

9 Technical Specifications

9

P12

Heating		Steam	Electric
Filling capacity	kg(lbs)	12(26.5)	12(26.5)
Cage volume	l(US gal)	240(63.4)	240(63.4)
Cage diameter	mm(in)	820(32.3)	820(32.3)
Cage depth	mm(in)	460(18.1)	460(18.1)
Cleaning speed	RPM	35	35
Spinning speed	RPM	500	500
Max. g-factor		115	115
Low level	l(US gal)	30(7.9)	30(7.9)
High level	l(US gal)	60(15.8)	60(15.8)

Operating load (max. at 400 V, 50 Hz)

With distillation	kW	7.4	20.1
With distillation with Slimsorba	kW	8.1	26.5

Connected loads:

Compressor capacity	kW	3.5	3.5
Fan capacity HLL /NLL	kW	2.5 /1.85	2.5 /1.85
Solvent pump capacity	kW	0.55	0.55
Still rake out system pump capacity	kW	0.55	0.55
Cage drive capacity	kW	3.7	3.7
Filter drive capacity	kW	0.75	0.75
Slimsorba fan capacity	kW	0.75	0.75
Air shaft heater battery capacity	kW	-	7.3
Distillation capacity	kW	-	10
Slimsorba steam generator capacity	kW	-	6

Dimensions:

Machine:				
Width:	Slimline	mm(in)	1080(42.5)	1080(42.5)
	Crossline	mm(in)	1840(72.4)	1840(72.4)
Depth:	Slimline	mm(in)	2165(85.2)	2165(85.2)
	Crossline	mm(in)	1406(55.3)	1406(55.3)
Height incl. trough		mm(in)	2260(89.0)	2260(89.0)
Floor space:	Slimline	m ² (ft ²)	2.3(24.8)	2.3(24.8)
	Crossline	m ² (ft ²)	2.5(27.0)	2.5(27.0)

9 Technical Specifications

9

P12

Heating			Steam	Electric
Filling volumes:				
Tank I	filling	l(US gal)	110(29.0)	110(29.0)
Tank II	filling	l(US gal)	70(18.5)	70(18.5)
Tank III	filling	l(US gal)	90(23.7)	90(23.7)
Economy filter		l(US gal)	40(10.6)	40(10.6)
Cartridge filter		l(US gal)	15(4)	15(4)
Distillation	filling	l(US gal)	120(31.7)	120(31.7)
Consumption for drying:				
Drying time incl. reduction	without Slimsorba	min.	17	17
	with Slimsorba	min.	22	22
Electric energy drying	without Slimsorba	kWh	1.7	2.9
	with Slimsorba	kWh	1.9	2.8
Saturated steam drying	without Slimsorba	kg(lb)	1.8(4)	-
	with Slimsorba	kg(lb)	1.8(4)	-
Cooling water drying (12 °C/53.6 °F)				
	without Slimsorba	l(US gal)	60(15.8)	60(15.8)
	with Slimsorba	l(US gal)	55(14.5)	55(14.5)
Consumption for distillation:				
Distilled solvent		l(US gal)	20(5.2)	20(5.2)
Electric energy distillation		kWh	-	2.8
Saturated steam distillation		kg(lb)	4.0 (8.8)	-
Cooling water for distillation(12°C or 53.6 °F)		l(US gal)	55(14.5)	55(14.5)
Consumption per cycle: *				
Electric energy	without Slimsorba	kWh	1.9	5.9
	with Slimsorba	kWh	2.1	5.8
Saturated steam	without Slimsorba	kg(lb)	5.8(12.7)	-
	with Slimsorba	kg(lb)	5.8(12.7)	-
Cooling water drying (12 °C or 53.6° F)				
	without Slimsorba	l(US gal)	115(30.3)	115(30.3)
	with Slimsorba	l(US gal)	110(29.0)	110(29.0)
Compressed air (6 bar/87 psi)		l(US gal)	6(1.6)	6(1.6)

Dimensions may differ if special options are used

9 Technical Specifications

9

P12

Heating **Steam** **Electric**

Other data:

Distill. throughput (DIN 11916) max.	l/h(US gal/h)	120(31.7)	75(19.8)
Filter throughput	l/h(US gal/h)	4000(1056)	4000(1056)
Filter surface, economy filter	m ² (ft ²)	2.7(29.0)	2.7(29.0)
Weight without solvent: Slimline	kg(lbs)	1140(2513)	1140(2513)
Crossline	kg(lbs)	1240(2734)	1240(2734)
Weight with solvent: Slimline	kg(lbs)	1590(3505)	1590(3505)
Crossline	kg(lbs)	1690(3726)	1690(3726)
Floor space: Slimline	m ² (ft ²)	2.3(24.81)	2.3(24.81)
Crossline	m ² (ft ²)	2.5(27)	2.5(27)
Floor surface ** Slimline	m ² (ft ²)	1.3(14)	1.3(14)
Crossline	m ² (ft ²)	1.3(14)	1.3(14)
Cage centrifugal force	N (lb)	5900(1326)	5900(1326)
Floor load static and dynamic Slimline	N/m ² (lb/ft ²)	16500(344)	16500(344)
Crossline	N/m ² (lb/ft ²)	17300(361)	17300(361)
Noise level	dB (A)	60	60
Carbon filling, Slimsorba	kg(lbs)	13(28)	13(28)

