



Characteristics of Sistema.bio®

Sistema.bio is a hermetic hybrid reactor that receives the daily waste of a farm, in which the manure mixed with water is fermented, producing biogas that is conducted through pipes to the points of use. At the other end of the system comes a powerful biofertilizer.



Durability: Our hybrid reactor is fabricated with high-quality geomembrane that is UV resistant. Piping and assemblies are made out of hydraulic and sanitary PVC, offering long lifespan in the harsh conditions of the countryside, and easy access to parts replacements.



Pre-Fabricated kit: The system is composed of a complete kit of pre-fabricated components optimized for packaging, transportation and easy installation. 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 200m³, 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 can perform daily activities and simple long term maintenance.

Components of Sistema.bio®

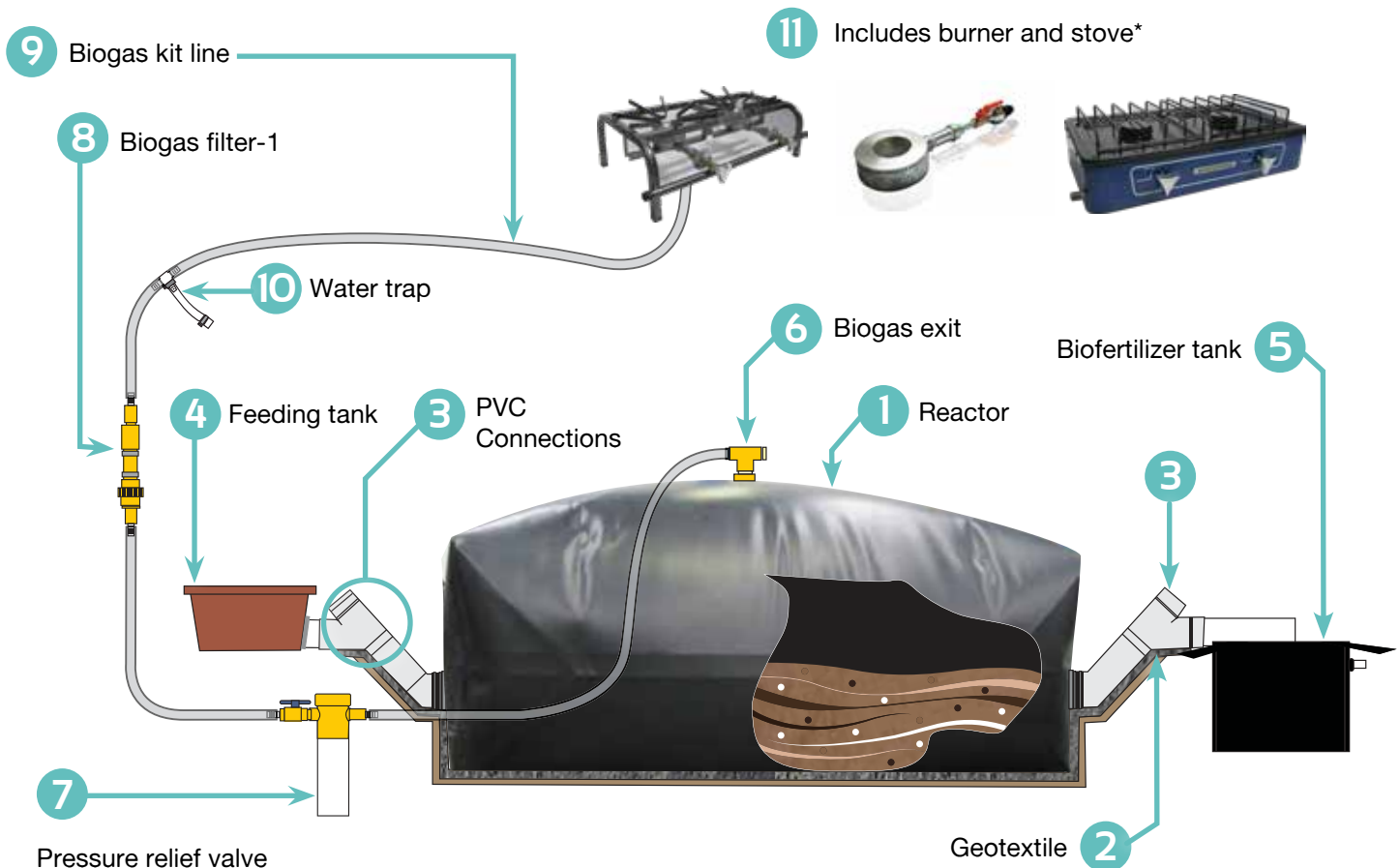


Table of contents



Dairy cows

Model	Manure (L/day)	Number of cows (fully confined)	Biogas production			Biofertilizer production	
			Daily biogas production (m ³ /d)*	Daily average cooking time on one burner (h/day)**	Equivalent in LPG (kg/month)	(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
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

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			Daily biogas production (m ³ /d)*	Daily average cooking time on one burner (h/day)**	Equivalent in LPG (kg/month)	(L/day)	(ha/year)
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
Sistema 30	200	10	7.2	14.4	93	600	21.9
Sistema 40	265	13	9.6	19.1	123	795	29.0
Sistema 80	530	27	19	38	245	1590	58
Sistema 120	795	40	29	57	368	2385	87
Sistema 160	1060	53	38	76	491	3180	116
Sistema 200	1325	66	48	96	614	3975	145

