

2025.01

Valid from 01.01.25 till 31.12.25



member of

WATROMAT® Sludge-Dryer

***WATROPUR is your partner for drying of
sludge from industrial or municipal
wastewater treatment plants***

***3000 sludge dryer references plants
in more than 50 countries***

Switzerland
Unterseen

WATROPUR GmbH
Headquarter



Croatia
Krizevci

WATROPUR doo
Production
Dryer



China
Lianyungang

WATROPUR Ltd
Production
Dryer



Hungary
Sopron

BONOTEC Kft
Production
Panel



Italy
Korea
Spain
Germany
Austria
Finland
England

WATROPUR Srl
WATROPUR Ltd
WATROPUR SLU
WATROPUR GmbH
WATROPUR GmbH
WATROPUR Oy
WATROPUR Ltd

Parma
Daegu
Barcelona
Düren
Kumberg
Lahti
Carmarthen

WATROMAT®

www.watropur.com

info@watropur.com



German
English
French

walter.uetz@watropur.com
+41 79 333 3040



Italian
English

emiliano.ungari@watropur.com
+39 335 771 6128



Korean
English

inhan@watropur.com
+82 10 9270 2611



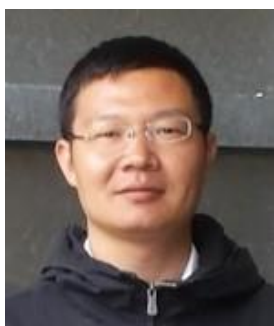
Spanish
English

tito.cely@watropur.com
+39 335 771 6128



Croatian
English

matija.klaric@watropur.com
+385 99 339 8334



Chinese
English

tony.zhang@watropur.com
+82 0109 2702611



Hungarian

csaba.balics@bonotec.hu
+36 30399 3135

Switzerland, Plating shop



0,1 tH₂O/d



Switzerland, Municipality



1,5 tH₂O/d



Germany, Tannery



2,4 tH₂O/d



Canada, Bacteria



1.5 tH₂O/d

Austria, Municipality



7,5 tH₂O/d



South Korea, Municipality



144 tH₂O/d



China, Municipality



12 tH₂O/d



France, Municipality



7,5 tH₂O/d



Russia, Municipality



30 tH₂O/d



Italy, Tanc cleaning



9 tH₂O/d



Malaysia, Oil refinery



48 tH₂O/day



Austria, Dairy



12 tH₂O/d



Italy, Pharma



4,5 tH₂O/d



France, Municipality



6 tH₂O/d



Norway, Aquaculture



12 tH₂O/d



Denmark, Hospital



1,5 tH₂O/d



Slovakia, Wire industry

1,5 tH₂O/d



Italy, Municipality

9 tH₂O/d



China, Cruise Vessel

3 tH₂O/d



Sri Lanka, Textile

2,4 tH₂O/d



Inlet % dried solids	Products	Outlet % dried solids	Part
2-8	Liquid-Dryer Screw-Press integrated in Belt-Dryer	90	0
2-8	Press-Dryer Screw-Press above Belt-Dryer	90	1
20-40	Bunker-Dryer Centrifuge, Bunker, Conveyor, Belt-Dryer	90	2
25-45	Container-Dryer Filter press, Drying-Container	90	3
30-50	Skip-Dryer Filter press, mobile Drying-Skip	90	4
Transport, Erection, Commissioning, Supervising			5

Products	page	Part
	13	0
	14-27	1
	28-47	2
	48-53	3
	54-60	4
Transport, Erection, Commissioning, Supervising	61-72	

	page	Part
Products		
Liquid-Dryer Municipal WWTP, Hospital, Hotel, Cruise vessel, Food and beverage, Surface drainage, Aquaculture, Bacteria	13	0
Press-Dryer Dairy, Distillery, Oil refinery, Pet food, Municipal WWTP, Slaughterhouse, Brewery, Nuclear	14-27	1
Bunker-Dryer Chemical- Pharmaceutical- and Cosmetic industry, Recycling industry, Food and beverage industry, Cellulose, Petrol	28-47	2
Container-Dryer Tannery, Wire manufacturer, Railway and aircraft industry, Automotive industry, Foundry, Decarbonisation, Desalination	48-53	3
Skip-Dryer Galvanizing, PCB, Textile, Pressing, Precious metals, Anodizing, Refractory, Arms, Facades, Polishing	54-60	4
Transport, Erection, Commissioning, Supervising	61-72	

Liquid-Dryer 00

WATROMAT® Liquid-Dryer

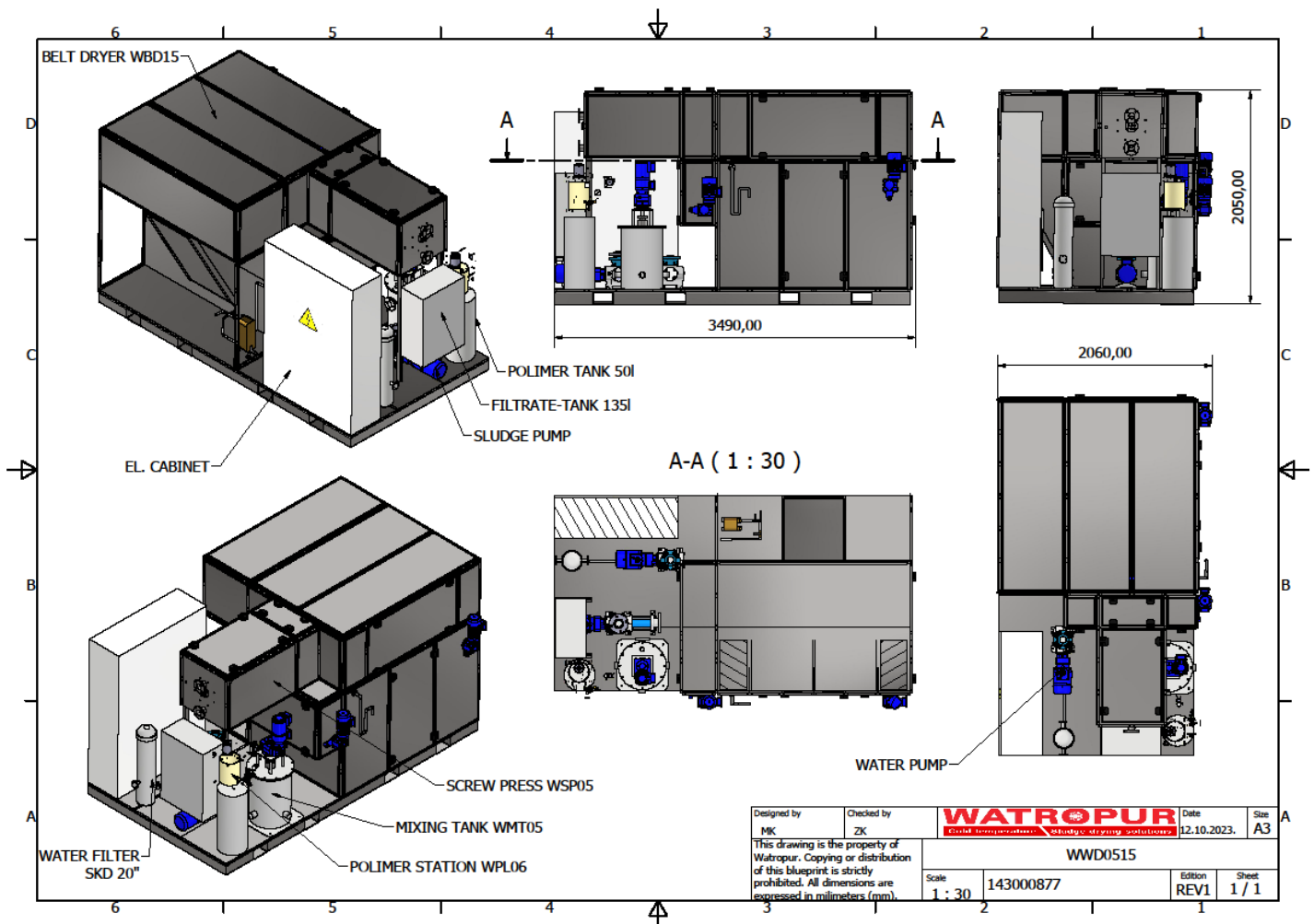
Liquid-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 2 % dried solids, outlet 90 % dried solids, drying temperature 30°C/86°F, noise level <75dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral or collecting conveyor (230XXXXXX). Include screw press, liquid Polymer preparation unit, belt-dryer, sludge and Polymer pumps and flow meters, and piping between all components. Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signaling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc Liquid-Dryer with control cabinet
Not included Collecting spiral (sludge outlet)



	type	WLD0515
000100104	SS316 wet / SS304 dry sludge	€ 197'262
Dried solids throughput Screw-Press	t/day	0,5
Water removal Belt-Dryer at 5-40°C environment	t/day	1,5
Electric power consumption	kWh	25
Cooling water >3 Bar (consumption at 24°C)	m3/h	0,5
Length X	m	3,5
Width Y	m	2
Height Z	m	2
Weight empty	kg	2800
Weight full	kg	3100



Press-Dryer

Page Part



16

10



21

11



24

12



25

13

Press-Dryer

16

10

**Screw-Press
Platform**

21

11

Polymer unit

24

12

Pump
Thickener, ISO Container

25

13

Press-Dryer 10

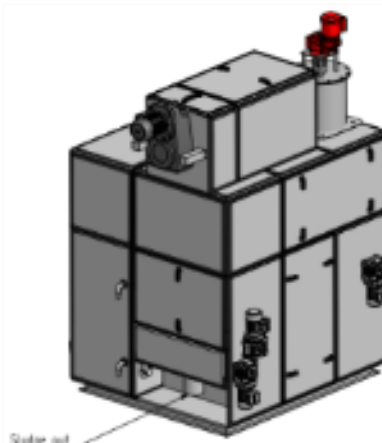
WATROMAT® Press-Dryer

Press-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 2 % dried solids, outlet 90 % dried solids, drying temperature 30° C/86° F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 50 l/min (>6 Bar), noise level <75dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral or collecting conveyor (230XXXXXX).

Delivery 1 pc Screw-Press, 1 pc mixing tank, 1 pc pressure transmitter,
1 pc Polymer unit liquid, 1 pc sludge pump, 2 pcs flow meters,
1 pc Belt-Dryer SS304 with control cabinet (for all)

Not included Outlet collecting spiral or conveyor, platform to hold screw press, piping

100100104	SS316	type	WPD0508
		€	262451
Dried solids throughput Screw-Press	t/day		0.3 - 2
Water removal Belt-Dryer at 5-40° C environment	t/day		0.8
Electric power consumption	kWh		14.1
Cooling water >3 Bar (consumption at 24°C)	m ³ /h		0.3
Length X	m		2
Width Y	m		2
Height Z	m		2.7
Weight empty	kg		2200
Weight full	kg		2500



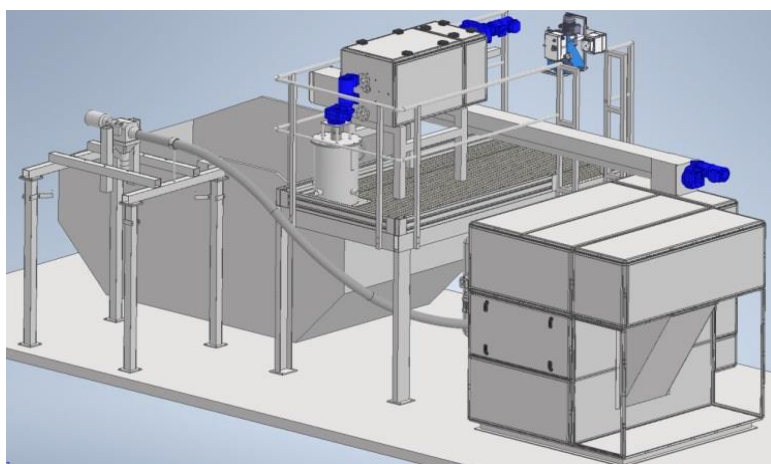
WATROMAT® Press-Dryer

Press-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 2 % dried solids, outlet 90 % dried solids, drying temperature 30° C/86° F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 50 l/min (>6 Bar), noise level <75dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral or collecting conveyor (230XXXXXX).

Delivery 1 pc Screw-Press, 1 pc mixing tank, 1 pc pressure transmitter,
1 pc Polymer unit liquid, 1 pc sludge pump, 2 pcs flow meters,
1 pc Belt-Dryer SS304 with collecting spiral, 1 pc control cabinet

Not included Outlet collecting spiral or conveyor, platform to hold screw press, Piping, bagging point

100100104	SS316	type	WPD0515
		€	317097
Dried solids throughput Screw-Press	t/day		0.5
Water removal Belt-Dryer at 5-40° C environment	t/day		1.5
Electric power consumption	kWh		23
Cooling water >3 Bar (consumption at 24°C)	m ³ /h		0.5
Length X	m		2.2
Width Y	m		2
Height Z	m		2.7
Weight empty	kg		3100
Weight full	kg		3600

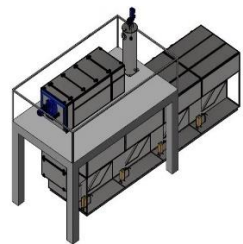


Press-Dryer 10

WATROMAT® Press-Dryer

Press-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 2 % dried solids, outlet 90 % dried solids, drying temperature 30° C/86°F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 50 l/min (>6 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral or collecting conveyor (230XXXXXX).

- Delivery** 1 pc Screw-Press, 1 pc mixing tank, 1 pc pressure transmitter,
1 pc Polymer unit liquid, 1 pc sludge pump, 2 pcs flow meters,
1 pc Belt-Dryer SS304, 1 pc control cabinet
- Not included** Outlet collecting spiral or conveyor, platform to hold screw press,
piping, bagging points



	type	WPD1515	WPD1530	WPD1545	WPD1560	WPD1575	WPD1590
100100204	SS316	353192	436797	528132	614981	703376	791688
Dried solids throughput Screw-Press	t/day	1.5					
Water removal Belt-Dryer at 5-40 °C environment	t/day	1.5	3	4.5	6	7.5	9
Electric power consumption	kWh	23	43	63	83	102	124
Cooling water >3 Bar (consumption at 24°C)	m3/h	0.5	1	1.5	2	2.5	3
Length X	m	2.2	4.1	6	7.9	9.8	11.6
Width Y	m	2					
Height Z	m	3					
Weight empty	kg	3400	4200	5000	6000	6700	7500
Weight full	kg	3900	5100	6400	8100	9300	9200



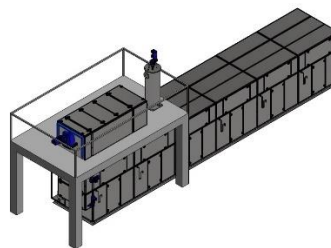
Press-Dryer 10

WATROMAT® Press-Dryer

Press-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 2 % dried solids, outlet 90 % dried solids, drying temperature 30° C/86°F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 50 l/min (>6 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral or collecting conveyor (230XXXXXX).

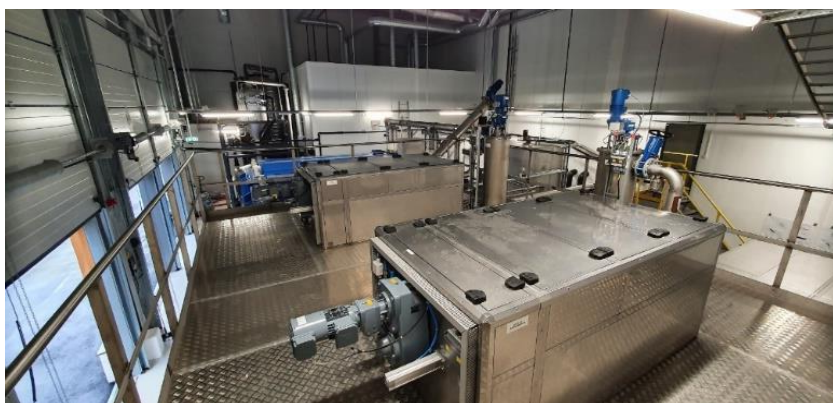
Delivery 1 pc Screw-Press, 1 pc mixing tank, 1 pc pressure transmitter,
1 pc Polymer unit liquid, 1 pc sludge pump, 2 pcs flow meters,
1 pc Belt-Dryer SS304, 1 pc control cabinet

Not included Outlet collecting spiral or conveyor, platform to hold screw press, piping



	type	WPD2560	WPD2575	WPD2590	WPD25105	WPD25120
100100304	SS316	660836	749232	837544	925853	1008321
Dried solids throughput Screw-Press	t/day			2.5		
Water removal Belt-Dryer at 5-40 °C environment	t/day	6.0	7.5	9.0	10.5	12.0
Electric power consumption	kWh	83	103	125	148	172
Cooling water >3 Bar (consumption at 24°C)	m ³ /h	2	2.5	3	3.5	4
Length X	m	7.9	9.8	11.6	13.5	15.4
Width Y	m			2		
Height Z	m			3.3		
Weight empty	kg	6200	7000	7800	8600	9300
Weight full	kg	8300	9500	13100	14800	15500

	type	WPD25120D	WPD25150D	WPD25180D	WPD25210D	WPD25240D
100100304	SS316	1092808	1258936	1451279	1697369	1811864
Dried solids throughput Screw-Press	t/day			2.5		
Water removal Belt-Dryer at 5-40 °C environment	t/day	2x6.0	2x7.5	2x9.0	2x10.5	2x12.0
Electric power consumption	kWh	2x83	2x104	2x125	2x146	2x177
Cooling water >3 Bar (consumption at 24°C)	m ³ /h	2x4	2x2.25	2x3	2x3.5	2x4
Length X	m	7.9	9.5	11.7	13.6	15.4
Width Y	m			2		
Height Z	m			5.5		
Weight empty	kg	8800	9600	12100	14500	15800
Weight full	kg	15000	16800	17400	11940	21400



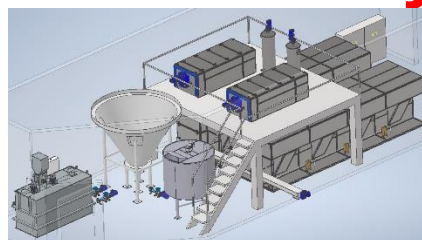
Press-Dryer 10

WATROMAT® Press-Dryer

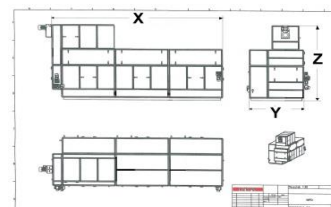
Press-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 2 % dried solids, outlet 90 % dried solids, drying temperature 30°C/86°F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 50 l/min (>6 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral or collecting conveyor (230XXXXXX).

