



SPI F



According to EN 453 Standard rev. 2015

Spiral mixer with fixed bowl

Our new SPI range of spiral mixers is the outcome of our culture and know-how in quality processing of all kinds of dough kneading for bakeries, pizzerias and confectionery industries as well as our meticulous research in product technology. Structural strength, extraordinary versatility of use, reliability, high standard of safety features, accuracy in the manufacturing process, ergonomics and attractive design highlight our proven success in dough making and project our tradition onto the future.

SPI is available in 10 models with a dough capacity ranging from 30 kg to 300 kg. This is our cutting-edge range of spiral mixers, the line of which is simple and modern. An electro-mechanical or an electronic version of SPI spiral mixer is also available. Esmach has focused the attention not only on researching and monitoring successfully all aspects regarding the process and dough rising, the latest products, the rheological properties of the mixtures, their timing and their final temperature but also on versatility of use with optimum results while processing both minimum and maximum capacity of dough to be achieved.

Standard features

- Steel frame properly enlarged and strengthened to confer firm stability to the machine structure even during the most demanding processes and to transfer entirely the mechanical energy, developed by the tool, to the dough kneading,
- Outer paneling painted with an anticorrosion double epoxy powder coating and suitable for food contact.
- Stability and levelling on the floor assured by three casters with blocking wedges useful for handling the machine while cleaning it deeply in the area underneath the frame.
- Stainless steel bowl with stainless steel rim for extra support, dividing blade and spiral arm.
- Transparent bowl lid suitable for food contact in compliance with the strictest hygienic and safety regulations.
- Innovative flat cover top in scratch-resistant ABS, divided in two sections.
- Electric panel in an IP55 protection box against flour dust and water sprays.
- Direct power transmission for the rotation of both spiral arm and bowl generated by trapezoidal drive belts on multi-groove pulleys.
- Independent motors for bowl and spiral arm in the models from 60 to 300 kg. An only one motor for 30 and 45 kg models.
- Two working speeds for bowl and spiral arm.
- Reversal of bowl rotation at first speed (*except 30 and 45 kg models*).
- Functional and innovative command console with rotation in both left and right directions and with an operative angle of 120°, allowing ideal ergonomic comfort also in narrow working rooms.
- Manual or automatic selection and monitoring of working cycle through a membrane keyboard panel in the electronic version only. Storage of up to 9 recipes.

- Power supply: 400V/3/50 Hz (different voltage upon request)

Plus

- Optimum balance between bowl rotation and spiral arm enabling a right kneading flow and a soft and gentle dough kneading.
- Perfectly shaped spiral arm rotation inside the bowl and right accurate proportions among bowl, spiral arm and dividing blade well matched together to get homogeneous, soft and distinguished dough also while using small dough amounts.
- Accurate bowl and spiral arm speed for an excellent dough kneading and its processing through stretching and lengthening, allowing continuous and constant dough kneading with a significant reduction of the processing time and limited heating up of the dough.

Accessories — Options

- Small trolley suitable for spiral mixer handling; The electronic version of the model can be supplied with the following accessories:
 - Lid + grid: stainless steel grid in addition to the transparent lid;
 - Water dispenser directly on the bowl with liter meter, mixer for manual temperature and temperature sensor on display.
 - Dough temperature detector with infrared sensor, visualization on display and stop option of the working process or immersion temperature detector with external sensor connected to the circuit board.



