



## Surprisingly easy industrial use

*Efficient, energy-saving and user-friendly: the new Spirit topLine machines simplify commercial laundry operations with innovative technologies, professional programmes and functional displays.*

### **Innovative programmes tailored to your specific needs**

To enhance the established, finely differentiated basic programmes with many practical options (prewash, express wash, time preselection, temperature reduction, etc.)

Schulthess has further expanded the range of professional, segment-specific programmes.



50 profiClean programmes for any need

The line now comprises a total of over 50 different profiClean programmes tailor-made for five industry-specific segments: special programs, restaurants / hotels, retirement and nursing homes, commercial operations, and building cleaning services / facility management.

New additions include the innovative programmes for cleaning mops, for example, which more than satisfy the stricter requirements of building cleaning.

These target group-specific programmes are specifically designed to meet the needs of each individual user and range from 20°C handwash to programmes for bath towels, cleaning mops, bed linens and incontinence laundry, or the disinfection of boil wash up to butchers' aprons. Due to their specific purpose, the firmly integrated programmes provide maximum user benefit which far exceeds the performance of standard washing machines. They can be easily and quickly selected with the profiClean button.

### **Washing efficiently and quickly with short programme times**

Commercial and industrial laundries, in particular, have to handle increasing volumes of laundry within the shortest possible time. Schulthess is well aware of these growing requirements and has therefore developed innovative programmes and technical features (e.g., hot water connection, high heat capacity) to achieve superior washing and drying results within a minimum of time. The best example of this is the new vat-type design which is capable of reducing energy and water consumptions by an additional 5 and 10%, respectively, and resulting in a positive effect on operating cost and on the environment.

The optimal use of resources through modern technology and the resulting decrease in operating cost is an area where Schulthess has always set new standards. With its innovative control system, the new Spirit topLine generation also contributes to a further reduction in consumption.

### **Load sensor – an innovation in the Spirit topLine**

A new optional feature of the Spirit topLine 8120 is an intelligent integrated load sensor. It detects the weight of the load at the start of the wash cycle based on which a detergent dosage is recommended and the programme time is automatically set. The load indicator offers several advantages: it ensures a minimal use of water and energy and prevents the machine from being overloaded. This, in turn, guarantees maximum fabric care and protection.



Option: load sensor and detergent dosage



Easy to load with a 180° opening angle

### **Optimal washing effect thanks to a larger drum**

The reason why the Schulthess Spirit topLine machines now work even faster, gentler and more efficiently is due, in part, to the drum. Its above-average capacity provides more room for the laundry to move, thus improving the washing action and ensuring an optimal spin effect. In addition, the higher capacity is a vital factor in the care of particularly delicate fabrics because it reduces creasing.

### **From gentle to rigorous: fine drum perforation with carriers**

The drum of the Spirit topLine machines consists of high-quality chrome nickel steel with exceptionally generous perforation compared to the conventional models available in the market. The ultra-fine drum perforation with up to 6831 holes significantly increases the efficiency of the washing process and leads to excellent washing and rinsing results. Maximum spin speeds of 1500 rpm provide an above-average drainage effect, leaving a residual moisture of only 43%. Even heavily soiled cleaning mops are thoroughly rinsed out and any remaining dirt is fully removed from the drum.

But that is not all: a total of three asymmetrically curved carriers contribute to optimally soaking the laundry. The intensity of the wash cycle can be adjusted, as needed, from gentle (flat side) to rigorous (steep side).

**Dosing made easy with the liquid detergent connection**

The Spirit topLine models can optionally be provided with a connection for liquid detergent to control up to eight dosing pumps. Upon request, the pumps are mounted on a special rack (dosing pump rack) installed on the rear of the machine so as to save space. This eliminates wall mountings and the washing machines can be relocated as needed, regardless of where they are located.

