

General 1

			MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLMM
Theoretical capacity of machine * The factory setting is indicated in ,bold'. It can be adjusted, when commissioning the machine.	Intensive programme	racks / hr.	50/ 70/ 75	65/ 85/ 100	80/ 105/ 120	90/ 120/ 135	105/ 140/ 160	120/ 165/ 185			135/ 180/ 200			150/ 200/ 225		
	Standard programme	racks / hr.	75/ 85/ 105	100/ 110/ 130	120/ 135/ 160	135/ 155/ 185	160/ 180/ 215	185/ 205/ 245			200/ 225/ 270			225/ 250/ 300		
	Rapid programme	racks / hr.	105/ 110/ 120	130/ 140/ 155	160/ 175/ 185	185/ 200/ 215	215/ 230/ 250	245/ 265/ 285			270/ 295/ 315			300/ 325/ 350		

General 1 (HighTemp)

Theoretical capacity of machine *	Intensive programme	racks / hr.	50	65	80	90	105	120	135	150
	Standard programme	racks / hr.	75	100	120	135	160	185	200	225
	Rapid programme	racks / hr.	115	130	155	170	210	240	250	300

* The factory setting in the standard programme fulfils the contact period of two minutes required by DIN 10510

General

			MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLLM
Number of dishwashing tanks in conformance with DIN 10510			2	2	2	3	3	3	4	4	4	4	4	4	4	4
Number of water connections	Softened water		1 (G ¾“)				2 (G ¾“)									
	Demineralised water (optional)		1 (G ¾“)													
Water drain	on machine	mm	DN 50													
	provided by customer, with si-phon	mm	DN 70													
Minimal flow rate		l/min	15													
Water flow pressure required behind foregoing water treatment		bar (kPa)	1.0 – 6.0 (100 - 600)													
Noise emission	LpAeq (related to place of work)	dB(A)	< 70													
Splash guard	back panelling essential when machine is not placed against a wall		IP X5													

General dimensions

Length of machine	without drying zone, with inlet tunnel (175 mm)	mm	1575	1925	1925	2275	2625	2975	2975	3325	3325	3325	3675	3675	3675	4025
Total length of system			calculated as the length of the machine plus drying zone / blowing-out zone													
Depth of machine		mm	860													
Height of machine, incl. air vents (140 mm)	without heat recovery	mm	1910													
	with heat recovery	mm	2010													
Loading height	with rack	mm	460													
Loading width		mm	500													
Rack size		mm	500 x 500													
Ground clearance		mm	150													
Working height	other working heights upon re-quest	mm	900													

Pre-wash zone

			MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLM
Length	S: Small; M: Medium; L: Large	mm	-	-	350 (S)	700 (M)	700 (M)	1050 (L)	700 (M)	700 (M)	700 (M)	1050 (L)	700 (M)	1050 (L)	1050 (L)	1050 (L)
Tank capacity		l	-	-	-	85										
Tank temperature	in conformance with DIN 10510	°C	-	-	-	40 - 50										
Circulation rate		l/min	-	-	-	450										
Cold water regulator	thermostat-controlled		-	-	-											
Number of wash arms	top (with 6 nozzles each)		-	-	1	3										
	bottom (with 5 nozzles each)		-	-	-	2										

Main wash zone 1

Length	M: Medium; L: Large	mm	700 (M)	1050 (L)	700 (M)	700 (M)	1050 (L)	1050 (L)	700 (M)	700 (M)	1050 (L)	700 (M)	1050 (L)	1050 (L)	700 (M)	1050 (L)
Tank capacity		l	85													
Tank temperature *	in conformance with DIN 10510	°C	60 - 65													
Circulation rate		l/min	650													
Number of wash arms	top (with 6 nozzles each)		5													
	bottom (with 5 nozzles each)		3													

