



*SP/1D Volumetric divider with front exit  
and rectangular hopper kg. 220*

## SP Automatic volumetric divider



*SP/2DL Volumetric divider with long side exit  
and conical hopper kg. 280*

**The SP volumetric divider is a machine developed to divide with precision soft types of dough or moderately leavened dough into pieces of the desired size and weight as well as to automatically feed the machines next in the production line.**

USE: Designed for intensive workloads, the volumetric divider is particularly suitable for bakeries and pastry workshops and manufacturers for medium or high volume production. Developed to be fed by mixers with self-tipping device or bowl elevators and to feed in turn a wide range of machines (rounders, moulders, long moulders), the SP divider can be considered as the core of a well-conceived automatic production line.

**• Features**

- Cast iron structure.
- Outer casing painted with dual cycle anti-corrosion treatment using epoxy powders (food contact).
- Cast iron and special alloy weighing group, high resistance stainless steel dividing blade.
- Greasing by an individually programmable 6 delivery automatic pump.
- Speed variator to set the work rhythm.
- Pre-selection piece counting device: the user sets the number of pieces to produce so that the divider stops automatically when the desired output has been reached. Should the machine stop before the final output has been produced, the number of missing pieces is shown on the piece counter display.
- 24V low voltage electric control panel.
- Protection and safety devices designed to comply with the strictest safety standard. The electric system is connected by safety devices to casings and hoppers that come in all models with safety mobile disc or guard.
- Machine mounted on two fixed wheels and a third rotating wheel.
- Electrical power supply: V.400/3/50 Hz (different voltages on request).

**Models**

**Version planned for single or double piece output:** the selection is made by means of a practical device installed on the dividing piston. The divider is available with front or side exit, both of which are height-adjustable, to allow the divider to work in line with different machine types. Both versions feature a conveyor with two belts whose speed can be set separately so as to allow the most convenient speed for double-piece production. Each belt speed can be adjusted by a practical selector featuring two positions. The mechanical stainless steel flour sifter adjusts the flour output through the motion transmitted by the belt conveyor motor.

**Version planned for single piece output,** particularly suitable for big-size bread production. The mechanical brush flour sifter has an independent motor.

**• Version planned for double piece output,** equipped with a front exit belt conveyor divided into two parts with differentiated speed. The mechanical brush flour sifter has an independent motor.

**Standard configuration - SP with front exit**

- Exit belt mm.500.
- Control panel on left side (user facing the exit conveyor belt).
- Macchine without hopper, to order out of all the models indicated at the following pages (compulsory).

**Options/Accessories - SP with front exit**


- Exit belt mm.700.
- Control panel on the opposite side.
- Stainless steel casing.
- Rolling belt mounted on the exit conveyor for processing slack and sticky dough.

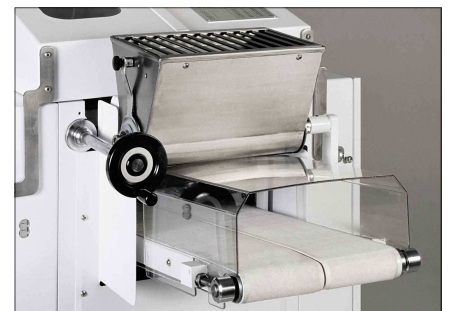
**Standard configuration - SP with side exit**

- Exit belt mm.574.
- Control panel on right side (user facing the exit conveyor belt).
- Macchine without hopper, to order out of all the models indicated at the following pages (compulsory).

**Options/Accessories - SP with side exit**

- Exit belt mm.1344.
- Exit belt mm.1540.
- Control panel and conveyor belt on the opposite side.

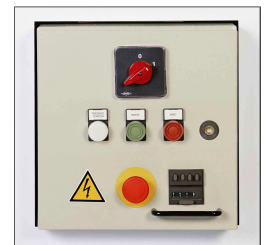
This machine complies  regulations.