**Maximum user convenience due to a generous graphic display**

The graphic display of the Spirit topLine is designed for easy operation, reliable programme selection and clear communication. It accompanies the user with easy-to-follow instructions and information through all phases of the washing process. One example of this practical support is the automatic remaining time display which continuously shows the time remaining in the programme.



Reliable programme selection and easy communication

**Quick and easy language selection at the touch of a button**

Up to 20 different languages can be selected at the touch of a button: German, Italian, French, English, Portuguese, Spanish, Turkish, Romansh, Serbo-Croatian, Russian, Dutch, Swedish, Norwegian, Danish, Finnish, Slovenian, Polish, Greek, etc.

**Option for individual solutions: multifunctional PC interface**

The Spirit topLine is optionally equipped with a multifunctional interface with serial interface (RS 485) acting as an intelligent communication interface. It can be linked to advanced individual applications to provide customers with complete flexibility as laundry solutions can be realized with different components designed to ensure user convenience, efficient processes and efficiency.



PC interface – state-of-the-art technical flexibility

**Save money with start time preselection**

Start time preselection with real-time display is another particularly user-friendly feature to preset the end of a wash cycle up to 24 hours in advance. Additionally, the machines can now be programmed up to **100 hours** ahead of time. This setting significantly increases productivity because it optimises capacity utilisation of the machine. Program your machine on Friday to have freshly washed laundry first thing Monday morning.

**Clever design for maximum comfort**

The Spirit topLine is equipped with a solid and generous metal door hinged on the left or the right, depending on preference. It has a 30 cm diameter and opens up to a 180° angle. This is ergonomically practical and ensures maximum loading and unloading comfort, especially when handling bulky items, such as bathrobes, ski clothing or curtains.

The excellent noise reduction system and the stable design also contribute to a pleasant work environment. Noise emission and vibration are minimal even during the high-speed spin cycle.

**Practical autoClean self-cleaning feature**

To facilitate service and maintenance of the washing machines even more, Schulthess introduced the autoClean self-cleaning programme in the new Spirit topLine. At the touch of a button the machine self-cleans in just 25 minutes at a temperature of 70°C to ensure complete hygiene.

### **Durable and non-wearing thanks to the superior design**

With a robust drum bearing including rolling bearings, a silicon carbide drum seal, and a stable chassis design with four friction dampers, Schulthess washing machines are made to last. Virtually non-wearing materials and exceptionally robust components make sure of that.

### **State-of-the-art drive system: asynchronous motor**

The Spirit topLine machines are equipped with the most efficient drive system available today. At its core is a maintenance-free, frequency-rectified asynchronous motor whose features speak for themselves:



Maintenance-free and efficient drive system

- Soft-start, with variable speed to suit different types of fabric;
- continuous speed change across all phases of the wash cycle;
- up to 1500rpm for a powerful spin cycle (613g) and maximum drainage (up to 43%);
- optimal power transmission and energy efficiency due to a flexible drive belt

### **Built almost for eternity: over 20,000 cycles**

Unparalleled: Schulthess topLine machines are so robust and non-wearing that they work without defect for over 20,000 wash cycles.

## *Schulthess Plus Points*

### **Programme variety**

A wide variety of basic and professional programmes ranging from 20°C to 95°C with short wash cycles accommodating all common fabrics and textiles ensures a superior daily laundry output.

- 50 profiClean programmes, 10 per each segment. Wash programmes for professional users in the segments special programmes, restaurants / hotels, retirement and nursing homes, commercial operations, and building cleaning services / facility management, hair salons, wellness and fitness centres, saunas, etc.;
- including 10 special programmes for a broad range of fabrics: wool 30°C, handwash 20°C, silk, outerwear, athletic wear, curtains, jeans, shirts; spinning; impregnation;
- attractive additional functions: express programmes for any temperature, gentle wash, prewash, laundry disinfection at 60 / 95°C, energy-saver, stop rinse, spin speed reduction, start time preselection up to 100 hours in advance.