MODELS

	Description
SPI 30 F E	Spiral mixer with approx. kg. 30 dough capacity (approx. kg. 18-20 flour capacity). Bowl diameter: 450 mm. Electronic control panel.
SPI 30 F M	Spiral mixer with approx. kg. 30 dough capacity (approx. kg. 18-20 flour capacity). Bowl diameter: 450 mm. Electro-mechanical control panel.
SPI 45 F E	Spiral mixer with approx. kg. 45 dough capacity (approx. kg. 30 flour capacity). Bowl diameter.: 530 mm. Electronic control panel.
SPI 45 F M	Spiral mixer with approx. kg. 45 dough capacity (approx. kg. 30 flour capacity). Bowl diameter: 530 mm. Electro-mechanical control panel.
SPI 60 F E	Spiral mixer with approx. kg. 60 dough capacity (approx. kg. 40 flour capacity). Bowl diameter: 550 mm. Electronic control panel.
SPI 60 F M	Spiral mixer with approx. kg. 60 dough capacity (approx. kg. 40 flour capacity). Bowl diameter: 550 mm. Electro-mechanical control panel.
SPI 80 F E	Spiral mixer with approx. kg. 80 dough capacity (approx. kg. 50-54 flour capacity). Bowl diameter: 700 mm. Electronic control panel.
SPI 80 F M	Spiral mixer with approx. kg. 80 dough capacity (approx. kg. 50-54 flour capacity). Bowl diameter: 700 mm . Electro-mechanical control panel.
SPI 100 F E	Spiral mixer with approx. kg. 100 dough capacity (approx. kg. 62-65 flour capacity). Bowl diameter:700 mm. Electronic control panel.
SPI 100 F M	Spiral mixer with approx. kg. 100 dough capacity (approx. kg. 62-65 flour capacity). Bowl diameter: 700 mm. Electro-mechanical control panel..
SPI 130 F E	Spiral mixer with approx. kg. 130 dough capacity (approx. kg. 75-80 flour capacity). Bowl diameter : 800 mm. Electronic control panel.
SPI 130 F M	Spiral mixer with approx. kg. 130 dough capacity (approx. kg. 75-80 flour capacity). Bowl diameter: 800 mm. Electro-mechanical control panel.
SPI 160 F E	Spiral mixer with approx. kg. 160 dough capacity (approx.kg. 100 flour capacity). Bowl diameter: 900 mm. Electronic control panel.
SPI 160 F M	Spiral mixer with approx. kg. 160 dough capacity (approx.kg. 100 flour capacity). Bowl diameter: 900 mm. Electro-mechanical control panel.
SPI 200 F E	Spiral mixer with approx. kg. 200 dough capacity (approx. kg. 125 flour capacity). Bowl diameter: 900 mm. Electronic control panel.
SPI 200 F M	Spiral mixer with approx. kg. 200 dough capacity (approx. kg. 125 flour capacity). Bowl diameter: 900 mm. Electro-mechanical control panel.
SPI 250 F E	Spiral mixer with approx. kg. 250 dough capacity (approx.kg. 150 flour capacity). Bowl diameter: 1045 mm. Electronic control panel.
SPI 300 F E	Spiral mixer with approx. kg. 300 dough capacity (approx. kg. 200 flour capacity). Bowl diameter: 1045 mm. Electronic control panel.

ACCESSORIES - OPTIONS

	Description
	Small trolley suitable for spiral mixer handling
	Lid + grid: stainless steel grid in addition to the transparent lid
	Water dispenser directly on the bowl with liter meter, mixer for manual temperature, temperature sensor on display. (available for the electronic version only).
	Dough temperature detector with infrared sensor, visualization on display and stop option of the working process. (available for the electronic version only).
	Immersion temperature detector with external sensor connected to the circuit board(available for the electronic version only).