Delivery 1 pc Screw-Press, 1 pc mixing tank, 1 pc pressure transmitter,
1 pc Polymer unit liquid, 1 pc sludge pump, 2 pcs flow meters,
1 pc Belt-Dryer SS304, 1 pc control cabinet

Not included Outlet collecting spiral or conveyor, platform to hold screw press and or upper dryer,
piping, dried solids sensor



	type	WPD5090	WPD50105	WPD50120
100100404	SS316	927639	1015949	1098163
Dried solids throughput Screw-Press	t/day		5.0	
Water removal Belt-Dryer at 5-40 °C environment	t/day	9.0	10.5	12.0
Electric power consumption	kWh	127	151	177
Cooling water >3 Bar (consumption at 24°C)	m ³ /h	2	2.5	3
Length X	m	11.6	13.5	15.4
Width Y	m		1.9	
Height Z	m		3.7	
Weight empty	kg	10900	11800	12750
Weight full	kg	14900	15000	15900



	type	WPD50120D	WPD50150D	WPD50180D	WPD50210D	WPD50240D
100100404	SS316	1182904	1349031	1541374	1787464	1901959
Dried solids throughput Screw-Press	t/day			5.0		
Water removal Belt-Dryer at 5-40 °C environment	t/day	2x6.0	2x7.5	2x9.0	2x10.5	2x12.0
Electric power consumption	kWh	2x83	2x104	2x125	2x146	2x164
Cooling water >3 Bar (consumption at 24°C)	m ³ /h	2x4	2x2.25	2x3	2x3.5	2x4
Length X	m	7.9	9.5	11.7	13.6	15.4
Width Y	m			2		
Height Z	m			6		
Weight empty	kg	9600	12100	14500	15800	17500
Weight full	kg	16800	17400	11940	21400	23200

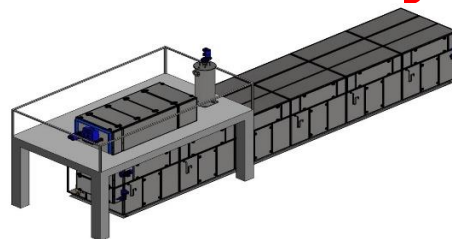


Press-Dryer 10

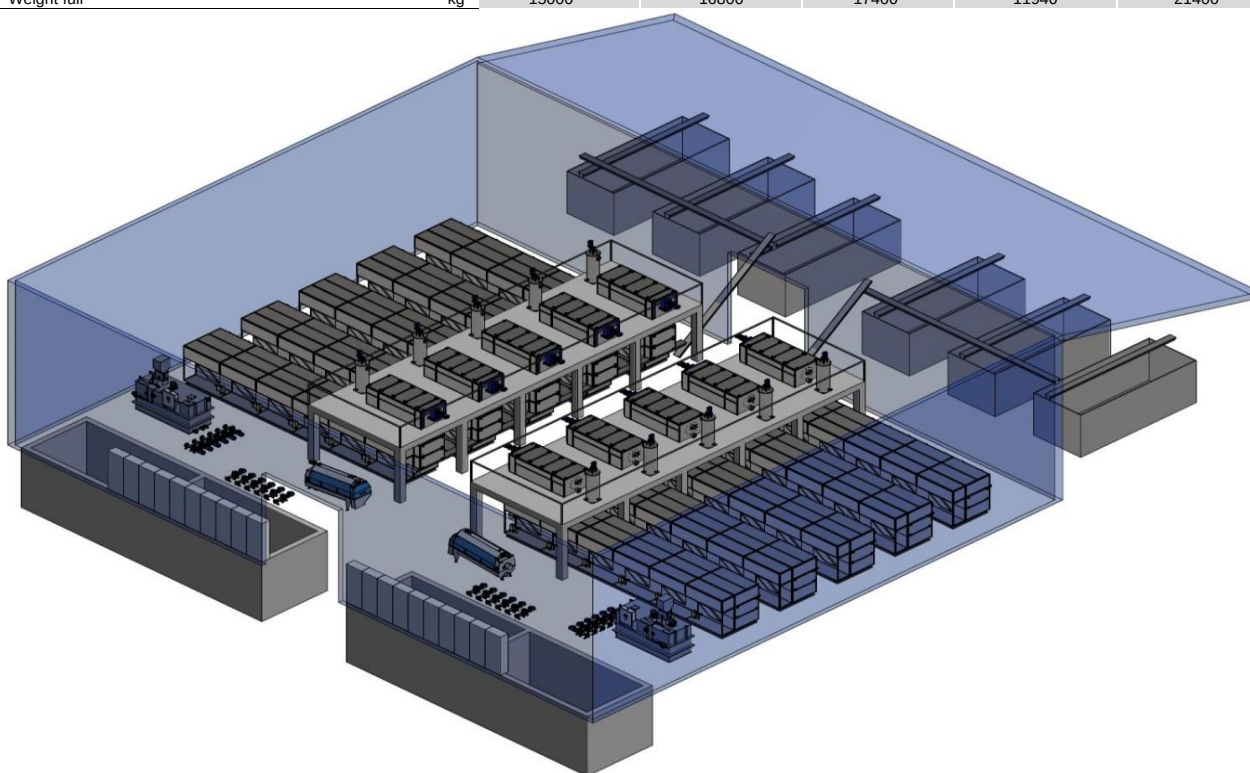
WATROMAT® Press-Dryer

Press-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 2 % dried solids, outlet 90 % dried solids, drying temperature 30° C/86° F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 50 l/min (>6 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral or collecting conveyor (230XXXXXX).

Delivery 1 pc Screw-Press, 1 pc mixing tank, 1 pc pressure transmitter,
1 pc Polymer unit powder, 2 pc pumps, 2 pcs flow meters,
2 pc Belt-Dryer SS304, 1 pc control cabinet
Not included Outlet collecting spiral or conveyor, platform to hold screw press and or upper dryer,
piping, dried solids sensor



	type	WPD75120D	WPD75150D	WPD75180D	WPD75210D	WPD75240D
100100504	SS316	1342533	1508661	1694809	1940899	2055394
Dried solids throughput Screw-Press	t/day			7.5		
Water removal Belt-Dryer at 5-40 °C environment	t/day	2x6.0	2x7.5	2x9.0	2x10.5	2x12.0
Electric power consumption	kWh	2x83	2x104	2x125	2x146	2x177
Cooling water >3 Bar (consumption at 24°C)	m ³ /h	2x4	2x2.25	2x3	2x3.5	2x4
Length X	m	7.9	9.5	11.7	13.6	15.4
Width Y	m			2		
Height Z	m			7.5		
Weight empty	kg	8800	9600	12100	14500	15800
Weight full	kg	15000	16800	17400	11940	21400



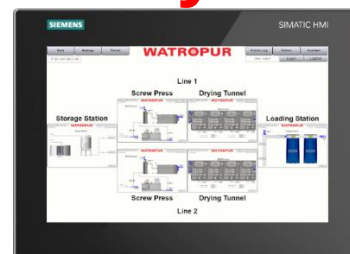
Control cabinet Press-Dryer 10

WATROMAT® Control cabinet Press-Dryer

Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signaling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc control cabinet Press-Dryer
Not included: Control cabinet belt dryer



	type	WELWPD05	WELWPD15	WELWPD25	WELWPD50	WELWPD75
110100900	Polyester	43308	48210	53850	59145	66267
Length X	mm			800		
Width Y	mm			400		
Height Z	mm			2100		
Weight	kg	56	64	69	75	85

Screw-Press 11

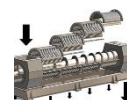
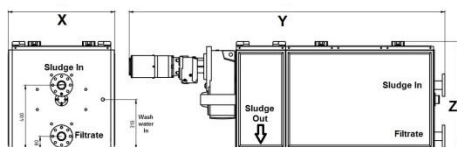
WATROMAT® Screw-Press

Screw-Press for sludge from industrial or municipal wastewater treatment plants, inlet 2-8 % dried solids, outlet organic sludge 20-35 % dried solids, inorganic sludge 20-40 % dried solids, sludge pH value 6.0-9.0.

Delivery 1 pc Screw-Press
Not included Control cabinet Screw-Press 1101009000
Mixing-Tank 110200100, Pressure transmitter 110200200, Polymer unit 120100XXX
Polymer pump and flow meter 120XXXXXX
Sludge pump and flow meter 130XXXXXX
Dried solids sensor 130100300
Piping



	type	WSP05	WSP15	WSP25	WSP50	WSP75
110100104	SS316	66187	87150	118350	188346	246789
Dried solids (standard) throughput	t/day	0.5	1.5	2.5	5.0	7.5
Dried solids organic (biological) throughput	t/day	0.3 - 1.4	0.6 - 2.8	1.2 - 5.6	2.4 - 8.4	3.6 - 13
Dried solids inorganic (chemical) throughput	t/day	0.4 - 2	1.3 - 4	2.2 - 8	4.6 - 12	7.0 - 16
Electric power	kWh	0.25	0.25	0.75	1.5	4
Wash water	m3/day	0.3	0.6	1.2	1.8	3.6
Compressed air >6 Bar	l/min	25		50		
Diameter inlet sludge	mm	50	100		150	
Diameter outlet filtrate	mm	50	100		150	
Length Y	mm	1895	3065	3447	4610	6015
Width X	mm	670	980	1290		
Height Z	mm	645	980		1265	
Weight empty	kg	500	1400	2200	4200	8600
Weight full	kg	600	1600	2600	4800	9300



	type	WHR250	WHR400	WHR500	WHR700	WHR800
110100205	Sealing Screw-Press	2641	3514	4282	6194	9486
Screw-Press	type	WSP05	WSP15	WSP25	WSP50	WSP75
Sealing half ring	Pcs/set	16				
Diameter	mm	250	400	500	700	900
Weight	kg/Set	3	5	7	10	15



	type	Wnozzle				
110100305	Nozzle washing water	31				
Screw press	type	WSP05	WSP15	WSP25	WSP50	WSP75
Thread (outside)	inch	1/4				
Quantity	Pcs	20	44	70	90	130



	type	Wvalve
110100405	Wash water valve	285
Coil voltage	VDC	24

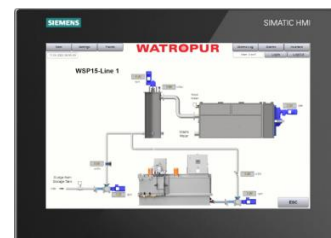
Control cabinet Screw-Press 11

WATROMAT® Control cabinet Screw-Press

Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signaling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc control cabinet
Not included:



	type	WELWSP05	WELWSP15	WELWSP25	WELWSP50	WELWSP75
110100900	Polyester	19016	20213	21490	22807	24284
Length X	mm	600		800		
Width Y	mm	300		400		
Height Z	mm	800		2100		
Weight	kg	30	35	40	75	85

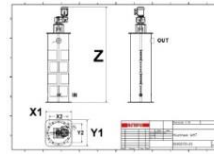


Mixing-Tank 11

WATROMAT® Mixing-Tank

Mixing tank for gentle mixing from sludge with polymer solution, closed pressure tank with baffles, agitator, nozzle pressure transmitter

Delivery 1 pc Mixing-Tank
Not included Pressure transmitter 110200200



	type		WMT05	WMT15	WMT25	WMT50	WMT75
110200104	SS316	€	11360	19779	25908	33488	50498
Volume	liter		50	150	250	850	1600
Electric power consumption	kWh		0.37	0.37	0.37	0.55	
Diameter inlet (down)	mm		4x 50 (2" thread)		4x100 (4" thread)		
Diameter outlet (up)	mm		50		100		150
Length X1	mm			500		900	1000
Width Y1	mm			500		900	1000
Height Z	mm		1237	1930	2094	2213	2636
Weight empty	kg		100	200	300	480	600
Weight full	kg		250	450	800	1330	2100



	type		WPT1
110200205	Pressure transmitter	€	2101
Measuring range	mA		4-20



	type		Wgraphite
110200305	Graphite seal	€/m	46

Screw-Press skid 11

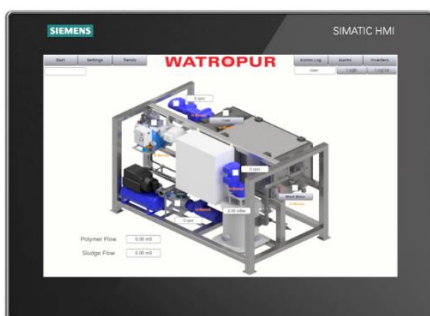
WATROMAT® Screw-Press skid

Screw-Press skid for sludge from industrial or municipal wastewater treatment plants, inlet 2-8 % dried solids, outlet organic sludge 20-35 % dried solids, inorganic sludge 20-50 % dried solids, sludge pH value 6.0-9.0.

Delivery 1 pc Screw-Press skid with Mixing-Tank, Polymer liquid unit incl. peristaltic pump, flow meter Polymer, sludge pump, flow meter sludge, control cabinet
Not included



	type		WSP05skid
110300103	SS316	€	147969
Dried solids throughput	t/day		0.5
Electric power consumption	kWh		1.7
Polymer liquid (50 % active)	l/hour		0.6
Water for Polymer unit	l/hour		180
Water for washing Screw-Press filter	m3/day		0.3
Length X	m		2
Width Y	m		1.2
Height Z	m		1.6
Weight empty	kg		600
Weight full	kg		750

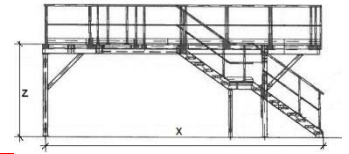


Platform 11

WATROMAT® Platform

Platform to hold and maintain screw press and mixing tank, with stair 800 mm double sided railing, and grating, whole construction is screwed in individual segments

Delivery 1 pc Platform (individual segments)
Not included Assembling on site



		type	WSP05	WSP15	WSP25	WSP50	WSP75
110400102	Hot galvanized	€	35080	46904	60751	77997	85663
110400103	SS304	€	55490	74194	96097	123376	135504
Weight Screw-Press		t	1	2	3	5	10
Weight Mixing-Tank		t	0.2	0.5	0.8	1.5	2.2
Length X		mm	6090	6710	7330	7950	8570
Width Y		mm	2770	3080		3390	
Height Z		mm		2500		2800	
Weight platform		T	2.2	2.6	3.2	3.6	4.1

		type	2x WSP05	2x WSP15	2x WSP25	2x WSP50	2x WSP75
110400202	Hot galvanized	€	52621	70357	91127	116329	128495
110400203	SS304	€	83237	111291	144146	184012	203255
Weight Screw-Press		t	2x1	2x2	2x3	2x5	2x10
Weight Mixing-Tank		t	2x0.2	2x0.5	2x0.8	2x1.5	2x2.2
Length X		mm	6090	6710	7330	7950	8570
Width Y		mm	4390	5010		5630	
Height Z		mm		2500		2800	
Weight platform		t	3.4	4.2	5.5	6.2	7.2

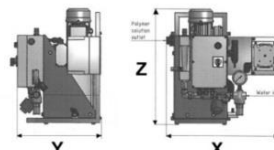


Polymer unit 12

WATROMAT® Polymer liquid

Polymer solution preparation and dosing unit for Emulsion Polymer, inlet Emulsion Polymer 50 % active, outlet 0.1 % Polymer-water solution, peristaltic dosing pump for polymer concentrate, mixing chamber with agitator, polymer solution feed with water network pressure, control cabinet

Delivery 1 pc Polymer liquid unit included peristaltic dosing pump
Not included

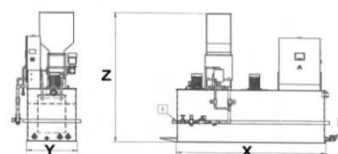


	type	WPL6	WPL12	WPL30	WPL135
120100105	SS304, Polypropylen	24270	27836	32423	38984
Screw-Press	type	WSP05	WSP15	WSP25	WSP50
Liquid Polymer (50 % active)	liter/hour	0.6	1.2	3.0	13.5
Water (>3 Bar)	liter/hour	180	300	600	900
Electric power consumption	kWh		0.1		0.25
Length X	mm		520		637
Width Y	mm		302		504
Height Z	mm		534		588
Weight	kg		25		63

WATROMAT® Polymer powder

Polymer solution preparation unit for powder Polymer, inlet Powder 100 % active, outlet 0.1 % Polymer water solution, three chambers for dissolving, maturation and storage, WPP1 only two chambers for dissolving and storage, dissolving and maturation chamber with agitators, hopper for powder storage, control cabinet.

Delivery 1 pc Polymer unit, 1 pc hopper
Not included Pump



	type	WPP1	WPP2	WPP4	WPP8	WPP16
120100205	Polypropylen	58297	67503	72795	94863	105685
Screw press	type	WSP05	WSP15	WSP25	WSP50	WSP75
Powder (100 % active)	kg/hour	0.8	2	4	8	16
Water clean, >3 Bar	liter/hour	400	1000	2000	4000	8000
Electric power consumption	kWh	1.5	2.6	3.2	5.0	9.5
Volume hopper	liter	50		100		
Length X	mm	1638	1890	3237	2190	2940
Width Y	mm	1351	862	1148	1062	1062
Height Z	mm	2030	2119	2119	3105	3305
Weight empty	kg	250	400	500	600	1200
Weight full	kg	400	1000	1200	1500	2400



Pump (Polymer) 13

WATROMAT® Pump (Polymer)

Pump for Polymer solution with 0.1 % (max. 0.2 %) active Polymer.

Delivery 1 pc pump
Not included



	type	WPU0	WPU2	WPU4	WPU10	WPU20
130100100	Pump (Polymer) €	5808	7594	8272	9332	12421
Screw press	type	WSP05	WSP15	WSP25	WSP50	WSP75
Flow Polymer solution	m3/hour	0.5	2	4	10	20
Electric power consumption	kWh	0.55	0.75	1.5	2.2	4
Length X	mm	1030	1030	1665	1665	2110
Width Y	mm	240	240	270	270	350
Height Z	mm	245	245	245	304	304
Weight	kg	48	53	58	70	85

	type	WPU0	WPU2	WPU4	WPU10	WPU20
130100105	Stator (nitrile PVC) €	1151	1278	1451	1657	2396

	type	WFM15	WFM20	WFM25	WFM40	WFM50
130100205	Flow meter (Polymer) €	2015	3442	4113	4366	4605
Flow	m3/hour	0.5	2	4	10	20
Diameter	mm	15	20	25	40	50

	type	Winjector	Winjector
130100305	Polymer-injector €	4898	7520
Flow	m3/hour	10	20
Diameter	mm	50	100



Pump (sludge) 13

WATROMAT® Pump (sludge)

Pump for sludge with approx. 2 % dried solids, need macerator in front.

