



FP SPOMAX S.A. is one of the biggest European manufacturers and suppliers of cast iron rolls for the cereal processing, food processing edible oil and chemical industry. Company supply rolls for wide range of customers including chocolate, coffee, pea/bean and salt processors, biscuit and confectionery machines manufacturers.

Rolls manufactured by SPOMAX are used for grinding, flaking and cracking products of vegetable and mineral origin.

SPOMAX supplies smooth, corrugated and self-matting rolls - the latter are used mainly in flour mills.

Standard parameters of external (working) layer:

- thickness: 15-20 mm
- hardness: 500-540 HB, max 580 HB.

Roll casting

FP SPOMAX rolls are produced in our own foundry in one of the most modern centrifugal casting lines in Europe. The chemical composition of each roll is checked during the casting process and each cast is individually numbered. The process of centrifugal casting enables us to maintain full control over the casting procedure and ensures uniformity of the hard layer of the rolls. As a result SPOMAX offers a high quality product which can be used for many years.

Roll machining

After casting, the rolls are cut to the required length and machined according to the individual requirements of each customer. Roll fluting is done using single point fluting machines and each roll is dynamically balanced. Finished rolls are subject to extensive quality control procedures, in which the measurements are compared with the received order. A certificate containing this comparison is supplied with each roll.

Shipment program

FP SPOMAX supplies rolls for various types of machines. Depending on the individual requirements of the clients we supply:

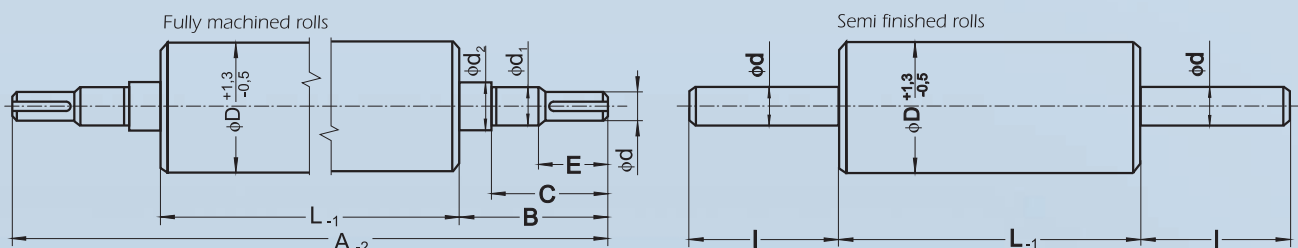
- fully machined rolls with smooth, corrugated or self-matting working layer and with machined spindles
- semi finished rolls with grinded working layer and with spindles designed for further machining



Net weight of the semi finished roll

[mm] D	L [mm]																			∅ d × l mm × mm	L _{max} [mm]			
	284	300	400	457,2 (18")	500	600	609,6 (24")	700	762 (30")	800	914,4 (36")	1000	1016 (40")	1066,8 (42")	1200	1250	1500	1524 (60")	2100					
150		44	53		63	72															∅ 60 × 200	1600		
152,4 (6")				60			75	90																
160	47	49			71	83																		
177,8 (7")				117			139	162																
180			110		126	141		156	171		201				231									
190			119		136	153		170	188		222			257										
200			128		148	167		187	206		245			284										
203,2 (8")				143			173	204																
220			167		192	216		241	265		314													
228,6 (9")				195			234	276	317	344														
230			178		205	232		259	276	286	317	340		394										
250			200		223	246		268	291		336			392	448									
254 (10")				218			254	290	326	351	362						471							
300			269		295	326		362	389		451			528	606									
304,6 (12")				294			344	394	444	477	494						644							
350			340		375	416		464	499		582													
355,6 (14")				374			440	507	574	618	641						841							
400			473		531	589		646	703		819								1598					
406,4 (16")				519			611	703	795	856	886													
450			575		643	712		779	848		983													
457,2 (18")				632			640	850	959	1032														
500			735		830	924		1019	1114		1304													
508 (20")				810			961	1113	1264															
600			1082		1222	1361		1500	1639		1918													
609,6 (24")				1192			1414	1636	1858															

Intermediate sizes also available.



FP SPOMAX manufactures rolls for own roller mills as well as numerous devices offered by other manufacturers. We have currently technical details for almost 1000 different types of rolls applied in different industries.

The self-matting rolls

The self-matting rolls are used primarily as milling rolls in the process of grinding of wheat and rye. They replace the so-far used smooth rolls. The self-matting rolls can also substitute fine-corrugated rolls on final passages of flour mills. Moreover they find application in food industry (manufacturing of spices, condiments, etc.) and feed industry (manufacturing of fodder additives) as well as in chemical and pharmaceutical industry.

The working part of self-matting rolls is a centrifugally cast iron sleeve with a special chemical composition and a special microstructure and lowered hardness down to ca. 400 HB. Self-matting rolls developed by SPOMAX are manufactured from a special alloy and have a surface which stays rough during the lifetime of the roll. Special features of the working layer allow it to keep the required roughness for a long time.

The application of self-matting rolls leads to an increase of flour extraction and to improvement of mill profitability.

In case of 10 to 12 milling passages, replacing standard rolls with the self-matting rolls an increase of passage flour extraction up to 2 to 3 percent and about 3 percent increase of total mill capacity has been recorded.

Alternatively, by using self-matting rolls it is possible to achieve an increase of milling capacity of up to 5 to 10 percent while retaining the same extraction (higher load of the milling slot) or reduction of the number of milling passages by one or even two passages.

Other advantages of the self matting rolls are: they do not get as hot as standard rolls, they ensure much better thermal conductivity as compared with standard rolls, they do not cause the product sticking, their lifetime is longer. Thanks to the application of the self-matting rolls it is possible to obtain a better flour quality as compared with flour production on standard rolls (an increase of bright flour extraction).

Manufacturer reserves the right for modifications of parameters and device appearance in the course of its improvement.