Heat balance: *

 Heat to dissipate
 via cooling water ***:

kJ/cycle	16000	16000
----------	-------	-------

Heat dissipated to the surroundings *:

kJ/cycle	4000	4000
----------	------	------

* Values apply to a standard 2-bath cycle, 1st bath low level for distillation at cooling water inlet temperature + 12 °C (53.6 °F), cage housing outlet temperature 50 °C (122 °F), steam supply 4 – 5 bar (58 – 72.5 psi) overpressure saturated steam, ambient temperature 5 to + 40 °C (41 – 104 °F)

** Portion of the floor surface for force transmission, see Installation Instructions, Point 5.3.1

*** Refers to water without any additives

Subject to change!

All values were taken under testing conditions and can deviate in practice!

9 Technical Specifications

9

P15

Heating		Steam	Electric
Filling capacity	kg(lb)	15(33.1)	15(33.1)
Cage volume	l(US gal)	300(79.2)	300(79.2)
Cage diameter	mm(in)	820(32.3)	820(32.3)
Cage depth	mm(in)	570(22.4)	570(22.4)
Cleaning speed	RPM	35	35
Spinning speed	RPM	500	500
Max. g-factor		115	115
Low level	l(US gal)	35(9.2)	35(9.2)
High level	l(US gal)	75(19.8)	75(19.8)

Operating load (max. at 400 V, 50 Hz)

With distillation	kW	7.4	20.1
With distillation with Slimsorba	kW	8.1	26.5

Connected loads:

Compressor capacity	kW	3.5	3.5
Fan capacity HLL /NLL	kW	2.5 /1.85	2.5 /1.85
Solvent pump capacity	kW	0.55	0.55
Still rake out system pump capacity	kW	0.55	0.55
Cage drive capacity	kW	3.7	3.7
Filter drive capacity	kW	0.75	0.75
Slimsorba fan capacity	kW	0.75	0.75
Air shaft heater battery capacity	kW	-	7.3
Distillation capacity	kW	-	10
Slimsorba steam generator capacity	kW	-	6

Dimensions:

Machine:				
Width:	Slimline	mm(in)	1080(42.5)	1080(42.5)
	Crossline	mm(in)	1840(77.4)	1840(77.4)
Depth:	Slimline	mm(in)	2165(86.0)	2165(86.0)
	Crossline	mm(in)	1406(55.3)	1406(55.3)
Height incl. trough		mm(in)	2260(89.0)	2260(89.0)
Floor space:	Slimline	m ² (ft ²)	2.3(24.8)	2.3(24.8)
	Crossline	m ² (ft ²)	2.5(26.9)	2.5(26.9)

Filling volumes:

Tank I	filling	l(US gal)	145(38.3)	145(38.3)
Tank II	filling	l(US gal)	95(25.1)	95(25.1)
Tank III	filling	l(US gal)	90(23.7)	90(23.7)
Economy filter		l(US gal)	40(10.6)	40(10.6)
Cartridge filter		l(US gal)	15(4)	15(4)
Distillation	filling	l(US gal)	120(31.7)	120(31.7)

9 Technical Specifications

P15				
Heating			Steam	Electric
Consumption for drying:				
Drying time incl. reduction	without Slimsorba	min.	19	19
	with Slimsorba	min.	24	24
Electric energy drying	without Slimsorba	kWh	1.8	3.0
	with Slimsorba	kWh	2.0	2.9
Saturated steam drying	without Slimsorba	kg(lbs)	2.0(4.4)	-
	with Slimsorba	kg(lbs)	2.0(4.4)	-
Cooling water drying	without Slimsorba	l(US gal)	65(17.1)	65(17.1)
12 °C (53.6 °F)	with Slimsorba	l(US gal)	60(15.8)	60(15.8)
Consumption for distillation:				
Distilled solvent		l(US gal)	25(6.6)	25(6.6)
Electric energy distillation		kWh	-	3.6
Saturated steam distillation		kg(lb)	5.4(11.9)	-
Cooling water for dist. (12 °C or 53.6 °F)		l(US gal)	70(18.4)	70(18.4)
Consumption per cycle: *				
Electric energy	without Slimsorba	kWh	2.0	6.8
	with Slimsorba	kWh	2.2	6.7
Saturated steam	without Slimsorba	kg(lbs)	7.4(16.3)	-
	with Slimsorba	kg(lbs)	7.4(16.3)	-
Cooling water drying	without Slimsorba	l(US gal)	135(35.6)	135(35.6)
(12 °C or 53.6 °F)	with Slimsorba	l(US gal)	130(34.3)	130(34.3)
Compressed air (6 bar or 87 psi)		l(US gal)	6(1.6)	6(1.6)

9 Technical Specifications

9

P15

Heating **Steam** **Electric**

Other data:

