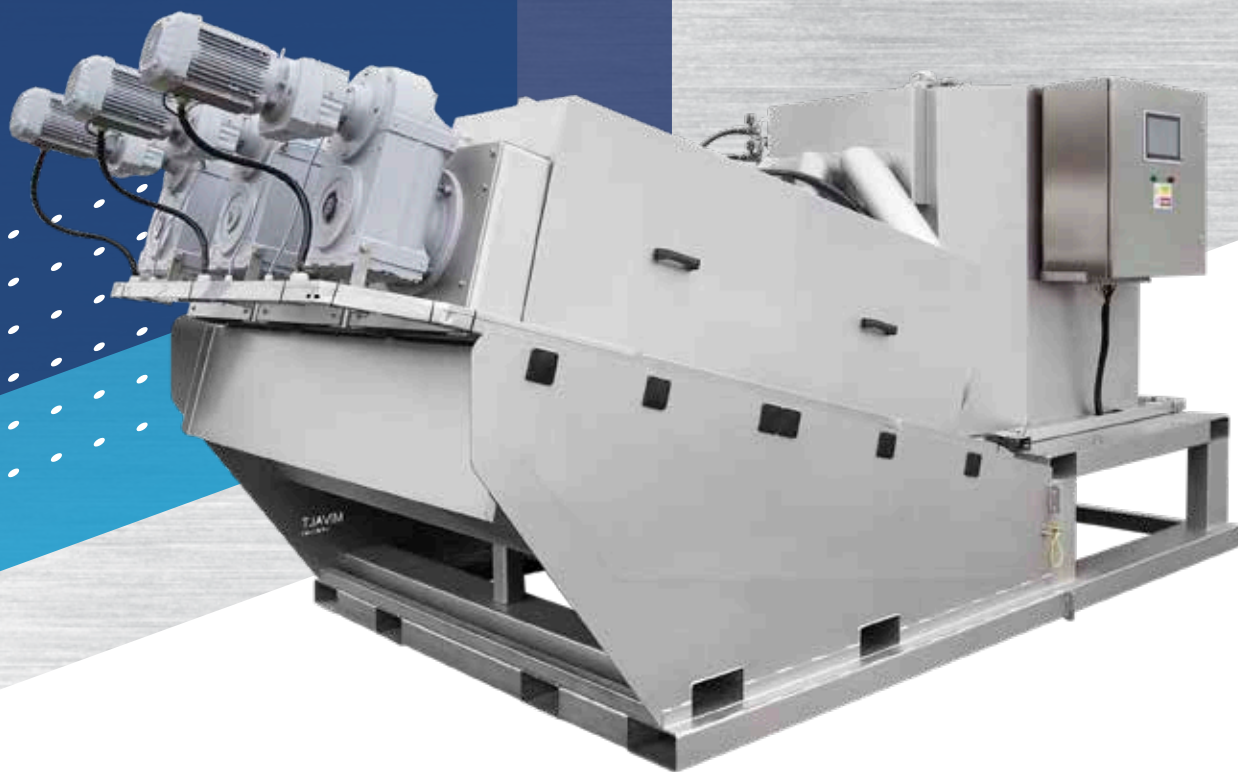


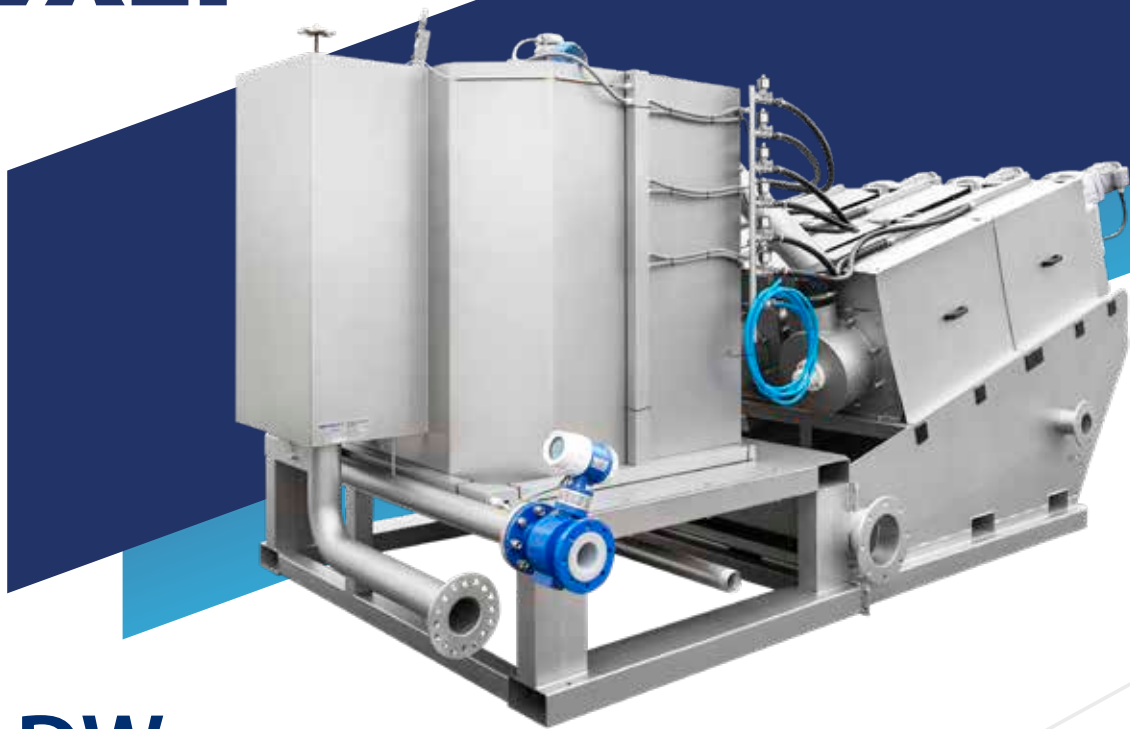
# Dewatering Screw Press

Efficiency and  
Reliability in  
Dewatering



Catalogue  
sheet

**MIVALT**



# MP-DW

## Dewatering Screw Press



### Product description

The Dewatering Screw Press is a key piece of technology in modern wastewater treatment strategies, offering unparalleled efficiency in dewatering sludge water up to 15-30% dry-matter content. Its design and functionality not only meet the needs of wastewater treatment plants but also cover the dewatering