Delivery 1 pc pump
Not included



	type	WPU2	WPU4	WPU10	WPU20	WPU30
130200100	Pump (sludge) €	7594	8272	9332	12421	18097
Screw press	type	WSP05	WSP15	WSP25	WSP50	WSP75
Flow sludge	m3/hour	2	4	10	20	30
Electric power consumption	kWh	0.55	1.5	2.2	4	7.5
Length X	mm	1030	1665	1665	2110	2450
Width Y	mm	240	270	270	350	350
Height Z	mm	245	245	304	304	404
Weight	kg	53	58	70	85	120

	type	WPU2	WPU4	WPU10	WPU20	WPU30
130200105	Stator (nitrile PVC) €	1278	1451	1657	1965	2189

	type	WFM20	WFM25	WFM40	WFM50	WFM95
130200205	Flow meter (sludge) €	3442	4113	4366	4605	5404
Flow	m3/hour	2	4	10	20	30
Diameter	mm	20	25	40	50	95

	type	WDS
130200305	Dried solids sensor €	26392
Flow	m3/hour	20-30
Diameter	mm	100



Piping 13

WATROMAT® Piping

Piping from sludge pump to mixing tank max. 10 m horizontal and max. 4 m vertical, piping from Polymer unit to mixing tank including ball back flow valve max. 5 m, piping mixing tank to screw press max. 1 m, 3 sample valves, without pipe clamps

Delivery 1 pc set (tubes, elbows, fittings, etc.)
Not included Pipe clamps



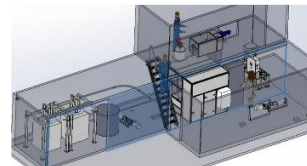
130300105	Polyvinylchlorid (PVC)	type	WTU05	WTU15	WTU25	WTU50	WTU75
		€	14784	16170	17728	19510	22770
Screw press		type	WSP05	WSP15	WSP25	WSP50	WSP75
Throughput		m3/h	2	4	10	20	30
Diameter pipe Polymer pump till mixing tank		mm	20	25		32	50
Diameter pipe sludge pump till mixing tank		mm	25	32	50	100	
Diameter pipe mixing tank till screw press		mm	50		100		150

ISO Container 13

WATROMAT® ISO Container

ISO container for housing of screw press, belt dryer and bagging unit, air-conditioned and heated, illuminated, floor and wall isolated 60 mm, roof isolated 100mm, door, window, for outdoor installation.

Delivery 1 pc ISO container assembled
Not included



130400101	Steel coated, Aluminium	type	WCO20	WCO40
		€	96660	137588
Electric power consumption		kWh	0.8	
Length X		mm	6055	12192
Width Y		mm	2435	
Height Z inside/outside		mm	2340/2591	
Weight empty		T	2.3	3.9



Thickener 13

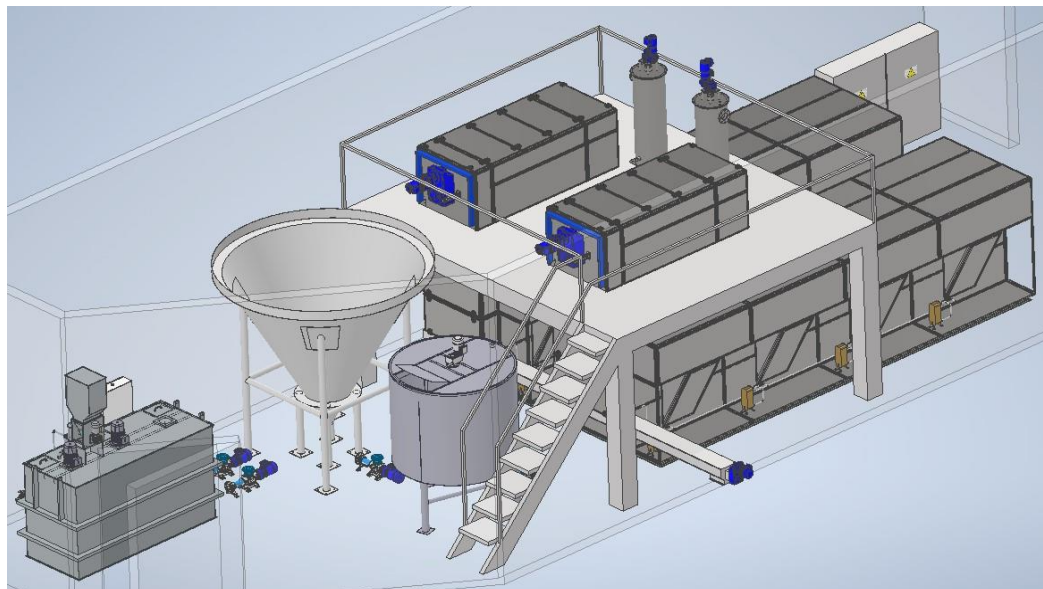
WATROMAT® Thickener

Static conical Thickener with lamellas, inlet 0.1 % dried solids, outlet 2 % dried solids.

Delivery 1 pc thickener, 1 pc sludge storage tank, 2 pneumatically valves
Not included Control cabinet



	type	WTH5	WTH10
130500104	SS316	238169	279404
Volume	m3	5	10
Electric power consumption	kWh	2.2	
Height	mm	3600	4200
Diameter	mm	3400	4000
Weight empty	t	1.6	2
Weight full	t	6.6	12



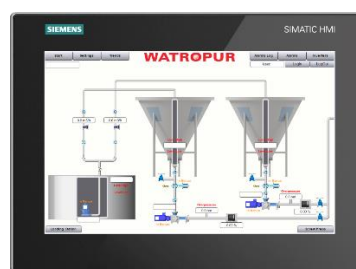
Control cabinet Thickener 13

WATROMAT® Control cabinet Thickener

Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signaling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc control cabinet
Not included



	type	WEL1WTH	WEL2WTH
130500900	Polyester	13715	20664
Thickener	pc	1	2
Length X	mm	600	
Width Y	mm	300	
Height Z	mm	800	
Weight	kg	35	45

Bunker-Dryer

Page Part

	30	20
	33	21
	40	22
	42	23

Bunker-Dryer

30

20

Belt-Dryer

33

21

Bunker, Conveyor

40

22

Dry sludge loading
Flex-Conveyor, Bagging

42

23

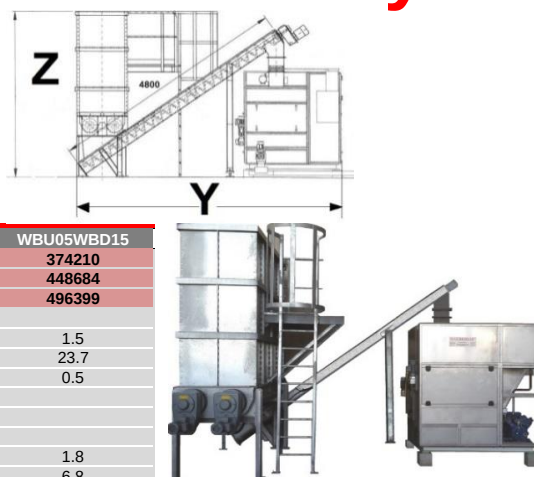
Bunker-Dryer 20

WATROMAT® Bunker-Dryer

Bunker-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 20-60 % dried solids, outlet 90 % dried solids, drying temperature 30 °C/86 °F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0.

Delivery 1 pc Bunker with 2 pcs discharge conveyors, 1 pc increasing conveyor,
1 pc control cabinet Bunker 200100900, 1 pc Belt-Dryer SS304,
1 pc Collecting-Spiral (only type WBU05WBD04 and WBU05WBD08)

Not included Collecting-Conveyor 230200XXX (only type WBU05WBD15)



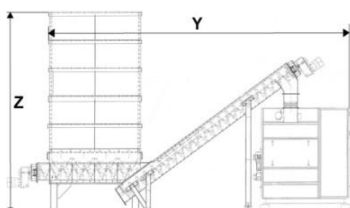
	type	WBU05WBD04	WBU05WBD08	WBU05WBD15
200100102	Hot galvanized	€ 307717	€ 327983	€ 374210
200100103	SS304	€ 382191	€ 402457	€ 448684
200100104	SS316	€ 429906	€ 450172	€ 496399
Bunker volume geometric	m ³	5	5	5
Water removal at 5-40 °C environment	t/day	0.4	0.8	1.5
Electric power consumption	kWh	10.7	15.7	23.7
Cooling water >3 Bar (24°C)	m ³ /h	0.2	0.3	0.5
Length X	m	3.5	3.5	3.5
Width Y	m	6	6	6
Height Z	m	3.4	3.4	3.4
Weight empty	t	1.5	1.7	1.8
Weight full	t	6.5	6.7	6.8

Bunker-Dryer 20

WATROMAT® Bunker-Dryer

Bunker-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 20-60 % dried solids, outlet 90 % dried solids, drying temperature 30 °C/86 °F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral (230100XXX) or collecting conveyor (230500XXX).

Delivery 1 pc bunker with 5 pcs discharge conveyors, 1 collecting conveyor
1 pc increasing conveyor, 1 pc control cabinet bunker, 1 pc belt dryer SS304
Not included Collecting conveyor or spiral



	type	WBU10WBD15	WBU10WBD30	WBU10WBD45
200100202	Hot galvanized	€ 413313	€ 496918	€ 588000
200100203	SS304	€ 505523	€ 589128	€ 680210
200100204	SS316	€ 623410	€ 707015	€ 800072
Bunker volume geometric	m ³	10	10	10
Water removal at 5-40 °C environment	t/day	1.5	3	4.5
Electric power consumption	kWh	27.8	47.8	67.8
Cooling water >3 Bar (24°C)	m ³ /h	0.5	1	1.5
Length X	m	4.6	4.6	4.6
Width Y	m	6	6	6
Height Z	m	2.6	2.6	2.6
Weight empty	t	7	8	9
Weight full	t	17	18	19



Bunker-Dryer 20

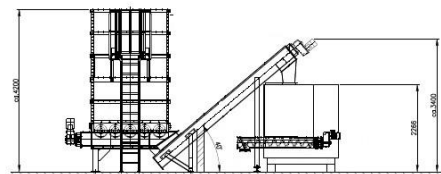
WATROMAT® Bunker-Dryer

Bunker-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet 20-60 % dried solids, outlet 90 % dried solids, drying temperature 30 °C/86 °F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting spiral (230100XXX) or collecting conveyor (230500XXX).

Delivery 1 pc Bunker with 5 pcs Discharge-Conveyors, 1 Collecting-Conveyor
1 pc Increasing-Conveyor, 1 pc control cabinet Bunker, 1 pc Belt-Dryer SS304

Not included Collecting conveyor or spiral

	type	WBU18WBD30	WBU18WBD45	WBU18WBD60
200100302	Hot galvanized	€ 507263	€ 598345	€ 685446
200100303	SS304	€ 603674	€ 694756	€ 781858
200100304	SS316	€ 727651	€ 818733	€ 905835
Bunker volume geometric	m ³	18	18	18
Water removal at 5-40 °C environment	t/day	3	4.5	6
Electric power consumption	kWh	47.8	67.8	86.8
Cooling water >3 Bar (24 °C)	m ³ /h	1	1.5	2
Length X	m	5.9	5.9	7.9
Width Y	m	6	6	6
Height Z	m	3.2	3.2	3.2
Weight empty	t	8	9	10
Weight full	t	23	24	25



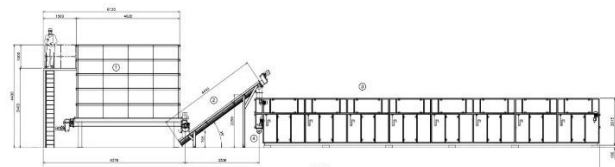
Bunker-Dryer 20

WATROMAT® Bunker-Dryer

Bunker-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet minimum 20 % dried solids, outlet 90 % dried solids, drying temperature 30 °C/86 °F, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting conveyor or spiral (230100XXX).

Delivery 1 pc Bunker with 5 pcs Discharge-Conveyors, 1 Collecting-Conveyor
1 pc Increasing-Conveyor, 1 pc control cabinet Bunker, 1 pc Belt-Dryer SS304

Not included Collecting conveyor or spiral



	type	WBU25WBD60	WBU25WBD75	WBU25WBD90	WBU25WBD105	WBU25WBD120
200100402	Hot galvanized	€ 802651	€ 891047	€ 979359	€ 1067668	€ 1149883
200100403	SS304	€ 820657	€ 925475	€ 997365	€ 1085674	€ 1167889
200100404	SS316	€ 961660	€ 1050056	€ 1138367	€ 1226677	€ 1308891
Bunker volume geometric	m ³	25	25	25	25	25
Water removal at 5-40 °C environment	t/day	6	7	9	10.5	12
Electric power consumption	kWh	88	108	128	148	168
Cooling water >3 Bar (24 °C)	m ³ /h	2	2.5	3	3.5	4
Length X	m	7.9	9.5	11.7	13.6	15.4
Width Y	m	6	6	6	6	6
Height Z	m	4.2	4.2	4.2	4.2	4.2
Weight empty	t	10	11	12	13	14
Weight full	t	35	36	37	38	39

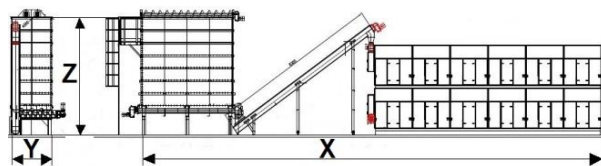
Bunker-Dryer 20

WATROMAT® Bunker-Dryer

Bunker-Dryer for sludge from industrial or municipal wastewater treatment plants, inlet minimum 20 % dried solids, outlet 90 % dried solids, drying temperature 30°C/86°F, bunker next to dryer, specific electric power consumption dryer: 333 W/kg H₂O, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting conveyor or spiral (230100XXX).

Delivery 1 pc Bunker with 5 pcs Discharge-Conveyors, 1 pc Collecting-Conveyor
1 pc Increasing-Belt, 1 pc control cabinet Bunker, 1 pc Belt-Dryer SS314

Not included Collecting conveyor or spiral, Platform to hold upper dryer
Sludge duct connection between upper and lower dryer



	type	WBU35WBD120D	WBU35WBD150D	WBU35WBD180D	WBU35WBD210D	WBU35WBD240D
200100502	Hot galvanized	€ 1239500	€ 1405627	€ 1597970	€ 1844060	€ 1971750
200100503	SS304	€ 1389233	€ 1555360	€ 1761525	€ 1993793	€ 2108288
200100504	SS316	€ 1590525	€ 1756652	€ 1948995	€ 1616277	€ 2309580
Bunker volume geometric	m ³	30				
Water removal at 5-40 °C environment	t/day	2x6	2x7.5	2x9	2x10.5	2x12
Electric power consumption	kWh	2x80	2x100	2x120	2x140	2x160
Cooling water >3 Bar (24°C)	m ³ /h	2x2	2x2.5	2x3	2x3.5	2x4
Length X	m	22.9	24.9	26.8	28.7	30.6
Width Y	m	2.6				
Height Z	m	5.5				
Weight empty (WBU35)	t	21	23.3	25.1	27	28.9
Weight full	t	36	38	40	42	44



Belt-Dryer 21

WATROMAT® Belt-Dryer

Belt-Dryer for sludge from industrial or municipal waste water treatment plant, inlet minimum 20 % dried solids, outlet 90 % dried solids, sludge inlet feed continuous, 24 h/day, minimum 30 min/h, inlet sludge grain size size between 5 and 20 mm, drying temperature 30° C/86° F, specific electric power consumption 333 W/kg H₂O, bottom frame C-profile 80 mm high, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0, sludge outlet with collecting spiral (230100XXX)

Delivery 1 pc Belt-Dryer with integrated control cabinet
Not included Shredder and Rake 210200XXX at inlet of Belt-Dryer



	type		WBD04	WBD08
210100103	SS304	€	106200	126466
Water removal at 5-40 °C environment	t/day		0.4	0.8
Electric power consumption	kWh		8	13
Cooling water >3 Bar (24°C)	m ³ /h		0.2	0.3
Length X	m		1.3	1.9
Width Y	m		1.6	
Height Z	m		2.1	
Weight empty	t		0.8	1.4
Weight full	t		0.9	1.8

WATROMAT® Belt-Dryer

Belt-Dryer for sludge from industrial or municipal waste water treatment plant, inlet minimum 20 % dried solids, outlet 90 % dried solids, sludge feed continuous, 24 h/day, minimum 30 min/h, inlet sludge grain size size between 5 and 100 mm, drying temperature 30° C/86° F, specific electric power consumption 333 W/kg H₂O, shredder WSH1240.310 and rake WRA1200 included, bottom frame C-profile 80 mm high, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0, sludge outlet prepared for conveyor (230XXXXXX).

Delivery 1 pc Belt-Dryer, 1 pc control cabinet
Not included



	type		WBD15	WBD30	WBD45	WBD60
210100203	SS304	€	172693	256299	347380	434482
Water removal at 5-40 °C environment	t/day		1.5	3	4.5	6
Electric power consumption	kWh		20	40	60	80
Cooling water >3 Bar (24°C)	m ³ /h		0.5	1.0	1.5	2
Length X	m		2.2	4.2	6	7.92
Width Y	m				2	
Height Z	m				2.1	
Weight empty	t		1.4	2.4	3.6	4.1
Weight full	t		1.8	3.2	4.8	5.7



Belt-Dryer 21

WATROMAT® Belt-Dryer

Belt-Dryer for sludge from industrial or municipal waste water treatment plant, inlet minimum 20 % dried solids, outlet 90 % dried solids, sludge feed continuous, 24 h/day, minimum 30 min/h, inlet sludge grain size between 5 and 100 mm, drying temperature 30°C/86°F, specific electric power consumption 333 W/kg H₂O, shredder WSH1240.310 and rake WRA1200 included, bottom frame HEB-profile 160 mm high, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0, sludge outlet prepared for conveyor (230XXXXXX).

