Cover Photos:

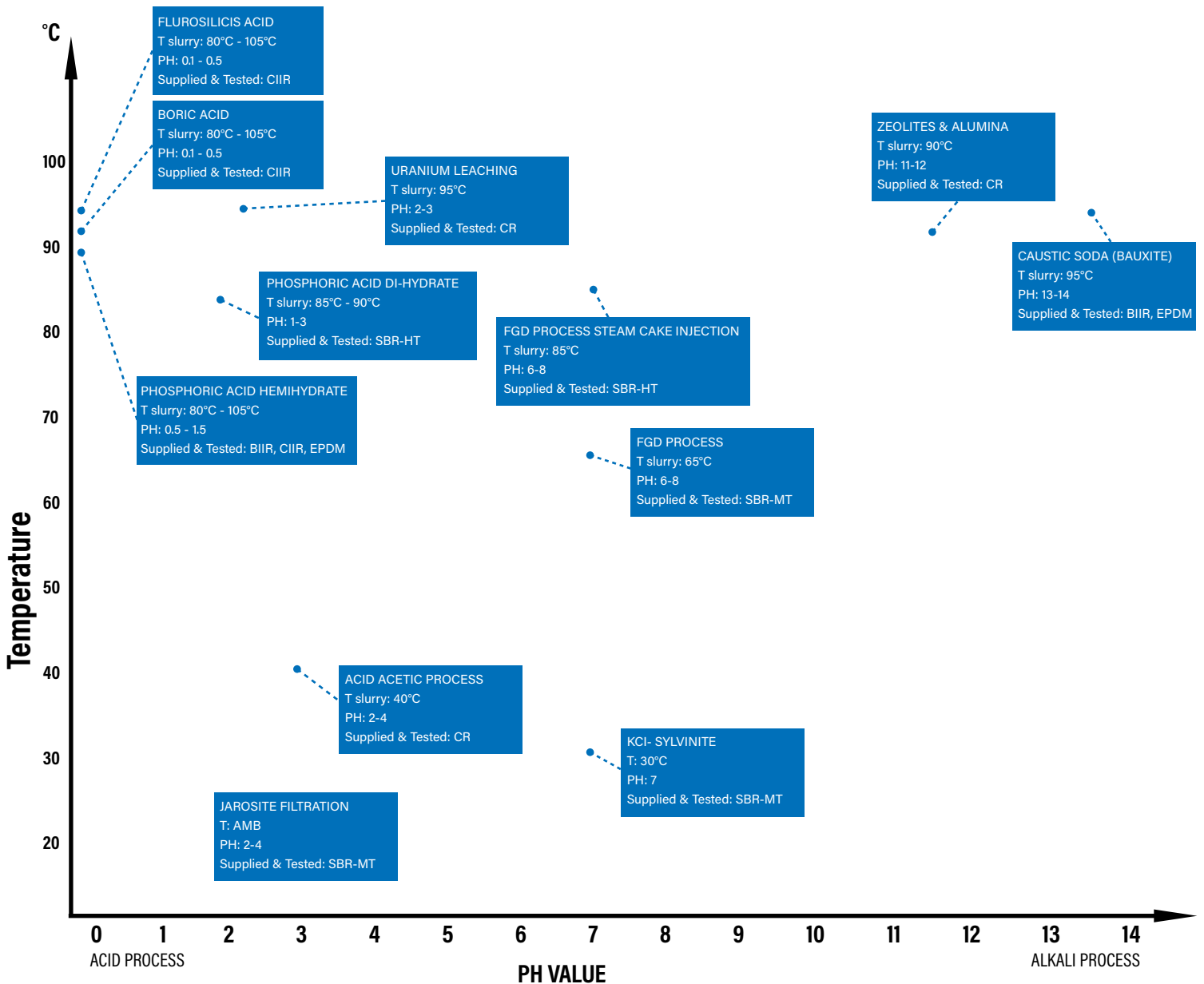
- ▶ Top: Gold Mine Operation (Tailings Filtration)
- ▶ Middle: Gypsum Cake (Wallboard Factory)

Chemical Refinement		Mining (Ore Leaching)	Food	Industries
Aluminum Fluoride	Nickel Salt	Quartz	Acetic Acid	Paper
Bauxite Ore	Peroxide	Uranium	Calcium	Pharmaceutical
Calcium	Phosphoric Acid	Copper	Lactic Acid	Waste Management
Gypsum Flue Gas Desulfurization (FGD)	Boric Acid	Lead	Citric Acid	Dyes & Pigments
Ore Leaching	Zinc Carbonates	Gold and Silver	Maltos	Food Processing
Phosphates	Zeolite	Titanium Dioxide	Sugar	Fertilizer
Magnesium		Sylvine	Mycellium	Petroleum

AVAILABLE COMPOUNDS

BeltTS drainage belts are custom manufactured using the best choice from a variety of tested compounds to meet the specific temperature and pH of slurry liquor or wash solution.