### **Expandability**

- PC interface with programme expansion module: the line of programmes can be enhanced by up to 20 customer-developed, fabric-specific wash programmes via the optional PC interface of the Spirit proLine;
- liquid detergent dosing system to control up to eight dosing pumps. Detergent type and quantity are directly programmable in the machine control system;
- drain valve: as an alternative to the detergent pump also available with drain valve;
- tower unit: combination washer / dryer (space-saving, requiring less than 0.5m<sup>2</sup>);
- machine plinth of chrome steel (+ 30.5 cm).





## Perfectly complementing the washing machines

*Economical, efficient and ecological: the new Spirit topLine dryers stand out due to their improved energy efficiency.*

### Easy to use with the “special” button

Easy, fast and clearly arranged: like their predecessor generation, the new Spirit topLine TA 8320 (exhaust air dryer) and the Spirit topLine TC 8330 (condensation dryer) offer a standardised and easy-to-follow operating concept. All available special programmes can be selected with the “special” button.

### Extensive selection of special programmes

To make the washing and drying process even more efficient, Schulthess has adapted the programmes and cycle times of the Spirit topLine dryers to perfectly match those of the Spirit topLine washing machines. In addition to the established basic programmes, including attractive mixed programmes, a total of 10 special programmes are now available for fabric-specific laundry care, for example programmes for shirts and blouses, jeans, outdoor wear, bed linens, bath towels, or woollens.

### Dryer: compact and exceptionally quiet

The Spirit topLine machines are also designed to be extraordinarily user-friendly. With its compact size, the Schulthess dryer takes up a minimum of space. A washer / dryer tower unit requires no more than 0.5 square meters of space. The super-silent noise reduction system of the professional Spirit topLine dryers additionally ensures that noise emissions are virtually inaudible.



Easy to select: language and special programmes

### Pure intelligence: residual moisture measuring system and timed programme

The Spirit topLine dryers are not only efficient, they are also equipped with intelligent additional functions and settings to offer gentle drying action and low energy consumption at the same time. The residual moisture measuring system is installed in the drum system and continuously measures the residual moisture of the laundry during the drying cycle. The programme automatically shuts off when the selected dryness level is reached. This means that the dryer runs only as long as necessary and thus uses less energy.

### Drying gently with "ecodry" and modern gentle drum

The new unparalleled "ecodry" drum system dries more gently than in the past. Curved carriers swirl the hot air around and tumble the laundry more gently and more efficiently – laundry care at its best! Additionally, a permanent air stream maintained at a constant temperature ensures that the laundry is particularly quickly, but gently dried.

### Easy to use, attractive design

To make loading and unloading the dryer as easy as possible, the door can be optionally hinged on the left or the right. An opening angle of 180° additionally facilitates access to the drum. Naturally, we have also paid special attention to the design. The new Spirit topLine dryers TA 8320 and TC 8330 are available with an attractive anthracite or chrome steel finish (front door and cover).



Easy to use – the new Spirit topLine models

### Drying with exhaust air or condensation

The topLine dryers from Schulthess include an exhaust air model with exhaust air connection and a condensation model with a pump to drain the condensed water.



Washer / dryer tower unit requires only 0.5m<sup>2</sup> of space

## Schulthess Plus Points

- Increased drum capacity (now from 1 to 7kg) and professional features guarantee short programme times and a high laundry output. The laundry also unfolds better and tends to crease less;
- short programme times and improved energy efficiency reduce operating costs;
- drum lighting ensures that no laundry items are lost;
- super-silent noise reduction for quiet operation;
- the easy-open lint filter is now integrated in the loading door;
- cool-down cycle and automatic crease protection for smooth laundry.

### Condensation dryer Spirit topLine TC 8330

- Faster than any other condensation dryer in the world: 7kg laundry cupboard-dry in only 46 minutes (cotton, 1500 rpm) due to a professional jumbo heat exchanger;
- even more economical thanks to further optimised energy efficiency (energy label B; up to 15% lower energy consumption than the standard condensation dryers available in the market; higher efficiency due to improved heat insulation);
- new professional heat exchanger accessible from the front, guaranteed short drying times.

