# AirSep PSA Oxygen System Specifications



### **Self-Contained Generators**

For unique applications, AirSep offers a range of completely self-contained oxygen generators equipped with air compressors. With the exception of the Centrox, these generators require no special installation. Simply connect the oxygen outlet to your oxygen distribution system and the power cord to a grounded electrical outlet. Turn the unit on and set your desired oxygen flow.

Product Flow			Product Pressure		
SCFH*	Nm³/Hr*	LPM*	psig	kPa	barg
8	0.21	3.8	9	62	0.62
12	0.31	5.7	9	62	0.62
15	0.39	7.1	7	48	0.48
15	0.39	7.1	7	48	0.48
23	0.60	10.8	7	48	0.48
12	0.31	6	9	62	0.62
17	0.44	8	20	138	1.37
21	0.55	10	20	138	1.37
12	0.31	6	9	62	0.62
17	0.44	8	20	138	1.37
21	0.55	10	20	138	1.37
38	1.0	18	20	138	1.37
21	0.55	10	7	48	0.48
17	0.44	8	50	345	3.5
32	0.84	15	50	345	3.5
	8 12 15 15 23 12 17 21 12 17 21 38 21 17	SCFH* Nm³/Hr*   8 0.21   12 0.31   15 0.39   15 0.39   23 0.60   12 0.31   17 0.44   21 0.55   12 0.31   17 0.44   21 0.55   38 1.0   21 0.55   17 0.44	SCFH* Nm³/Hr* LPM*   8 0.21 3.8   12 0.31 5.7   15 0.39 7.1   15 0.39 7.1   23 0.60 10.8   12 0.31 6   17 0.44 8   21 0.55 10   12 0.31 6   17 0.44 8   21 0.55 10   38 1.0 18   21 0.55 10   17 0.44 8	SCFH* Nm³/Hr* LPM* psig   8 0.21 3.8 9   12 0.31 5.7 9   15 0.39 7.1 7   15 0.39 7.1 7   23 0.60 10.8 7   12 0.31 6 9   17 0.44 8 20   21 0.55 10 20   12 0.31 6 9   17 0.44 8 20   21 0.55 10 20   38 1.0 18 20   21 0.55 10 7   17 0.44 8 50	SCFH* Nm³/Hr* LPM* psig kPa   8 0.21 3.8 9 62   12 0.31 5.7 9 62   15 0.39 7.1 7 48   15 0.39 7.1 7 48   23 0.60 10.8 7 48   12 0.31 6 9 62   17 0.44 8 20 138   21 0.55 10 20 138   21 0.55 10 20 138   21 0.55 10 20 138   38 1.0 18 20 138   21 0.55 10 7 48   21 0.55 10 7 48   21 0.55 10 7 48   21 0.55 10 7 48   21 0.55 10 7 <t< td=""></t<>



### **Standard Generators**

AirSep SeQual brand and Alpha-Series Oxygen Generators produce from 8 to 5,500 cubic feet of oxygen per hour at up to 95% oxygen concentration. When electricity and a source of compressed air is supplied, these dependable machines can provide oxygen for practically any application.



Madal		Product Flow		P	roduct Pressu	re
Model	SCFH*		LPM*	psig	kPa	barg
ATF-8	8	0.21	3.8	9	62	0.62
ATF-12	12	0.31	5.7	9	62	0.62
ATF-15	15	0.39	7.1	7	48	0.48
ATF-23	23	0.60	10.8	7	48	0.48
ATF-25	25	0.65	12	14	97	0.96
ATF-32	32	0.84	15	14	97	0.96
Quad-60	60	1.57	28	7	48	0.48
Quad-100	100	2.62	47	15	103	1.03
Quad-130	130	3.41	60	15	103	1.03
AS-A	20 – 25	0.53 - 0.66	9 – 11	45 – 50	310 – 345	3.0 - 3.4
AS-B	45 – 55	1.18 – 1.45	21 – 25	45 – 55	310 – 379	3.0 - 3.7
AS-D	80 – 90	2.10 – 2.37	37 – 42	45 – 55	310 – 379	3.0 - 3.7
AS-D+	80 – 100	2.10 - 2.63	37 – 47	45 – 65	310 – 448	3.0 - 4.4
AS-E	160 – 195	4.21 – 5.13	75 – 92	45 – 65	310 – 448	3.0 - 4.4
AS-G	250 – 320	6.57 – 8.41	117 – 151	45 – 65	310 – 448	3.0 - 4.4
AS-J	450 – 600	11.83 – 15.77	212 – 283	45 – 65	310 – 448	3.0 - 4.4
AS-K	750 – 900	19.72 - 23.66	353 – 424	45 – 65	310 – 448	3.0 - 4.4
AS-L	1,000 – 1,300	26.29 - 34.18	471 – 613	45 – 65	310 – 448	3.0 - 4.4
AS-N	1,500 – 1,800	39.43 - 47.32	707 – 849	45 – 65	310 – 448	3.0 - 4.4
AS-P	2,000 - 2,300	52.58 - 60.46	943 – 1,085	45 – 65	310 – 448	3.0 - 4.4
AS-Q	2,500 - 2,800	65.72 – 73.61	1,179 – 1,321	45 – 65	310 – 448	3.0 - 4.4
AS-R	3,000 – 3,700	78.86 – 97.27	1,415 – 1,746	45 – 65	310 – 448	3.0 - 4.4
AS-W	4,000 – 4,600	105.15 - 120.93	1,887 – 2,170	45 – 65	310 – 448	3.0 - 4.4
AS-Z	5,000 - 5,500	131.45 – 144.59	2,359 - 2,595	45 – 65	310 – 448	3.0 - 4.4
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Note: For Alpha Series Standard Generator models, specify oxygen flow and pressure at time of order.