of industrial water and wastewater within food processing operations. Integrating this press within new WWTP designs can significantly reduce construction costs by eliminating the need for large sedimentation tanks, offering a cost-effective and environmentally friendly solution.

### Dewatering Process Description

Sludge water goes into the Dewatering Screw Press via a feeder pump, leading to an inlet chamber that optimizes the flow via an overflow system. A critical step in the process involves the injection of a flocculant (polymer) into the sludge water, which helps solid particles clump together into "flocks". This flocculation process, taking place in the mixing chamber, is enhanced by slow agitation with the flocculant. Next, the sludge is moved to the screw assembly, which features fixed and loosen rings that act as a self-cleaning filter. This reliable design ensures a smooth dewatering process, finishing with a spring-loaded closure plate that maximizes dewatering efficiency by increasing the internal pressure.



## Some Fields of Applications

- Municipal Waste Water Treatments
- Biogas Stations
- Slaughterhouses
- Oil Industry -> Oil, Gas & Mining industry
- Milk and Dairy Production
- Wine and Beverage Production
- Distillery Industry
- Food Processing
- Grease Trap
- Industrial waste processing



## Key Benefits

- Energy Efficiency: Designed to operate with minimal energy consumption.
- Ease of Installation and Operation: User-friendly design ensures undemanding installation and operation.
- Durability: Surface treatment of critical parts guarantees resistance to wear.
- High Performance: Capable of efficiently thickening sludge from 0.5–5% at the inlet to 15–30% at the outlet, with specific sludges up to 45%.
- Low Noise and Vibration: Low RPMs ensure quiet and smooth operation.
- Versatility: Suitable for a broad range of applications across different industries.
- Automated Operation: Features an automated mode for operator-free operation.
- Cost-Effectiveness: Investment return could be as little as one year
- Technical and maintenance support
- Modifiability & Accessories
- Technical development and enhancement

Model	Wasted activated sludge, chemically precipitated sludge				Thickened excessive, secondary sludges				Mineral sludges (metals, mining, etc.)				Primary sludges, DAF sludges, industrial				Sludges with high fat content, oil sludges			
	0.3%		1.0%		2.0%		3.0%		1.0%		2.0%		3.0%		6.0%		5.0%		10.0%	
	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]	[kg DS/h]	[m³/h]
MP-DW-131	6	2,0	10	1,0	10	0,5	12	0,4	25	0,5	25	0,3	15	0,5	25	0,4	20	0,4	30	0,3
MP-DW-201	20	6,7	30	3,0	30	1,5	34	1,1	75	1,5	75	0,8	45	1,5	65	1,1	74	1,5	120	1,2
MP-DW-301	40	13,3	60	6,0	60	3,0	80	2,7	150	3,0	150	1,5	90	3,0	135	2,3	145	2,9	250	2,5
MP-DW-302	80	26,7	120	12,0	120	6,0	160	5,3	300	6,0	300	3,0	180	6,0	270	4,5	290	5,8	500	5
MP-DW-303	120	40,0	180	18,0	180	9,0	240	8,0	450	9,0	450	4,5	270	9,0	405	6,8	435	8,7	750	7,5
MP-DW-401	70	23,3	140	14,0	140	7,0	160	5,3	350	7,0	350	3,5	220	7,3	350	5,8	380	7,6	580	5,8
MP-DW-402	140	46,7	280	28,0	280	14,0	320	10,7	700	14,0	700	7,0	440	14,7	700	11,7	760	15,2	1160	11,6
MP-DW-403	210	70,0	420	42,0	420	21,0	480	16,0	1050	21,0	1050	10,5	660	22,0	1050	17,5	1140	22,8	1740	17,4

Model	Screw Diameter [mm]	D.S. Capacity (kg/h)		Power (kW)	Weight (kg)	Dimensions		
		Inlet Sludge Content				L [mm]	H [mm]	W [mm]
		0.2-0.5%	0.5-5%					
MP-DW-131	∅130	6	10	0.5	300	2200	1100	600
MP-DW-201	∅200	20	30	0.9	580	2900	1350	800
MP-DW-301	∅300	40	60	1.1	980	3600	1750	1000
MP-DW-302	2x ∅300	80	120	1.9	1350	3800	1800	1300
MP-DW-303	3x ∅300	120	180	2.7	1700	3950	1750	1750
MP-DW-401	∅400	100	140	1.9	1350	4350	1750	1250
MP-DW-402	2x ∅400	200	280	3.4	2700	4900	2200	1600
MP-DW-403	3x ∅400	300	420	4.9	3750	5100	2200	2200



# MIVALT

**MIVALT s. r. o.**

Hlinky 972/34, Brno 603 00

Czech Republic

e-mail: [obchod@mivalt.eu](mailto:obchod@mivalt.eu)

[www.mivalt.cz](http://www.mivalt.cz)



Czech manufacturer