swift
by motan

DRYING

sCOMPACT
sDRY

DRYING SOLUTIONS

ZERO LOSS

sCOMPACT 80/150/250

COMPACT DRYER WITH INTEGRATED CONVEYING

swift – simple units, combined with state-of-the art control technology

The new swift product family comprises the most cost-efficient models of the motan product portfolio. swift products are quick and easy to operate. Whether for standardised injection moulding, blow moulding, or extrusion applications – they are always the right choice. The swift product family not only represents value for money, quick delivery and our usual motan quality, but also state-of-the-art control technology.

The sCOMPACT S and sCOMPACT A dryers are designed for flexible material processing in the production line and are suitable for use with a processing machine. They offer a system-specific solution with integrated conveying and a drying bin. The dryers are available in three versions and are each equipped with one drying bin of the size 80, 150 or 250 litres and a hopper loader with a capacity of 4 litres. The sCOMPACT A dryer is provided with advanced functions such as the dew point control and the dry air conveying function with purging. The sCOMPACT 250 dryer can optionally supply two processing machines.

sCOMPACT 80/150/250

Drying

The sCOMPACT dryers are developed especially in order to guarantee a stable and reliable drying process. The two desiccant cartridges generate a continuous dry air flow with low dew point and are perfectly suitable for production facilities with high air temperatures and high ambient humidity.

sCOMPACT control

The microprocessor control of the sCOMPACT uses both SSR and PID technology in order to ensure a precise drying temperature. The control manages a dry air generator, a drying bin and up to 3 hopper loaders. Thanks to a modern 7" touch screen colour display, all conveying and drying functions can be shown and monitored in a user-friendly way. The control offers a choice of 16 user interface languages. The A version of the dryers are equipped with a dew point control for accurate drying and reduction of the energy consumption. They are also equipped with a conveying line purging function. The sCOLOR V dosing unit with two dosing modules can be optionally controlled at the sCOMPACT control. Thanks to the integrated conveying and mixing function in the sCOMPACT control, you will save money as no separate control is needed.

sCOMPACT control

- Easy handling by means of a 7" touch screen colour display
- 128 MB RAM, 128 MB Flash
- Intelligent maintenance reminder
- Available in 16 user interface languages
- Reserved communication interface
- Dew point control
- Line purging

Conveying

The integrated sCONVEY CHS loader is used to transport plastic granulate quickly and without contamination to the processing machine or the drying bin. Costly downtimes are avoided by precisely coordinated material conveying to the processing machine. This prevents material loss and the production area remains clean and safe. When conveying hygroscopic materials with small throughputs or where space is limited a sCONVEY CMS machine loader version with 0.5l is available. The discharge module of the loader has no discharge flap and the unit must be mounted directly on the feed throat of the processing machine.

sCONVEY CHS

sCONVEY CMS

sDRYBIN I design

All drying bins are made of stainless steel and are completely insulated, including the drying bin cone. They are mounted on a stable frame. The long-life solid-state relays provide a precise and reliable temperature control which will prevent thermal damage to sensitive materials.

Cleaning door for drying bin

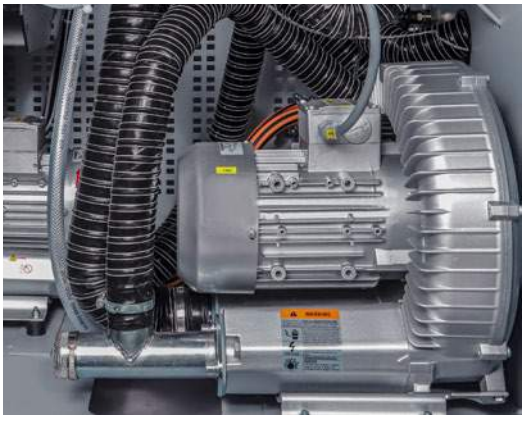
Large cleaning door

All drying models are equipped with especially large cleaning doors with an inspection window and can be opened with the help of a quick-release lock. The doors are adapted to the shape of the drying bin which optimises the material flow and makes cleaning easier. A hinged lid facilitates the access from above.