Main wash zone 2

Length	M: Medium; L: Large	mm	-	-	-	-	-	-	700 (M)	1050 (L)	700 (M)	700 (M)	1050 (L)	700 (M)	1050 (L)	1050 (L)
Tank capacity		l	-	-	-	-	-	-	85							
Tank temperature *	in conformance with DIN 10510	°C	-	-	-	-	-	-	60 - 65							
Circulation rate		l/min	-	-	-	-	-	-	650							
Number of wash arms	top (with 6 nozzles each)		-	-	-	-	-	-	5							
	bottom (with 5 nozzles each)		-	-	-	-	-	-	3							

Rinse zone

Length	M: Medium	mm	700 (M)													
Tank capacity		l	70													
Tank temperature	in conformance with DIN 10510	°C	60 - 70													
Number of wash arms (pump rinse)	top (with 5 nozzles each)		1													
	bottom (with 5 nozzles each)		1													
Rinse temperature		°C	85													

* Detergent without disinfection component

Vapour extraction

			MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLLM
Volume of extracted air	without heat recovery	m³/h	400-500													
	with heat recovery	m³/h	400-500													
Temperature of exhaust air	without heat recovery	°C	30-40													
	with heat recovery	°C	25-30													
Relative humidity	without heat recovery	%	95													
	with heat recovery	%	95													

OPTIONAL: drying zone

Length	straight drying zone	mm	optional 700/1050/1400													
	corner drying zone	mm	795													
	straight and corner drying zone	mm	optional 1495/1845													
Air temperature at the jet	adjustable	°C	60													

OPTIONAL: blowing-out zone

Length		mm	optional 700/1050													
Air temperature at the jet	adjustable	°C	60													

Consumption values*

Detergent when dosed at 2 g/l, for example	pre-dosing	g	170	170	170	170	170	170	170	170	170	170	170	170	170	170
	subsequent dosing	g/h	440	440	440	440	440	480	480	500	500	500	520	520	520	580
Rinse aid at a dosage of 0.3 g/l, for example		g/h	78	66	66	66	66	66	72	72	75	75	75	78	78	78
Rinse water		l/h	220	220	220	220	220	240	240	250	250	250	260	260	260	290

* The consumption values are for continuous operation under ideal conditions.

Connected electrical loads

		MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLLM
Voltage		3N~ / 3~ / 3(N)~													
Heating capacity drying zone	OPTIONAL	kW	drying zone 1: 4 kW as provided ex works; 2 kW reserve; make provisions for 6 kW when calculating the current consumption drying zone 2: 4 kW as provided ex works; 2 kW reserve; make provisions for 6 kW when calculating the current consumption (heated electrically from machine no. 575155)												
Ventilator drying zone (P1)	OPTIONAL	kW	1 drying zone: 0.5kW; 2 drying zones: 1kW												
Heating capacity blowing-out zone	OPTIONAL	kW	4 kW as provided ex works; 2 kW reserve; make provisions for 6 kW when calculating the current consumption												
Fan motor blowing-out zone (P1)	OPTIONAL	kW	0.6kW												
Total connected load															
Machine without drying zone, without blowing-out zone		kW	5.1	5.1	5.1	6.8	6.8	6.8	9.1	9.1	9.1	9.1	9.1	9.1	9.1

Connected electrical loads (HighTemp)

Voltage		3N~ / 3~ / 3(N)~													
Heating capacity drying zone	OPTIONAL	kW	drying zone 1: 6 kW drying zone 2: 6 kW												
Ventilator drying zone (P1)	OPTIONAL	kW	1 drying zone: 0.5 kW; 2 drying zones: 1 kW												
Total connected load															
Machine without drying zone		kW	5.1	5.1	5.1	6.8	6.8	6.8	9.1	9.1	9.1	9.1	9.1	9.1	9.1

Steam pressure / temperature

			MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLL
saturated steam Steam pressure / temperature	Water inlet 10-20°C	bar	0.5-4.0										1.0-4.0			
		°C	111.4-151.8										120.2-151.8			
	Water inlet 21-40°C	bar	0.5-4.0										0.5-4.0			
		°C	111.4-151.8										111.4-151.8			
	Water inlet 41-70°C	bar	0.3-4.0										0.5-4.0			
		°C	107.1-151.8										111.4-151.8			
	Water inlet 10-20°C and heat recovery	bar	0.3-4.0										1.0-4.0			
		°C	107.1-151.8										120.2-151.8			