2-way front exit and stainless steel flour sifter



Speed variation handwheel



Control panel including piece counter



Mechanical gear for 1 or 2 way processing

**SP VOLUMETRIC DIVIDER (SUMMING TABLE models - performances - combinations)**

TYPE	MODELS	DOUGH PIECES *				Hourly output		EXIT	AVAILABLE LENGTHS
		1 way		2 ways		pieces/hour			
		min	max	min	max	min	max		
1	SP/1	200	1700	****	****	650	1800	FRONT	mm 500 or 700
	SP/1D	200	1500	40	500	650	3600	FRONT	mm 500 or 700
	SP/1DL	200	1500	40	500	650	3600	SIDE	mm 574 – 1344 – 1540
2	SP/2	400	2650	****	****	650	1800	FRONT	mm 500 or 700
	SP/2L	400	2650	****	****	650	1800	SIDE	mm 574 – 1344 – 1540
	SP/2D	400	2200	100	800	650	3600	FRONT	mm 500 or 700
	SP/2DL	400	2200	100	800	650	3600	SIDE	mm 574 – 1344 – 1540
	SP/S2	****	****	100	600	1300	3600	FRONT	mm 500
3	SP/3	500	3000	****	****	650	2600	FRONT	mm 500 or 700
	SP/S3	****	****	170	1300	1300	2600	FRONT	mm 500

\* Minimum and maximum weight are approximate and can change according to the processing method and the dough specific weight.

ADJUSTABLE WORK RHYTHM: for SP/1-2 from 650 up to 1.800 strokes/hour for SP/3 from 650 up to 1.300 strokes/hour

**COUPLING AT THE EXIT**

Exit	Length	Recommended combinations
FRONT	mm 500	AC conical rounder
FRONT	mm 700	FE long moulder, FOR/3CR - FOR/4CR moulders, FOR/S4C moulder-long moulder
EXIT	mm 574	AC conical rounder
EXIT	mm 1344	FE long moulder, FOR/3CR - FOR/4CR moulders, FOR/S4C moulder-long moulder
FRONT	mm 1540	FE/AT counter-moving belt rounder-long moulder

**AVAILABLE HOPPERS AND COUPLING FOR FEEDING**

Model	Ref.	Shape	Capacity	Recommended combinations	Protection
HLB	150318-150377 (SP/3)	ROUND	KG 90	(manual feeding)	Mobile disc
HLT	150326-150378 (SP/3)	ROUND	KG 280	ESR/3M bowl elevators	Tilting grid
HLR	150335-150369 (SP/3)	RECTANGULAR	KG 220	ISE/ FRA mixers up to kg.200 MONO-TWIN 200 A-B-E, TNSE H	Sliding grid
HPR	150336-150370 (SP/3)	RECTANGULAR	KG 280	ISE/300 FRA mixers	Sliding grid



HLT hopper with tilting grid



HLR hopper with sliding grid

### ORDER SPECIFICATIONS

- ◆ The hopper can be ordered only after having checked the type of feeding (manual or by mixers/elevators). To couple the volumetric divider with machines not built by Esmach, verify the unloading heights. To couple the volumetric divider with ISE/FR and MONO-TWIN machines built before 01.01.95, order the machine raising kit (ask to the Customer Service).
- ◆ Check combination at the exit and choose a compatible conveyor belt. To couple the volumetric divider with machines not built by Esmach, check heights.
- ◆ Verify the position of control devices according to the combination required.
- ◆ Minimum and maximum weights are approximate and can change according to the processing method and the dough specific weight.

### MODELS - OPTIONS

Model	Description	Price €
<b>SP/1 - UFM</b>	<b>1-way volumetric divider with front exit mm. 500. Single portion from gr. 200 to gr. 1700.</b>	
UF - L	Option: front exit mm.700.	
CF/OPP	Option: electric controls on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
T/ARR	Rolling belt mounted on the exit conveyor.	
<b>SP/1D - UFM</b>	<b>1 and 2-way volumetric divider with front exit mm. 500. Single portion (1 way) from gr. 200 to gr. 1500. Double portion (2 ways) from gr. 40 to gr. 500.</b>	
UF - L	Option: front exit mm. 700.	
CF/OPP	Option: electric controls on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
T/ARR	Rolling belt mounted on the exit conveyor.	
<b>SP/1DL - ULC</b>	<b>1 and 2-way volumetric divider with side exit mm. 574. Single portion (1 way) from gr. 200 to gr. 1500. Double portion (2 ways) from gr. 40 to gr. 500.</b>	
UL - M	Option: side exit mm. 1344.	
UL - L	Option: side exit mm. 1540.	
CL - OPP	Option: electric controls and side exit on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
<b>SP/2 - UFM</b>	<b>1-way volumetric divider with front exit mm. 500. Single portion from gr. 400 to gr. 2650.</b>	
UF - L	Option: front exit mm. 700.	
CF/OPP	Option: electric controls on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
T/ARR	Rolling belt mounted on the exit conveyor.	
<b>SP/2L - ULC</b>	<b>1-way volumetric divider with side exit mm. 574. Double portion from gr. 400 to gr. 2600.</b>	
UL - M	Option: side exit mm. 1344.	
UL - L	Option: side exit mm. 1540.	
CL - OPP	Option: electric controls and side exit on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	