Delivery 1 pc Belt-Dryer, 1 pc control cabinet
Not included

	type		WBD75	WBD90	WBD105	WBD120
210100303	SS304	€	522878	611190	699499	781714
Water removal at 5-40 °C environment	t/day		7.5	9	10.5	12
Electric power consumption	kWh		100	120	140	160
Cooling water >3 Bar (24°C)	m3/h		2.5	3	3.5	4
Length X	m		9.5	11.7	13.6	15.4
Width Y	m		2			
Height Z	m		2.2			
Weight empty	t		5.1	6.7	8.3	10
Weight full	t		7.9	8.3	9.9	11.6

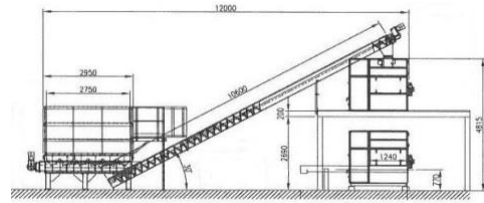


Belt-Dryer 21

WATROMAT® Belt-Dryer

Belt-Dryer for sludge from industrial or municipal waste water treatment plant, inlet minimum 20 % dried solids, outlet 90 % dried solids, sludge feed continuous, 24 h/day, minimum 30 min/h, inlet sludge grain size between 5 and 100 mm, drying temperature 30°C/86°F, specific electric power consumption 333 W/kg H₂O, shredder WSH1240.310 and two rakes WRA1200 included, bottom frame HEB-profile 160 mm high, compressed air 25 l/min (>3 Bar), noise level <85dBA, sludge pH value 6.0-9.0. Sludge outlet for collecting conveyor or spiral (230XXXXXX).

Delivery 2 pcs Belt-Dryers, 1 pc control cabinet
Not included Collecting conveyor or spiral, Platform for hold upper dryer
Sludge duct between upper and lower dryer



	type	WBD120D	WBD150D	WBD180D	WBD210D	WBD240D
210100503	SS304	6866454	1032582	1224925	1471015	1585510
Water removal at 5-40 °C environment	t/day	2x6	2x7.5	2x9	2x10.5	2x12
Electric power consumption	kWh	2x80	2x100	2x120	2x140	2x160
Cooling water >3 Bar (24°C)	m3/h	2x2	2x2.5	2x3	2x3.5	2x4
Length X	m	7.9	9.5	11.7	13.6	15.4
Width Y	m			2		
Height Z	m			4.815		
Weight empty	t	8.2	10.2	12.2	15	17
Weight full	t	10	14.2	17.4	21.6	23

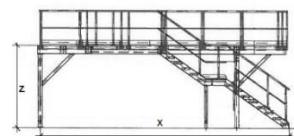


Platform 21

WATROMAT® Platform

Platform to hold and maintain upper belt dryer from belt dryer double (210500503), with stair 800 mm double sided railing, and grating, whole construction is screwed in individual segments.

Delivery 1 pc platform (individual segments)
Not included Installation on site



	type	WBD120D	WBD150D	WBD180D	WBD210D	WBD240D
210100802	Hot galvanized	65231	87219	112966	145035	159291
210100803	SS304	94585	126468	163800	210301	230972
Belt dryer	Type	WBD60	WBD75	WBD90	WBD105	WBD120
Length X	m	9.5	11.1	13.5	15.4	17.2
Width Y	m			3.3		
Height Z	m			2.9		
Weight platform	t	2.2	2.6	3.2	3.6	4.1



Control cabinet Belt-Dryer 21

WATROMAT® Control cabinet Belt-Dryer

Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signalling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc control cabinet
Not included



	type	WELDAG15
210100900	Polyester	€ 17100
Length X	mm	300
Width Y	mm	400
Height Z	mm	600
Weight	kg	41

	type	WELBD04	WELWBD08
210100900	Polyester	€ 24956	26204
Length X	mm		300
Width Y	mm		600
Height Z	mm		800
Weight	kg	41	43

	type	WELWBD15	WELWBD30	WELWBD45	WELWBD60
210100900	Steel coated	€ 29748	30846	31734	32413
Length X	mm			400	
Width Y	mm			800	
Height Z	mm			2100	
Weight	kg	120	125	130	140

	type	WELWBD75	WELWBD90	WELWBD105	WELWBD120
210100900	Steel coated	€ 33645	34639	35650	36666
Length X	mm			400	
Width Y	mm			800	
Height Z	mm			2100	
Weight	kg	145	150	155	160

	Typ	WELWBD120D	WELWBD150D	WELWBD180D	WELWBD210D	WELWBD240D
210100900	Steel coated	€ 44805	48740	52826	58271	64287
Length X	mm			400		
Width Y	mm			2x800		
Height Z	mm			2100		
Weight	kg	250	255	260	280	295

Transmitter 21

WATROMAT® Transmitter

Delivery 1 pc transmitter
Not included

	type	WODS10	WHT46C	WDS851000	WAL030
210100915	Transmitter 4-20 mA	€ 1637	566	552	512
Range		0.05 -12 m	0.05 - 3 m	0-1000 Pascal	0-30 Bar
Function		analog	1 switch	analog	analog



Shredder 21

WATROMAT® Shredder

Shredder for sludge with 20 till 40 % dried solids, installed at inlet of belt dryer 210100XXX, inlet sludge size maximum 100 mm, outlet approx. 20 mm, sludge feed continuous 24 hours/day, minimum 30 min/hour.

Delivery 1 pc Shredder
Not included



		type	WSH300.200	WSH1240.310
210200103	SS304	€	14055	20577
Used for Belt-Dryer		type	WB04-08	WBD15-WBD240
Electric power		kWh	0.37	
Capacity sludge		t/day	6	30
Length inside		mm	300	1240
Width inside		mm	200	310
Height inside		mm	300	310
Weight		kg	50	110

		type	Wsprocket
210200115	Sprocket Polyamid	€	59
Used for shredder		type	WSHXXX



Rake 21

WATROMAT® Rake

Rake with linear pneumatic drive for distribution of sludge pieces over the entire width of the belts, installed at the beginning of the belts (belt dryer 210100XXX), for sludge with minimum 20 % dried solids, sludge size maximum 25 mm, pressure air 25 l/min (>3 Bar), sludge feed continuous 24 hours/day, minimum 30 min/h, pressure air control system.

Delivery 1 pc Rake
Not included



		type	WRA900	WRA1200
210200203	SS314	€	5657	6229
Length		mm	900	1200
Weight		kg	22	26

		type	WRA900	WRA1200
210200210	Linear drive pneumatic	€	3121	7913
Length		mm	900	1200
Weight		kg	14	16

Rotary 21

WATROMAT® Rotary

Rotary for loosening of sludge layers, sludge from wastewater treatment plants with minimum 40 % dried solids.

Delivery 1 pc Rotary shaft d25mm with 36 round teeth's, 2 pcs bearings, 1 pc gearbox motor
Not included Installation



		type	WRO900	WRO1200
210200303	SS304	€	3123	3934
Belt-Dryer		type	WBD04-08	WBD15-240DD
Electric power		kWh	0.37	
Length		mm	900	1200
Weight		kg	21	25

Heat exchanger and motor 21

WATROMAT® Heat exchanger and motor

Heat exchanger and motor for belt dryer. Lifetime spare part for belt dryer. Evaporator for cooling of drying air (condensate water), condenser for heating of drying air. External condenser for cooling of refrigerant with water.

Delivery 1 pc
Not included

		type	EVAP04	EVAP08	EVAP15
210300103	Evaporator SS304	€	7778	10879	16112
210300104	Evaporator SS316	€	9151	12799	19448
Belt-Dryer		type	WBD04	WBD08	WBD15-240D
Length X		mm	975	1680	1810
Width Y		mm	310	310	300
Height Z		mm	540	420	620
Weight		kg	54	71	90



		type	COND04	COND08	COND15
210300203	Condenser SS304	€	8445	13011	17778
210300204	Condenser SS316	€	9935	16601	23278
Belt-Dryer		type	WBD04	WBD08	WBD15-240D
Length X		mm	975	1680	1730
Width Y		mm	370	360	350
Height Z		mm	540	420	620
Weight		kg	69	85	113



		type	EXTC04	EXTC08	EXTC15
210300213	External condenser	€	2260	3588	6026
Belt-Dryer		type	WBD04	WBD08	WBD15-240D
Length X		mm	76	98	122
Width Y		mm	90	90	124
Height Z		mm	464	464	335
Weight		kg	6	7.5	8



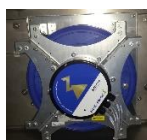
		type	COMP04	COMP08	COMP15
210300301	Cooling compressor	€	5924	11442	19074
Belt-Dryer		type	WBD04	WBD08	WBD15-240D
Length X		mm	225	280	415
Width Y		mm	225	280	750
Height Z		mm	510	552	445
Weight		kg	39	65	211



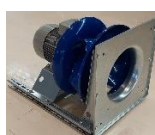
		type	GM37	GM150
210300310	Gear motor (belt)	€	1278	2193
Belt-Dryer		type	WBD04-60	WBD75-240D
Electric power		kW	0.37	1.5
Length X		mm	322	347
Width Y		mm	148	215
Height Z		mm	194	217
Weight		kg	11	24



		type	VENTD15
210300405	Ventilator ECblue	€	7860
Belt-Dryer		type	WBD04-240D
Length X		mm	380
Width Y		mm	550
Height Z		mm	550
Weight		kg	36



		type	VENT15
210300405	Ventilator classic incl. FI	€	6868
Belt-Dryer		type	WBD04-240D
Length X		mm	380
Width Y		mm	550
Height Z		mm	550
Weight		kg	36



		type	Dual Hinge
210300505	Dual Hinge	€	56



Filter and Belt 21

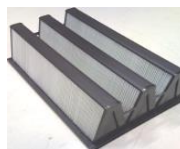
WATROMAT® Filter

Compact filter for Belt-Dryer 210100XXX, WBD04 and WBD08: 1 pc, WBD15: 2 pcs, WBD30: 4 pcs, WBD45: 6 pcs, WBD60: 8 pcs, WBD75: 10 pcs, WBD90: 12 pcs, WBD12DD: 12 pcs, WBD15DD: 16 pcs, WBD18DD: 24 pcs, WBD215: 20 pcs, WBD240: 32 pcs.

Delivery 1 pc

Not included Prefilter and mounting frame 210400XXX

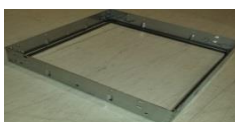
	type		869.592.292 (after 2016)	892.592.292 (before 2015)
210400105	Filter	€	783	838
Length X	mm		869	897
Width Y	mm		592	592
Height Z	mm		292	380
Weight	kg		7	7



	type		869.592.20
210400203	Prefilter SS304	€	911
Length X	mm		869
Width Y	mm		592
Height Z	mm		20
Weight	kg		3



	type		887.609.70
210400303	Mounting frame SS304	€	667
Length X	mm		887
Width Y	mm		609
Height Z	mm		70
Weight	kg		2



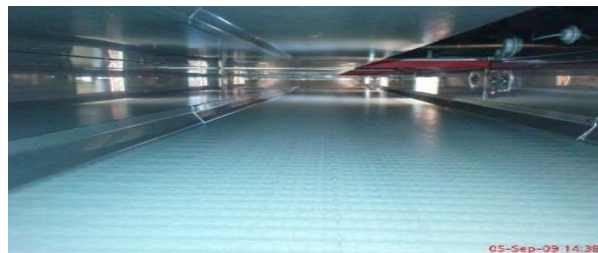
WATROMAT® Belt

Multiple belts made of modular perforated parts, drive with sprockets and ball bearing.

Delivery 1 pc, belt min. 1 m length

Not included

	type		WBE09	WBE12
210500105	Belt PP	€/m (length)	754	966
Belt-Dryer	type		WBD04-08	WBD15-240D
Width	m		0.9	1.2
Weight	kg/m (length)		4.5	6



	type		WSO25	WSO35
210500205	Sprocket PA	€	136	172
Belt-Dryer	type		WBD04-60/120D	WBD75-240D
Diameter shaft	mm		25	35
Weight	kg		0.3	0.4



	type		WSO25	WSO35
210500303	Ball bearing SS304	€	68	80
Belt-Dryer	type		WBD04-60	WBD75-240D
Diameter shaft	mm		25	35
Weight	kg		0.3	0.4

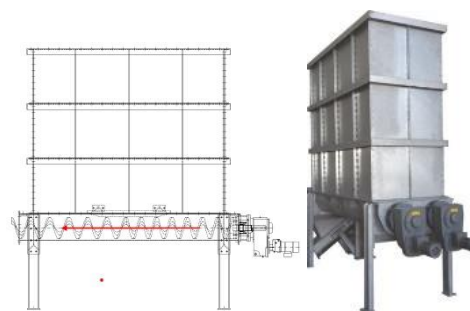


Bunker 22

WATROMAT® Bunker

Bunker for sludge with minimum 20 % dried solids, receives sludge to operate belt dryer (210100XXX) continuously, bunker walls segments including stiffeners and struts, discharge floor with two progressively pushing spirals, increasing conveyor (220600XXX) transport sludge to belt dryer (210100XXX)

Delivery 1 pc discharge floor with 2 discharge screws, 3 pcs bunker wall segments
Not included Increasing conveyor, platform ladder, control cabinet



		type	WBU5
220200102	Hot galvanized	€	123534
220200103	SS304	€	179125
220200104	SS316	€	216185
Volume geometric	m3		5.6
Electric power discharge screw	kWh		2x0.37
Length bunker X	m		3.15
Width bunker Y	m		1.1
Height bunker Z	m		3.4
Weight empty	t		3.8
Weight full	t		8.8

Bunker 22

WATROMAT® Bunker

Bunker for sludge with minimum 20 % dried solids, receives sludge to operate belt dryer 210100XXX continuously, bunker walls segments including stiffeners and struts, discharge floor with five progressively pushing spirals and one collecting conveyor, collecting conveyor transport sludge to increasing conveyor, increasing conveyor (220600XXX) transport sludge to belt dryer (210100XXX)

Delivery 1 pc discharge floor with 5 pcs discharge conveyors and 1 pc collecting conveyor
Not included Increasing conveyor, platform ladder, control cabinet



		type	WBU10	WBU18	WBU25	WBU35
220300102	Hot galvanized	€	164900	174235	200328	292726
220300103	SS304	€	239104	252640	290475	424453
220300104	SS316	€	346703	366328	421189	615457
Volume geometric	m3		11	18	27	36
Electric power consumption bunker conveyor	kWh		5x0.37			
Electric power consumption collecting conveyor	kWh		2.2			
Length bunker X	m		4.5			
Width bunker Y	m		2			
Height bunker Z	m		2.5	3.0	3.7	4.4
Weight empty	t		5.4	6.7	6.8	11
Weight full	t		15.4	25	30	36



Platform Ladder 22

WATROMAT® Platform Ladder

Platform with railing, ladder with security back ring, connection to bunker prepared

Delivery 1 pc platform, 1 pc ladder
Not included



WBU05



WBU10-35

		type	WBU05-10	WBU18	WBU25	WBU35
220300202	Hot galvanized	€	4991	5457	6189	6588
220300203	SS304	€	7237	7913	8974	9553
220300204	SS316	€	12665	13847	15705	16718
Platform size	m x m		0.8 x 0.8			
Ladder height	m		3.0	3.5	4.0	5.0
Weight	kg		160	180	200	220

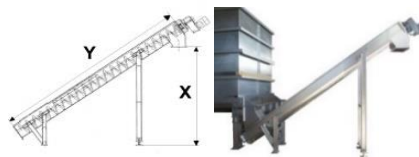


Increasing-Conveyor 22

WATROMAT® Increasing-Conveyor

Increasing conveyor for non-thixotropic sludge with minimum 20 % dried solids, transport sludge from bunker (220100XXX, 220200XXX, 220300XXX) to the belt dryer (210100XXX)

Delivery 1 pc increasing conveyor
Not included Control cabinet



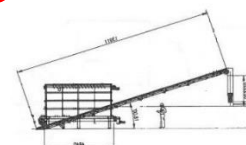
	type	WSC48/35	WSC46/35
220600102	Hot galvanized	53706	51443
220600103	SS304	72590	69449
220600104	SS316	83245	79738
Bunker 220100XXX	type	WBU05	WBU10-35
Belt dryer 210100XXX	type	WBD04-120	
Electric power	kWh	3	
Capacity	m ³ /h	2	
Length Y	mm	4800	4629
Increasing degree	°	35	
Height X	m	2.4	
Weight	kg	450	560

Increasing-Belt 22

WATROMAT® Increasing-Belt

Increasing belt for sludge with minimum 20 % dried solids, transport sludge from bunker (220XXXXXX) to the belt dryer (210100XXX).

Delivery 1 pc increasing belt
Not included Control cabinet



	type	WSC54/18	WSC49/18	WSC83/18	WSC139/18
220600203	SS304	51110	53706	66483	77800
Bunker	type	WBU05	WBU10-25	WBU10-35	
Belt-Dryer	Type	WBD04-120		WBD120D-240D	
Electric power	kWh	2.2		3	
Capacity	m ³ /h			2	
Length Y	mm	5400	4900	8329	13900
Increasing degree	°			18	
Height X	m	2.4		4.8	>4.8
Weight	kg	250	280	360	380



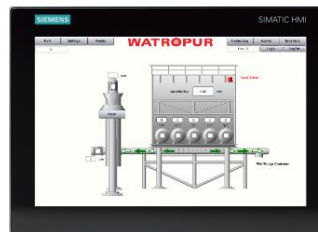
Control cabinet Bunker 22

WATROMAT® Control cabinet Bunker

Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signaling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc control cabinet
Not included



	type	WELWBU10	WELWBU18	WELWBU25	WELWBU35
220900900	Polyester	24276	25286	26251	28876
Bunker	type	WBU05-10	WBU18	WBU25	WBU35
Length X	mm	400			
Width Y	mm	250			
Height Z	mm	600			
Weight	kg	35	40	45	50

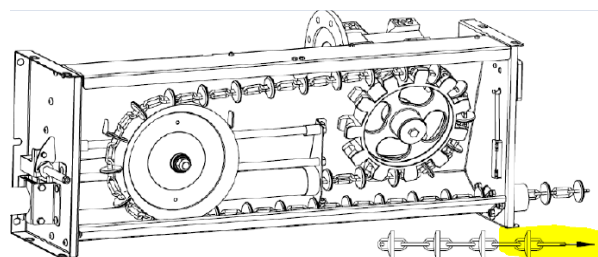


Flex-Conveyor 23

WATROMAT® Flex-Conveyor

Flex-Conveyor transport fully or partially dried sludge with more than 50% dried solids and a grain size between 1 and 20 mm from the outlet of the WATROMAT® belt dryer (210XXXXXX) to the WATROMAT® bagging point (230XXXXXX) or to any transport device. The drive unit moves the chain in a loop in a closed pipe circuit. The maximum chain length is 100 m with a maximum of 10 corner wheels. The Flex-Conveyor can maximum 45 degrees moving up and the maximum transport height over the entire circuit is 4 m. Automatic outlet with electric valve and level sensor. The drive unit compensates for 35 cm chain length, has a chain safety switch and a magnetic switch against open service door, delivery in individual parts, easy assembly on site.

