

Spartan Environmental Technologies
Air and Water Treatment

Ozone
Generators

THE MCP SYSTEM



MCP Ozone Generators are available from Spartan Environmental Technologies, LLC
Phone : 800-492-1252, Fax : 440-368-3569, e-mail : info@SpartanWaterTreatment.com
Web : www.SpartanWaterTreatment.com

Overview

Type	Production g O ₃ / h		Feed gas supply SCFM		Cooling Water gpm		Absorbed Power KW		Dimensions ft
	Air 2 – 3 wt%	Oxygen 6 – 10 Wt%	Air 2 – 3 Wt%	Oxygen 6 – 10 Wt%	Air	Oxygen	Air	O ₂	L x W x H,mm Weighth,lb
MCP1	50–40	95-70	1.2–0.6	0.7-0.3	0.4	0.9	0.6	0.6	2x2.6x6.2 330
MCP2	100-80	190-130	2.5-1.2	1.4-0.6	0.9	1.3	1.2	1.2	2x2.6x6.2 352
MCP4	200-160	380-270	4.8-2.5	2.7-1.1	1.8	2.7	2.3	2.3	2.6x2.6x6.4 770
MCP7	350-280	670-470	8.4-4.5	4.8-2.0	2.7	4.9	4.0	4.0	2.6x2.6x6.4 1034
MCP13	700-560	1300-940	16.7-8.9	9.6-4.0	6.2	10.2	8.0	8.0	2.6x5.9x6.4 1320

For General Information Purposes Only – Consult Spartan Environmental Technologies, LLC for Details

Cooling Water Temperature 15 degrees C

Oxygen Dew Point <-70 degrees C

Operating Pressure: Air (1.7 bar), Oxygen (1 bar)

Feed Gas Pressure: Air (8 bar), Oxygen (1 bar)

The MCP series is a new line of high technology ozone generators that are compact, inexpensive and easy to use. Ozone is produced from dried air or from oxygen. The ozone generators are assembled with modular electrodes and electronics; reducing the number and cost of spare parts. The ozone generators are fully assembled and factory tested. They include mechanical, electrical and instrument fittings.

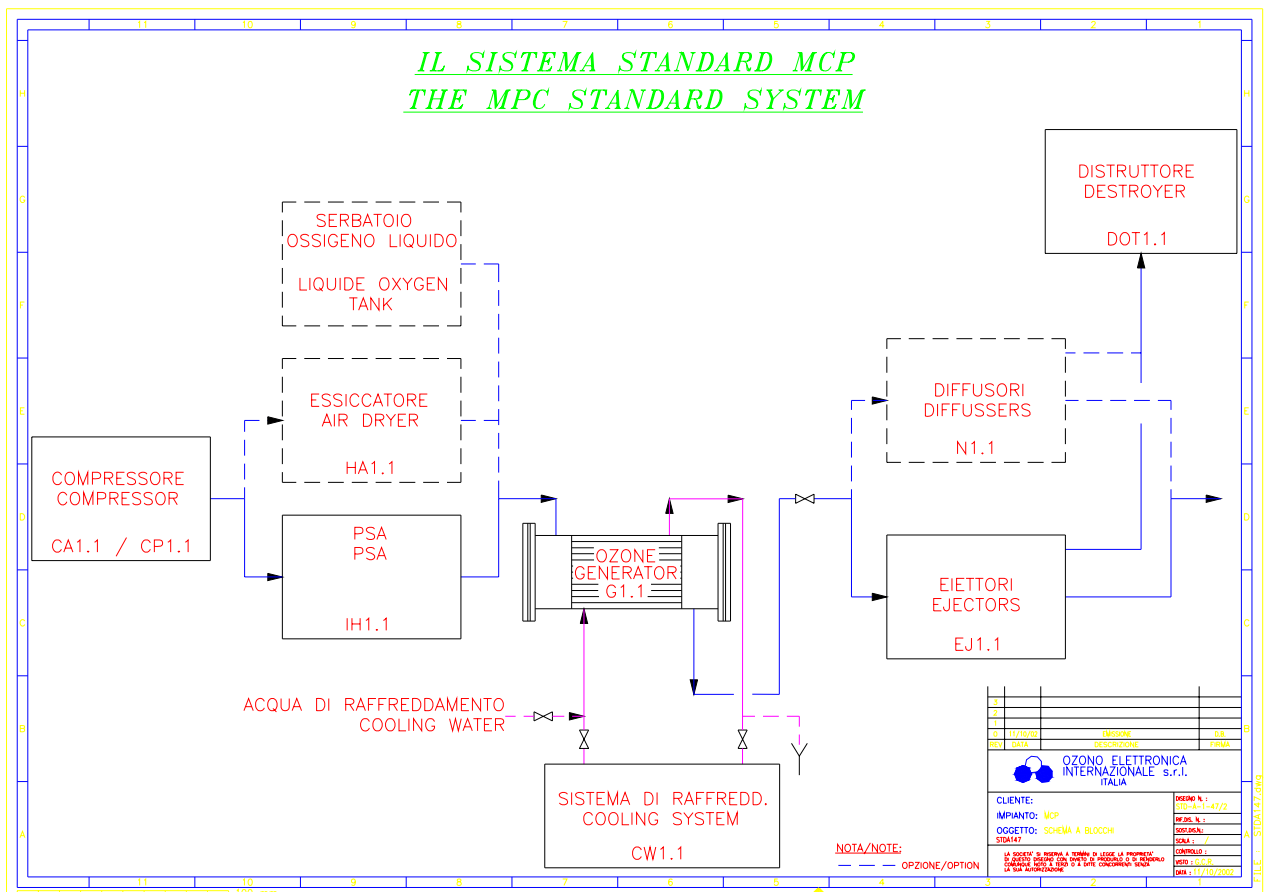
The MCP system is manufactured by Ozono Elettronica Internazionale of Milan Italy. They have been producing ozone generators and associated equipment for over 35 years and have installed more than 700 systems in that time.

