

## Performance Data for the Clear Solutions model CS-1000

Replacement	Operating pressure range	Rated capacity	Operating temp range	Rated flow
CS-1000-R	40 - 120 PSI (2.8 - 8.3 BAR)	651 Gallons (2464L)	33 - 100° F (4.4-37.7° C)	1.25 GPM (4.73 LPM)



Hellenbrand, Inc. • www.hellenbrand.com  
 404 Moravian Valley Road • Waunakee, WI 53597 • USA • 608-849-3050

Testing performed under NSF/ANSI Standards 42, 53 & 401. This system has been tested according to NSF/ANSI 42, 53 and 401 for the reduction of substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for the water leaving the system, as specified in NSF/ANSI 42, 53 & 401.

NSF/ANSI 42	Influent Challenge Concentration	Percent Reduction Requirement	Actual Minimum % Reduction	Actual Average % Reduction
Chlorine Taste & Odor	2.0 ± 10% mg/L	≥ 50%	89.1%	95.5%
Chloramine	3.0 ± 10% mg/L	≤ 0.5 mg/L	89.1%	95.5%
Particulate Class I	at least 10,000 particles/mL	≥ 85%	> 99.9%	> 99.9%
NSF/ANSI 53	Influent Challenge Concentration	Percent Reduction Requirement	Actual Minimum % Reduction	Actual Average % Reduction
Asbestos	10 <sup>7</sup> to 10 <sup>8</sup> fibers/L	≥ 99%	99%	> 99%
Cyst	min 50,000 / L	≥ 99.95%	> 99.99%	> 99.99%
Lead pH 6.5	0.15 ± 10% mg/L	0.010 mg/L	> 99.3%	> 99.3%
Lead pH 8.5	0.15 ± 10% mg/L	0.010 mg/L	> 99.4%	> 99.4%
Mercury pH 6.5	0.006 ± 10% mg/L	0.002 mg/L	> 96.6%	> 96.6%
Mercury pH 8.5	0.006 ± 10% mg/L	0.002 mg/L	> 96.7%	> 96.7%
MTBE	0.015 ± 20% mg/L	0.005 mg/L	66.9%	86.6%
Turbidity	11 ± 1 NTU	≤ 0.5 NTU	99.0%	99.1%
VOC (chloroform surrogate)	0.300 ± 10% mg/L	≥ 95%	96.7%	99.6%
NSF/ANSI 401	Influent Challenge Concentration	Percent Reduction Requirement	Actual Minimum % Reduction	Actual Average % Reduction
Phenytol	200 ± 20% ng/L	≤ 60 ng/L	< 10 ng/L	> 95.6%
Ibuprofen	400 ± 20% ng/L	≤ 60 ng/L	< 20 ng/L	> 95.4%
Naproxen	140 ± 20% ng/L	≤ 20 ng/L	< 5 ng/L	> 96.4%
Estrone	140 ± 20% ng/L	≤ 20 ng/L	< 5 ng/L	> 96.5%
Bisphenol A	2,000 ± 20% ng/L	≤ 300 ng/L	< 20 ng/L	> 98.9%
Nonyl phenol	1,400 ± 20% ng/L	≤ 200 ng/L	< 50 ng/L	> 97.5%

Organic chemicals included by surrogate testing				
Chemical	Drinking water regulatory level (MCL/MAC) mg/L	Influent challenge concentration mg/L	Chemical reduction percent	Maximum product water concentration mg/L
alachlor	0.002	0.050	>98	0.001
atrazine	0.003	0.100	>97	0.003
benzene	0.005	0.081	>99	0.001
carbolfuran	0.04	0.190	>99	0.001
carbon tetrachloride	0.005	0.078	98	0.0018
chlorobenzene	0.1	0.077	>99	0.001
chloropicrin	—	0.015	99	0.0002
2,4-D	0.07	0.110	98	0.0017
dibromochloropropane (DBCP)	0.0002	0.052	>99	0.00002
o-dichlorobenzene	0.6	0.080	>99	0.001
p-dichlorobenzene	0.075	0.040	>98	0.001
1,2-dichloroethane	0.005	0.088	95 <sup>1</sup>	0.0048
1,1-dichloroethylene	0.007	0.083	>99	0.001
cis-1,2-dichloroethylene	0.07	0.170	>99	0.0005
trans-1,2-dichloroethylene	0.1	0.086	>99	0.001
1,2-dichloropropane	0.005	0.080	>99	0.001
cis-1,3-dichloropropylene	—	0.079	>99	0.001
dinoseb	0.007	0.170	99	0.0002
endrin	0.002	0.053	99	0.00059
ethylbenzene	0.7	0.088	>99	0.001
ethylene dibromide (EDB)	0.00005	0.044	>99	0.00002
haloacetonitriles (HAN)				
bromochloroacetonitrile	—	0.022	98	0.0005
dibromoacetonitrile	—	0.024	98	0.0006
dichloroacetonitrile	—	0.0096	98	0.0002
trichloroacetonitrile	—	0.015	98	0.0003
haloketones (HK)				
1,1-dichloro-2-propanone	—	0.0072	99	0.0001
1,1,1-trichloro-2-propanone	—	0.0082	96	0.0003
heptachlor (H-34, Heptox)	0.0004	0.025	>99	0.00001
heptachlor epoxide	0.0002	0.0107	98	0.0002
hexachlorobutadiene	—	0.044	>98	0.001
hexachlorocyclopentadiene	0.05	0.060	>99	0.000002
lindane	0.0002	0.055	>99	0.00001
methoxychlor	0.04	0.050	>99	0.0001
pentachlorophenol	0.001	0.096	>99	0.001
simazine	0.004	0.120	>97	0.004
styrene	0.1	0.190	>99	0.0005
1,1,2,2-tetrachloroethane	—	0.081	>99	0.001
tetrachloroethylene	0.005	0.081	>99	0.001
toluene	1	0.078	>99	0.001
2,4,5-TP (silvex)	0.05	0.270	99	0.0016
tribromoacetic acid	—	0.042	>98	0.001
1,2,4-trichlorobenzene	0.07	0.160	>99	0.0005
1,1,1-trichloroethane	0.2	0.084	95	0.0046
1,1,2-trichloroethane	0.005	0.150	>99	0.005
trichloroethylene	0.005	0.180	>99	0.0010
trihalomethanes (includes):				
chloroform (surrogate chemical)				
bromoform				
bromodichloromethane	0.080	0.300	95	0.015
chlorodibromomethane				
xylene (total)	10	0.070	>99	0.001



System tested and certified IAPMO R&T against NSF/ANSI Standard 42, 53 & 401 for the reduction of the claims specified on the Performance Data Sheet

Not all water will contain contaminants listed.

Testing was performed under standard laboratory conditions, actual performance may vary. Filter usage must comply with all state and local laws.

Filter is only to be used with cold water. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

See owners manual for general installation conditions and needs as well as manufacturer's limited warranty.

Do not use water that is microbiologically unsafe or of unknown water quality without adequate disinfection before or after the system.

Hellenbrand products are not for sale or distribution into the State of California effective 8/31/18