Distill. throughput (DIN 11916) max.	l/hr(US gal/h)	120(31.7)	75(19.8)
Filter throughput	l/h(US gal/h)	4000(1056)	4000(1056)
Filter surface, economy filter	m ² (ft ²)	2.7(29.0)	2.7(29.0)
Weight without solvent:	Slimline	kg(lbs)	1240(2734)
	Crossline	kg(lbs)	1340(2954)
Weight with solvent:	Slimline	kg(lbs)	1770(3902)
	Crossline	kg(lbs)	1870(4123)
Floor space:	Slimline	m ² (ft ²)	2.3(24.8)
	Crossline	m ² (ft ²)	2.5(26.9)
Floor surface: **	Slimline	m ² (ft ²)	1.41(15.2)
	Crossline	m ² (ft ²)	1.41(15.2)
Cage centrifugal force	N(lb)	7300(1640)	7300(1640)
Floor load, stat. and dyn:	Slimline	N/m ² (N/ft ²)	17500(365)
	Crossline	N/m ² (N/ft ²)	18200(380)
Noise level	dB (A)	60	60
Carbon filling, Slimsorba	kg(lbs)	13(28)	13(28)

Heat balance: *

Heat to dissipate
via cooling water ***:

	kJ/cycle	19000	19000
--	----------	-------	-------

Heat dissipated to the
surroundings *:

	kJ/cycle	4500	4500
--	----------	------	------

* Values apply to a standard 2-bath cycle, 1st bath low level for distillation at cooling water inlet temperature + 12 °C (53.6 °F), cage housing outlet temperature 50 °C (122 °F), steam supply 4 – 5 bar (58 – 72.5 psi) overpressure saturated steam, ambient temperature 5 to + 40 °C (41 – 104 °F)

** Portion of the floor surface for force transmission, see Installation Instructions, Point 5.3.1

*** Refers to water without any additives

Subject to change!

All values were taken under testing conditions and can deviate in practice!

9 Technical Specifications

P18

Heating		Steam	Electric
Filling capacity	kg(lbs)	18(39.7)	18(39.7)
Cage volume	l(US gal)	360(95.1)	360(95.1)
Cage diameter	mm(in)	820(32.3)	820(32.3)
Cage depth	mm(in)	680(26.7)	680(26.7)
Cleaning speed	RPM	35	35
Spinning speed	RPM	500	500
Max. g-factor		115	115
Low level	l(US gal)	45(11.9)	45(11.9)
High level	l(US gal)	90(23.7)	90(23.7)

Operating load (max. at 400 V, 50 Hz)

With distillation	kW	7.4	20.1
With distillation with Slimsorba	kW	8.1	26.5

Connected loads:

Compressor capacity	kW	3.5	3.5
Fan capacity HLL /NLL	kW	2.5 /1.85	2.5 /1.85
Solvent pump capacity	kW	0.55	0.55
Still rake out system pump capacity	kW	0.55	0.55
Cage drive capacity	kW	3.7	3.7
Filter drive capacity	kW	0.75	0.75
Slimsorba fan capacity	kW	0.75	0.75
Air shaft heater battery capacity	kW	-	7.3
Distillation capacity	kW	-	10
Slimsorba steam generator capacity	kW	-	6

Dimensions:

Machine:

Width:	Slimline	mm(in)	1080(42.5)	1080(42.5)
	Crossline	mm(in)	1840(77.4)	1840(77.4)
Depth:	Slimline	mm(in)	2275(89.5)	2275(89.5)
	Crossline	mm(in)	1540(60.6)	1540(60.6)
Height incl. trough		mm(in)	2260(89.0)	2260(89.0)
Floor space:	Slimline	m ² (ft ²)	2.4(25.8)	2.4(25.8)
	Crossline	m ² (ft ²)	2.8(30.1)	2.8(30.1)

Filling volumes:

Tank I	filling	l(US gal)	155(40.9)	155(40.9)
Tank II	filling	l(US gal)	100(26.4)	100(26.4)
Tank III	filling	l(US gal)	90(23.7)	90(23.7)
Economy filter		l(US gal)	40(10.6)	40(10.6)
Cartridge filter		l(US gal)	15(4)	15(4)
Distillation	filling	l(US gal)	120(31.7)	120(31.7)

9 Technical Specifications

9

P18			Steam	Electric
Heating			Steam	Electric
Consumption for drying:				
Drying time incl. reduction without Slimsorba	min.		21	21
with Slimsorba	min.		26	26
Electric energy drying	without Slimsorba	kWh	1.9	3.1
	with Slimsorba	kWh	2.1	3.0
Saturated steam drying	without Slimsorba	kg(lbs)	2.2(4.8)	-
	with Slimsorba	kg(lbs)	2.2(4.8)	-
Cooling water drying	without Slimsorba	l(US gal)	70(18.4)	70(18.4)
12 °C (53.6 °F)	with Slimsorba	l(US gal)	65(17.1)	65(17.1)
Consumption for distillation:				
Distilled solvent		l(US gal)	30(7.9)	30(7.9)
Electric energy distillation		kWh	-	4.4
Saturated steam distillation		kg(lbs)	6.8(14.9)	-
Cooling water for distillation(12°C or 53.6 °F)		l(US gal)	85(22.4)	85(22.4)
Consumption per cycle: *				
Electric energy	without Slimsorba	kWh	2.1	7.7
	with Slimsorba	kWh	2.3	7.6
Saturated steam	without Slimsorba	kg(lbs)	9.0(19.8)	-
	with Slimsorba	kg(lbs)	9.0(19.8)	-
Cooling water drying	without Slimsorba	l(US gal)	155(40.9)	155(40.9)
(12 °C or 53.6 °F)	with Slimsorba	l(US gal)	150(39.6)	150(39.6)
Compressed air (6 bar or 87 psi)		l(US gal)	6(1.6)	6(1.6)