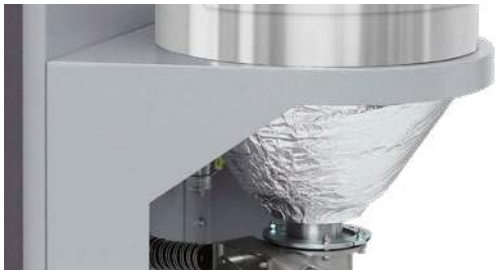
Side channel blower

A three-phase side channel blower is used for conveying. They are maintenance-free and have a long service life. Thanks to the low-noise, simple and compact design, the blowers can be installed directly in the dry air generator.

Side channel blower



Fully insulated drying bin



Fully insulated drying bin

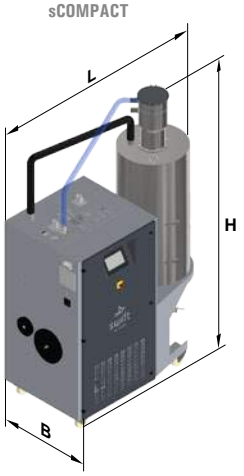
The entire drying bin including material discharge is completely heat-insulated. This ensures stable conditions in the bin and saves energy.

sCOMPACT 80/150/250

TECHNICAL DATA

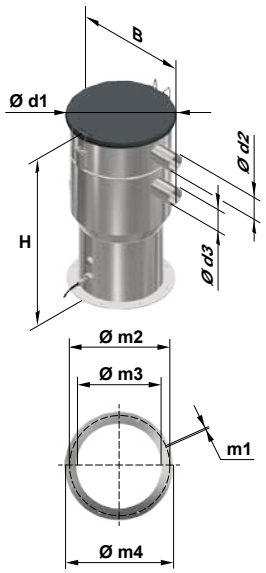
Technical data	sCOMPACT 80		sCOMPACT 150		sCOMPACT 250	
Drying bin volume (l)	80		150		250	
Average dry air flow (m³/h)	30		50		90	
Temperature range (°C)	60-140		60-140		60-140	
Power supply (V/Hz)	3/N/PE 400/50	3/N/PE 400/60	3/N/PE 400/50	3/N/PE 400/60	3/N/PE 400/50	3/N/PE 400/60
Connected load (kW)	4.7	4.9	5.7	5.9	6.1	6.4
Maximum pre-fuse (A)	30		30		30	
Dew point (°C)	-40 ~ -70		-40 ~ -70		-40 ~ -70	
Number of hopper loaders (max.)	2 (3)		2 (3)		2 (3)	
Typical conveying distance (m)	5		5		5	
Weight approx. (kg)	260		275		330	
Dimensions (mm)						
L	1354		1354		1341	
B	717		717		765	
H	1854		2114		2312	
Colour RAL window grey/slate grey	7040/7015		7040/7015		7040/7015	

sCOMPACT

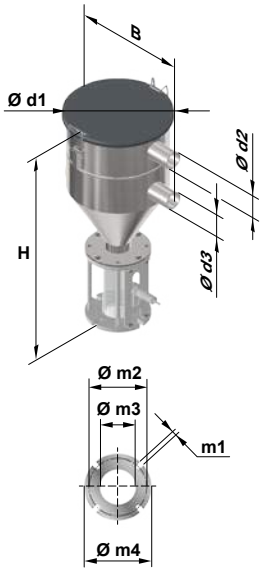


Technical data	sCONVEY CHS 4l	sCONVEY CMS 0.5l
Fill volume - litres/cycle (l)	4	0.5
Weight (kg)	3.8	5
Filter mesh size (µm)	1000	1000
Dimensions (mm)		
H	398	479
B	260	260
Ø d1	226	226
Ø d2	38	38
Ø d3	38	38
m1	7	10
Ø m2	195	100
Ø m3	165	53
Ø m4	215	130

sCONVEY CHS 4l



sCONVEY CMS 0.5l



Perfomance data

Material
throughput rates (kg/h)

