



<https://enviroflex.at>

Combined

Belt Filter Press & Belt Thickener

Enviroflex GmbH – Advanced Solutions for Sludge Thickening & Dewatering

Enviroflex GmbH, based in Austria, is a leading provider of innovative solid-liquid separation technologies. With years of expertise in the field, we specialize in complete, tailor-made solutions for municipal and industrial sludge treatment—from primary thickening to final dewatering.

Our current catalogue focuses exclusively on our high-performance belt presses and belt thickeners, engineered to deliver reliable, efficient, and cost-effective results for a wide range of sludge types.

Product Highlights

Gravity Belt Thickeners: Ideal for thickening dilute sludge (e.g., primary or secondary sludge) to a manageable consistency, minimizing volume before further treatment or disposal.

Belt Filter Presses: Designed for continuous dewatering of thickened or illiquid sludge, producing a dry cake with high solids content.

Integrated Systems: Combined units with both belt thickener and stages in one frame—perfect for thin sludges like waste activated sludge (WAS), offering a compact and fully automated process.

Key Advantages of Enviroflex Belt Technology

High Capture Rate – Advanced belt and roller design ensures minimal solids loss in filtrate (typically <1%), protecting downstream systems and optimizing efficiency.

High Dry Solids Content (DS%) – Precision-engineered pressure and shear zones, including high-pressure "tension" rollers, achieve excellent cake dryness, even with difficult sludges.

Low Wash Water Consumption – Efficient belt cleaning systems reduce water use and operational costs.

Wide Belt Selection – High-quality belts available in various weave patterns, air permeability, and chemical resistance grades, customized for specific sludge characteristics.

Robust, Low-Maintenance Design – Built for long service life with corrosion-resistant materials and minimized mechanical complexity.

Flexible Operation – Adjustable belt speed, pressure zones, and polymer dosing for optimized performance under varying sludge loads.

Fully Automated Control Systems – Integrated with user-friendly HMI and optional SCADA interfaces for remote monitoring and process optimization.

Compact Footprint – Space-saving designs available for containerized and retrofit applications.

Complete System Integration

In addition to manufacturing the belt thickening and dewatering units, we supply and integrate the full process chain:

Sludge feed tanks and pumps

Polymer preparation and dosing units (powder or emulsion)

Polymer mixing and maturation tanks

Sludge conveyors (screw, belt, shaftless)

Filtrate handling systems

Electrical control panels and automation (with CE compliance and ISO-certified production)

Although this catalogue focuses on **Integrated Systems: Combined units with both belt thickener and belt press stages in one frame**, we also offer other belt presses and belt thickener alone as well as other sludge dewatering systems such as **multi-disk screw presses** for compact and low-speed operations.

Contact us for custom configurations.



(HSE-MS)



ISO 9001 2015



Enviroflex GmbH

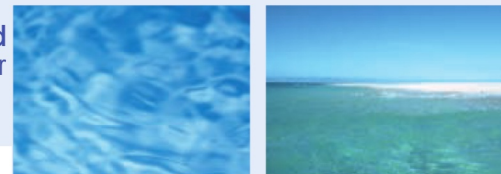
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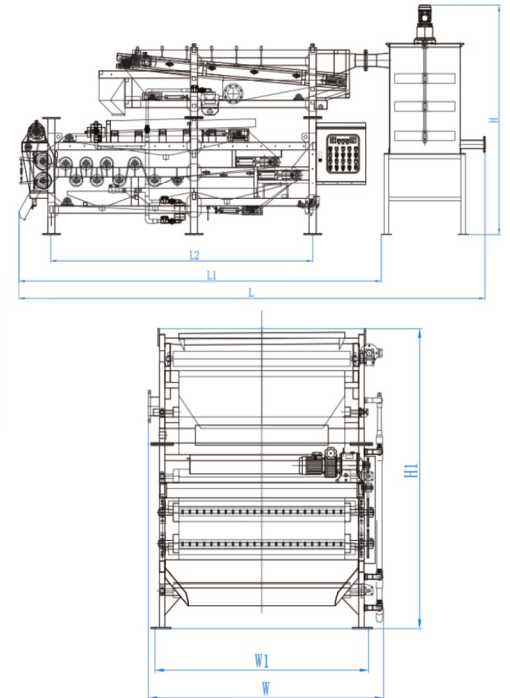
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HTE3 Series Two Stage Type, Combined Dewatering Belt Filter Press with Gravity Belt Thickening