9 Technical Specifications

P18

Heating **Steam** **Electric**

Other data:

Distill. throughput (DIN 11916) max.		l/hr(US gal/h)	120(31.7)	75(19.8)
Filter throughput		l/h(US gal/h)	4000(1056)	4000(1056)
Filter surface, economy filter		m ² (ft ²)	2.7(29.0)	2.7(29.0)
Weight without solvent:	Slimline	kg(lbs)	1340(2954)	1340(2954)
	Crossline	kg(lbs)	1440(3175)	1440(3175)
Weight with solvent:	Slimline	kg(lbs)	1950(4299)	1950(4299)
	Crossline	kg(lbs)	2050(4520)	2050(4520)
Floor space:	Slimline	m ² (ft ²)	2.4(25.8)	2.4(25.8)
	Crossline	m ² (ft ²)	2.8(30.1)	2.8(30.1)
Floor surface: **	Slimline	m ² (ft ²)	1.53(16.4)	1.53(16.4)
	Crossline	m ² (ft ²)	1.53(16.4)	1.53(16.4)
Cage centrifugal force		N(lb)	8800(1977)	8800(1977)
Floor load, stat. and dyn:	Slimline	N/m ² (N/ft ²)	18300(382)	18300(382)
	Crossline	N/m ² (N/ft ²)	18900(394)	18900(394)
Noise level		dB (A)	60	60
Carbon filling, Slimsorba		kg(lbs)	13(28)	13(28)

Heat balance: *

Heat to dissipate
via cooling water ***:

			kJ/cycle	22000	22000
--	--	--	----------	-------	-------

Heat dissipated to the
surroundings *:

			kJ/cycle	5000	5000
--	--	--	----------	------	------

* Values apply to a standard 2-bath cycle, 1st bath low level for distillation at cooling water inlet temperature + 12 °C (53.6 °F), cage housing outlet temperature 50 °C (122 °F), steam supply 4 – 5 bar (58 – 72.5 psi) overpressure saturated steam, ambient temperature 5 to + 40 °C (41 – 104 °F)

** Portion of the floor surface for force transmission, see Installation Instructions, Point 5.3.1

*** Refers to water without any additives

Subject to change!

All values were taken under testing conditions and can deviate in practice!

10 Settings and Optimum Operating Values 10

		P12	P15
Basic value:			
Steam pressure (saturated steam)	bar(psi)	4–5(58–72.5)	4–5(58 – 72.5)
Steam temperature (max. permitted)	°C(°F)	150(302)	150(302)
Cooling water pressure	bar(psi)	2-4(29-58)	2-4(29-58)
Cooling water temperature, max.	°C(°F)	25(77)	25(77)
Compressed air	bar(psi)	6(87)	6(87)
Cage speeds:			
Cleaning/	RPM	35	35
Spinning	RPM	500	500
Reversing cycle (cleaning)	sec.	10/1/10	10/1/10
Low level	l(US gal)	30(7.9)	35(9.2)
High level	l(US gal)	60(15.8)	70(18.5)
Pump pressure (max.)	bar(psi)	2.5(36.2)	2.5(36.2)
Filter surface, economy filter	m ² (ft ²)	2.7(29.0)	2.7(29.0)
Filter powder (only for machines without emission-free still rake out system)	kg(lb)	1.2(2.6)	1.2(2.6)
Tank I: optimum filling volume (high level)	l(US gal)	60(15.8)	75(19.8)
Tank III: optimum filling volume	l(US gal)	60(15.8)	75(19.8)
Detergent solution cooler:			
Detergent solution thermal sensor:			
Detergent solution cooler ON	°C(°F)	15–30(59-86)	15 – 30(59-86)
Refrigeration technology:			
Filling capacity, cooling agent R 404A	kg(lb)	4.6(10.1)	4.6(10.1)
Nozzle size: solvent cooling	no.	03	03
Drying + Reduction	no.	06	06
High pressure control switch ON	approx. bar(psi)	21(319)	21(319)
High pressure control switch OFF	approx. bar(psi)	26(377)	26(377)
Low pressure control	approx. bar(psi)	1(14.5)	1(14.5)
Drying:			
Cooling water regulator setting:			
Adjust 4 – 6 min. after start of drying	bar(psi)	20(290)	20(290)
Temperature sensor, cage entry (gentle drying)	°C(°F)	60(140)	60(140)
Temperature sensor, cage exit	°C(°F)	50(122)	50(122)
Temperature sensor after cooler:			
Control value, drying	°C(°F)	40(104)	40(104)
Control value, cycle end	°C(°F)	15(59)	15(59)
Safety thermostat, heater battery (electric only)	°C(°F)	110(230)	110(230)