Steam pressure / temperature (HighTemp)

Steam pressure:: 2.0-4.0 bar
Steam temperature: 133.5-151.8 °C

Energy requirement, steam consumption

			MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLL
Total energy requirement and steam consumption w/o heat recovery	Water inlet 10°C	kJ kg/h	114100 57.1					120300 60.2	152700 76.4	159000 79.5			165300 82.7		177800 88.9	
	Water inlet 20°C	kJ kg/h	103200 51.6					108600 54.3	141000 70.5	146500 73.3			151900 76.0		162800 81.4	
	Water inlet 30°C	kJ kg/h	92300 46.2					96900 48.5	129300 64.7	133900 67.0			138500 69.3		147700 73.9	
	Water inlet 40°C	kJ kg/h	81400 40.7					85200 42.6	117600 58.8	121300 60.7			125100 62.6		132600 66.3	
	Water inlet 50°C	kJ kg/h	70500 35.3					73500 36.8	105900 53.0	108800 54.4			111700 55.9		117600 58.8	
	Water inlet 60°C	kJ kg/h	59700 29.9					61700 30.9	94100 47.1	96200 48.1			98300 49.2		102500 51.3	
	Water inlet 70°C	kJ kg/h	48800 24.4					50000 25.0	82400 41.2	83700 41.9			84900 42.5		87400 43.7	
	Water inlet 10°C	kJ kg/h	81700 40.9					87900 44.0	120300 60.2	126600 63.3			132900 66.5		145400 72.7	
Total energy requirement and steam consumption with heat recovery	Water inlet 20°C	kJ kg/h	70800 35.4					76200 38.1	108600 54.3	114100 57.1			119500 59.8		130400 65.2	

Energy requirement, steam consumption (HighTemp)

			MTR 2-120 MM	MTR 2-155 LM	MTR 2-155 SMM	MTR 3-185 MMM	MTR 3-215 MLM / LMM	MTR 3-250 LLM	MTR 4-250 MMMM	MTR 4-285 MMLM	MTR 4-285 MLMM	MTR 4-285 LMMM	MTR 4-315 MLLM	MTR 4-315 LLMM	MTR 4-315 LMLM	MTR 4-350 LLLLM
Total energy requirement and steam consumption w/o heat recovery	Water inlet 10°C	kJ kg/h	168100 84,1					174300 87,2	217500 108,8	223800 111,9			230100 115,1			242600 121,3
	Water inlet 20°C	kJ kg/h	157200 78,6					162600 81,3	205800 102,9	211300 105,7			216700 108,4			227600 113,8
	Water inlet 30°C	kJ kg/h	146300 73,2					150900 75,5	194100 97,1	198700 99,4			203300 101,7			212500 106,3
	Water inlet 40°C	kJ kg/h	135400 67,7					139200 69,6	182400 91,2	186100 93,1			189900 95,0			197400 98,7
	Water inlet 50°C	kJ kg/h	124500 62,3					127500 63,8	170700 85,4	173600 86,8			176500 88,3			182400 91,2
	Water inlet 60°C	kJ kg/h	113700 56,9					115700 57,9	158900 79,5	161000 80,5			163100 81,6			167300 83,7
	Water inlet 70°C	kJ kg/h	102800 51,4					104000 52,0	147200 73,6	148500 74,3			149700 74,9			152200 76,1
Total energy requirement and steam consumption with heat recovery	Water inlet 10°C	kJ kg/h	135700 67,9					141900 71,0	185100 92,6	191400 95,7			197700 98,9			210200 105,1
	Water inlet 20°C	kJ kg/h	124800 62,4					130200 65,1	173400 86,7	178900 89,5			184300 92,2			195200 97,6