



### CHARACTERISTICS OF Sistema.bio®

Sistema.bio technology is a biogas hybid reactor, designed to treat the daily waste of animal farms. The reactor ferments manure mixed with water, producing biogas and a powerfil bio fertilizer.



**DURABILITY:** Our hybrid reactor is fabricated with high-quality, UV resistant geomembrane. Piping and assemblies are made out of hydraulic PVC and HDPE, offering long lifespan in the harsh conditions of the countryside.



PREFABRICATED KIT: The system is composed of a complete kit of prefabricated components optimized for packaging, transportation and easy installation. All parts are easily accessible for replacements. The manufacturing process complies with the strictest quality control standards to ensure a long product life.



**VARIETY OF SIZES:** Our product catalogue offers a range of reactor sizes, from 6 to 200m<sup>3</sup>, to meet the needs of small to medium farmers.

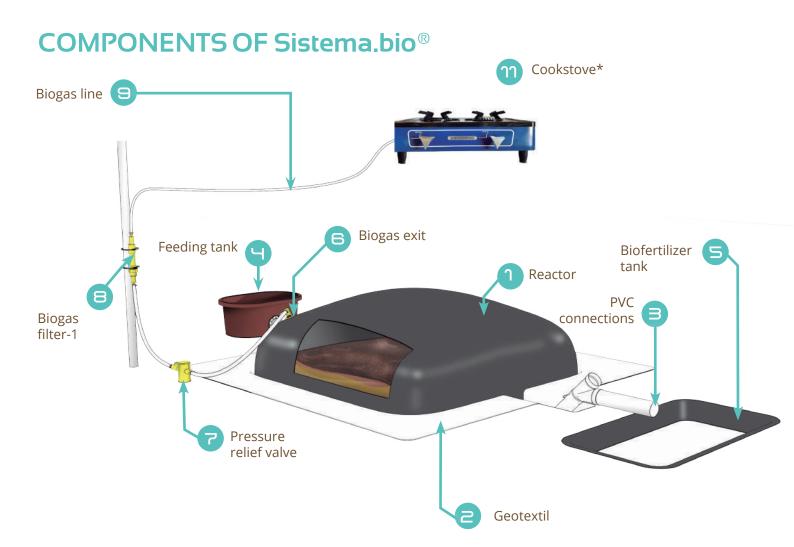


MODULAR: The design allows interconnection among reactors, increasing the system's treatment capacity. This allows Sistema.bio to adapt to a wide range of scenarios, and farmers to expand the reactor according to their needs.



### **EASY OPERATION AND MAINTENANCE:**

Any member of the family or worker on the farm can perform daily activities and simple long term maintenance.





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	Dairy cows								
		Manure (L/day)	Number of cows (fully confined)	Biogas production			Biofertilizer		
	Model			Daily biogas production (m <sup>3</sup> /d)*	Daily average cooking time on one burner (h/day)**	Equivalent in LPG (kg/month)	produ (L/day)	(ha/year)	
	Sistema 6	45	2	1.7	3.3	21	135	4.9	
	Sistema 8	65	3	2.4	4.8	31	195	7.1	
Warm climate ( >23° C)	Sistema 12	90	5	3.3	6.7	43	270	9.9	
	Sistema 16	130	7	4.8	9.6	62	390	14.2	
	Sistema 20	180	9	6.7	13.3	86	540	19.7	
	Sistema 30	260	13	9.6	19.2	124	780	28.5	
	Sistema 40	350	18	12.9	25.9	166	1050	38.3	
	Sistema 80	700	35	25.9	51.8	333	2100	76.7	
	Sistema 120	1050	53	38.8	77.7	499	3150	115.0	
	Sistema 160	1400	70	51.8	103.5	665	4200	153.3	
	Sistema 200	1750	88	64.7	129.4	831	5250	191.6	
ate climate (15° to 23 °C)	Sistema 6	35	2	1.3	2.5	16	105	3.8	
	Sistema 8	50	3	1.8	3.6	23	150	5.5	
	Sistema 12	65	3	2.3	4.7	30	195	7.1	
	Sistema 16	100	5	3.6	7.2	46	300	11.0	
	Sistema 20	135	7	4.9	9.7	63	405	14.8	
ď	Sistema 30	200	10	7.2	14.4	93	600	21.9	
ੋਂ	Sistema 40	265	13	9.6	19.1	123	795	29.0	
í	Sistema 80	530	27	19	38	245	1590	58	

<sup>\*</sup> The biogas production is estimated based on a standard biodigester use.
\*\* The production of biogas is variable and depends on particular farm's

# **COMPARATIVE DIAGRAMS**

# SISTEMA 8 22 . SISTEMA 8 22 . SISTEMA 2 22 . SISTEMA 20 22 . SISTEMA 30 22 . SISTEMA 4 22 . SISTEMA 30 22 . SISTEMA 4 22 . SISTEMA 4 22 . SISTEMA 40 22 .

# **MULTIREACTORS\*\***

116

2385

**SISTEMA 80** = 2 x Sistema 40

**SISTEMA1 20** = 3 x Sistema 40

**SISTEMP1 60** = 4 x Sistema 40

**SISTEMA 200** = 5 x Sistema 40

operating conditions.

NOTE: a waste: dilution water ratio of 1:2 has been selected for cow manure.



# THE PACKAGE INCLUDES:







\*Ask our technicians about biogas accessories available in your region.

Contact:

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For more information, visit: www.sistema.bio/in

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