10 Settings and Optimum Operating Values

		P12	P15
Distillation:			
Cooling water regulator condenser	°C(°F)	45(113)	45(113)
Thermal sensor:			
Cycle distillation OFF	°C(°F)	135(275)	135(275)
Still stripping OFF	°C(°F)	138(280)	138(280)
Still stripping OFF (electric)	°C(°F)	145(293)	145(293)
Thermal sensor, distilled solvent	°C(°F)	55(131)	55(131)
Panel in steam feeder	mm(in)	4(0.16)	4(0.16)
Panel in direct steam line	mm(in)	3(0.12)	3(0.12)
Water filling capacity in heating chamber, approx.	l(US gal)	5(1.3)	5(1.3)
Pressure control switch, still (el):			
ON	bar(psi)	5.2(75.4)	5.2(75.4)
OFF	bar(psi)	5.6(81.2)	5.6(81.2)
Safety thermostat, heating rod (elec. Only)	°C(°F)	230(446)	230(446)

10 Settings and Optimum Operating Values 10

P18

Basic value:		
Steam pressure (saturated steam)	bar(psi)	4–5(58–72.5)
Steam temperature (max. permitted)	°C(°F)	150(302)
Cooling water pressure	bar(psi)	2-4(29-58)
Cooling water temperature, max.	°C(°F)	25(77)
Compressed air	bar(psi)	6(87)
Cage speeds:		
Cleaning/	RPM	35
Spinning	RPM	500
Reversing cycle (cleaning)	sec.	10/1/10
Low level	l(US gal)	45(11.9)
High level	l(US gal)	90(23.7)
Pump pressure (max.)	bar(psi)	2.5(36.2)
Filter surface, economy filter	m ² (ft ²)	2.7(29.0)
Filter powder (only for machines without emission-free still rake out system)	kg(lb)	1.2(2.6)
Tank I: optimum filling volume (high level)	l(US gal)	90(23.7)
Tank III: optimum filling volume	l(US gal)	90(23.7)
Detergent solution cooler:		
Detergent solution thermal sensor:		
Detergent solution cooler ON	°C(°F)	15–30(59-86)
Refrigeration technology:		
Filling capacity, cooling agent R 404A	kg(lb)	4.6(10.1)
Nozzle size: solvent cooling	no.	03
Drying + Reduction	no.	06
High pressure control switch ON	approx. bar(psi)	21(319)
High pressure control switch OFF	approx. bar(psi)	26(377)
Low pressure control	approx. bar(psi)	1(14.5)
Drying:		
Cooling water regulator setting:		
Adjust 4 – 6 min. after start of drying	bar(psi)	20(290)
Temperature sensor, cage entry (gentle drying)	°C(°F)	60(140)
Temperature sensor, cage exit	°C(°F)	50(122)
Temperature sensor after cooler:		
Control value, drying	°C(°F)	40(104)
Control value, cycle end	°C(°F)	15(59)
Safety thermostat, heater battery (electric only)	°C(°F)	110(230)

10 Settings and Optimum Operating Values

P18		
Distillation:		
Cooling water regulator condenser	°C(°F)	45(113)
Thermal sensor:		
Cycle distillation OFF	°C(°F)	135(275)
Still stripping OFF	°C(°F)	138(280)
Still stripping OFF (electric)	°C(°F)	145(293)
Thermal sensor, distilled solvent	°C(°F)	55(131)
Panel in steam feeder	mm(in)	4(0.16)
Panel in direct steam line	mm(in)	3(0.12)
Water filling capacity in heating chamber, approx.	l(US gal)	5(1.3)
Pressure control switch, still (el):		
ON	bar(psi)	5.2(60.9)
OFF	bar(psi)	5.6(66.7)
Safety thermostat, heating rod (elec. Only)	°C(°F)	230(446)

11 Safety Remarks Located on the Machine

11

Gemäß EN ISO 8230 befinden sich an der Maschine nachfolgende Sicherheitshinweise:

In accordance with EN ISO 8230 the machine is fitted with safety hints as given below:

Conforme à EN ISO 8230 les indications de sécurité suivantes se trouvent à la machine:

**Kontaktwasser kann geringe Spuren von Lösemittel enthalten.
Vorschriftsmäßig entsorgen!**

*Contact water may contain small quantities of solvent.
Please dispose according to the regulation in your country!*

**L'eau de contact peut contenir une petite quantité de solvant.
Evacuer l'eau de contact conformément à la réglementation.**

SN 708073

**Nadelfänger täglich bzw. bei Bedarf öfter reinigen
(Nur bei ausgeschalteter Maschine und nach beendeter Trocknungsphase).**

*Clean button trap if necessary but at least once a day
(only if machine is switched off and the drying phase has been finished).*

**Nettoyer le filtre à épingle tous les jours et si nécessaire plus souvent
(seulement hors fonctionnement de la machine et après une opération de séchage).**