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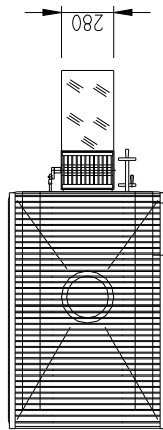
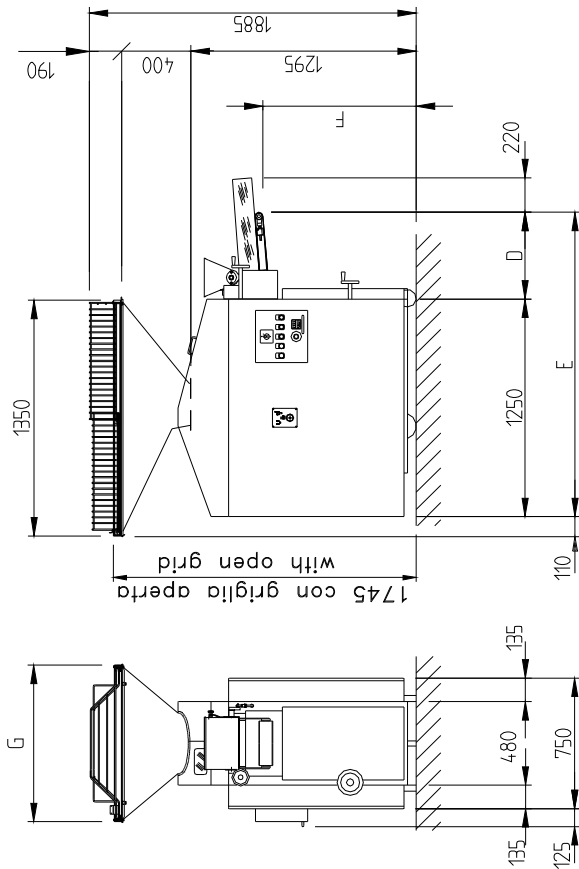
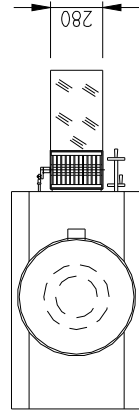
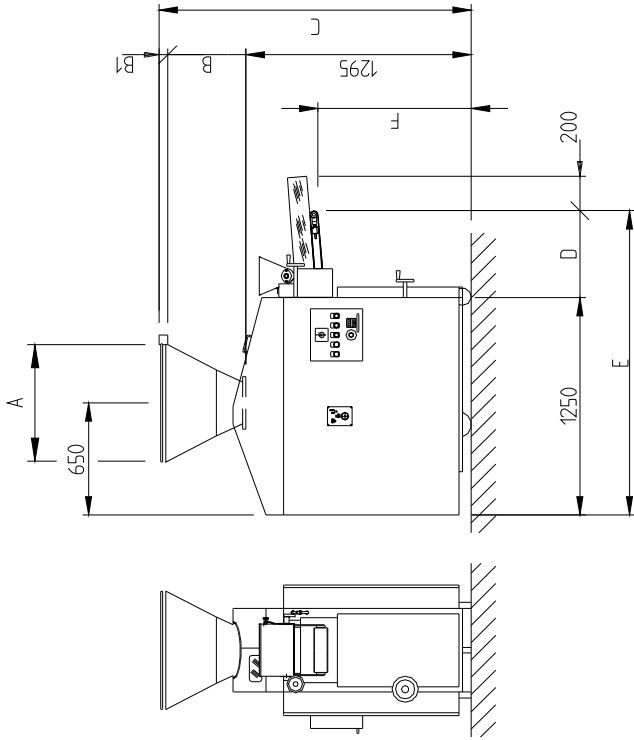
Model	Description	Price €
<b>SP/2D - UFM</b>	<b>1 and 2-way volumetric divider with front exit mm. 500. Single portion (1 way) from gr. 400 to gr. 2200. Double portion (2 ways) from gr. 100 to gr. 800.</b>	
UF - L	Option: front exit mm. 700.	
CF/OPP	Option: electric controls on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
T/ARR	Rolling belt mounted on the exit conveyor.	
<b>SP/2DL - ULC</b>	<b>1 and 2-way volumetric divider with side exit mm. 574. Single portion (1 way) from gr. 400 to gr. 2200. Double portion (2 ways) from gr. 100 to gr. 800.</b>	
UL - M	Option: side exit mm. 1344.	
UL - L	Option: side exit mm. 1540.	
CL - OPP	Option: electric controls and side exit on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
<b>SP/S2</b>	<b>2-way volumetric divider with front exit mm. 500. Double portion from gr. 100 to gr. 600.</b>	
CF/OPP	Option: electric controls on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
T/ARR	Rolling belt mounted on the exit conveyor.	
<b>SP/3 - UFM</b>	<b>1-way volumetric divider with front exit mm. 500. Single portion from gr. 500 to gr. 3000.</b>	
UF - M	Option: front exit mm. 700.	
CF/OPP	Option: electric controls on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
T/ARR	Rolling belt mounted on the exit conveyor.	
<b>SP/S3</b>	<b>2-way volumetric divider with front exit mm. 500. Double portion from gr. 170 to gr. 1300.</b>	
CF/OPP	Option: electric controls on the opposite side.	
SP/INOX	Stainless steel casing (instead of painted).	
T/ARR	Rolling belt mounted on the exit conveyor.	