### Exhaust air dryer Spirit topLine TA 8320

- 7kg laundry cupboard-dry in only 36 minutes (cotton, 1500 rpm).

# Spirit topLine washing machines

Company or brand name	Schulthess	
<b>Type of appliance</b>	<b>Washing machine</b>	
<b>Type of sales description</b>	<b>Spirit topLine 8120</b>	
Product no.		
Model with drain pump (P)	8120.1EPU	
Model with drain valve (V)	8120.1EUV	
<b>Application features<sup>1)</sup></b>		
Filling amount	max. kg	7
Drum volume	l	66
Spin speed	max. rpm	1500
g force	g	613
Residual moisture <sup>1)2)</sup>	%	43
Duration cold water connection <sup>1)</sup>	min	56
Duration hot water connection 70°C <sup>1)</sup>	min	45
<b>Consumption data</b>		
Energy consumption:		
– Cold water connection <sup>1)</sup>	kWh	1.29
– Hot water connection 70°C <sup>1)</sup>	kWh	0.16
Water consumption <sup>1)</sup>	l	62
<b>Structural form</b>		
Footed appliance with work surface		
Door hinge <sup>3)</sup>	r/l/i	
<b>Dimensions</b>		
Height	cm	90
Width	cm	63
Depth including space from wall	cm	74
Depth with door open (front loader)	cm	114
Height adjustable	cm	2
Empty weight	kg	98
<b>Equipment</b>		
Detergent tank and drum		
Door opening	∅ cm	chrome-nickel steel front, 30
Automatic door opening	•	
Connecting cable	m	1.6
Drain:		
– Drain hose with benda, only model (P)	m	1.5
– Model with drain pump (P)	∅ mm	22
– Model with drain valve (V)	∅ mm	50
<b>Electric power and water supply</b>		
Electrical connection:		
voltage / connected loads / fuse	V	400 3N~ / 50Hz / 4.4kW / 10A
	V	400 2N~ / 50Hz / 4.4kW / 10A
	V	230 1N~ / 50Hz / 2.1kW / 10A
	V	230 1N~ / 50Hz / 2.5kW / 13A
	V	230 3~ / 50Hz / 4.4kW / 13A
Water connection:		
– pressure hose G 3/4" with fine filter	m	1.5
– can be connected to cold water / hot water	cold water / hot water 70°C	
– Water pressure	bar	0.1 – 1MPa (1 – 10bar)
<b>Options</b>		
– Execution in chrome steel		
– Door hinge left		
– Drain valve or drain pump		
– Programme expansion module with PC interface		
– Load sensor with weight detection		
– Connection for liquid detergent pumps		
– Cash card system		
– Machine plinth in chrome steel (305 mm)		
<b>Safety and service</b>		
Complies with Swiss safety regulations		
Complies with the European Machinery Directive	SEV-tested 2006 / 42 / EC	
Guarantee	1 year	
Service provided by	Schulthess Maschinen AG	
Manufacturer's name and address	Schulthess Maschinen AG, CH-8633 Wolfhausen/ZH	
Country of origin	Switzerland	

## Explications:

– no • yes

1) Values determined in accordance with standard EN 60456 in the standard programme for cotton 60°C without prewash.

2) 100% drainage means that after spinning is completed 1kg laundry (dry weight) contains 1kg of water. The lower the percentage, the less moisture the laundry contains. This is important for the energy consumption of a dryer.

3) Door hinge: l = left, r = right, i = interchangeable. Example: l/i is state as delivered, door hinge left. Hinge interchangeable.