Delivery 1 pc Drive-Unit with Motor and two fixing traverses, 1 pc Chain, pcs tubes, Corner-Wheels, Automatic-Outlets 24V, tube connectors
Not included Supports for tubes and Corner-Wheels, control cabinet 230100900



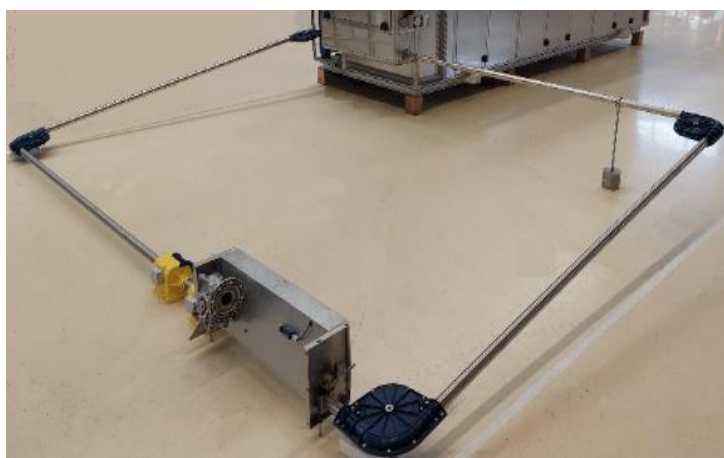
	type		WFC10	WFC20	WFC30
230100100	Flex-Conveyor	€	31450	36459	42498
Transport distance horizontal straight	m		10	20	30
Chain SS304 (length)	m		25	50	75
Tube SS304 (1 pc = 3 m long)	pcs		10	20	30
Corner wheels	pcs			4	
Automatic outlet	pcs			1	
Weight	kg		210	340	460

230100110	Motor	€	1345
Electric power consumption	kW		1.50
Capacity	m3/h		0.5

230100120	Drive-Unit	€	3480
Weight	kg		45



230100130 Drive unit with two traverses



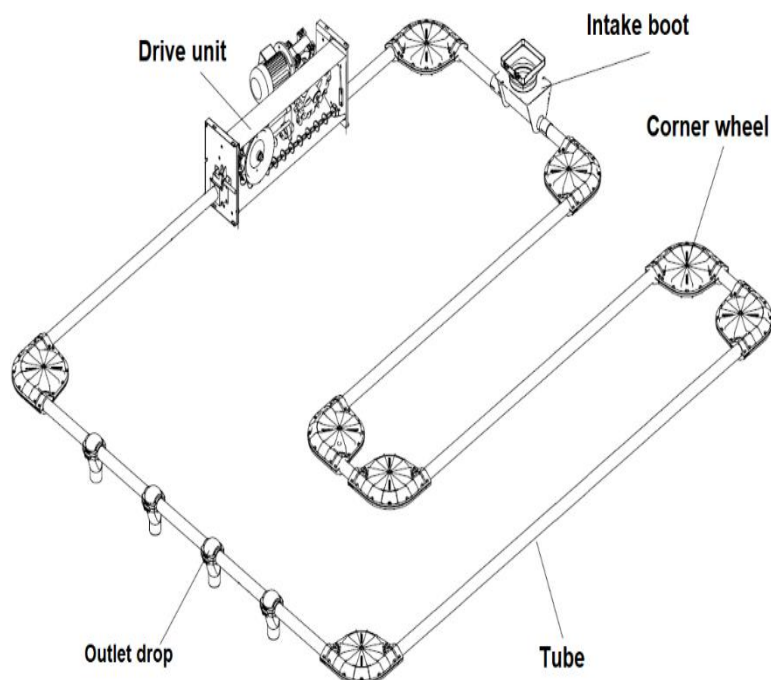
230100130	Chain SS304, ø45 mm	€/m	233
Weight	kg/m		1.5

230100140	Corner-Wheel, Nylon	€	248
Weight	kg		8



230100160	Tube, SS304	€/m	98
Weight (3 m, ø56x1.25mm)	kg/m		2.5

230100180	Automatic-Outlet	€	4265
Weight	kg		12



Collecting-Spiral 23

WATROMAT® Collecting-Spiral

WATROMAT® Collecting-Spiral collect dry sludge with at least 50% dry solids and a grain size between 1 and 20 mm at outlet of Belt-Dryer (210XXXXXX) and transport it into Bagging-Spiral (230100200).

Delivery 1 pc Collecting-Spiral
Not included Control cabinet

		type	WSC09	WSC12
230100203	SS304	€	4346	4905
Belt dryer		type	WBD04-08	WBD15-120
Electric power		kWh	0.37	
Capacity		m ³ /h	0.5	
Length		mm	900	1200
Weight		kg	4	15



Bagging-Spiral 23

WATROMAT® Bagging-Spiral

Bagging-Spiral spiral for sludge with at least 80% dry matter and a grain size between 1 and 20 mm. It consists of a special flexible hardened steel spiral in a PVC tube. The maximum spiral length is 24 m with a maximum of 3 pcs of 45-degree elbows. The spiral slope should be a maximum of 45 degrees and the transport height over the entire system is a maximum of 2.4 m. The elbows have a radius of 1,5 m and need a minimum horizontal distance of 3,6 m for 2,4 m transport height. Bagging-Spiral transport sludge from belt dryer (210XXXXXX) to bagging point (230XXXXXX), beginning of spiral with end piece and intake boot, end of the spiral with control unit, full flow detector and motor, between tubes, elbows and outlet drops, length depend on type of Bagging-Point (230600100).

Delivery 1 pc Flexible-Spiral, 1 pc Motor, 1 pc Control-Unit, 1 pc End-Piece,
pcs tubes, Elbows, Intake-Boot, outlet drops, tube connectors with clamps
Not included Supports for pipe, control cabinet 230100900



		type	WSC09	WSC12	WSC15	WSC18	WSC21	WSC25
230100210	Bagging-Spiral	€	5125	5923	6722	7520	8319	9117
Pipe (1 pc = 3 m)		pcs	3	4	5	6	7	8
Intake boot		pcs	1	2	3	4	5	6
Outlet drop		pcs	3	4	5	6	7	8
Tube clamps		pcs	5	10	15	20	25	35
Length X		m	9	12	15	18	21	24
Weight		kg	65	95	125	155	185	215

230100220	Motor	€	1032
Electric power consumption		kW	0.75
Capacity		m ³ /h	0.5

230100230	Control-Unit +full flow detector	€	1038
-----------	----------------------------------	---	------



230100240	Flexible-Spiral	€/m	233
Weight		kg/m	1.5

230100250	End-piece	€	353
-----------	-----------	---	-----

230100260	Intake-Boot	€	1657
-----------	-------------	---	------

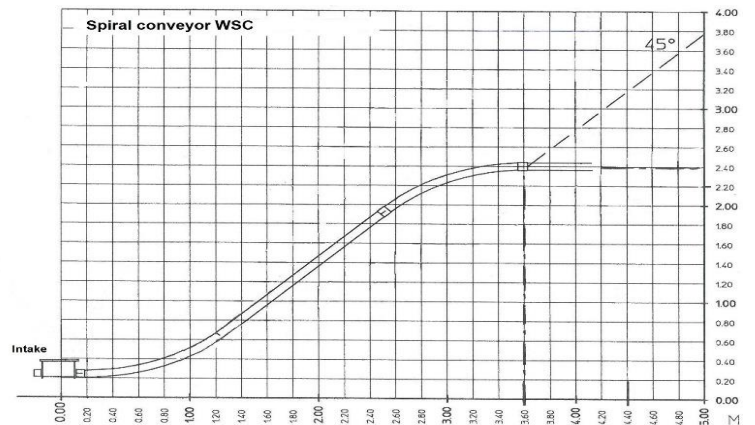
230100270	Pipe PVC	€/m	512
Weight		kg/m	0.6

230100280	Elbow	€	246
-----------	-------	---	-----



Weight		kg	0.6
--------	--	----	-----

230100290	Outlet drop	€/m	487
-----------	-------------	-----	-----



230100240 230100255 230100260 230100270 230100220

Bagging-Point 23

WATROMAT® Bagging-Point

Bagging-Point for dry sludge with minimum 80 % dried sludge, modular frames for bag volume 1 m3 (elevation 2 m3, 230600200), height adjustable hooks, receive sludge from Flex-Conveyor or Bagging-Conveyor (230XXXXXX)

Delivery 1 pc Bagging-Point
Not included Bagging-Spiral, control cabinet



	type	WLS1	WLS2	WLS3	WLS4	WLS5
230100303	SS304	20631	30484	35445	40303	45419
Bag volume	m3	1	2	3	4	5
Height free below	mm			1400		
Length X	mm	1300	2600	3900	5200	6500
Width Y	mm			1300		
Height Z	mm			2140		
Weight	kg	150	400	500	600	1200

	type	WLS1E
230310313	Elevation Bagging-Point	5218
Bag volume	m3	2
Elevation	mm	800
Height free below	mm	2200
Weight	kg	24



Bagging-Conveyor 23

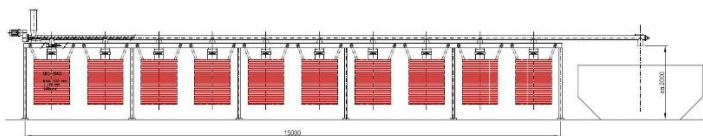
WATROMAT® Distribution-Conveyor (for Big Bag)

Distribution-Conveyor for loading of Big Bag's with dry sludge with minimum 60 % dried solids, transport sludge horizontal from increasing conveyor (230XXXXXX) to Big Bag's, extra outlet for overflow, outlet with flange connection, shut-off pneumatically valve with switch, compressed air supply >6 Bar, inlet pipes with sack holder and clamping device, option: one-sided operating gangway with stair, railing and light grid cover

Delivery 1 pc Distribution-Conveyor (for Big Bag)
Not included Gangway, stair and railing, control cabinet 230100900



	type	WSC5	WSC8	WSC11	WSC14	WSC17
230100402	Steel painted	43285	68695	82940	97240	24186
Loading points for Big Bag's	pcs	2	4	6	8	10
Bag volume max.	m3	2x2	4x2	6x2	8x2	10x2
Height free below	m			1.4		
Length conveyor	m	5	8	11	14	17
Electric power	kWh			2.2		
Capacity	m3/h			10		
Length bagging frame (without extra outlet)	m	2.9	5.7	8.6	11.4	14.25
Width (without gangway)	m			1.1		
Height (inlet connection)	mm			3.2		
Weight	kg	340	480	620	760	900



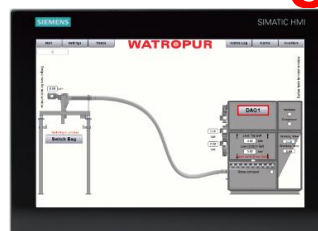
Control cabinet Bagging 23

WATROMAT® Control cabinet Bagging

Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signalling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc control cabinet
Not included



	type	WELbagging
230100900	Polyester	12308
Length X	mm	600
Width Y	mm	300
Height Z	mm	800
Weight	kg	30



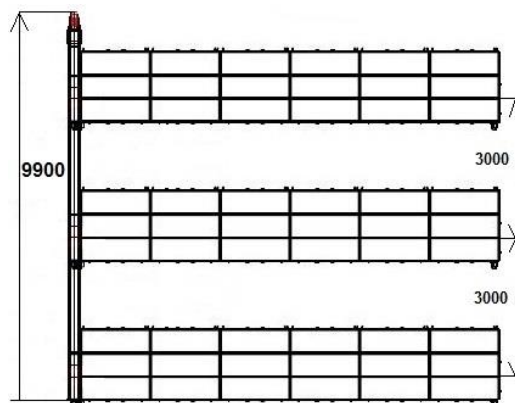
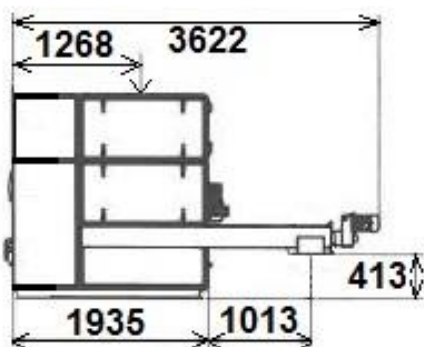
Collecting-Conveyor 23

WATROMAT® Collecting-Conveyor

Collecting-Conveyor for sludge with minimum 60 % dried solids, is fixed at outlet of belt dryer (210XXXXX), collect the sludge from the Belt-Dryer and transport it to the increasing conveyor (230200XXX).

Delivery 1 pc Collecting-Conveyor
Not included Control cabinet

	type	WSC24	WSC61	WSC99	WSC136
230200103	SS304	€ 24685	€ 39511	€ 46034	€ 51358
230200104	SS316	€ 37027	€ 59266	€ 69051	€ 77037
Belt dryer outlets	pcs	1	2	3	4
Electric power	kWh	1.1			
Capacity	m3/h	2			
Length	mm	2400	6150	9900	13650
Weight	kg	185	330	495	685



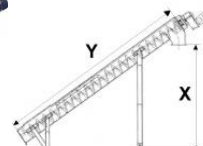
Increasing-Conveyor 23

WATROMAT® Increasing-Conveyor

Increasing-Conveyor, for sludge with minimum 60 % dried solids, transport sludge from collecting conveyor (230XXXXXX) to bagging conveyor (230XXXXXX), reversible conveyor (230XXXXXX) or distribution conveyor (230XXXXXX).

Delivery 1 pc dry Increasing-Conveyor, 2 pcs support
Not included Control cabinet

	type	WSC48/35	WSC55/35	WSC65/35	WSC85/35
230200203	SS304	€ 47051	€ 51443	€ 65751	€ 79394
230200204	SS316	€ 60427	€ 75068	€ 100357	€ 117660
Length Y	mm	4800	5500	6500	8500
Used for container (310200XXX, chapter 3)	type	1xWTC	2xWTC	1xWGM	2xWGM
Electric power	kWh	3			
Capacity	m3/h	2			
Increasing degree	°	35			
Height X	m	2.4	2.9	3.4	3.8
Weight	kg	450	580	710	850

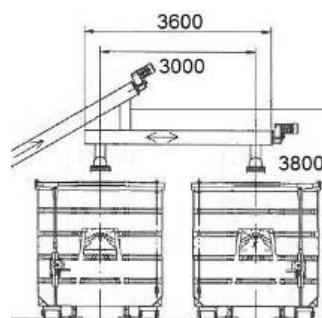


Reversible-Conveyor 23

WATROMAT® Reversible-Conveyor

Reversible-Conveyor (horizontal) for sludge with minimum 60 % dried solids for distribution between two or more roll off containers, transport sludge horizontal from Increasing-Conveyor (230XXXXXX) to Distribution-Conveyors with winch (230XXXXXX), shut-off pneumatically valve with switch for third or more outlets, motor for forward and backward transport, need for fixation support console from loading conveyor with winch (230XXXXXX).

Delivery 1 pc Reversible-Conveyor
Not included Support console, control cabinet



	type	WSC36	WSC66
230300303	SS304	€ 60427	75068
Outlets	pcs	2	3
Electric power	kWh	0.75	
Capacity	m3/h	2	
Length	mm	3600	6600
Weight	kg	460	500

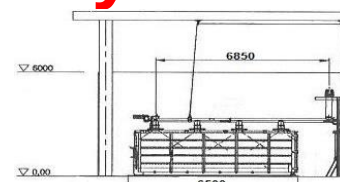


Distribution-Conveyor 23

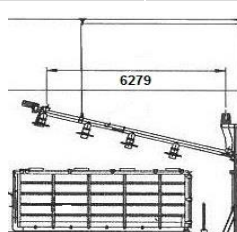
WATROMAT® Distribution-Conveyor

Distribution-Conveyor for loading sludge with minimum 60 % dried solids into roll off containers, container filling volume maximum 80 %, transport sludge from increasing conveyor (230XXXXXX) or reversible conveyor (230XXXXXX) to loading points from roll off container, last loading point with full flow sensor, roll off container with or without cover, winch (mounted on the wall) for lifting the distribution conveyor 6-25 degree.

Delivery 1 pc Distribution-Conveyor, 1 pc support console, 1 pc winch
Not included Roll off container, cover, guides, winch fixing points, control cabinet



	type	WSC38/6-25	WSC48/6-25	WSC58/6-25	WSC68/6-25
230300403	SS304	€ 43285	68695	82940	97240
Loading points (outlets)	pcs	1	2	3	4
Used for container (type page 52)	type	WTC	WGM15	WGM20	WGM30
Length Y	mm	3850	4850	5850	6850
Electric power	kWh	0.75			
Capacity	m3/h	2			
Increasing degree (winch)	°	6-25			
Weight	kg	450	580	710	850



Distribution-Conveyor 23

WATROMAT® Distribution-Conveyor (for roll off container with spiral)

Distribution-Conveyor for loading of roll off containers with internal spiral(s) for dry sludge with minimum 60 % dried solids, container filling volume maximum 90 %, transport sludge from increasing conveyor (230XXXXXX) to roll off container outlets, outlets with flexible telescope tube, flange connection, shut-off pneumatically valve with switch, compressed air supply >6 Bar, vertical supports between containers.

Delivery 1 pc Distribution-Conveyor
Not included Roll off container with internal spiral conveyor, control cabinet



Roll off container with spiral inside

	type	WSC5	WSC8	WSC11	WSC14	WSC17
230300503	SS304	€ 46860	57952	64192	70330	76724
Outlets	pcs	1	2	3	4	5
Container height	mm			2825		
Length conveyor	m	5	8	11	14	17
Electric power	kWh			2.2		
Capacity	m3/h			10		
Weight	kg	340	480	620	760	900



Control cabinet Conveyor 23

WATROMAT® Control cabinet Conveyor

Control cabinet, execution as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signaling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc cabinet
Not included:



	type	WELWSC1-3	WELWSC4-6	WELWSC7-9
230300900	Polyester	€ 24186	28025	30113
Numbers of conveyors	pcs	1-3	4-6	7-9
Length X	mm		600	
Width Y	mm		300	
Height Z	mm		800	
Weight	kg	30	35	40



Container-Dryer

Page Part



50

30



51

31



52

32



53

33

Page **Part**

Container-Dryer

50

30

Drying-Container

51

31

Air duct

52

32

Filter, heat exchanger

52

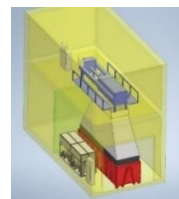
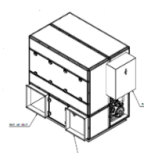
33

Container-Dryer 30

WATROMAT® Container-Dryer

Container-Dryer for filter cake sludge from plate and frame filter presses, inlet minimum 25 % dried solids, outlet 90 % dried solids, drying container in the centre under the filter press chambers, steel cables in the fall channel at every 0,5 m height, container maximum 1 m longer than filter press chamber length, cake distribution in container homogeneous with flat surface, drying temperature 30°C/86°F, specific electric power consumption 333 W/kg H₂O, noise level <85dBA sludge pH value 6.0-9.0.