Option: LID + GRID





SPI F spiral mixer with fixed bowl

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		SPI F							
TECHNICAL DATA		30	45	60	80	100	130	160	200
A	mm	477	477	565	588	588	735	735	735
B	mm	978	978	1150	1207	1207	1450	1495	1495
C	mm	1378	1378	1530	1563	1563	1625	1610	1610
D	mm	741	791	911	886	936	870	883	943
E	mm	1879	1864	1705	1751	1776	1890	1945	1975
F	mm	562	562	675	741	741	875	948	948
G	mm	181	131	153	189	139	224	202	142
machine mass	kg	218	222	360	417	417	630	680	705
mass on pallet only	kg	239	243	395	452	452	660	716	741
mass on a crate	kg	301	305	479	536	536	744	800	825
mass on a case	kg	323	327	556	613	613	765	821	846
machine overall dimensions on pallet	mm	1150x650x1550		1300x850x1730			1600x1000x1750		
packing overall dimensions (crate/case)	mm	1250x750x1670		1400x950x1820			1700x1100x1850		
min.-max dough capacity (a)	kg	2/30	2.5/45	3/60	3.5/80	4/100	4/130	4.5/160	4.5/200
bowl capacity	L	50	60	95	120	145	200	250	290
1 st /2 nd spiral arm rotation speed	r.p.m.	100/200			103/207				
1 st /2 nd bowl rotation speed	r.p.m.	10/20		7.5/14	7.5/15		10/20		
Installed power	kW	1.5		2.57	4.55		6.8	8.4	
Spiral arm motor power	kW	1.5-0.75 (b)		2.2-1.5	4 - 3		5.9 - 4.05	7.5 - 4.8	
bowl motor power	kW	-		0.37-0.25	0.55-0.37		0.9-0.45		
Voltage (c)	V	400							
Frequency (c)	Hz	50							
No. of phases (c)	-	3							
plug coupling	-	3PH+Gr							

(a) the max. mixture capacity shown, refers to a water/flour ratio not less than 60% (flour W= 250, P/L= 0,4); it reduces in the ratio reduction:(water quantity)/(flour quantity)

(b) same motor both for spiral arm and bowl

(c) these values represent the most frequent case; should voltage and/or frequency and/or no. of phases be different, the specifications shown on the identification plate will be valid only.



Electronic control panel for SPI



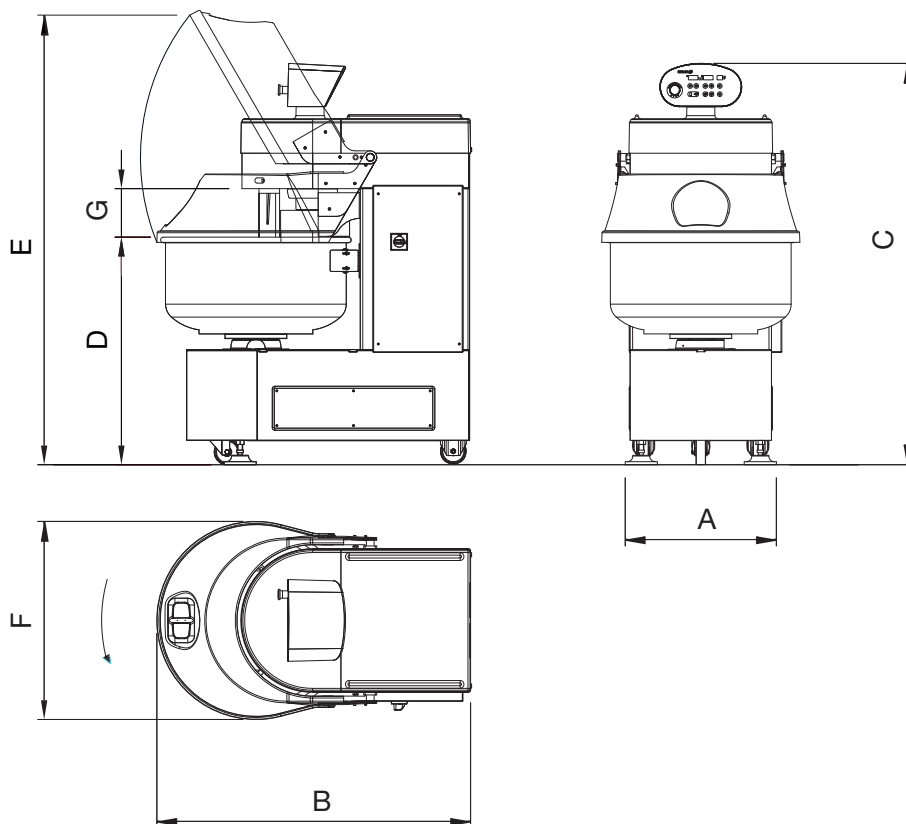
Electro-mechanical control panel for



Small trolley for SPI F han-



SPIRAL MIXER



2/2 version 02 May 2017

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