## HOPPERS WITH SAFETY GUARDS

Model	Ref.	Description	Price €
HLB	SP/1-2 150318 SP/3 150377	Stainless steel round hopper with 90 kg dough capacity (manual feeding).	
HLT	SP/1-2 150326 SP/3 150378	Stainless steel round hopper with 280 kg dough capacity (back or side coupling to ESR/3M bowl elevator).	
HLR	SP/1-2 150335 SP/3 150369	Stainless steel rectangular hopper with 220 kg dough capacity (back or side coupling to ISE/FR self-tilting mixer up to 200 Kg - MONO-TWIN and TNSE H).	
HPR	SP/1-2 150336 SP/3 150370	Stainless steel rectangular hopper with 280 kg dough capacity (back or side coupling to ISE/FR self-tilting mixer up to 300 Kg).	

**Attention:** orders for **hoppers only** will be accepted on condition that the Customer has an Esmach divider already with 24V controls. Should that not be the case, the installation will be carry out only after appropriate revision of the machine.

SPEZZATRICE VOLUMETRICA CON USCITA FRONTALE	Macchine_2002/010
VOLUMETRIC DIVIDERS WITH FRONT EXIT	01/10/01



ABBINAMENTO (lato carico) COUPLINGS (inlet)		TRAMOCCIA - HOPPER			
Mod.	Capacità Capacity	A (mm)	B (mm)	B1 (mm)	C (mm)
HLB	90 kg	ø675	460	30	1785
HLT	280 kg	ø1270	550	40	1885
CARICO MANUALE MANUAL LOAD CON ESR/3M COUPLED WITH ESR/3M					
ABBINAMENTO (lato scarico) COUPLINGS (outlet)		TRAMOCCIA - HOPPER			
Mod.	Capacità Capacity	D (mm)	E (mm)	F (mm)	G (mm)
HLR	220 kg	500	1750	780 ÷ 880	900
HPR	280 kg	700	1950	820 ÷ 930	1200
LATERALE e POST. ISE/FR-TWIN SIDE AND BACK COUPLED ISE/FR-TWIN					
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TRASPORTATORE CON CAMBIO CONVEYOR BELT WITH SPEED VARIATOR					
ABBINAMENTO (lato scarico) COUPLINGS (outlet)		TIPO TYPE			
AC/ (tutte-all the types)		MEDIO-MEDIUM			
FE "EUROPA"-FOR 3CR FOR 4CR - FOR S 4C		LUNGO-LONG			
POTENZA INSTALLATA-INSTALLED POWER		kW			
POTENZA MAX ASSORBITA-MAX ABSORBED POWER		kW			
PESO - WEIGHT		kg			
VOLUME IMBALLO - PACKING VOLUME		m <sup>3</sup>			
CONNESSIONE ELETTRICA-PLUG COUPLING		3PH+Gr			

DATI TECNICI - TECHNICAL FEATURES

SPEZZATRICE VOLUMETRICA CON USCITA LATERALE

Macchine\_2002/011

VOLUMETRIC DIVIDERS WITH SIDE EXIT

01/10/01

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