SN 708074

**Reinigen der Destillation nur bei
- ausgeschalteter Maschine und
- kalter Destillierblase durchführen**

*Clean still only if
- machine is switched off and
- distillation is cold*

**Nettoyer l'alambic seulement si:
-La machine est hors de fonctionnement
- Le distillateur est revenu à température ambiante**

SN 708075

9. Technical Specifications

9

P21

Heating		Steam	Electric
Filling quantity	kg (lbs)	21 (46.3)	21 (46.3)
Cage volume	l (US gal)	420 (110.9)	420 (110.9)
Cage diameter	mm (in)	1000 (39.4)	1000 (39.4)
Cage depth	mm (in)	535 (21.1)	535 (21.1)
Cleaning speed/drying speed	RPM	35	35
Spinning speed:	RPM	500	500
Max. g-factor		140	140
Low level	l (US gal)	52.5 (13.9)	52.5 (13.9)
High level	l (US gal)	105 (27.7)	105 (27.7)
Operating load (max. at 400 V,50Hz)			
Standard model	kW	12	42
With all options	kW	13	43
Connected loads:			
Compressor capacity	kW	4.0	4.0
Fan capacity	kW	1.5	1.5
Solvent pump capacity	kW	1.1	1.1
Still rake out system pump capacity	kW	0.55	0.55
Cage drive capacity	kW	5.5	5.5
Filter drive capacity	kW	0.55	0.55
Slimsorba fan capacity	kW	0.75	0.75
Steam generator capacity	kW	-	30
Dimensions:			
Machine dimensions:			
Width with distillation	mm (in)	2200 (86.6)	2200 (86.6)
Depth	mm (in)	1500 (59.1)	1500 (59.1)
Height without cartridge filter	mm (in)	2180 (85.8)	2180 (85.8)
Height with cartridge filter	mm (in)	2340 (92.1)	2340 (92.1)
Floor space	m ² (ft ²)	3.3 (35.5)	3.3 (35.5)
Filling volumes:			
Tank I	filling	l (US gal)	200 (52.8)
Tank II	filling	l (US gal)	125 (33.0)
Tank III	filling	l (US gal)	200 (52.8)
Economy filter 1		l (US gal)	75 (19.8)
Economy filter 2		l (US gal)	50 (13.2)
Distillation	filling	l (US gal)	220 (58.1)
Cartridge filter 1 (long)		l (US gal)	25 (6.6)
Cartridge filter 2 (short)		l (US gal)	15 (4.0)

The dimensions given may differ if special options are used

9 Technical Specifications

9

P21

Heating			Steam	Electric
Consumption for drying:				
Drying time inc. reduction		min.	15	15
Electric energy drying	without Slimsorba	kWh	2.4	4.0
	with Slimsorba	kWh	2.6	4.2
Saturated steam drying	without Slimsorba	kg (lbs)	4.0 (8.8)	-
	with Slimsorba	kg (lbs)	4.0 (8.8)	-
Cooling water drying (12 °C/53.6 °F)				
	without Slimsorba	l (US gal)	85 (22.4)	85 (22.4)
	with Slimsorba	l (US gal)	75 (19.8)	75 (19.8)
Consumption for distillation(1x at low level):				
Electric energy distillation		kWh	-	8.0
Saturated steam distillation		kg (lbs)	12.0 (26.5)	-
Cooling water for distillation (12 °C/53.6 °F)		l (US gal)	160 (42.2)	160 (42.2)
Consumption per cycle: *				
Electric total energy	without Slimsorba	kWh	2.8	12.0
	with Slimsorba	kWh	3.0	12.2
Saturated steam	without Slimsorba	kg (lbs)	16.0 (35.9)	-
	with Slimsorba	kg (lbs)	16.0 (35.9)	-
Cooling water drying (12 °C/53.6 °F)				
	without/with Slimsorba	l (US gal)	245/235 (64.7/62.0)	245/235 (64.7/62.0)
Compressed air (6 bar/87 psi)		l (US gal)	6 (1.6)	6 (1.6)

9 Technical Specifications

9

P21

Heating		Steam	Electric
Other:			
Distillation throughput (DIN 11916) max.	l/h (US gal/h)	240 (63.4)	180 (47.6)
Filter throughput	l/h (US gal/h)	5000 (1320)	5000 (1320)
Filter surface, economy filter 1	m ² (ft ²)	5.0 (53.8)	5.0 (53.8)
Filter surface, economy filter 2	m ² (ft ²)	3.5 (37.7)	3.5 (37.7)
Weight without solvent (with 2 economy filters, 2 cartridge filters, Slimsorba)			
	kg (lbs)	2025 (4465)	2025 (4465)
Weight with solvent (with 2 economy filters, 2 cartridge filters, Slimsorba)			
	kg (lbs)	2890 (6218)	2890 (6218)
Floor space	m ² (ft ²)	3.3 (35.5)	3.3 (35.5)
Floor surface **	m ² (ft ²)	2.3 (24.8)	2.3 (24.8)
Cage centrifugal force	N (lb)	12600 (2830)	12600 (2830)
Floor load, static and dynamic	N/m ² (lb/ft ²)	17500 (365)	17500 (365)
Noise level	dB (A)	62	62
Heat balance: *			
Heat to dissipate via cooling water ***:			
	kJ/cycle	33800	33800
Heat dissipated to the surroundings:			
	kJ/cycle	8400	8400

* Values apply to a standard 2-bath load, 1st bath low level for distillation at cooling water inlet temperature + 12 °C (53.6 °F), steam supply 4 – 5 bar (58.0 - 72.5 psi) overpressure saturated steam, ambient temperature + 5 °C to + 40 °C (41 to 104 °F)

** For portion of the floor surface for force transmission, see Installation Instructions, Point 5.3.1

*** Refers to water without additives

Subject to change!