	Drying temp. (°C)	Residence time (h)	sCOMPACT 80 (kg/h)	sCOMPACT 150 (kg/h)	sCOMPACT 250 (kg/h)
ABS	80	2,5	20	38	67
CA	75	2,5	15	28	77
CAB	75	3	13	25	59
CP	75	4	12	24	45
EPDM	80	4	11	20	41
PA 6/66	75	5	11	20	34
PA 6 40% GF	80	5	17	31	84
PA 6.10 /.11 /.12	80	5	11	20	70
PAEK	140	4	14	26	49
PBT	110	3	20	38	65
PC	120	2,5	20	38	75
PC/PBT	110	3,5	15	28	54
PE	90	2	12	23	70
PE black	90	3	11	21	34
PEEK	140	4	19	35	49
PEI	140	5	14	26	39

Material
throughput rates (kg/h)

	Drying temp. (°C)	Residence time (h)	sCOMPACT 80 (kg/h)	sCOMPACT 150 (kg/h)	sCOMPACT 250 (kg/h)
PES	140	4	15	28	51
PET	140	7	10	18	30
PI	140	2	24	45	105
PLA	100	3	15	28	64
PMMA	80	2,5	19	36	71
POM	110	2,5	22	42	85
PP	100	2,5	15	29	54
PP talc 40%	100	3	15	28	58
PPO (PPE)	110	2,5	20	38	64
PPS	140	3,5	19	35	57
PS	80	2	24	45	79
PSU	130	3	20	38	63
PVC	70	2	24	45	105
SAN	80	2,5	21	39	65
SB	80	2	22	42	80
TPU (PUR)	80	3,5	14	27	51

The throughput rates indicated in the table are based on approx. values applicable to commercially available materials. Depending on bulk density, initial moisture and chosen drying parameters they can vary.
Subject to technical changes.

sDRY 250
FLEXIBLE DRY AIR DRYER

The new sDRY 250 dry air generator offers the ideal price-performance ratio for standard applications in the drying of granulate. The sDRY 250 has a dry air capacity of 250 m³/h. The dry air generator can either be operated with a single drying bin or combined with multiple preconfigured drying bins in your plant. The drying bins are available from 100l to 900l sizes. This gives you the maximum possible flexibility and an uninterrupted production flow. For more energy efficient drying, additional functions such as dew point control or return air cooling can be added.

sDRY 250 with
sDRYBIN I 600l

sDRY 250 with
2x sDRYBIN S 400l

Regeneration air cooler
By actively cooling the regeneration air during cooldown, the dryer is able to achieve very low and consistent dew points and has a shorter regeneration time.

Desiccant beds
The dryers are equipped with two fully insulated, stationary desiccant beds. The advantages are large amounts of molecular sieve. This means long drying cycles and no moving parts. This saves energy, ensures reliability, and guarantees constant and stable dry air quality.

Constant drying

The ideally positioned air distribution in the hopper ensures an even distribution of the drying air. This keeps even the material that is already at the machine infeed dry and at temperature.

Fully insulated drying bins

The entire drying bin, including the material outlet, is completely thermally insulated. This guarantees stable conditions in the drying bin and thus saves energy.

Heating in the drying bin

Drying systems need individual drying temperatures in different drying bins. We only offer “cold” dry air generators. Heating of the process air takes place directly in the drying bin and is individually adjustable. There is no energy loss in the dry air piping from the dry air generator to the hopper.

Large cleaning door

The drying bins are equipped with especially large cleanout doors fitted with a sight glass and easy-to-open quick release handles. The doors fit the shape of the bin in order to optimise material flow and simplify cleaning. In addition, some of them have a split hinged lid for easy access from above.