Filter Belt Rubber Compounds According To Process Parameters:	
NR - Natural Rubber	CIIR - Chlorobutyl
SBR-MT and SBR-HT - Styrene Butadiene Rubber, medium and high temperature	CR - Neoprene
EPDM - Ethylene-Propylene Diene Monomer	CSM - Hypalon
EPM - Ethylene-Propylene Monomer	NBR - Nitrile Rubber
BIIR - Bromobutyl	CDB - Food Quality Rubber (White Rubber)



GROOVING AND DRILLING

Molded or machine groove capabilities to create any customized drainage pattern.

GROOVE TYPES

- Flat – No inclination between center and edges
- Sloped – Having an inclination between center and edges
- Groove Shapes: (1) Round; (2) Square; or (3) “V”

FABRIC-FREE ZONES

This process protects the carcass from exposure to damaging chemicals in the liquid slurry being conveyed and extends the belt's service life.

SPLICING OPTIONS

- Manufactured endless with a hot vulcanized splice
- Belt made with prepared ends to be spliced endless on-site by hot vulcanization or cold bonding
- Belt manufactured with lateral curbs, or curbs can be shipped loose for on-site installation

DRAINAGE BELT STANDARD BASE BELT CONSTRUCTIONS*

- 3-Ply 330 PIW Black 110 lb. Poly x Poly
- 4-Ply 440 PIW Black 110 lb. Poly x Poly
- 4-Ply 560 PIW Black 140 lb. Poly x Poly
- 5-Ply 550 PIW Black 110 lb. Poly x Poly

* Other fabrics and compounds are available. Contact us to determine an appropriate base construction.

DRAINAGE BELT DIMENSIONS

- Overall thickness to 40 mm (1-1/2”) and higher
- One piece widths to 3320 mm (130”) are standard and can be made up to 4700 mm (185”) wide with a hot vulcanized longitudinal splice
- Belt lengths available to over 100 meters (328')



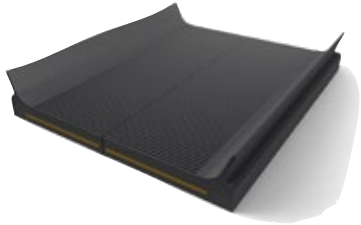
Example of textile carcass drainage belt with transverse grooves. Finished belts will have molded rubber edges.



Example of 10mm diameter holes in grooves.

CURB DESIGN AND BELT STRUCTURE

Containment curbs, or skirts, increase the capacity of horizontal drainage belts and help prevent spillage. Curb styles and heights are supplied by BeltTS in a variety of profile designs. The most common include:



***Now Stocked
in the USA**

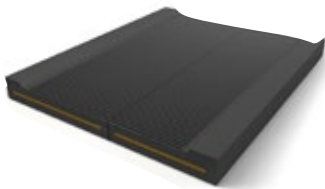
LATERAL STRAIGHT CURBS*

75 or 125 mm (3" or 5") curb heights; applied by hot vulcanization or cold bonding. Available as loose replacement curbs for cold bonding on-site