Delivery 1 pc Container-Dryer with control panel
Not included Drying container, dry air duct, wet air duct



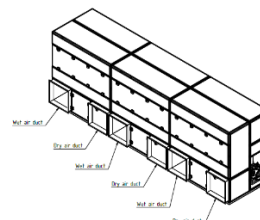
	type	WCD04	WCD08	WCD15
300100203	SS304	64890	84860	145822
Water removal at 5-35°C environment	t/day	0.4	0.8	1.5
Electric power	kWh	7.9	12.9	20
Cooling water >3 Bar (consumption at 24°C)	m ³ /h	0.2	0.3	0.5
Drying container volume	m ³	2-30	2-30	9-30
Length	mm	1290	1910	1910
Width	m	980	980	1290
Height	m	1910	1910	1910
Dry air duct	pc	1	1	1
Dry air duct connection dimension inside	mmxmm	400x400	400x400	570x570
Wet air duct	pc	1	1	1
Wet air duct connection dimensions inside	mmxmm	800x400	1200x400	570x570
Weight	t	0.6	0.8	1.5



WATROMAT® Container-Dryer

Container-Dryer for filter cake sludge from plate and frame filter presses, inlet minimum 25 % dried solids, outlet 90 % dried solids, drying container in the centre under the filter press chambers, steel cables in the fall channel for every 0,5 m height, container maximum 1 m longer than filter press chamber length, cake distribution in container homogeneous with flat surface, drying temperature 30°C/86°F, specific electric power consumption 333 W/kg H₂O, noise level <85dBA sludge pH value 6.0-9.0.

Delivery 1 pc Container-Dryer, 1 pc control panel
Not included Drying container, dry air duct, wet air duct



	type	WCD30	WCD45	WCD60
300100203	SS304	198828	272247	328206
Water removal at 10-35°C environment	t/day	3	4.5	6
Electric power	kWh	40	60	80
Cooling water >3 Bar (24°C)	m ³ /h	1	1.5	2
Drying container volume	m ³	15-30	20-30	30
Length	mm	3795	5680	7565
Width	mm	1290	1290	1290
Height	mm	1910	1910	1910
Dry air duct	pc	2	3	4
Dry air duct connection dimension inside	mmxmm	570x570	570x570	570x570
Wet air duct	pc	2	3	4
Wet air duct connection dimensions inside	mmxmm	570x570	570x570	570x570
Weight	t	3.0	4.5	6



Control cabinet Container-Dryer 30

WATROMAT® Control cabinet Container-Dryer

Control cabinet, execution as Siemens Sirius (WELWCD04-08) or as WATROMAT® master or as slave, master with Siemens touch panel MTP1200 Unified Comfort, slave without touch panel, Profinet bus, PLC Siemens S7-1512, IO system ET200SP, power distribution, Siemens Sirius, switching and protective devices, N-disconnecting, emergency stop relay, command and signalling devices, 4 relays for hardwire voltage free signal exchange (24VAC/DC), Start/Stop, no sludge, in operation, permission from client, all wired and tested.

- Power code 1: 3 x 400 V / 1 x 230 V / 50 Hz (3 phases, neutral, earth)
- Power code 2: 3 x 480 V (3 phases, earth) / 1 x 110 V / 60 Hz (phase, neutral, earth)

Delivery 1 pc control cabinet
Not included



	type	WELWCD04	WELWCD08	WELWCD15
300100900	Polyester	11076	13038	19133
Length X	mm	300	300	300
Width Y	mm	400	400	600
Height Z	mm	600	600	800
Weight	kg	28	42	85



	type	WELWCD30	WELWCD45	WELWCD60
300100900	Steel coated	24699	27111	36674
Length X	mm		400	
Width Y	mm		800	
Height Z	mm		2100	
Weight	kg	120	130	140



Drying-Container 31

WATROMAT® Drying-Container

Drying-Container to use with Container-Dryer 300100100, move and discharge with truck.

Delivery 1 pc Drying-Container
Not included Cover 310200115 and air inlet cover 310200121



	type	WTC06	WTC09	WGM15	WGM20	WGM30
310200101	Steel painted RAL3020	17629	18208	19126	21536	22939
Used with Container-Dryer	type	WCD04-15		WCD04-30	WCD04-45	WCD04-60
Volume	m3	6	9	15	20	30
Capacity	t	3-5	4-7	5-10	8-15	12-20
Length X	m	3.5		4.5	5.7	6.7
Width Y	m	1.6		2		
Height Z	m	1.6	2	2	2.2	2.2
Weight	t	0.8	1.0	1.8	2.6	3.1



	type	WTC06	WTC09	WGM15	WGM20	WGM30
310200115	Cover PVC	2183	2393	2507	2628	2868
Length X	m	3.5		4.5	5.7	6.7
Width Y	m	1.6		2		
Weight Z	kg	16	20	36	48	62



	type	Wcover
310200121	Cover air injection	830
Length X	m	0.57
Height	M	0.1
Weight	kg	25



WATROMAT® Car

Car for moving Drying-Container 310200100 on rails with electric motor, remote control

Delivery 1 pc car
Not included

	type	WTW0WTC	WTW90WTC
310200201	Steel painted RAL3020	21240	23650
Used with Drying-Container	type	WTC	
Track width	mm	1400	2000
Electric power	kWh	0.35	
Length X	mm	2100	1500
Width Y	mm	1500	2100
Height Z	mm	360	
Weight	t	0.33	0.38



Air duct 32

WATROMAT® Dry air duct

Dry air duct components, connect dryer with drying container.

Delivery 1 pc air duct
Not included



320100102	Galvanized	type	TLKWCD15	Cuff15	TLKseal
		€	3097	2099	375
Dryer		type	WCD15	WCD15	WCD15-60
Length X		m	0.5	1	2
Width Y		mm	570	500	
Height Z		mm	570	0.1	
Weight		kg	20	18	1



WATROMAT® Wet air duct

Wet air duct, guide wet air back to dryer.

Delivery 1 pc air duct
Not included

320200102	Galvanized	type	RLKWCD15
		€	4752
Dryer		type	WSD15
Length X		m	2
Width Y		mm	570
Height Z		mm	570
Weight		kg	28



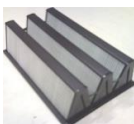
Filter 33

WATROMAT® Filter

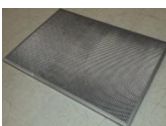
Compact filter, prefilter, mounting frame for dry air generator 330100XXX, WCD15: 2 pcs, WCD30: 4 pcs, WCD45: 6 pcs, WCD60: 8 pcs.

Delivery 1 pc
Not included

330200105	Filter	type	869.592.292
		€	783
Length X		mm	869
Width Y		mm	592
Height Z		mm	292
Weight		kg	7



330200203	Prefilter SS304	type	869.592.20
		€	911
Length X		mm	869
Width Y		mm	592
Height Z		mm	20
Weight		kg	3



330200303	Mounting frame SS304	type	887.609.70
		€	667
Length X		mm	887
Width Y		mm	609
Height Z		mm	70
Weight		kg	2



Heat exchanger and motors 33

WATROMAT® Heat exchanger

Heat exchanger and motors for container dryer 300100XXX. Evaporator for cooling and condenser for heating of drying air cycle. External condenser water cooled.

Delivery 1 pc
Not included

		type	EVAP15
330300103	Evaporator SS304	€	16112
330300104	Evaporator SS316	€	19448
Dryer		type	WCD15
Length X		mm	1810
Width Y		mm	300
Height Z		mm	620
Weight		kg	90



		type	COND15
330300203	Condenser SS304	€	17778
330300204	Condenser SS316	€	23278
Dryer		type	WCD15
Length X		mm	1730
Width Y		mm	350
Height Z		mm	620
Weight		kg	113



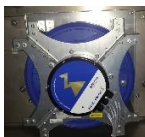
		type	EXTC15
330300303	External condenser	€	2554
Dryer		type	WCD15
Length X		mm	122
Width Y		mm	124
Height Z		mm	335
Weight		kg	8



		type	COMP15
310300501	Compressor	€	19074
Dryer		type	WCD15
Length X		mm	415
Width Y		mm	750
Height Z		mm	445
Weight		kg	211



		type	VENT15
330300601	Ventilator ECblue	€	7860
Dryer		type	WCD15
Length X		mm	380
Width Y		mm	550
Height Z		mm	550
Weight		kg	36



		type	Dual Hinge
330300605	Dual Hinge	€	42



Skip-Dryer

page Part



56

40



58

41



59

42



60

43

Skip-Dryer

56

40

Drying-Skip

58

41

Air duct

59

42

Big Bag hopper

60

43

Skip-Dryer 40

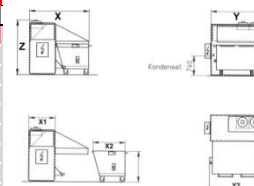
WATROMAT® Skip-Dryer

Skip-Dryer for filter cake sludge from plate and frame filter presses, sludge from industrial or municipal waste water treatment plants, inlet minimum 30 % dried solids, outlet 90 % dried solids, Drying-Container filled up below the filter press in the centre of the filter press chambers, steel cables in the fall channel for every 0,5 m height, cake distribution in container homogeneous with flat surface, drying temperature 30°C/86°F, specific electric power consumption 333 W/kg H₂O, noise level <75dBA, heat exchangers made of copper, sludge pH value 6.0-9.0. External condenser water cooled (option air cooled).

Delivery 1 pc Skip-Dryer with control cabinet, 1 pc dry air duct, 1 pc wet air duct
Not included Drying-Skip



	type	WSD01	WSD04	WSD08
400100103	SS304	38559	61492	85719
Water removal at 10-35 °C environment	t/day	0.1	0.4	0.8
Electric power	kWh	2.6	7.9	12.9
Volume drying skip	liter	500	1320-1700	1320-1700
Cooling water >3 Bar (24°C)	m ³ /h	0.1	0.2	0.3
Length X	mm	1691	2225	
Width Y	mm	980	1918	2416
Height Z	mm	1490	2035	
Weight	t	0.4	0.6	0.8



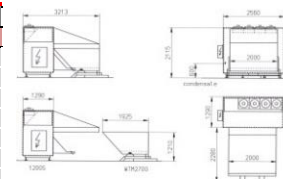
WATROMAT® Skip-Dryer

Skip-Dryer for filter cake sludge from plate and frame filter presses, sludge from industrial or municipal waste water treatment plants, inlet minimum 30 % dried solids, outlet 90 % dried solids, drying container ideally filled up in the middle under the filter press, steel cables in the fall channel, cake distribution in container homogeneous with flat surface, drying temperature 30°C/86°F, specific electric power consumption 333 W/kg H₂O, noise level <75dBA, heat exchanger made of copper, sludge pH value 6.0-9.0. External condenser air or water cooled.

Delivery 1 pc Skip-Dryer with control cabinet, 1 pc dry air duct, 1 pc wet air duct
Not included Drying-Skip



	type	WSD12	WSD16	WSD20
410100203	SS304	102874	117711	141041
Water removal at 10-35 °C environment	t/day	1.2	1.6	2
Electric power	kWh	16	21	26
Volume drying skip	liter	1700-3700		2700-3700
Cooling water >3 Bar (24°C)	m ³ /h	0.2	0.5	0.6
Length X	mm	3213		3780
Width Y	mm	2560		3800
Height Z	mm	2115		2115
Weight	t	1.5	1.6	2.1



Control cabinet Skip-Dryer 40

WATROMAT® Control cabinet Skip-Dryer

Control cabinet, execution as WATROMAT®-cabinet, Siemens Sirius, switching and protective devices, command and signalling devices, wired and tested

- Power code 1: 3x400V/1x230V/50Hz (3 phases, neutral, earth)
- Power code 2: 3x480V (3 phases, earth), 1x110V/60Hz (phase, neutral, earth)

Delivery 1 pc cabinet
Not included

	type	WEL64WSD01	WEL64WSD04	WEL64WSD08	WEL86WSD12	WEL86WSD16
400100900	Polyester	€ 10200	11076	13038	16308	19105
Skip dryer	type	WSD01	WSD02	WSD08	WSD12-16	WSD20-24
Length X	m	400			600	
Width Y	m	300			300	
Height Z	m	600			800	
Weight	kg	18	28	42	52	66



	type	MTR122
400100915	Temperatur controller	578



Filter 40

WATROMAT® Filter

Filter for skip dryer 400100100, WSD01: 1 pc, WSD04: 2 pcs, WSD08: 3 pcs, WSD12: 4 pcs, WSD16: 4 pcs, WSD20: 5 pcs.

Delivery 1 pc
Not included

	type	500.300.47	490.490.47
400200105	Filter	€ 185	€ 196
Skip-Dryer	type	WSD01	WSD04-16
Length X	mm	500	490
Width Y	mm	300	490
Height Z	mm	47	47
Weight	kg	0.8	1.1



	type	507.507.70
400200113	Filter mounting frame SS304	€ 248
Filter	type	490.490.47
Length X	mm	507
Width Y	mm	507
Height Z	mm	70
Weight	kg	0.2



Heat exchanger 40

WATROMAT® Heat exchanger

Heat exchangers, cooling compressor and fan for Skip-Dryer 400100XXX, external condenser air-cooled.

Delivery 1 pc
Not included

	type	EVAP01	EVAP04	EVAP08	EVAP12	EVAP16
400300102	Evaporator copper	€ 2478	€ 3524	€ 4553	€ 7825	€ 9630
400300103	Evaporator SS304	€ 4858	€ 9412	€ 13164	€ 16571	€ 19912
400300104	Evaporator SS316	€ 5524	€ 11073	€ 15486	€ 19495	€ 24703
Skip-Dryer	type	WSD01	WSD04	WSD08	WSD12-16	WSD20-24
Length X	m	620	975	1680	1810	3120
Width Y	m	360	310	310	300	540
Height Z	m	280	540	420	620	380
Weight	kg	30	54	71	90	140



	type	COND01	COND04	COND08	COND12	COND16
400300202	Condenser copper	€ 2643	€ 3801	€ 5691	€ 9389	€ 11556
400300203	Condenser SS304	€ 5132	€ 10218	€ 15743	€ 18850	€ 20165
400300204	Condenser SS316	€ 5790	€ 12022	€ 20087	€ 25356	€ 28167
Skip-Dryer	type	WSD01	WSD04	WSD08	WSD12-16	WSD20-24
Length X	m	620	975	1680	1730	3120
Width Y	m	360	370	360	350	540
Height Z	m	280	540	420	620	380
Weight	kg	45	69	85	113	180



	type	EXTC01	EXTC04	EXTC08	EXTC12	EXTC16
400300302	External condenser copper	€ 1790	€ 2486	€ 3946	€ 6628	€ 9024
Skip-Dryer	type	WSD01	WSD04	WSD08	WSD12-16	WSD20-24
Electric power	kWh	0.1	0.15	0.25	0.45	0.90
Length X	m	280	920	1620	2120	3120
Width Y	m	280	540	420	540	540
Height Z	m	280	250	310	280	380
Weight	kg	15	99	125	155	180



	type	COMP01	COMP04	COMP08	COMP12	COMP16
400300500	Cooling compressor	€ 4193	€ 6517	€ 12586	€ 18024	€ 36049
Skip-Dryer	type	WSD01	WSD04	WSD08	WSD12-16	WSD20-24



	type	VENT01	VENT04	VENT08	VENT12	VENT16
400300600	Ventilator	€ 2850	€ 3640	€ 5488	€ 8560	€ 17120
Skip-Dryer	type	WSD01	WSD04	WSD08	WSD12-16	WSD20-24



Drying-Skip 41

WATROMAT® Drying-Skip

Drying-Skip to use with Skip-Dryer 400100XXX, discharged with forklift (3t) and tilting traverse 410100XXX, removable perforated base sieve, opening injection for dried air duct, push to handle, tilting mechanism, 2 crane lifting eyes, 4 castors.

Delivery 1 pc drying skip with 4 pcs castors
Not included

		type	WSK05	WSK13	WSK17
410100102	Hot galvanized	€	4298	9043	10716
410100103	SS304	€	8410	16608	20194
Skip-Dryer		type	WSD01	WSD04-08	WSD08-16
Volume		liter	500	1300	1700
Effective load		kg	400	1000	1500
Length X		mm	1000	1325	1325
Width Y		mm	980	1680	2180
Height Z		mm	1054	1154	1154
Weight		kg	135	250	300



WATROMAT® Tilting traverse

Tilting traverse to empty drying skip 410100XXX, with third leg to use for forklift (3t), cable operated from forklift driver's seat, can be secured to prevent slipping and unintentional emptying

Delivery 1 pc tilting traverse, 1 pc third leg
Not included

		type	WST05	WST13	WST17
410100151	Steel painted RAL9035	€	2939	4055	4556
Distance between fork pockets		mm	250	450	590
Width of fork pockets		mm		200	
Height of fork pockets		mm		80	
Weight		kg	80	145	173

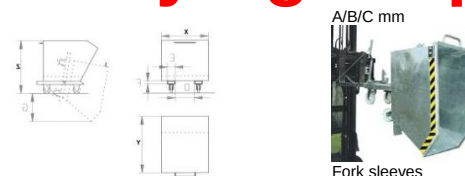


Drying-Skip 41

WATROMAT® Drying-Skip

Drying-Skip to use with Skip-Dryer 400100XXX, discharged with forklift (3t), removable perforated base sieve, opening injection for dried air duct, push to handle, fork sleeves 200x60 mm, tilting mechanism, 4 castors, cable operated from forklift driver's seat.