Technical Data & External Dimensions of Belt Filter Press

Spec. Model		HTE3-750	HTE3-1000	HTE3-1250	HTE3-1500	HTE3-2000	HTE3-2000-L	HTE3-2500	HTE3-2500-L	HTE3-3000
(mm) Belt Width		750	1000	1250	1500	2000	2000	2500	2500	3000
Low D.S	Treating Capacity(m ³ /hr) (S.S.0.4~0.8%) Inlet D.S	14.0~22.0	18.0~28.0	24.8~39.0	36.0~55.0	47.5~70.0	57.0~88.0	65.0~90.0	70.0~105.0	100.0~130.0
	D.S (kg/hr) Dried Sludge	60~125	76~160	104~215	152~310	200~410	240~500	260~540	310~615	380~780
Middle D.S	Treating Capacity(m ³ /hr) (S.S.0.8~1.5%) Inlet D.S	1.4~17.0	14.7~21.0	19.5~29.0	29.0~41.5	39.5~55.0	47.5~66.0	52.0~68.0	63.0~80.0	75.0~100.0
	D.S (kg/hr) Dried Sludge	96~186	124~240	164~320	244~465	328~640	400~800	435~815	520~1000	580~1250
Water Content of dewatered Sludge		65~84	65~84	65~84	65~84	65~84	65~84	65~84	65~84	65~84
Power Consumption(Kw)	Driving Motor (Variable Speed)	0.75	0.75	0.75	1.1	1.5	1.5	1.5	2.2	2.2
	Flocculator Tank Motor	0.37	0.37	0.55	0.75	0.75	0.75	0.75	0.75	0.75
	Belt Thickener Motor	0.75	0.75	0.75	0.75	1.1	1.1	1.1	1.1	1.5
Lower Collecting Tray for Pressed Filtrate		None	None	None	None	None	None	None	None	None
External Dimension (mm) (Reference)	(L)	4650	4650	4650	5720	5970	6530	6170	7170	7170
	(W)	1480	1660	1910	2220	2630	2630	3220	3270	3470
	(H)	2300	2300	2300	2530	2510	2510	2730	2730	2830
(mm) Base Dimension L1×H1		3150 × 2100	3150 × 2100	3150 × 2150	4850 × 2300	5400×2590	5400 × 2590	4950 × 2500	5750 × 2600	5850 × 2600
(mm) Base Dimension L2×W1		2100 × 1086	2100 × 1336	2100 × 1586	3350 × 1870	4020×2390	4020 × 2390	3550 × 2870	4165 × 2870	4050 × 3150
(kgs) Reference Weight		1680	1950	2250	3000	4700	5000	4600	5000	5900

- Remarks:
- Our company will reserve the modifying right of the above specifications.
 - Treating capacity and the DS of dewatered Sludge depend on the VSS of the feed sludge.
 - Please ask for the actual installation dimension before ordering.

Sludge Dewatering Application



Municipal Sewage Sludge



Metal-Processing Sewage



Mining & Stone Wastewater



Electronic Sewage.