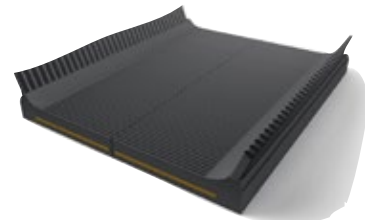
LIFTING FLAT CURBS

With inner guides integrally molded with the cover as a one piece construction



FLAT TRAPEZOIDAL CURBS

Applied by cold bonding



CORRUGATED LATERAL CURBS

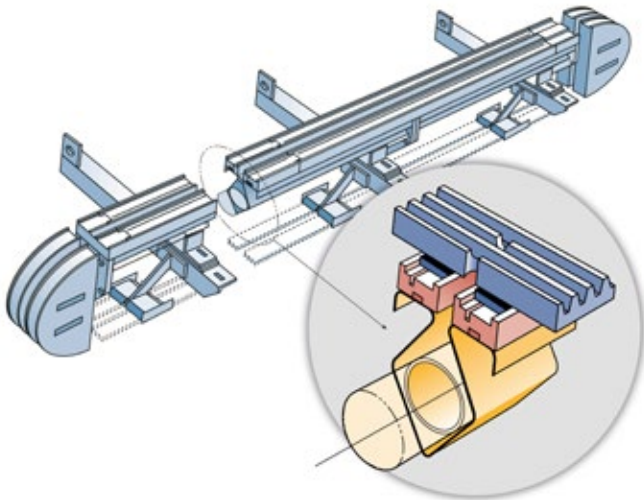
Heights up to 150mm (6"); applied by cold bonding

BeltTS WEAR BELTS

EXTENDS THE LIFE OF THE DRAINAGE BELT WHILE MAINTAINING A VACUUM SEAL

Horizontal belt filters (HBF) are equipped with wear belts that protect the drainage belt from premature wear caused by friction. Wear belts also act as a seal to prevent the loss of vacuum pressure (see diagram).

For optimum service life, BeltTS wear belts are made with abrasion and chemical resistant rubber compounds. Using the highest quality construction, any possible slippage is avoided and vacuum pressure remains constant.



BeltTS DISK BELTS

ENDLESS RUBBER BELTS FOR VACUUM FILTRATION IN FLAT ROTATING TABLE FILTERS

Vacuum table filter belts are used primarily in de-hydrate and hemi-hydrate filtration processes to produce phosphoric acid. The rubber belt acts like a vertical wall across the table, avoiding the accumulation of material and facilitating the transport and discharge of slurry.

Rotary drum belt filters are used in different applications for solid / liquid pressure filtration. Press Belts provide sustained pressure on the cake during the filtrations process and facilitate the transition of the slurry from liquid to solid. BeltTS Press Belts are manufactured in widths up to 4.5M (177") wide and act like vertical walls across the table filter, avoiding the accumulation of material and facilitating the transport and discharge of slurry.



MAIN PROCESS APPLICATIONS

Organic and Inorganic chemistry processes:

Phosphate
Phosphoric Acid

Chemical processing
Alumina (hydrate)

Mining and mineral
Processing

BeltTS PRESS BELTS

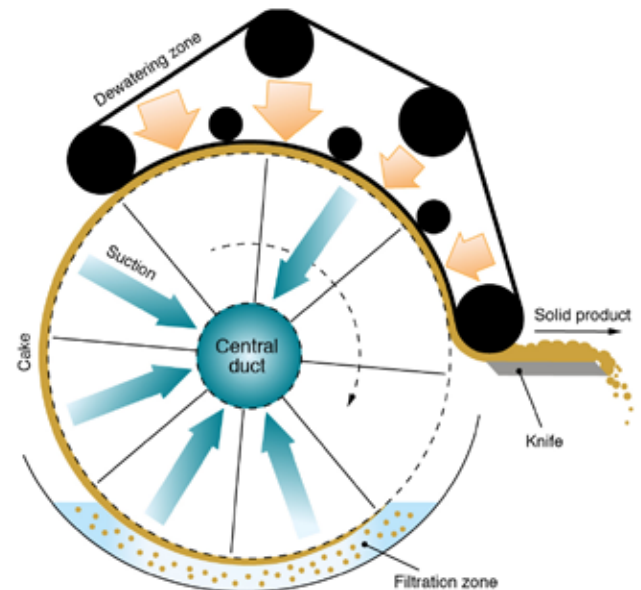
RUBBER BELTS FOR ROTARY DRUM FILTERS

- Rotary drum filters are used in different applications for solid and liquid pressure filtration.
- Press belts provide sustained pressure on the cake during the filtration process and facilitate the transition of the slurry from liquid to solid.
- Manufactured in widths up to 4.5 m (177 in.) and improves the efficiency of the filtration flow by as much as 200%.