Functional design

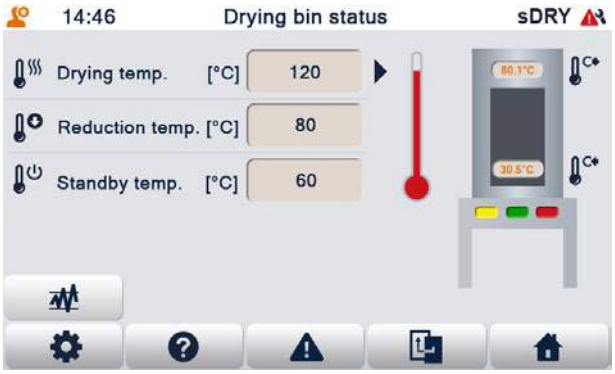
All swift drying bins are made of stainless steel, mounted on a stable frame and have a front control box for optimum accessibility.

sDRY control

MODERN MICROPROCESSOR CONTROL

Intuitive control design

Easy handling via 7" touch screen colour display with modern microprocessor control and user-friendly graphics interface to operate the drying system. Displays on the control panel always show the current drying status.

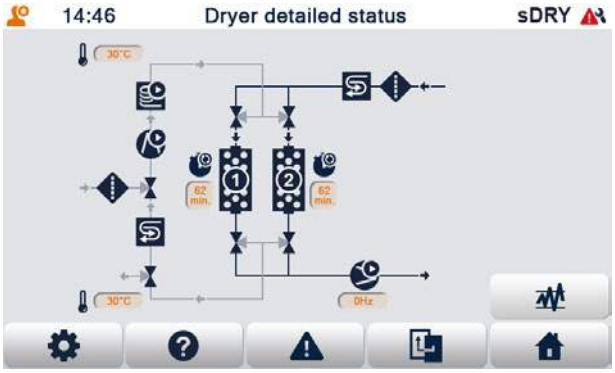


Dew point display and control

The sDRY 250 dryers offer dew point display and dew point control as an option. Regeneration of the molecular sieve is triggered when the maximum dew point set value of the return air has been reached. This value can be defined and set by the user and offers large energy savings.

Hybrid drying mode

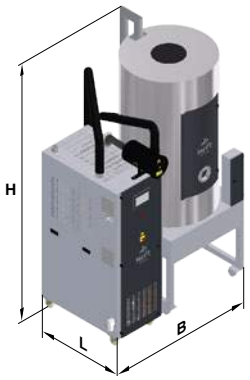
With the 600l and 900l drying bins versions, a hybrid drying mode can be utilised to boost the dry air flow up to 300m³/h. By having both desiccant beds in process simultaneously, after the completion of the regeneration cycle, drying times and material throughputs can be optimised.



sDRY 250
TECHNICAL DATA

Technical data	sDRY 250 with 1 sDRYBIN I	
Average dry air flow (m³/h)	250	
Power supply (V/Hz)	3/N/PE 400 50/60	
Connected load - dryer (kW)	18	
Maximum pre-fuse (A)	35	
Dew point (°C)	< -40	
Weight approx. - dryer (kg)	236	
Drying bin volume (l)	600	900
Weight approx. - bin (kg)	190	360
Temperature range (°C)	60-180	60-140
Dimensions (mm)		
L	924	1100
B	1425	1650
H	2458	2879
Colour RAL window grey/slate grey	7040/7015	

sDRY 250 with sDRYBIN I

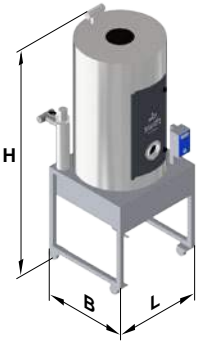


Technical data	sDRY 250 with sDRYBIN S				
Average dry air flow (m³/h)	250				
Power supply (V/Hz)	3/N/PE 400 50/60				
Connected load - dryer (kW)	9				
Maximum pre-fuse (A)	35				
Dew point (°C)	< -40				
Weight approx. - dryer (kg)	236				
Drying bin volume (l)	100	150	250	400	600
Temperature range (°C)	60 - 140		60 - 180 *		
Connected load (kW) *	2.5	2.5	2.5	4	6	9
Power supply (V/Hz)	1/N/PE 230 50/60		3//PE 400 50/60		
Dimensions (mm)					
L	580	580	750	875	875
B	600	600	710	900	900
H	1705	2040	2050	2450	2450
Colour RAL window grey/slate grey	7040/7015				