The following description refers to drawing: STD-A-1-47/2 shown below.

Ozone is produced from air or from oxygen. In the first case an air drying system HA1.1 is required while in the second case an oxygen producing system HP1.1 is needed. HP1.1 produces oxygen using the pressure swing adsorption method (PSA). In both cases compressed air is necessary from an existing internal network or produced from compressors CA1.1 or CP1.1. Alternatively oxygen can be supplied from a liquid storage tank (LOX).

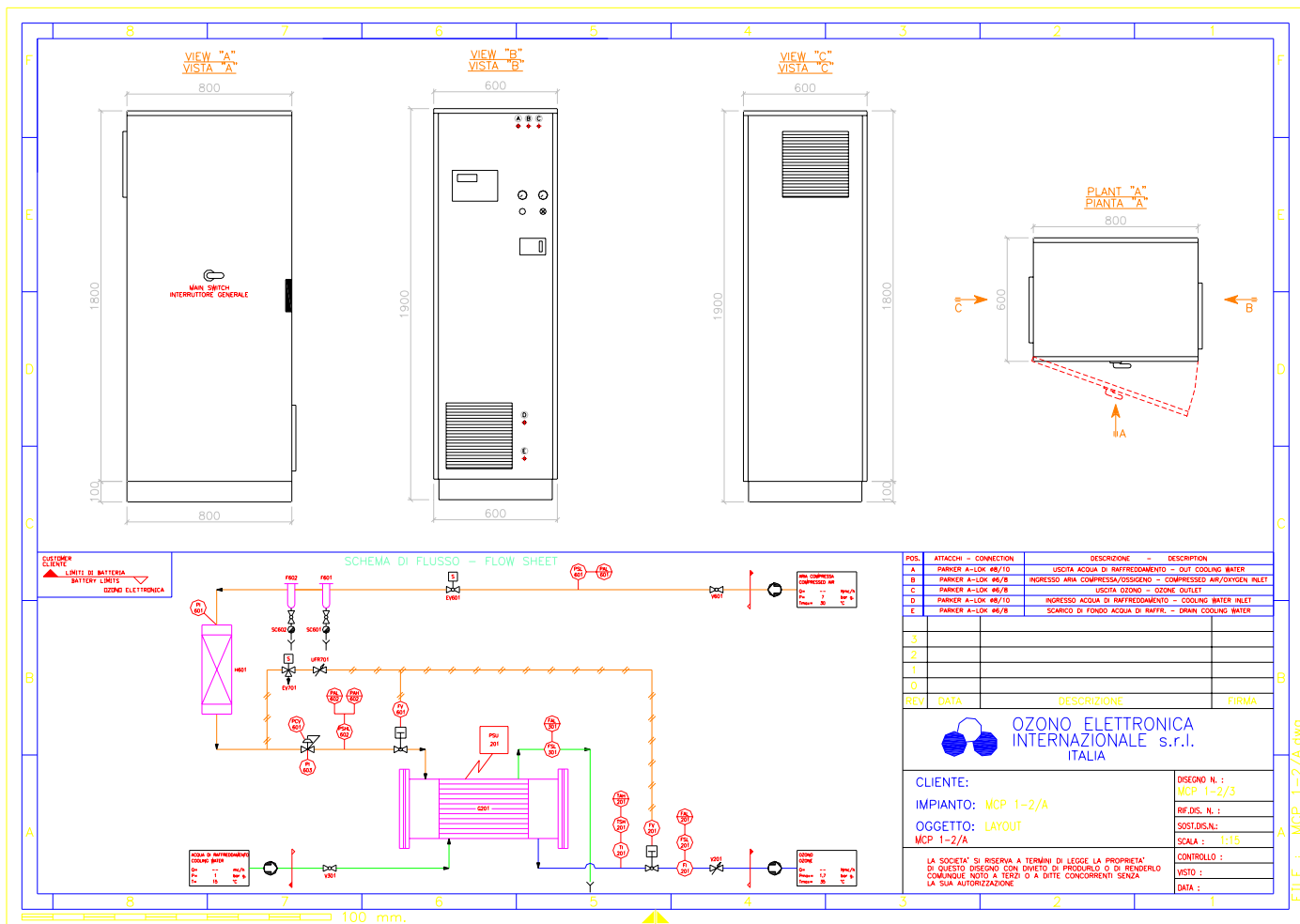
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If cooling water at 15-20°C is not available it can be substituted by a cooling water system CW1.1. After production, ozone must be introduced in the contact system (or process) this can be usually done with diffusers N1.1 or with ejectors EJ1.1. An ejector is used when the counter pressure in the receiving system is higher then that of the ozone generator. The residual ozone not reacted is normally destroyed by an ozone destroying system DOT1.1, to remove the ozone that was not transferred to the process in the contact basin.



