

LENNTECH
WATER TREATMENT SOLUTIONS

ozonia[®] CFS

compact ozone generators



The **ozonia[®] CFS** range is designed for small to medium sized ozone applications. The **ozonia[®] CFS** range incorporates the same robust industrial technology as larger **ozonia[®]** ozone systems.

applications

- ▶ drinking water
- ▶ bottling water plants
- ▶ cooling towers
- ▶ aquaculture
- ▶ food & beverage

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WATER TREATMENT SOLUTIONS

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ready for the resource revolution



ozone technology: ozonia® CFS



The **ozonia® CFS** range is designed for **small to medium-sized ozone applications**. The design is based on feedback from hundreds of operators and includes the latest technology to ensure continuous operation at full-load in industrial environments.

An **ozonia® CFS** compact ozone generator includes the ozone generator, the medium-voltage power supply to the generator, control system, process related control equipment and interconnections. The control system ensures flexible operation and allows integration into all types of plant concepts.

how it works

Ozone, the triatomic form of oxygen, is generated by recombining oxygen atoms with oxygen molecules. This process takes place in the gap between the dielectric layer on the high voltage electrode and an earth electrode in the ozone generator. When high voltage is applied to this arrangement, a silent electrical discharge occurs in the gap. This excites the oxygen molecules in the feed gas flowing through the gap, which causes them to split and combine with other oxygen molecules to form ozone.

product highlights

- ▶ high performance
- ▶ compact and versatile
- ▶ low-cost
- ▶ high ozone concentration
- ▶ low power
- ▶ user friendly
- ▶ easily integrated
- ▶ low service requirement

main features

- ▶ robust ozonia® advanced technology (AT dielectrics)
- ▶ high ozone concentration at full-load
- ▶ very compact dimensions for easy integration
- ▶ low maintenance & service personnel requirement
- ▶ high adaptability: ozone production range 4-100%

model	ozone production				oxygen requirement		air requirement		outlet pressure			
	oxygen 10 wt%		air 3 wt%		oxygen 10 wt%		air 3 wt%		oxygen 10 wt%		air 3 wt%	
	lb/d	g/h	lb/d	g/h	scfm	Nm ³ /h	scfm	Nm ³ /h	psig	barg	psig	barg
ozonia [®] CFS-1	2.91	55	1.96	37	0.24	0.39	0.6	0.96	10.15	0.7	29.01	2
ozonia [®] CFS-3	8.78	166	5.93	112	0.72	1.15	1.8	2.89	10.15	0.7	29.01	2
ozonia [®] CFS-7	19.89	376	13.86	262	1.63	2.61	4.2	6.74	14.5	1	29.01	2
ozonia [®] CFS-14	39.74	751	27.67	523	3.25	5.22	8.4	13.49	14.5	1	29.01	2

The recommended concentration range is between 6 wt% and 12 wt% when fed with oxygen and 3wt% to 5wt% when fed with dry air.

technical features

- ▶ **voltage ozonia[®] CFS-1 & CFS-3:**
1 x 230/207 VAC ± 10%
- ▶ **voltage ozonia[®] CFS-7 & CFS-14:**
3 x 400/480 VAC ± 10%
- ▶ **frequency:** 50/60 Hz
- ▶ **ambient temperature:** +5 to 40°C
- ▶ **design altitude:** < 1,000 m.a.s.l.
- ▶ **humidity:** RH < 65% (yearly average)
- ▶ **feed gas inlet pressure:** 3 to 8 bar (g)
- ▶ **cooling water pressure:** 2 to 6 bar (g)

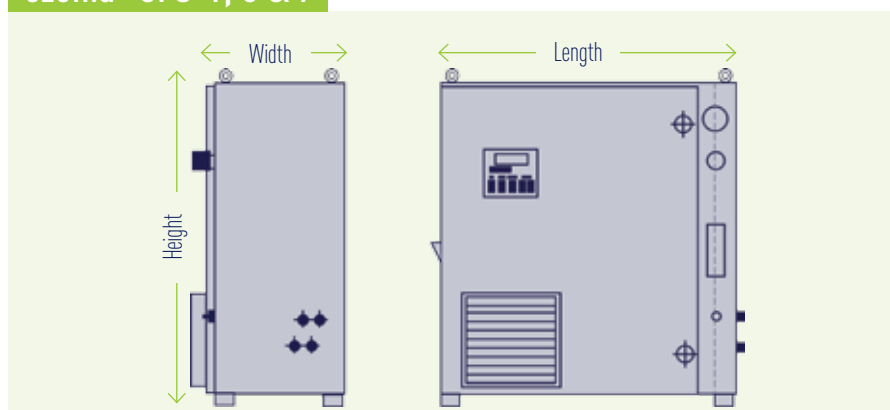
materials

- ▶ **enclosure:**
power coated mild steel
- ▶ **in contact with ozone:**
stainless steel 316, PTFE, PVDF, Viton
- ▶ **in contact with water:**
PE, brass, stainless steel 304/316

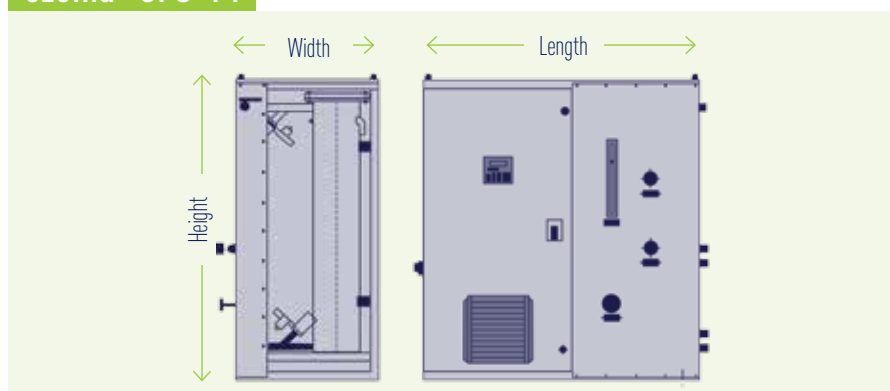
remote control and alarms

- ▶ **ozone production on/off**
- ▶ **set value (4 to 20 mA)**
- ▶ **gas valve open**
- ▶ **alarm bits**

ozonia[®] CFS-1, 3 & 7



ozonia[®] CFS-14



model	L x H x W		weight	
	inch	mm	lb	kg
ozonia [®] CFS-1	28.4 x 31.5 x 14.6	720 x 800 x 370	155	70
ozonia [®] CFS-3	28.4 x 31.5 x 14.6	720 x 800 x 370	187	85
ozonia [®] CFS-7	39.4 x 31.5 x 17.7	1,000 x 800 x 450	440	200
ozonia [®] CFS-14	51.2 x 57.1 x 26.4	1,300 x 1,450 x 670	926	420

SUEZ's **ozonia**® ozone technology portfolio includes products from the laboratory scale to the largest ozone systems ever built. Suez uses our extensive ozone technology experience to provide the industry's most reliable and robust products.

Our unique ability to deliver the most reliable and robust systems is why thousands of customers around the world have chosen **ozonia**® ozone systems.

We have been the ozone industry pioneer for over 25 years. Trust SUEZ to deliver the highest quality ozone solutions to meet your treatment challenges.

7
product ranges
certified to
international
standards

over
10,000
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over
25
years of
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