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Sistema 6	25	1	0.8	1.7	11	75	2.7
Sistema 8	35	2	1.2	2.3	15	105	3.8
Sistema 12	45	2	1.5	3.0	19	135	4.9
Sistema 16	65	3	2.2	4.3	28	195	7.1
Sistema 20	90	5	3.0	6.0	38	270	9.9
Sistema 30	135	7	4.5	9.0	58	405	14.8
Sistema 40	180	9	6.0	12.0	77	540	19.7
Sistema 80	360	18	12	24	154	1080	39
Sistema 120	540	27	18	36	231	1620	59
Sistema 160	720	36	24	48	307	2160	79
Sistema 200	900	45	30	60	384	2700	99



Pig

Model	Manure (L/day)	Number of pigs	Biogas production			Biofertilizer production	
			Daily biogas production (m ³ /d)*	Daily average cooking time on one burner (h/day)**	Equivalent in LPG (kg/month)	(L/day)	(ha/year)
Sistema 6	30	19	1.9	3.7	24	135	4.9
Sistema 8	40	25	2.5	5.0	32	180	6.6
Sistema 12	60	38	3.7	7.5	48	270	9.9
Sistema 16	80	50	5.0	10.0	64	360	13.1
Sistema 20	120	75	7.5	15.0	96	540	19.7
Sistema 30	180	113	11.2	22.5	144	810	29.6
Sistema 40	235	147	14.7	29.4	189	1058	38.6
Sistema 80	470	294	29	59	377	2115	77
Sistema 120	705	441	44	88	566	3173	116
Sistema 160	940	588	59	117	754	4230	154
Sistema 200	1175	735	73	147	943	5288	193

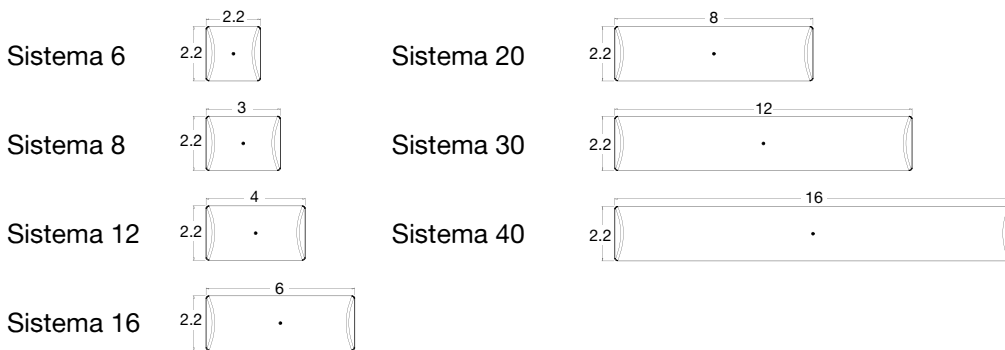
Model	Manure (L/day)	Number of pigs	Biogas production			Biofertilizer production	
			Daily biogas production (m ³ /d)*	Daily average cooking time on one burner (h/day)**	Equivalent in LPG (kg/month)	(L/day)	(ha/year)
Sistema 6	25	16	1.5	3.0	20	113	4.1
Sistema 8	35	22	2.1	4.3	27	158	5.7
Sistema 12	45	28	2.7	5.5	35	203	7.4
Sistema 16	65	41	4.0	7.9	51	293	10.7
Sistema 20	90	56	5.5	11.0	70	405	14.8
Sistema 30	130	81	7.9	15.8	102	585	21.4
Sistema 40	175	109	10.7	21.3	137	788	28.7
Sistema 80	350	218	21	43	274	1575	57
Sistema 120	525	327	32	64	411	2363	86
Sistema 160	700	436	43	85	548	3150	115
Sistema 200	875	545	53	107	685	3938	144

Model	Manure (L/day)	Number of pigs	Biogas production			Biofertilizer production	
			Daily biogas production (m ³ /d)*	Daily average cooking time on one burner (h/day)**	Equivalent in LPG (kg/month)	(L/day)	(ha/year)
Sistema 6	16	10	0.9	1.8	12	72	2.6
Sistema 8	22	14	1.2	2.5	16	99	3.6
Sistema 12	30	19	1.7	3.4	22	135	4.9
Sistema 16	45	28	2.5	5.1	32	203	7.4
Sistema 20	60	38	3.4	6.7	43	270	9.9
Sistema 30	90	56	5.1	10.1	65	405	14.8
Sistema 40	120	75	6.7	13.5	87	540	19.7
Sistema 80	240	150	13	27	173	1080	39
Sistema 120	360	225	20	40	260	1620	59
Sistema 160	480	300	27	54	346	2160	79
Sistema 200	600	375	34	67	433	2700	99

* The biogas production is estimated based on a standard biodigester use.
 ** The production of biogas is variable and depends on particular farm's operating conditions.
 NOTE: a waste: dilution water ratio of 1:2 has been selected for cow manure.

* The biogas production is estimated based on a standard biodigester use.
 ** The production of biogas is variable and depends on particular farm's operating conditions.
 NOTE: a waste:water dilution ratio of 1:3.5 has been selected for pig manure.

Comparative diagrams



Multireactors**

Sistema 80 = 2 x Sistema 40

Sistema 120 = 3 x Sistema 40

Sistema 160 = 4 x Sistema 40

Sistema 200 = 5 x Sistema 40

*Units in m.**Reactors interconnected with each other.



The sistema includes:



Installation and post sales service included



Financing plan



Warranty

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

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