Printing & Dyeing Sewage



Slaughter House & Livestock Sewage

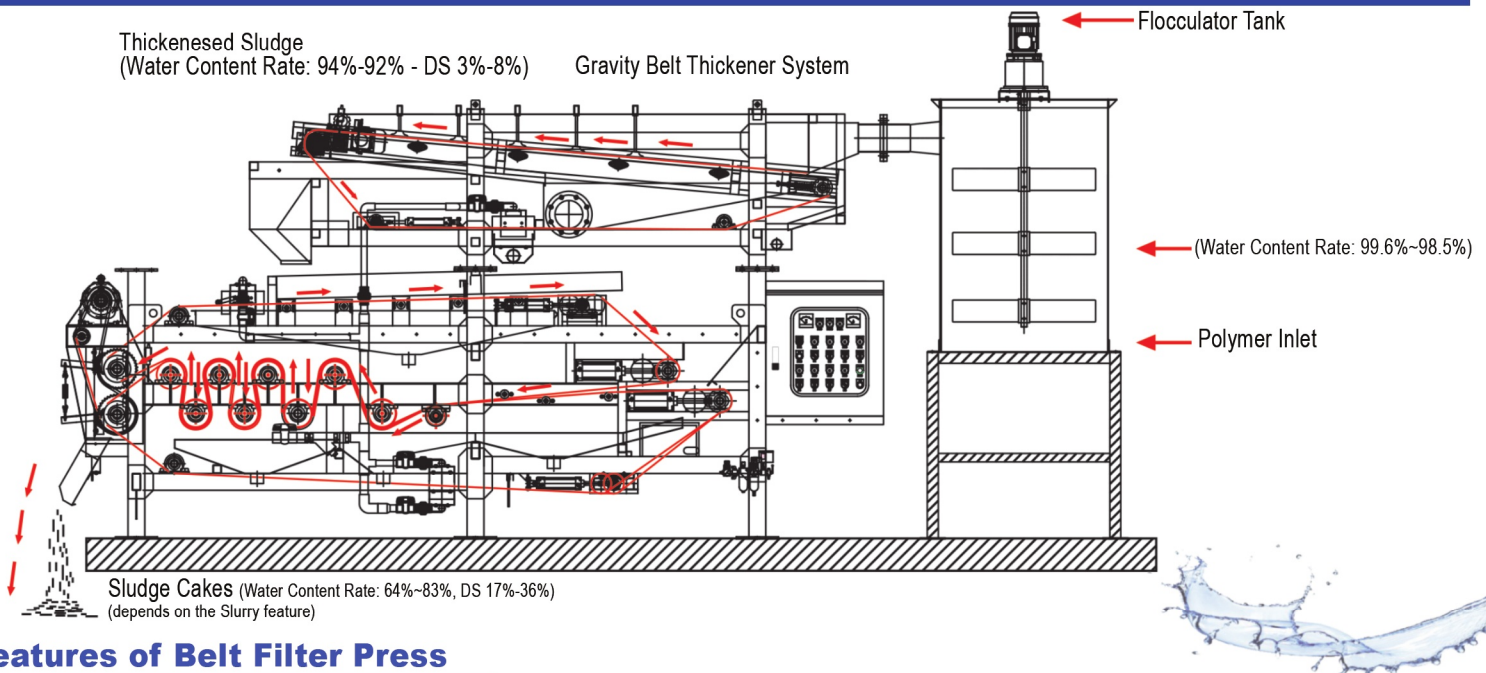


Metallurgical Industry Wastewater

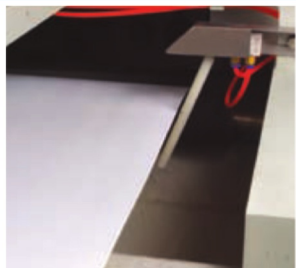


Spraying Sewage

Gravity Belt Thickening/Dewatering Belt Filter Press(Triple-Belt Filter Press)



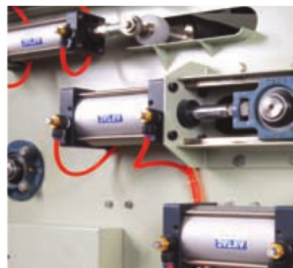
Features of Belt Filter Press



Belt alligment system:
automatic continuous detection, correcting deviation of belt cloth so that the machine can run continuously and extend belt's life.



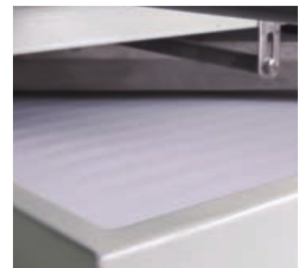
Press roller:
material adopt SUS304, TIG reinforced welding, machined by fine processing, enough strength.



Air pressure control device :
the filter cloth tensioned by cylinder runs in its scope stably without leakage, high security.



Belt fabric:
with the characteristics of nice water permeability, good durability and excellent corrosion resistance.



Sludge distributor:
The thickened sludge shall be distributed evenly on the upper belt to ensure the equal squeezing pressure, which will improve dewatering efficiency and extend the service life of belt cloth.

Gallery

Belt Filter Press



Belt Thickener