9 Technical Specifications

9

Machine		P26	P30
Heating		steam	steam
Filling quantity	kg (lbs)	26 (57.3)	30 (66.2)
Cage volume	l (US gal)	520 (137.3)	600 (158.4)
Cage diameter	mm (in)	1000 (39.4)	1000 (39.4)
Cage depth	mm (in)	665 (26.2)	770(30.3)
Cleaning speed/drying speed	RPM	35	35
Spinning speed:	RPM	500	500
Max. g-factor		140	140
Low level	l (US gal)	65 (17.2)	75 (19.8)
High level	l (US gal)	130 (34.3)	150 (39.6)
Operating load (max. at 400 V,50Hz)			
Standard model	kW	12	12
With all options	kW	13	13
Connected loads:			
Compressor capacity	kW	4.0	4.0
Fan capacity	kW	1.5	1.5
Solvent pump capacity	kW	1.1	1.1
Still rake out system pump capacity	kW	0.55	0.55
Cage drive capacity	kW	5.5	5.5
Filter drive capacity	kW	0.55	0.55
Slimsorba fan capacity	kW	0.75	0.75
Steam generator capacity	kW	-	-
Dimensions:			
Machine dimensions:			
Width with distillation	mm (in)	2200 (86.6)	2200 (86.6)
Depth	mm (in)	1630 (64.2)	1735 (68.3)
Height without cartridge filter	mm (in)	2180 (85.8)	2180 (85.8)
Height with cartridge filter	mm (in)	2340 (92.1)	2340 (92.1)
Floor space	m ² (ft ²)	3.6 (38.7)	3.8 (40.9)
Filling volumes:			
Tank I	filling l (US gal)	225 (59.4)	250 (66.0)
Tank II	filling l (US gal)	140 (37.0)	155 (40.9)
Tank III	filling l (US gal)	225 (59.4)	250 (66.0)
Economy filter 1	l (US gal)	75 (19.8)	75 (19.8)
Economy filter 2	l (US gal)	50 (13.2)	50 (13.2)
Distillation	filling l (US gal)	220 (58.1)	220 (58.1)
Cartridge filter 1 (long)	l (US gal)	25 (6.6)	25 (6.6)
Cartridge filter 2 (short)	l (US gal)	15 (4.0)	15 (4.0)

The dimensions given may differ if special options are used

9 Technical Specifications

9

Machine			P26	P30
Heating			steam	steam
Consumption for drying:				
Drying time inc. reduction		min.	17	19
Electric energy drying	without Slimsorba	kWh	2.8	3.0
	with Slimsorba	kWh	2.6	2.8
Saturated steam drying	without Slimsorba	kg (lbs)	4.5 (9.8)	5.0 (11.0)
	with Slimsorba	kg (lbs)	4.5 (9.8)	5.0 (11.0)
Cooling water drying (12 °C/53.6 °F)	without Slimsorba	l (US gal)	95 (25.1)	105 (27.7)
	with Slimsorba	l (US gal)	85 (22.4)	95 (5.1)
Consumption for distillation(1x at low level):				
Electric energy distillation		kWh	-	-
Saturated steam distillation		kg (lbs)	14.5 (32.0)	17.0 (37.5)
Cooling water for distillation (12 °C/53.6 °F)		l (US gal)	190 (50.2)	220 (58.1)
Consumption per cycle: *				
Electric total energy	without Slimsorba	kWh		
	with Slimsorba	kWh	3.2 /3.0	3.4 /3.2
Total saturated steam	without Slimsorba	kg (lbs)	19.0 (41.9)	22.0 (48.5)
	with Slimsorba	kg (lbs)	19.0 (41.9)	22.0 (48.5)
Total cooling water (12 °C/53.6 °F)	without Slimsorba	l (US gal)	285 (75.2)	325 (85.8)
	with Slimsorba		275 (72.6)	315 (83.2)
Compressed air (6 bar/87 psi)		l (US gal)	6 (1.6)	6 (1.6)