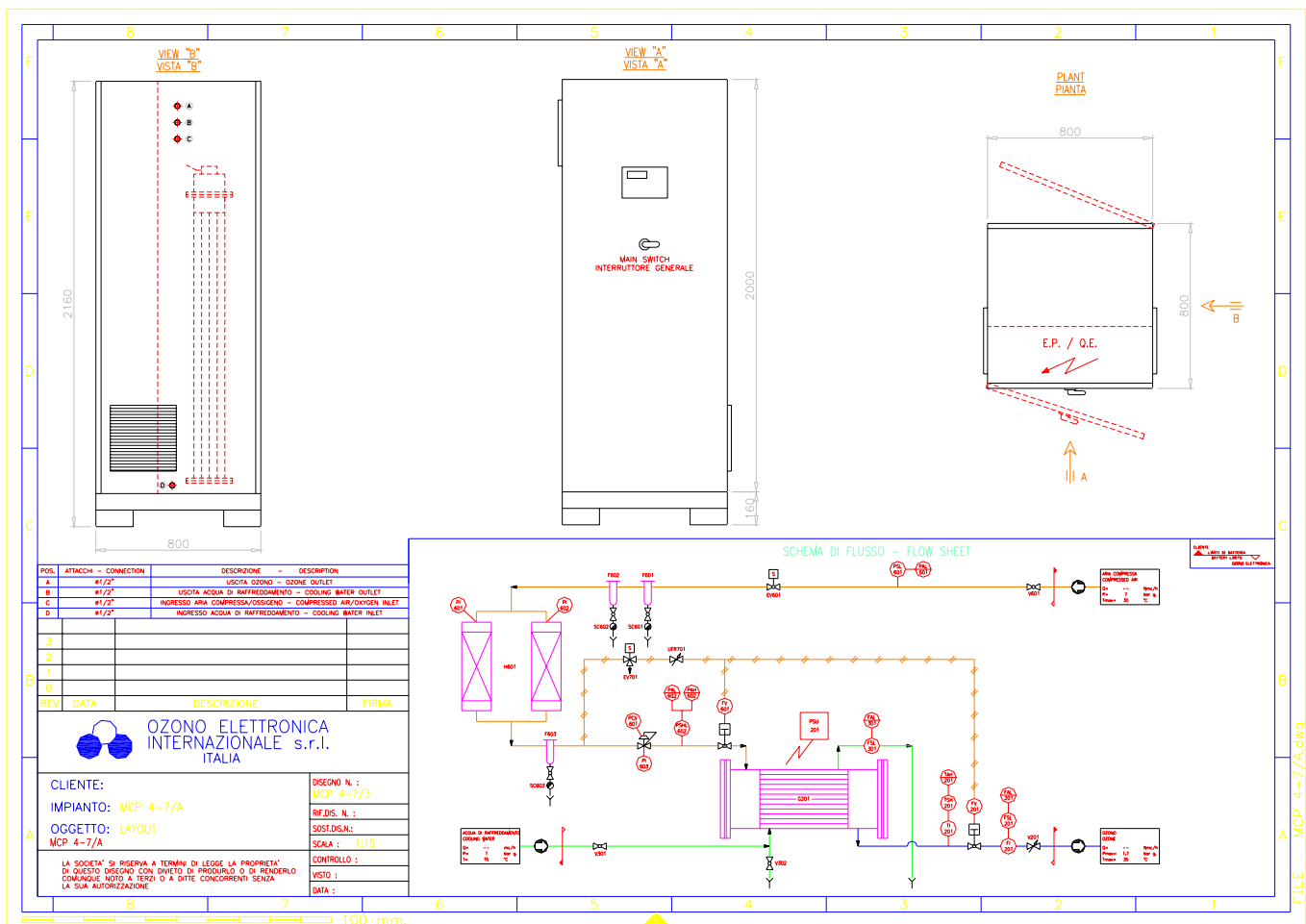
Drawing: STD-A-1-47/2

MCP Models 1 and 2



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MCP Models 4 and 7



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