# Spirit topLine dryers

Company or brand name	Schulthess	Schulthess
<b>Type of appliance</b>	<b>Exhaust air dryer</b>	<b>Condensation dryer</b>
<b>Type of sales description</b>	<b>Spirit topLine TA 8320</b>	<b>Spirit topLine TC 8330</b>
Product no.	8320.1U	8330.1U
<b>Application features</b>		
Filling amount		
– cotton, cupboard dry	max. kg 7	7
– cotton, ironing moist	max. kg 7	7
– easy-care, cupboard dry	max. kg 3.5	3.5
Drying time <sup>1)</sup>		
Programme "Cotton, cupboard dry" (laundry spun before beginning drying at about 1500 rpm, 43% residual moisture)	min 36	46
<b>Consumption</b>		
Energy consumption <sup>1)</sup>		
Program "cotton, cupboard dry" (laundry spun before beginning drying at about 1500 rpm, 43% residual moisture)	kWh 3.0	2.9
<b>Structural form</b>		
Footed appliance with work surface	•	•
Standard unit for wash and dry column	•	•
Door hinge <sup>2)</sup>	r/l/i	r/l/i
<b>Dimensions<sup>3)</sup></b>		
Height	cm 90	90
Width	cm 63	63
Depth including space from wall	cm 84 <sup>3)</sup>	88
Depth with door open	cm 145 <sup>3)</sup>	149
Height adjustable	cm 2	2
Empty weight	kg 76	86
<b>Control of drying</b>		
By time setting <sup>4)</sup>	•	•
Automatic by electronic moisture sensing <sup>5)</sup>	•	•
<b>System and equipment</b>		
Air extraction system	•	–
Air condensation system	–	•
Exhaust air duct	Ø 100 mm, 90°-angle adapter	–
Exhaust air hose Ø 100 mm	m 2	–
Drying programs	12	12
Additional programs and times programs	•	•
Special programs	10	10
Mixed	•	•
Display of the program time	•	•
Door opening	•	•
Loading opening	cm front, Ø 36 / 31	front, Ø 36 / 31
Connecting cable	m 1.5	1.5
Outlet hose	m –	2, Ø 22 mm
Condensate drain with pump	–	•
<b>Electric power and water supply</b>		
Electrical connection:	V 400 3N~ / 50Hz / 5.9kW / 10A	400 3N~ / 50Hz / 5.1kW / 10A
voltage / connected loads / fuse	V 400 2N~ / 50Hz / 4.4kW / 10A	400 2N~ / 50Hz / 3.7kW / 10A
	V 230 1N~ / 50Hz / 2.2kW / 10A	230 1N~ / 50Hz / 2.3kW / 10A
	V 230 1N~ / 50Hz / 3.7kW / 16A	230 1N~ / 50Hz / 3.7kW / 16A
	V 230 3~ / 50Hz / 5.9kW / 16A	230 3~ / 50Hz / 5.1kW / 16A
<b>Options</b>		
	– Execution in chrome steel	– Execution in chrome steel
	– Cash card system	– Cash card system
	– Tower kit for washer / dryer column	– Tower kit for washer / dryer column
	– Machine plinth in chrome steel (305 mm)	– Machine plinth in chrome steel (305 mm)
<b>Safety and service</b>		
Complies with Swiss safety regulations	SEV-tested	SEV-tested
Complies with the European Machinery Directive	2006 / 42 / EC	2006 / 42 / EC
Guarantee	1 year	
Service provided by	Schulthess Maschinen AG	
Manufacturer's name and address	Schulthess Maschinen AG, CH-8633 Wolfhausen/ZH	
Country of origin	Switzerland	

#### Explications:

– no • yes

1) Values determined in accordance with standard EN 61121.

2) Door hinge: l = left, r = right, i = interchangeable. Example: l/i is state as delivered, door hinge left. Hinge interchangeable.

3) In the case of an exhaust air connection at the rear, a greater distance from the wall may be required. Dimensions are to be found in the dimensioned drawings.

4) Set the degree of drying according to the laundry items in accordance with operating instructions.

5) Degree of drying maintained automatically.