

Drum-Dryer

ПЯТЫЙ ПАРТНЕР

The Drum-Dryer is a modular roll-to-roll drying unit developed for the combination with the Porta-Wash washing units and the Porta-Pad coating unit. As a Drum-Fix it can be used for dry-heat fixation processes like disperse dyes on polyester.

The Drum-Dryer is equipped with electrically heated, aluminium drums, guaranteeing an even temperature in the full width of the drum. The fabric in the Drum-Dryer touches the drums one-sided only, so undesirable ironing effects are avoided.

The maintenance-free chains drive all drums and rollers thus a tensionless fabric transport is guaranteed. In addition to that a fabric bar can be attached to the chain which greatly simplifies the feed-in handling of cloth into the Drum-Dryer.

The Drum-Dryer series consists of a basic module with one drum and can also, at a later stage, simply be enlarged to a maximum of 4 drums within the same machine configuration. This modularity enables a flexible configuration.

The infeed and outfeed of the Drum-Dryer can optionally be equipped with a scroll roller to unroll e.g. knitwear before drying. Additional scroll rollers before each of the 4 drums is an option.

All modules required for the proper functioning of the Drum-Dryer are integrated in the device. The closed drying chamber is equipped with an exhaust fan to remove vapour, thereby keeping the working environment clean and dry.

The Drum-Dryer in combination with the Porta-Wash washing units gives a complete and modular line for washing and drying of digitally printed textile substrates. In combination with the Porta-Pad it gives a complete and modular line for coating, finishing and drying.

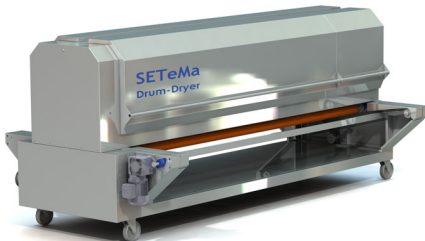
The roll infeed and discharge frames units are modular units and can be selected from roll-to-roll, lorry to lorry, batch winder or a combination of these. The optional ascending batch winder for higher roll capacity is offered with an automatic transverse substrate correction and cloth-side detection for perfect straight rolls.

With temperatures between 50 and 220°C and dwell times from 10 seconds till several minutes the Drum-Dryer is suitable for drying and fixation of disperse direct and disperse transfer/sublimation dyes.

The Drum Dryer series is available in a 1.85, 2.50 and 3.40 meter width and is made of 304 and 316 stainless steel and teflon taped aluminium drums.

The Drum-Dryer is CE marked.

A DD-2500 in combination with a Porta-Pad-2500 as pre-treatment unit



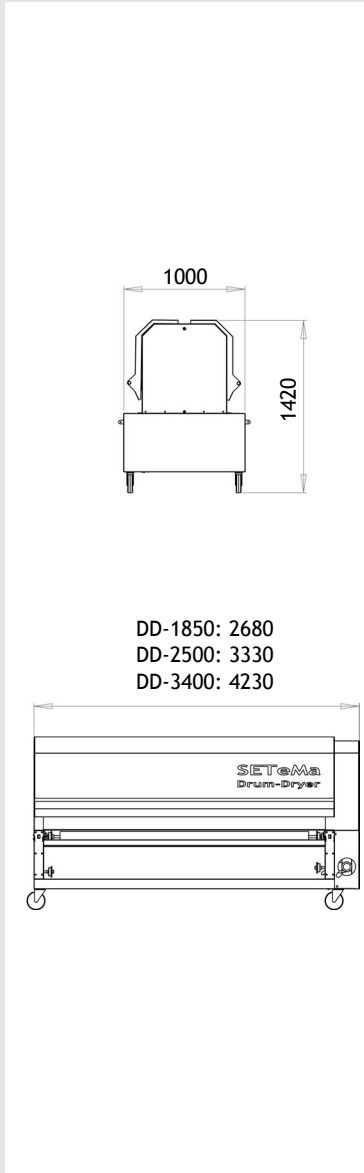
- compact modular roll-to-roll dryer
- no leaders for feed-in / feed-out
- efficient heat transfer by electrically heated, aluminium drums
- one-sided contact drying
- for all types of textile cloth
- also suitable for fixation of disperse direct and disperse transfer / sublimation dyes
- easy to operate
- easy to maintain
- free configuration, from 1 to 4 drums
- available in 1.85, 2.50 and 3.40 meter width
- stainless steel 304 and 316

options:

- ascending batch winder
- transverse substrate correction with cloth side detection
- scroll rollers for e.g. knitwear
- infeed / discharge frame for working from / to lorry
- custom power / frequency



Drum-Dryer/Drum-Fix series technical specifications



Type, capacity		DD1	DD2	DD3	DD4	
Fabric length inside Drum Dryer		2.6	3.2	3.8	4.4	[m]
Evaporation capacity		4-7.5	8-15	12-22	16-30	[kg/h]
Maximum drying capacity	36 g/m ² wet pick-up	60	120	180	240	[m/h]
	72 g/m ² wet pick-up	30	60	90	120	[m/h]
Temperature range	Drum temperature	50 - 220				[°C]
Drying	Typical temperature	110 - 160				[°C]
Fixation Type, capacity		DD1	DD2	DD3	DD4	
Production capacity	150 sec. contact time	7.7	15.4	23.1	30.8	[m/h]
	60 sec. contact time	19.2	38.4	57.6	76.8	[m/h]
	30 sec. contact time	38.4	76.8	115.2	153.6	[m/h]
	Typical temperature	175 - 200				[°C]
Type, width		1850	2500	3400		
Fabric	maximum width	1.85	2.50	3.40		[m]
Fabric roll	maximum weight				60	[kg]
	maximum diameter				0.55	[m]
Exhaust fan	flow				150 - 600	[m ³]
Type, weights		DD1	DD2	DD3	DD4	
	DD-1850	500	550	600	650	[kg]
	DD-2500	570	630	690	750	[kg]
	DD-3400	675	750	825	900	[kg]
Required Connections		DD1	DD2	DD3	DD4	
	power voltage	N + 3 x 230/400				[VAC]
	power current	16	32	50	63	[A]
Drum heater, power	DD-1850	6	12	18	24	[kW]
	DD-2500	8.1	16.2	24.3	32.4	[kW]
	DD-3400	9.9	19.8	29.7	39.6	[kW]
infeed/discharge units						