<sup>\*</sup>SCF (Standard cubic foot) gas measured at 1 atmosphere and 70°F.

<sup>\*</sup>Nm³ (Normal cubic meter) gas measured at 1 atmosphere and 0°C.

<sup>\*</sup>LPM (Liters per minute) gas measured at 1 atmosphere and 21°C.

<sup>\*</sup>SCF (Standard cubic foot) gas measured at 1 atmosphere and 70°F.

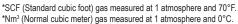
<sup>\*</sup>Nm³ (Normal cubic meter) gas measured at 1 atmosphere and 0°C.

<sup>\*</sup>LPM (Liters per minute) gas measured at 1 atmosphere and 21°C.

#### Mini Pack Generators

Designed specifically for applications with fixed flow and pressure characteristics, the reduced size oxygen receiver feature of our Mini Pack Oxygen Generators offers a quick start-up and a significantly smaller footprint than comparable systems that utilize a standard, separate receiver. Simply connect the unit's inlet to a suitable compressed air source, the oxygen outlet to the application, and the power cord to an appropriate electrical source.

Model	Product Flow			Pro	Product Pressure		
Wodel	SCFH*	Nm³/Hr*	LPM*	psig	kPa	barg	
AS-A Mini Pack	20 – 25	0.53 - 0.66	9 – 11	45 – 50	310 – 345	3.0 - 3.4	
AS-B Mini Pack	45 – 55	1.18 – 1.45	21 – 25	45 – 55	310 – 379	3.0 - 3.4	
AS-D Mini Pack	80 – 90	2.10 - 2.37	37 – 42	45 – 55	310 – 379	3.0 - 3.4	



<sup>\*</sup>LPM (Liters per minute) gas measured at 1 atmosphere and 21°C.



AS-A, AS-B and AS-D Mini Pack Generators



# **Standard or Custom-Designed Systems**

Standard oxygen plants are available in either low pressure power-optimized or high pressure cost-optimized designs. Low pressure plants generate nominal 93% oxygen at up to 15 psig (105 kPa or 1.03 barg) and consume approximately 400 kWh¹ per ton of oxygen. High pressure plants generate nominal 93% oxygen at up to 65 psig (448 kPa or 3.0 barg) without the use of an oxygen compressor. They consume approximately 750 kWh¹ per ton oxygen.

Custom-designed oxygen plants offer oxygen concentrations from 70 - 99%. An optional oxygen compressor delivers the oxygen at pressures up to 3,000 psig (20,685 kPa or 2.06 barg).

<sup>1</sup> Power consumption based on per ton (2,000 lb) of total product generated.

## **Cylinder Refilling Systems**

AirSep Oxygen Cylinder Refilling Plants enable customers to fill oxygen cylinders for existing needs or to supply others. AirSep manufacturers a complete line of turnkey oxygen cylinder refilling plants — with capacities from 8-100s of cylinders per day. Complete plants include a feed air compressor, feed air dryer, oxygen generator, oxygen compressor, and a cylinder filling rack. The oxygen compressor delivers oxygen at up to 2,200 psig (15,169 kPa or 151.6 barg) to a high pressure manifold capable of filling up to 10 cylinders at a time.

These cylinder refilling plants operate automatically and generate oxygen that meets the United States and European Pharmacopoeia Oxygen 93 Percent (93% ±3%) Monograph. For special applications, an optional high purity module can be added to the plant, to increase oxygen concentration to 99% ±.5%.

Model	Capacity - Cylinders/day			
	(Standard K Cylinders (244 SCF])			
AS-D-CR	8			
AS-G-CR	20			
AS-J-CR	40			
AS-K-CR	60			
AS-L-CR	100			



Models larger than the AS-L-CR are built to order.

Generators produce a product dew point of -100°F (-73°C). All generators are available in 120 VAC or 220 VAC. Specify voltage and frequency at time of order. All performance ratings based on an ambient temperature up to 100°F (38°C), up to 1,000 feet elevation, and 80% relative humidity.