APPLICATIONS

Organic and Inorganic Chemistry Processes:

- Metallurgical Applications
- Chemical and Pharmaceutical Slurries
- Dyestuff
- Pulp
- Aluminum Hydroxide and Sulphate
- Soda and Sodium Bicarbonate
- Gypsum (FGD Plant)
- Waste Water Treatment Plants
- Industrial and Municipal Sludges
- Pigments
- Mineral Beneficiations



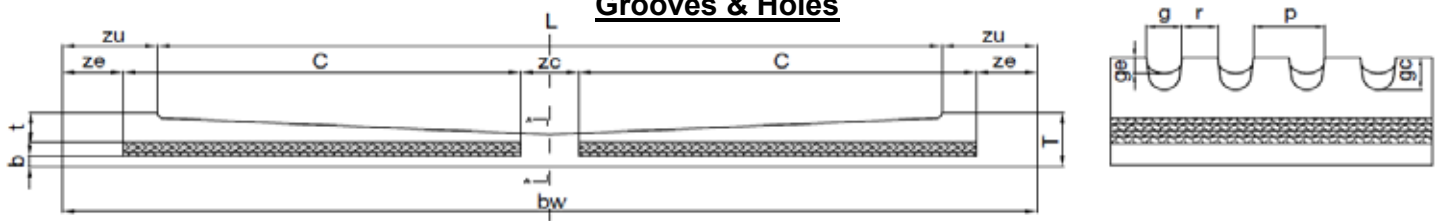
Inquiry From: _____
 Phone: _____ Fax: _____ Email: _____
 Address: _____

Base Belt

Cover Thickness (t + b)

Length: _____ Ply: _____ Top (t): _____ Bottom (b): _____
 Width (bw): _____ Fabric: _____ OAG(T): _____
 Belt Rubber Compound: _____ Tension Rating: _____ Runs Indoor/Outdoor: _____
 Running Time (Hours/Day & Days/Yr): _____

Grooves & Holes



Hole Dia: _____ Groove Width (g): _____ Center No Fabric Zone (zc): _____
 Oval (x): _____ Rib Width (r): _____ Edge Zone w/o Grooves (zu): _____
 Slot (x): _____ Groove Pitch (p): _____ Groove Depth at Edge (ge): _____
 Single (x): _____ Groove Length (L): _____ Groove Depth at Center (gc): _____
 DBL (x): _____ Carcass Width (C): _____ Edge No Fabric Zone (ze): _____
 In Rib (x): _____
 In Grv (x): _____

Curbs/Bottom Guide

Curb Style: _____ Total 0.5" x 3" Bottom Guides (0-5): _____



A. Lateral 3" (75mm)



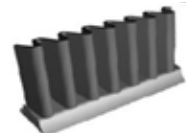
B. Lateral 5" (125mm)



C. Lifting/Flat

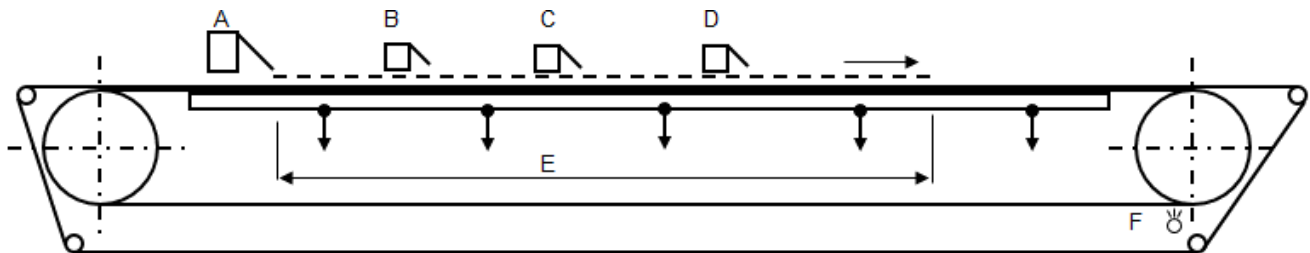


D. Trapezoidal



E. Corrugated 6" (150mm)

Slurry/Wash Composition



Speed: _____ fpm/mpm Liquid Transit Length (E): _____ ft/mt (Visible Wet Area)
 Pulley: _____ In/mm Washing (F): _____ ft³/mtr³/hour, and Temp (°F -°C): _____
 Slurry Feed Composition (A): _____

	Wash (B)	Wash (C)	Wash (D)
Solids: _____ %Weight			
Liquid: _____ %Weight			
pH: _____			
Temp: _____ °F -°C			
Flow: _____ ft ³ /mtr ³ /hour			
	Current from Wash: _____		Counter/Co
	Wash Composition: _____		
	Wash Temperature: _____		
	Wash pH: _____		
	Flow Rate: _____		ft ³ /mtr ³ /hour



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