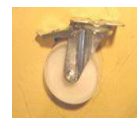
Delivery 1 pc Drying-Skip with 4 pcs castors
Not included



		type	WKB04	WKB08	WKB12
410100202	Hot galvanized	€	5744	9758	13157
410100203	SS304	€	10352	17575	20392
Skip-Dryer		type	WSD01	WSD04-08	WSD08-12
Volume		liter	400	800	1200
Effective load		kg	320	530	800
Fork sleeves (A)		mm	200	495	640
Length X		mm	1440		1640
Width Y		mm	700		1280
Height Z		mm	904	1004	1304
Weight		kg	205	256	265



		type	Fix	Swivel
410100300	Polyamide	€	189	322
Effective load		kg	450	450
Lock backwards			No	Yes
Height		mm		224
Weight		kg	5	6



		type	Fix	Swivel
410100310	Polyamide	€	379	469
Effective load		kg	800	590
Lock backwards			No	Yes
Height		mm		224
Weight		kg	5	6

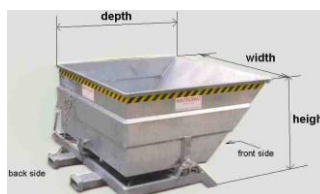
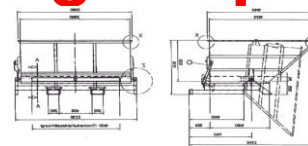


Drying-Skip 41

WATROMAT® Drying-Skip

Drying-Skip to use with Skip-Dryer 410100XXX, transported and discharged with forklift (5 t).

Delivery 1 pc drying skip
Not included



		type	WTM27	WTM37
410200102	Hot galvanized	€	15075	18457
410200103	SS304	€	22613	27685
Skip-Dryer		type	12-16	16-24
Volume		liter	2700	3700
Effective load		t	2.1	3
Length X		mm	2340	
Width Y		mm	2230	
Height Z		mm	1210	1470
Weight		t	2.1	2.6

		type	WTMbrake
400200103	Tipping brake	€	2251



Dry air duct 42

WATROMAT® Dry air duct

Dry air duct, connect skip dryer to drying container and guide dry air into container.

Delivery 1 pc dry air duct
Not included

		type	TLK01WSK05	TLK04WSK13	TLK08WSK17	TLK12WSK17
420100103	SS304	€	2621	3628	3945	4611
Length X		mm	610	1100	1630	
Width Y		mm	320	380	380	
Height Z		mm	300	500	1000	
Weight		kg	8	18	25	26



		type	TLK12WTM27	TLK16WTM27	TLK20WTM37	TLK24WTM37
420100103	SS304	€	4812	4812	5078	5078
Length X		m	1710			
Width Y		mm	1370			
Height Z		mm	700			
Weight		kg	35	42	48	54



		type	Seal
420100115	Dry air duct seal	€	375
Length X		m	2
Weight		kg	0.4



Wet air duct 42

WATROMAT® Wet air duct

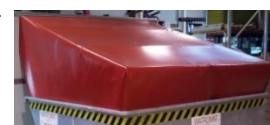
Wet air duct, guide wet air from drying container back to skip-dryer.

Delivery 1 pc wet air duct
Not included

		type	RLK01WSK05	RLK04WSK13	RLK08WSK17	RLK12WSK17
420200103	PVC, frame SS304	€	2522	2985	4291	4585
Length X		mm	800	1530	2030	2340
Width Y		mm	1080	1280	1280	1280
Height Z		mm	500	800	800	800
Weight		kg	6	9	15	19



		type	RLK12WTM27	RLK16WTM27	RLK20WTM37	RLK24WTM37
420200103	PVC, frame SS304	€	4865	4865	5264	5264
Length X		mm	800	1530	2030	2340
Width Y		mm	1080	1280	1280	1280
Height Z		mm	500	800	800	800
Weight		kg	24	29	34	39



Filling hopper 43

WATROMAT®

Filling hopper

Filling hopper to discharge dry sludge into Big Bag's or containers, sludge with minimum 70 % dried solids, hopper made of steel sheet with all-round, reinforced edging, sturdy frame with full-length fork sleeves, with support legs, with 4 hooks under the fork sleeves.

Delivery

Not included

1 pc filling hopper

	type	WHO1
430300101	Steel painted RAL3020	€ 6371
Ground lee way	mm	1190
Length X	mm	1980
Width Y	mm	980
Height Z	mm	2050
Hopper opening top	mm	1875x850
Hopper opening bottom	mm	700x500
Weight	kg	221



Transport, Erection Commissioning

page Part



63

50



65

51



69

52



71

53

Land transport

61

50

Ship transport

65

51

Travel costs

69

52

**Erection
Commissioning
Supervising**

71

53

Land transport 100-1000 km

50

Part	Country												
	Destination	km	100	200	300	400	500	600	700	800	900	1000	
		Days	1	2	3	3	3	4	4	4	5	5	
11	Screw press	WSP05	2200	2420	2640	2860	3080	3300	3520	3740	3960	4180	
		WSP15	2904	3194	3485	3775	4066	4356	4646	4937	5227	5518	
		WSP25	3630	3993	4356	4719	5082	5445	5808	6171	6534	6897	
		WSP50	4138	4552	4966	5380	5793	6207	6621	7035	7449	7863	
		WSP75	4598	5058	5518	5977	6437	6897	7357	7817	8276	8736	
11	Platform press	WSP	1828	2010	2193	2376	2559	2741	2924	3107	3290	3472	
		WSP double	3010	3311	3612	3913	4214	4515	4816	5117	5418	5719	
12	Polymer unit	WPL	293	322	351	381	410	439	469	498	527	556	
		WPP	462	508	554	601	647	693	739	785	832	878	
13	Thickener	WTH	4939	5433	5927	6421	6915	7409	7903	8397	8891	9384	
21	Belt dryer	WBD04-08	896	986	1075	1165	1255	1344	1434	1523	1613	1703	
		WBD15-30	1700	1870	2040	2210	2380	2550	2720	2890	3060	3230	
		WBD45-60	3198	3518	3838	4157	4477	4797	5117	5436	5756	6076	
		WBD75	4326	4759	5192	5624	6057	6489	6922	7355	7787	8220	
		WBD90	5032	5535	6039	6542	7045	7548	8051	8555	9058	9561	
		WBD105	5849	6434	7019	7604	8189	8774	9359	9944	10529	11114	
		WBD120	6818	7500	8182	8864	9546	10228	10909	11591	12273	12955	
		WBD120D	6927	7620	8313	9006	9698	10391	11084	11777	12469	13162	
		WBD150D	8330	9163	9996	10829	11663	12496	13329	14162	14995	15828	
		WBD180D	10260	11285	12311	13337	14363	15389	16415	17441	18467	19493	
		WBD210D	11926	13118	14311	15503	16696	17888	19081	20274	21466	22659	
		WBD240D	13504	14854	16205	17555	18906	20256	21606	22957	24307	25658	
21	Platform dryer	WBDXXXD	3825	4208	4590	4973	5355	5738	6120	6503	6885	7268	
22	Bunker	WBU00X	1618	1780	1942	2104	2266	2428	2589	2751	2913	3075	
		WBU5	2366	2603	2840	3076	3313	3549	3786	4023	4259	4496	
		WBU10-25	4385	4823	5262	5700	6139	6577	7016	7454	7893	8331	
		WBU35	4722	5194	5666	6138	6610	7082	7555	8027	8499	8971	
23	Bagging point	WLS1-2	957	1052	1148	1244	1339	1435	1531	1626	1722	1818	
		WLS3-5	1913	2105	2296	2487	2679	2870	3061	3253	3444	3635	
23	Conveyor	WSC	957	1052	1148	1244	1339	1435	1531	1626	1722	1818	
23	Silo	WSI	5677	6244	6812	7380	7947	8515	9083	9650	10218	10786	
30	Container dryer	WCD04-08	896	986	1075	1165	1255	1344	1434	1523	1613	1703	
		WCD15	1113	1225	1336	1447	1558	1670	1781	1892	2004	2115	
		WCD30	1700	1870	2040	2210	2380	2550	2720	2890	3060	3230	
		WCD48-60	2277	2505	2732	2960	3188	3416	3643	3871	4099	4326	
31	Drying container	WTC	1454	1600	1745	1890	2036	2181	2327	2472	2617	2763	
		WGM	2110	2321	2532	2742	2953	3164	3375	3586	3797	4008	
40	Skip-dryer	WSD01	260	286	312	338	364	390	416	442	468	494	
		WSD04-08	980	1078	1176	1274	1372	1470	1568	1666	1764	1862	
		WSD12-16	1119	1231	1343	1455	1567	1678	1790	1902	2014	2126	
		WSD20-24	2060	2266	2472	2678	2884	3090	3296	3502	3708	3914	
41	Drying skip	WSK05	293	323	352	381	411	440	469	499	528	558	
		WSK13	488	537	586	634	683	732	781	830	879	927	
		WSK17	553	608	664	719	774	830	885	940	996	1051	
		WTM27	1051	1156	1262	1367	1472	1577	1682	1787	1892	1997	
		WTM37	1277	1405	1533	1660	1788	1916	2043	2171	2299	2427	
43	Big Bag hopper	WHO	619	681	743	805	867	929	990	1052	1114	1176	

Land transport 1200-3000 km

50

Part	Country											
	Destination	km	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
		Days	5	6	6	7	7	8	8	9	9	10
11	Screw press	WSP05	4400	4620	4840	5060	5280	5500	5720	5940	6160	6380
		WSP15	5808	6098	6389	6679	6970	7260	7550	7841	8131	8422
		WSP25	7260	7623	7986	8349	8712	9075	9438	9801	10164	10527
		WSP50	8276	8690	9104	9518	9932	10346	10759	11173	11587	12001
		WSP75	9196	9656	10116	10575	11035	11495	11955	12415	12874	13334
11	Platform press	WSP	3655	3838	4021	4203	4386	4569	4752	4934	5117	5300
		WSP double	6020	6321	6622	6923	7224	7525	7826	8127	8428	8729
12	Polymer unit	WPL	586	615	644	674	703	732	761	791	820	849
		WPP	924	970	1016	1063	1109	1155	1201	1247	1294	1340
13	Thickener	WTH	9878	10372	10866	11360	11854	12348	12842	13336	13830	14324
21	Belt dryer	WBD04-08	1792	1882	1971	2061	2151	2240	2330	2419	2509	2599
		WBD15-30	3400	3570	3740	3910	4080	4250	4420	4590	4760	4930
		WBD45-60	6396	6716	7035	7355	7675	7995	8315	8634	8954	9274
		WBD75	8653	9085	9518	9950	10383	10816	11248	11681	12114	12546
		WBD90	10064	10568	11071	11574	12077	12580	13084	13587	14090	14593
		WBD105	11699	12284	12869	13454	14038	14623	15208	15793	16378	16963
		WBD120	13637	14319	15000	15682	16364	17046	17728	18410	19091	19773
		WBD120D	13855	14547	15240	15933	16626	17318	18011	18704	19397	20089
		WBD150D	16661	17494	18327	19160	19993	20826	21659	22492	23325	24158
		WBD180D	20519	21545	22571	23597	24623	25649	26675	27701	28727	29753
		WBD210D	23851	25044	26236	27429	28621	29814	31007	32199	33392	34584
		WBD240D	27008	28358	29709	31059	32410	33760	35110	36461	37811	39162
21	Platform dryer	WBDXXXD	7650	8033	8415	8798	9180	9563	9945	10328	10710	11093
22	Bunker	WBU00X	3237	3399	3560	3722	3884	4046	4208	4370	4531	4693
		WBU5	4733	4969	5206	5442	5679	5916	6152	6389	6626	6862
		WBU10-25	8770	9208	9647	10085	10524	10962	11400	11839	12277	12716
		WBU35	9443	9915	10388	10860	11332	11804	12276	12748	13221	13693
23	Bagging point	WLS1-2	1913	2009	2105	2200	2296	2392	2487	2583	2679	2774
		WLS3-5	3827	4018	4210	4401	4592	4784	4975	5166	5358	5549
23	Conveyor	WSC	1913	2009	2105	2200	2296	2392	2487	2583	2679	2774
23	Silo	WSI	11354	11921	12489	13057	13624	14192	14760	15327	15895	16463
30	Container dryer	WCD04-08	1792	1882	1971	2061	2151	2240	2330	2419	2509	2599
		WCD15	2226	2338	2449	2560	2672	2783	2894	3006	3117	3228
		WCD30	3400	3570	3740	3910	4080	4250	4420	4590	4760	4930
		WCD48-60	4554	4782	5009	5237	5465	5693	5920	6148	6376	6603
31	Drying container	WTC	2908	3054	3199	3344	3490	3635	3781	3926	4072	4217
		WGM	4219	4430	4641	4852	5063	5274	5485	5696	5907	6118
40	Skip-dryer	WSD01	520	546	572	598	624	650	676	702	728	754
		WSD04-08	1960	2058	2156	2254	2352	2450	2548	2646	2744	2842
		WSD12-16	2238	2350	2462	2574	2685	2797	2909	3021	3133	3245
		WSD20-24	4120	4326	4532	4738	4944	5150	5356	5562	5768	5974
41	Drying skip	WSK05	587	616	646	675	704	734	763	792	822	851
		WSK13	976	1025	1074	1123	1171	1220	1269	1318	1367	1415
		WSK17	1106	1161	1217	1272	1327	1383	1438	1493	1549	1604
		WTM27	2103	2208	2313	2418	2523	2628	2733	2838	2944	3049
		WTM37	2554	2682	2810	2938	3065	3193	3321	3448	3576	3704
43	Big Bag hopper	WHO	1238	1300	1362	1424	1486	1548	1610	1671	1733	1795

Canada-USA

51

Part	Country		Canada	Canada	Canada	Canada	USA	USA	USA	USA
	Destination	km	Vancouv	Montreal	Toronto	Quebec	Los A	Housten	Orleans	Charl
		Days	31	10	11	9	27	22	20	17
11	Screw press	WSP05	11160	3600	3960	3240	9720	7920	7200	6120
		WSP15	14731	4752	5227	4277	12830	10454	9504	8078
		WSP25	13811	4455	4901	4010	12029	9801	8910	7574
		WSP50	18905	6098	6708	5489	16466	13416	12197	10367
		WSP75	22506	7260	7986	6534	19602	15972	14520	12342
11	Platform press	WSP	3966	1279	1407	1151	3454	2814	2559	2175
		WSP double	6532	2107	2318	1896	5689	4635	4214	3582
12	Polymer unit	WPL	738	238	262	214	642	523	476	405
		WPP	1463	472	519	425	1274	1038	944	802
13	Thickener	WTH	15640	5045	5550	4541	13622	11099	10090	8577
21	Belt dryer	WBD04-08	1652	533	586	480	1439	1172	1066	906
		WBD15-30	6423	2072	2279	1865	5595	4559	4144	3523
		WBD45-60	8272	2668	2935	2401	7204	5870	5337	4536
		WBD75	9060	2923	3215	2630	7891	6430	5845	4969
		WBD90	10608	3422	3764	3080	9239	7528	6844	5817
		WBD105	12330	3978	4375	3580	10739	8751	7955	6762
		WBD120	11788	3803	4183	3422	10267	8366	7605	6465
		WBD120D	11329	3655	4020	3289	9868	8040	7309	6213
		WBD150D	13624	4395	4834	3955	11866	9669	8790	7471
		WBD180D	17020	5490	6039	4941	14824	12078	10980	9333
		WBD210D	19784	6382	7020	5744	17231	14040	12764	10849
		WBD240D	22628	7299	8029	6570	19709	16059	14599	12409
21	Platform dryer	WBDXXXD	8300	2678	2945	2410	7229	5891	5355	4552
22	Bunker	WBU00X	3013	972	1069	875	2624	2138	1944	1652
		WBU5	4406	1421	1563	1279	3837	3127	2842	2416
		WBU10-25	6419	2071	2278	1864	5591	4555	4141	3520
		WBU35	7319	2361	2597	2125	6374	5194	4722	4013
23	Bagging point	WLS1-2	3563	1149	1264	1034	3103	2528	2298	1954
		WLS3-5	7125	2298	2528	2069	6206	5056	4597	3907
23	Conveyor	WSC	3563	1149	1264	1034	3103	2528	2298	1954
23	Silo	WSI	22173	7153	7868	6437	19312	15736	14305	12160
30	Container dryer	WCD04-08	2836	915	1006	823	2470	2013	1830	1555
		WCD15	5867	1892	2082	1703	5110	4163	3785	3217
		WCD30	11200	3613	3974	3252	9755	7948	7226	6142
		WCD48-60	15059	4858	5343	4372	13116	10687	9715	8258
31	Drying container	WTC	4508	1454	1600	1309	3926	3199	2908	2472
		WGM	6540	2110	2321	1899	5696	4641	4219	3586
40	Skip-dryer	WSD01	2345	756	832	681	2042	1664	1513	1286
		WSD04-08	3832	1236	1360	1112	3337	2719	2472	2101
		WSD12-16	4062	1310	1442	1179	3538	2883	2621	2228
		WSD20-24	6520	2103	2314	1893	5679	4627	4207	3576
41	Drying skip	WSK05	1882	607	668	546	1639	1336	1214	1032
		WSK13	2389	771	848	694	2081	1695	1541	1310
		WSK17	2368	764	840	688	2063	1681	1528	1299
		WTM27	3915	1263	1389	1137	3410	2778	2526	2147
		WTM37	4399	1419	1561	1277	3832	3122	2838	2412
43	Big Bag hopper	WHO	2881	930	1022	837	2510	2045	1859	1580