9 Technical Specifications

9

Machine		P26	P30
Heating		Steam	Steam
Other:			
Distillation throughput (DIN 11916) max.	l/h (US gal/h)	240 (63.4)	240 (63.4)
Filter throughput	l/h (US gal/h)	5000 (1320)	5000 (1320)
Filter surface, economy filter 1	m ² (ft ²)	5.0 (53.8)	5.0 (53.8)
Filter surface, economy filter 2	m ² (ft ²)	3.5 (37.7)	3.5 (37.7)
Weight without solvent (with 2 economy filters, 2 cartridge filters, Slimsorba)	kg (lbs)	2175 (4795)	2325 (5125)
Weight with solvent (with 2 economy filters, 2 cartridge filters, Slimsorba)	kg (lbs)	3140 (6925)	3380 (7455)
Floor space	m ² (ft ²)	3.6 (38.7)	3.8 (40.9)
Floor surface **	m ² (ft ²)	2.6 (28.0)	2.8 (30.1)
Cage centrifugal force	N (lbs)	15600 (3505)	18000 (4045)
Floor load, stat. and dyn.	N/m ² (lbs/ft ²)	17600 (370)	18000 (375)
Noise level	dB (A)	62	62
Heat balance: *			
Heat to dissipate via cooling water ***:			
	kJ/cycle	38600	44800
Heat dissipated to the surroundings:			
	kJ/cycle	10000	11600

* Values apply to a standard 2-bath load, 1st bath low level for distillation at cooling water inlet temperature + 12 °C (53.6 °F), steam supply 4 – 5 bar (58.0 - 72.5 psi) overpressure saturated steam, ambient temperature + 5 °C to + 40 °C (41 to 104 °F)

** For portion of the floor surface for force transmission, see Installation Instructions, Point 5.3.1

*** Refers to water without additives

Subject to change!

10. Settings and Optimum Operating Values 10

Machine		P21	P26	P30
Basic values:				
Steam pressure (saturated steam)	bar (psi)	4 – 5 (58 - 72)	4 – 5 (58 - 72)	4 - 5 (58 - 72)
Steam temperature (max. permitted)	°C (°F)	150 (302)	150 (302)	150 (302)
Cooling water pressure	bar (psi)	2 – 4 (29 - 58)	2 – 4 (29 - 58)	2 – 4 (29 - 58)
Low cooling water level switch	bar (psi)	2 (29)	2 (29)	2 (29)
Cooling water temperature, max.	°C (°F)	25 (77)	25 (77)	25 (77)
Compressed Air	bar (psi)	6 (87)	6 (87)	6 (87)
Low air pressure switch (if present)	bar (psi)	4 (58)	4 (58)	4 (58)
Cage speeds:				
Cleaning /drying	RPM	35	35	35
Spinning	RPM	400 /500	400 /500	400 /500
Reversing cycle (cleaning)	sec.	10 /5 /10	10 /5 /10	10 /5 /10
Low level	l (US gal)	52.5 (13.9)	65 (17.2)	75 (19.8)
High level	l (US gal)	105 (27.7)	130 (34.3)	150 (39.6)
Pump pressure (max.)	bar (psi)	2.5 (36)	2.5 (36)	2.5 (36)
Filter surface, economy filter	m ² (ft ²)	5.0 (53.8)	5.0 (53.8)	5.0 (53.8)
Filter powder (only for machines without emission-free still rake out system)	kg (lb)	2.5 (5.5)	2.5 (5.5)	2.5 (5.5)
Tank I: Optimum filling volume (high level)	l (US gal)	110 (29.0)	135 (35.6)	155 (40.9)
Detergent solution cooler:*				
Detergent solution thermal sensor:	°C	15 - 30	15 - 30	15 - 30
Detergent solution cooler ON	(°F)	(59 - 86)	(59 - 86)	(59 - 86)
Refrigeration technology:				
Filling capacity, cooling agent R 404A	kg (lb)	5.2 (11.4)	5.2 (11.4)	5.2 (11.4)
Expansion valve:				
Nozzle size: solvent cooling	No.	03	03	03
drying /reduction	No.	01	01	01
High pressure control ON	bar (psi)	21 (304.6)	21 (304.6)	21 (304.6)
High pressure control OFF	bar (psi)	25 (362.6)	25 (362.6)	25 (362.6)
Low pressure control	bar (psi)	2 (29)	2 (29)	2 (29)

10 Settings and Optimum Operating Values 10

Machine		P21	P26	P30
Drying:				
Cooling water regulator setting:				
Adjust 4 – 6 min. after start of drying	bar (psi)	18 (261)	18 (261)	18 (261)
Temperature sensor cage inlet	°C (°F)	60 (140)	60 (140)	60 (140)
Temperature sensor after cooler:				
Control value, drying	°C (°F)	40 (104)	40 (104)	40 (104)
Control value, cycle end	°C (°F)	15 (59)	15 (59)	15 (59)
Distillation				
Cooling water regulator condenser	°C (°F)	45 (113)	45 (113)	45 (113)
Thermal sensor:				
Cycle distillation OFF	°C (°F)	135 (275)	135 (275)	135 (275)
Still stripping OFF	°C (°F)	138 (280)	138 (280)	138 (280)
Thermal sensor, distilled solvent	°C (°F)	55 (131)	55 (131)	55 (131)
Restrictor in steam feeder	mm (in)	6 (.24)	6 (.24)	6 (.24)
Restrictor in direct steam line	mm (in)	4 (.16)	4 (.16)	4 (.16)

*Option