* An after-cooler is required for temperatures above 140°C.

sDRY 250

sDRYBIN S



Performance data

Material (throughput rates)

	Drying temp. (°C)	Residence time (h)	sDRY-BIN S 100 (kg/h)	sDRY-BIN S 150 (kg/h)	sDRY-BIN S 250 (kg/h)	sDRY-BIN S 400 (kg/h)	sDRY-BIN S 600 (kg/h)	sDRYBIN I 600 (kg/h)	sDRYBIN I 900 (kg/h)
ABS	80	2-3	25	38	63	101	155	155	230
CA	75	2-3	19	28	46	74	115	115	170
CAB	75	2-3	17	25	42	67	100	100	150
CP	75	4	16	24	40	63	95	95	145
EPDM	80	4	13	20	33	53	80	80	120
PA 6	75	4-6	14	20	34	54	85	85	125
PA 6 40% GF	80	4-6	20	31	51	82	125	125	185
PA 6.10 / 66	80	4-6	14	20	34	54	85	85	125
PA 6.11	80	6	10	16	26	41	65	65	95
PAEK *	160	4	20	29	49	78	120	120	180
PBT	110	3	26	38	64	103	155	155	235
PC	120	3	26	38	64	103	155	155	235
PE	90	1-2	15	23	38	61	95	95	140
PE black	90	3	14	21	35	56	85	85	125
PEEK *	150	3	26	38	64	103	155	155	235
PEI *	150	3-4	20	29	49	78	120	120	180
PES *	150	4	21	31	51	82	125	125	185

Performance data

Material (throughput rates)

	Drying temp. (°C)	Residence time (h)	sDRY-BIN S 100 (kg/h)	sDRY-BIN S 150 (kg/h)	sDRY-BIN S 250 (kg/h)	sDRY-BIN S 400 (kg/h)	sDRY-BIN S 600 (kg/h)	sDRYBIN I 600 (kg/h)	sDRYBIN I 900 (kg/h)
PET (blow moulding) *	163	4-6	17	25	42	67	100	100	150
PET (film) *	170	4-6	17	25	42	67	100	100	150
PET (preforms) *	175	4-6	13	20	33	53	80	80	120
PET (injection moulding)	120	4	15	23	38	61	95	95	140
PET G	65	4-6	13	20	33	53	80	80	120
PI	140	2	30	45	76	121	185	185	275
PMMA	80	2-3	24	36	60	95	145	145	215
POM	110	2-3	28	42	69	111	170	170	250
PP	100	2-3	20	29	49	78	120	120	180
PP talc 40%	100	2-3	19	28	46	74	115	115	170
PPO (PPE)	110	2-3	26	38	64	102	155	155	230
PPS	140	3-4	23	35	58	93	140	140	210
PS	80	2	30	45	76	121	185	185	280
PSU	130	3-4	25	38	63	100	150	150	225
PUR, TPU	90	2-3	19	28	46	74	115	115	170
PVC	70	1-2	30	45	76	121	185	185	275
SAN	80	2-3	26	39	65	104	160	160	235
SB	80	2	28	42	69	111	170	170	250

* only for use at the high temperature bins
The throughput rates indicated in the table are based on approx. values applicable to commercially available materials. Depending on bulk density, initial moisture and chosen drying parameters they can vary.
Subject to technical changes

To find your local partner, please visit our website.

www.swift-motan.com

V008_2022-10