

OS-150 Ozone System

Turnkey Ozone Generating System

The OS-150 Ozone System is a Turnkey Ozone Generating System designed specifically for Groundwater Remediation. This system can be a stand alone system, trailer or shed mounted. This is a customizable system that can be tailored to fit most all remediation applications. Systems generating from 30-120 g/hr of ozone are available in this configuration. Larger systems are available.



Features

- Turn Key Ozone System
- Completely configurable to the customers needs
- Completely customizable unit to fit any needs
- OS-150 will generate from 30-120 g/hr ozone in this enclosure
- Ozone Production up to 240 g/hr available, a larger enclosure is necessary
- Ozone Generated from 90 % Oxygen
- Only one compressor is used to simplify system
- OS-150 will sparge at up to 25 PSI normally, up to 45 PSI is possible

Product ID: **OS-150**

Lead Time: **4 weeks**

Specifications

Ozone Production:

- 30 g/hr from one TG-30
 - 60 g/hr from one TG-60
 - 90 g/hr from one TG-30 and one TG-60
 - 120 g/hr from two TG-60's
- Up to 240 g/hr possible in a slightly larger enclosure

Ozone Concentration:

4-6% by weight

Ozone Flowrate:

- 20 SCFH at 30 g/hr
- 40 SCFH at 60 g/hr
- 60 SCFH at 90 g/hr
- 80 SCFH at 120 g/hr

OS-150 Parts Explanation



This is the inside view of the OS-150. For more information on these components open the system diagram and explanation file under Related Files.

Control Panel



The entire operation of the OS-150 can be performed on the exterior panel. All functions are placed on one side of the unit with room on the door or opposite panel for a manifold if necessary. The OS-150 is very customizable, the interface panel can even be placed on the opposite side of the enclosure if necessary

UP6-5 with OS-150



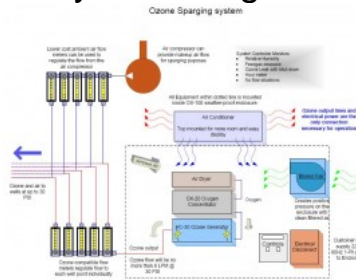
The OS-150 Ozone System can be used with its own built-in compressor although most customers require added air for sparging purposes. We recommend a Rotary Screw Compressor like the UP6-5 from Ingersoll Rand. Ozone Solutions can provide this compressor to offer a complete turn key sparging system to the customer.

Front view



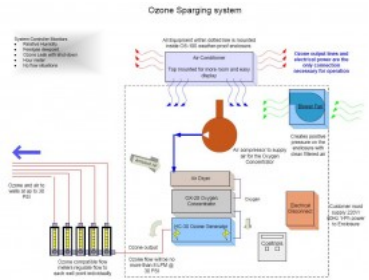
The OS-150 is very compact at only 60-in tall, 40-in wide, and 25-in deep. With a built in top mount air conditioner this unit is ready to use upon delivery.

System Diagram



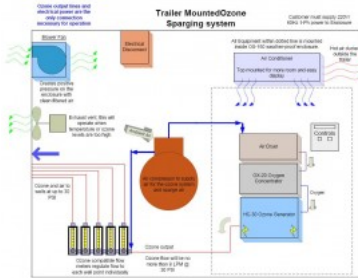
This diagram is of a system with an external UP-6 Compressor for sparging purposes. This customer had the opportunity to mix up to 10 CFM of dry air from the compressor with the ozone generated from the OS-150 System. The manifold was built separate and controlled by the customers system.

System Diagram with Internal Compressor



This system has a compressor built into the OS-150. This system will offer up to 25 PSI of pressure for sparging purposes. The flow rate is only 30 LPM (1-CFM) Maximum. For some applications this is sufficient, and of course it is very cost effective with all of the equipment necessary housed in one enclosure. The flow manifold is built into the side of the OS-150 and is completely accessible from the outside. In this configuration the OS-150 is the only component necessary for an entire sparging operation.

Trailer System



This diagram illustrates a trailer mounted system. This is a complete turn key system mounted into a trailer completely assembled and ready for operation upon delivery.

This system incorporates a 5 HP Type 30 Compressor with the OS-150 and distribution manifold. The Manifold is mounted to the wall of the trailer but is completely controlled by the OS-150 Controller with a Human Interface Panel integrated into a Siemens PLC.

Flow Manifold



This is an example of a flow manifold and interface. This manifold has 3 groups of 5 wells each. This is operated completely by the Human Interface Panel on the top left hand corner of the manifold. This Interface Panel can be configured to select any one or more banks of wells and time them for any duration desired.

Manifolds can also be configured with one solenoid for each well also. This will allow for complete control of the well selection, grouping, and timing.

This manifold was placed inside the OS-150 enclosure. The manifold can also be placed on the exterior wall of the enclosure or be wall mountable in a trailer or shed. In any configuration the PLC can use a Human Interface Panel to control the well selection and timing.

This system also has a Sensaphone autodialer incorporated to alert personnel of any fault conditions or downtime.