65

Mexico-Argentina

51

Part	Country		Mexico	Mexico	Panama	Nicaragua	Colombia	Chille	Peru	Brazil	Uruguay	Argent
	Destination	km	Mazatlan	Veracruz	Colon	Manag	Cartagena	Valp	Callao	Santos	Montev	Arbue
		Days	30	15	19	19	19	31	30	18	20	21
11	Screw press	WSP05	10800	5400	6840	6840	6840	11160	10800	6480	7200	7560
		WSP15	14256	7128	9029	9029	9029	14731	14256	8554	9504	9979
		WSP25	13365	6683	8465	8465	8465	13811	13365	8019	8910	9356
		WSP50	18295	9148	11587	11587	11587	18905	18295	10977	12197	12807
		WSP75	21780	10890	13794	13794	13794	22506	21780	13068	14520	15246
11	Platform press	WSP	3838	1919	2431	2431	13794	3966	3838	2303	2559	2686
		WSP double	6321	3161	4003	4003	13794	6532	6321	3793	4214	4425
12	Polymer unit	WPL	714	357	452	452	9586	738	714	428	476	500
		WPP	1416	708	897	897	9586	1463	1416	849	944	991
13	Thickener	WTH	15135	7568	9586	9586	9586	15640	15135	9081	10090	10595
21	Belt dryer	WBD04-08	1598	799	1012	1012	792	1652	1598	959	1066	1119
		WBD15-30	6216	3108	3937	3937	3244	6423	6216	3730	4144	4351
		WBD45-60	8005	4002	5070	5070	4178	8272	8005	4803	5337	5603
		WBD75	8768	4384	5553	5553	4609	9060	8768	5261	5845	6138
		WBD90	10266	5133	6502	6502	5397	10608	10266	6159	6844	7186
		WBD105	11933	5966	7557	7557	6273	12330	11933	7160	7955	8353
		WBD120	11408	5704	7225	7225	5712	11788	11408	6845	7605	7986
		WBD120D	10964	5482	6944	6944	6313	11329	10964	6578	7309	7675
		WBD150D	13185	6592	8350	8350	7591	13624	13185	7911	8790	9229
		WBD180D	16471	8235	10431	10431	9483	17020	16471	9882	10980	11529
		WBD210D	19145	9573	12125	12125	11023	19784	19145	11487	12764	13402
		WBD240D	21898	10949	13869	13869	12608	22628	21898	13139	14599	15329
21	Platform dryer	WBDXXXD	8033	4016	5087	5087	13794	8300	8033	4820	5355	5623
22	Bunker	WBU00X	2916	1458	1847	1847	2700	3013	2916	1750	1944	2041
		WBU5	4264	2132	2700	2700	2700	4406	4264	2558	2842	2985
		WBU10-25	6212	3106	3934	3934	3934	6419	6212	3727	4141	4348
		WBU35	7082	3541	4486	4486	4486	7319	7082	4249	4722	4958
23	Bagging point	WLS1-2	3448	1724	2183	2183	2183	3563	3448	2069	2298	2413
		WLS3-5	6895	3448	4367	4367	4367	7125	6895	4137	4597	4827
23	Conveyor	WSC	3448	1724	2183	2183	2183	3563	3448	2069	2298	2413
23	Silo	WSI	21458	10729	13590	13590	13590	22173	21458	12875	14305	15021
30	Container dryer	WCD04-08	2745	1372	1738	1738	4821	2836	2745	1647	1830	1921
		WCD15	5677	2839	3596	3596	4821	5867	5677	3406	3785	3974
		WCD30	10839	5419	6864	6864	4821	11200	10839	6503	7226	7587
		WCD48-60	14573	7286	9229	9229	8041	15059	14573	8744	9715	10201
31	Drying container	WTC	4362	2181	2763	2763	2763	4508	4362	2617	2908	3054
		WGM	6329	3164	4008	4008	4008	6540	6329	3797	4219	4430
40	Skip-dryer	WSD01	2269	1135	1437	1437	1437	2345	2269	1362	1513	1588
		WSD04-08	3708	1854	2349	2349	2349	3832	3708	2225	2472	2596
		WSD12-16	3931	1966	2490	2490	2490	4062	3931	2359	2621	2752
		WSD20-24	6310	3155	3996	3996	3996	6520	6310	3786	4207	4417
41	Drying skip	WSK05	1821	911	1153	1153	1153	1882	1821	1093	1214	1275
		WSK13	2312	1156	1464	1464	1464	2389	2312	1387	1541	1618
		WSK17	2292	1146	1452	1452	1452	2368	2292	1375	1528	1604
		WTM27	3788	1894	2399	2399	2399	3915	3788	2273	2526	2652
		WTM37	4257	2129	2696	2696	2696	4399	4257	2554	2838	2980
43	Big Bag hopper	WHO	2789	1394	1766	1766	1766	2881	2789	1673	1859	1952

Turkey-Iran

51

Part	Country		Turkey	Israel	Agypt	Jordan	UA	Katar	Bharein	Saudi	Iran	Irak
	Destination	km	Istanbul	TelAviv	Kairo	Amman	Dubai	Doha	Manama	Damman	BanAB	UmmQ
		Days	10	14	15	21	26	27	28	29	30	31
11	Screw press	WSP05	3600	5040	5400	7560	9360	9720	10080	10440	10800	11160
		WSP15	4752	6653	7128	9979	12355	12830	13306	13781	14256	14731
		WSP25	4455	6237	6683	9356	11583	12029	12474	12920	13365	13811
		WSP50	6098	8538	9148	12807	15856	16466	17076	17685	18295	18905
		WSP75	7260	10164	10890	15246	18876	19602	20328	21054	21780	22506
11	Platform press	WSP	1279	1791	1919	2686	3326	3454	3582	3710	3838	3966
		WSP double	2107	2950	3161	4425	5478	5689	5900	6110	6321	6532
12	Polymer unit	WPL	238	333	357	500	619	642	666	690	714	738
		WPP	472	661	708	991	1227	1274	1321	1369	1416	1463
13	Thickener	WTH	5045	7063	7568	10595	13117	13622	14126	14631	15135	15640
21	Belt dryer	WBD04-08	533	746	799	1119	1385	1439	1492	1545	1598	1652
		WBD15-30	2072	2901	3108	4351	5387	5595	5802	6009	6216	6423
		WBD45-60	2668	3736	4002	5603	6937	7204	7471	7738	8005	8272
		WBD75	2923	4092	4384	6138	7599	7891	8183	8476	8768	9060
		WBD90	3422	4791	5133	7186	8897	9239	9581	9923	10266	10608
		WBD105	3978	5569	5966	8353	10342	10739	11137	11535	11933	12330
		WBD120	3803	5324	5704	7986	9887	10267	10648	11028	11408	11788
		WBD120D	3655	5117	5482	7675	9502	9868	10233	10598	10964	11329
		WBD150D	4395	6153	6592	9229	11427	11866	12306	12745	13185	13624
		WBD180D	5490	7686	8235	11529	14275	14824	15373	15922	16471	17020
		WBD210D	6382	8935	9573	13402	16593	17231	17869	18507	19145	19784
		WBD240D	7299	10219	10949	15329	18979	19709	20438	21168	21898	22628
21	Platform dryer	WBDXXXD	2678	3749	4016	5623	6962	7229	7497	7765	8033	8300
22	Bunker	WBU00X	972	1361	1458	2041	2527	2624	2722	2819	2916	3013
		WBU5	1421	1990	2132	2985	3695	3837	3979	4121	4264	4406
		WBU10-25	2071	2899	3106	4348	5384	5591	5798	6005	6212	6419
		WBU35	2361	3305	3541	4958	6138	6374	6610	6846	7082	7319
23	Bagging point	WLS1-2	1149	1609	1724	2413	2988	3103	3218	3333	3448	3563
		WLS3-5	2298	3218	3448	4827	5976	6206	6436	6665	6895	7125
23	Conveyor	WSC	1149	1609	1724	2413	2988	3103	3218	3333	3448	3563
23	Silo	WSI	7153	10014	10729	15021	18597	19312	20028	20743	21458	22173
30	Container dryer	WCD04-08	915	1281	1372	1921	2379	2470	2562	2653	2745	2836
		WCD15	1892	2649	2839	3974	4920	5110	5299	5488	5677	5867
		WCD30	3613	5058	5419	7587	9393	9755	10116	10477	10839	11200
		WCD48-60	4858	6801	7286	10201	12630	13116	13601	14087	14573	15059
31	Drying container	WTC	1454	2036	2181	3054	3781	3926	4072	4217	4362	4508
		WGM	2110	2953	3164	4430	5485	5696	5907	6118	6329	6540
40	Skip-dryer	WSD01	756	1059	1135	1588	1967	2042	2118	2194	2269	2345
		WSD04-08	1236	1731	1854	2596	3214	3337	3461	3585	3708	3832
		WSD12-16	1310	1835	1966	2752	3407	3538	3669	3800	3931	4062
		WSD20-24	2103	2945	3155	4417	5469	5679	5889	6100	6310	6520
41	Drying skip	WSK05	607	850	911	1275	1578	1639	1700	1761	1821	1882
		WSK13	771	1079	1156	1618	2004	2081	2158	2235	2312	2389
		WSK17	764	1070	1146	1604	1986	2063	2139	2216	2292	2368
		WTM27	1263	1768	1894	2652	3283	3410	3536	3662	3788	3915
		WTM37	1419	1987	2129	2980	3690	3832	3973	4115	4257	4399
43	Big Bag hopper	WHO	930	1301	1394	1952	2417	2510	2603	2696	2789	2881

67

India-Australia

51

Part	Country		India	SriLa	Vietnam	Taiw an	Korea	Korea	Taiw an	Austr	Austr	Papua
	Destination	km	Mumbai	Colom	Hanoi	Kaoh	Busan	Seoul	Taipei	Perth	Melb	Mores
		Days	20	21	26	33	33	34	41	34	35	28
11	Screw press	WSP05	7200	7560	9360	11880	11880	12240	14760	12240	12600	10080
		WSP15	9504	9979	12355	15682	15682	16157	19483	16157	16632	13306
		WSP25	8910	9356	11583	14702	14702	15147	18266	15147	15593	12474
		WSP50	12197	12807	15856	20125	20125	20735	25003	20735	21344	17076
		WSP75	14520	15246	18876	23958	23958	24684	29766	24684	25410	20328
11	Platform press	WSP	2559	2686	3326	4222	4222	4349	5245	4349	4477	3582
		WSP double	4214	4425	5478	6953	6953	7164	8639	7164	7375	5900
12	Polymer unit	WPL	476	500	619	785	785	809	976	809	833	666
		WPP	944	991	1227	1557	1557	1604	1935	1604	1652	1321
13	Thickener	WTH	10090	10595	13117	16649	16649	17153	20685	17153	17658	14126
21	Belt dryer	WBD04-08	1066	1119	1385	1758	1758	1812	2185	1812	1865	1492
		WBD15-30	4144	4351	5387	6838	6838	7045	8495	7045	7252	5802
		WBD45-60	5337	5603	6937	8805	8805	9072	10940	9072	9339	7471
		WBD75	5845	6138	7599	9645	9645	9937	11983	9937	10229	8183
		WBD90	6844	7186	8897	11292	11292	11634	14030	11634	11977	9581
		WBD105	7955	8353	10342	13126	13126	13524	16308	13524	13921	11137
		WBD120	7605	7986	9887	12549	12549	12929	15591	12929	13309	10648
		WBD120D	7309	7675	9502	12060	12060	12426	14984	12426	12791	10233
		WBD150D	8790	9229	11427	14503	14503	14942	18019	14942	15382	12306
		WBD180D	10980	11529	14275	18118	18118	18667	22510	18667	19216	15373
		WBD210D	12764	13402	16593	21060	21060	21698	26165	21698	22336	17869
		WBD240D	14599	15329	18979	24088	24088	24818	29928	24818	25548	20438
21	Platform dryer	WBDXXXD	5355	5623	6962	8836	8836	9104	10978	9104	9371	7497
22	Bunker	WBU00X	1944	2041	2527	3208	3208	3305	3985	3305	3402	2722
		WBU5	2842	2985	3695	4690	4690	4832	5827	4832	4974	3979
		WBU10-25	4141	4348	5384	6833	6833	7040	8489	7040	7247	5798
		WBU35	4722	4958	6138	7791	7791	8027	9679	8027	8263	6610
23	Bagging point	WLS1-2	2298	2413	2988	3792	3792	3907	4712	3907	4022	3218
		WLS3-5	4597	4827	5976	7585	7585	7815	9423	7815	8044	6436
23	Conveyor	WSC	2298	2413	2988	3792	3792	3907	4712	3907	4022	3218
23	Silo	WSI	14305	15021	18597	23604	23604	24319	29326	24319	25034	20028
30	Container dryer	WCD04-08	1830	1921	2379	3019	3019	3111	3751	3111	3202	2562
		WCD15	3785	3974	4920	6245	6245	6434	7759	6434	6624	5299
		WCD30	7226	7587	9393	11922	11922	12284	14813	12284	12645	10116
		WCD48-60	9715	10201	12630	16030	16030	16516	19916	16516	17002	13601
31	Drying container	WTC	2908	3054	3781	4799	4799	4944	5962	4944	5089	4072
		WGM	4219	4430	5485	6962	6962	7173	8649	7173	7384	5907
40	Skip-dryer	WSD01	1513	1588	1967	2496	2496	2572	3101	2572	2647	2118
		WSD04-08	2472	2596	3214	4079	4079	4203	5068	4203	4326	3461
		WSD12-16	2621	2752	3407	4325	4325	4456	5373	4456	4587	3669
		WSD20-24	4207	4417	5469	6941	6941	7151	8624	7151	7362	5889
41	Drying skip	WSK05	1214	1275	1578	2003	2003	2064	2489	2064	2125	1700
		WSK13	1541	1618	2004	2543	2543	2620	3160	2620	2697	2158
		WSK17	1528	1604	1986	2521	2521	2598	3132	2598	2674	2139
		WTM27	2526	2652	3283	4167	4167	4294	5177	4294	4420	3536
		WTM37	2838	2980	3690	4683	4683	4825	5818	4825	4967	3973
43	Big Bag hopper	WHO	1859	1952	2417	3067	3067	3160	3811	3160	3253	2603

68

Travel costs Europe

52

Europe Country	Distance in km Destination	Travel time Hours	Car/Flight costs Euro	Travel costs Euro
	100	2	180	404
	200	4	360	807
	300	6	540	1211
	400	7	680	1462
	500	8	800	1694
	600	9	900	1906
	700	10	840	1958
	800	11	880	2109
	900	12	900	2241
	1000	13	960	2413
	1200	14	1104	2669
	1400	15	1232	2908
	1600	16	1344	3132
	1800	17	1440	3340
	2000	18	1480	3492
	2200	19	1628	3752
	2400	20	1776	4011
	2600	21	1924	4271
	2800	22	2072	4531
	3000	24	2220	4902
Near and Middle East				
Türkey	Istanbul	12	900	2241
Israel	Tel Aviv	14	1000	2565
Agypten	Kairo	15	1000	2676
Emirate	Dubai	18	1100	3112
Saudi Arabia	Riadh	18	1200	3212
Iran	Teheran	20	1200	3435
Asia				
Indien	Mumbay	28	1120	4249
Malaysia	Kuala Lumpur	30	1450	4803
Taiwan	Taipei	36	1550	5574
Korea	Seoul	38	1610	5857
Japan	Tokyo	42	1800	6494
Australien	Melbourne	46	1800	6941
America				
Kanada	Montreal	23	1120	3691
USA	New York	24	960	3642
USA	Chicago	27	1250	4268
USA	Charleston	28	1250	4379
USA	New Orleans	30	1450	4803
USA	Los Angeles	34	1600	5400
Colombia	Bogota	34	1320	5120
Mexico	Mexico	35	1320	5232
Brasilien	Sao Paulo	36	1320	5344
Peru	Lima	38	1650	5897
Uruguay	Montevideo	40	1580	6051
Argentinien	Buones Aires	42	1580	6274

Travel costs China

52

China	Distance in km	Travel time	Car/Flight	Travel
Destination	City	Hours	costs	costs
				RMB
	100	2	400	1704
	200	4	800	3358
	300	6	1200	5012
	400	8	1600	6666
	500	10	2000	8320
	600	12	2400	9974
	700	14	2800	11628
	800	16	3200	13282
	900	18	3600	14936
	1000	20	4000	16590
	1200	24	4800	19898
	1400	28	5600	23206
	1600	32	6400	26514
	1800	36	7200	29822
	2000	40	8000	33130
Province				
Henan	Beijing	9	800	6493
Hubei	Wuhan	10	850	7170
Jiangshe	Nanchang	10	900	7220
Shanxi	Tayuoan	11	950	7897
Lianoning	Shenyang	11.5	1000	8261
Shaanxi	Xian	12	1100	8674
Neimenngu	Baatau	12	1200	8774
Jilin	Jilin	12	1300	8874
Hunan	Changsha	12	1400	8974
Fujiang	Fuzhou	12	1500	9074
Guangdong	Gungzhou	12.5	1700	9588
Chongqing	Chongqing	12.5	1600	9488
Ningxia	Yuanchian	12.5	1900	9788
Heilongjiang	Harbin	12.5	2000	9888
Gungxi	Nannung	13	2200	10401
Guyzhou	Guyang	13	2300	10501
Sichaun	Chengdu	13	2400	10601
Gansu	Lanzhou	13	2500	10701
Yunnan	Kunming	13.5	2800	11315
Quinhai	Xining	13.5	2900	11415
Xinjang	Urumqui	14	3000	11828
Asia				
India	Mumbay	28	1120	19776
Malaysia	Kuala Lumpur	30	1450	21435
South Corea	Seoul	38	1610	26911
Japan	Tokyo	42	1800	29759
Australia	Melbourne	46	1800	32417

Erection, Commissioning costs

53

Part	Name	Type	Days	Total peoples	Costs Euro €
11	Screw press	WSP05-15	2	1	1980
		WSP25	3	1	2970
		WSP50	4	1	3960
		WSP75	5	1	4950
13	Thickener	WTH	1	1	990
21	Belt dryer	WBD04-15	2	1	1980
		WBD30	2	1	1980
		WBD45-60	2	2	3960
		WBD75-90	3	2	5940
		WBD105-120	4	2	7920
		WBD120-180D	5	2	9900
		WBD210-240D	6	2	11880
22	Bunker	WBU00X	2	0	0
		WBU05	1	0	0
		WBU10-25	2	0	0
		WBU35	3	0	0
23	Bagging, conveyor	WLS, WSC	1	1	990
23	Silo	WSI	7	1	6930
30	Container-dryer	WCD04-15	2	1	1980
		WCD30	2	1	1980
		WCD45	3	1	2970
		WCD60	4	1	3960
40	Skip-dryer	WSD01-08	1	1	990
		WSD12-16	2	1	1980
		WSD20-24	3	1	2970

Supervising costs

53

Part	Name	Type	Days	Total peoples	Costs Euro €
11	Screw press	WSP05-15	1	1	990
		WSP25	1	1	990
		WSP50	2	1	1980
		WSP75	2	1	1980
13	Thickener	WTH	0	1	0
21	Belt dryer	WBD04-15	1	1	990
		WBD30	1	1	990
		WBD45-60	2	1	1980
		WBD75-90	3	1	2970
		WBD105-120	4	1	3960
		WBD120-180D	5	1	4950
		WBD210-240D	6	1	5940
22	Bunker	WBU00X	0	0	0
		WBU05	0	0	0
		WBU10-25	0	0	0
		WBU35	0	0	0
23	Bagging, conveyor	WLS, WSC	0	1	0
23	Silo	WSI	2	1	1980
30	Container-dryer	WCD04-15	1	1	990
		WCD30	1	1	990
		WCD45	2	1	1980
		WCD60	2	1	1980
40	Skip-dryer	WSD01-08	1	1	990
		WSD12-16	2	1	1980
		WSD20-24	3	1	2970

72