

Protect Your Patients, Clients and Staff. Reduce Your Liability.

Minimize risk from Legionella with a new approach to separation technology from Nancrede Engineering.

LEGIONELLA ANNIHILATOR™ HIGH EFFICIENCY NANOFILTRATION SYSTEM

The Legionella Annihilator™ nanofiltration system removes Legionella and other harmful pathogens and viruses from the water while also removing bacterial food sources stunting their growth. The nanofiltration system also removes hardness eliminating the need for ion exchange softeners.

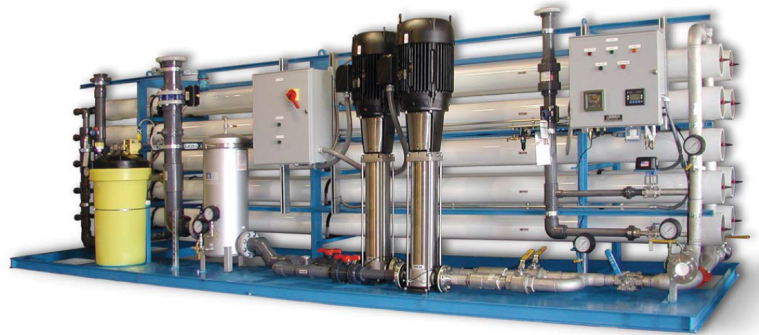
- Complete removal of Legionella, viruses and other pathogens
- Removal of endotoxins and pathogen food sources
- Need for water softeners is eliminated reducing stagnant tanks and dead leg piping
- Huge cost savings from removing ion exchange water softeners

STANDARD FEATURES

- Piping and valving optimization to minimize Legionella growth.
- Distribution and controls to reduce bacteria
- High efficiency, low energy consumption
- Ultra-efficient design minimizes water waste
- 5-micron sediment prefilter housing (304SS)
- Skid Mounted, pre-piped and pre-wired
- Chemical feed pump systems
- UL-508A Listed electrical panels
- Product water conductivity transmitters
- Product and reject flow transmitters
- Factory hydro-tested for two hours

OPERATING PARAMETERS

- Nominal Legionella reduction 99.9%
- Nominal virus reduction 99.9%
- Nominal endotoxin and bacterial food source reduction 99.9%
- Inlet pressure: 80 – 150 psig
- Control Circuit: 120 VAC, 1-phase, 60 Hz
- Temperature: 45 – 85 °F



INSTRUMENTATION / CONTROLS

- AB 1400 PLC with BMS communication
- Variable Frequency Drive (VFD)
- pH/ORP monitors
- Butterfly valves with air or electric actuators
- 304 stainless steel piping and distribution

OPTIONS

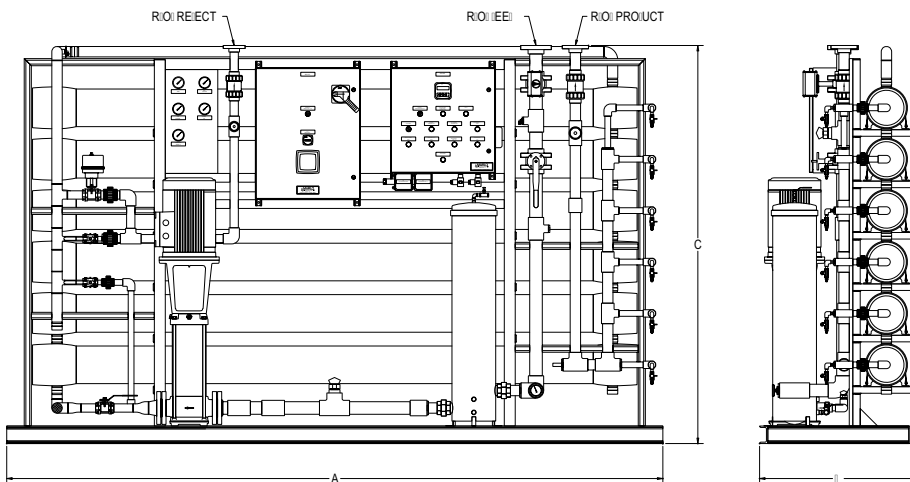
- Membrane CIP/sanitization system
- Additional ORP monitors
- Ultraviolet sterilizer & downstream microfiltration system
- Atmospheric storage tank and level controls
- Legionella control recirculating system for tank
- Auto drain system to activate high pressure pump in low to no flow scenarios
- Inlet and outlet pressure transducers
- ASME code stamped housings
- Stainless steel membrane housings
- Additional piping including 316 SS piping
- Seismic zone rated systems
- Premium online hardness monitor

LEGIONELLA ANNIHILATOR™ HIGH EFFICIENCY NANOFILTRATION SYSTEM SERIES SPECIFICATIONS

Model Number	Permeate Capacity		Element Quantity	Feed (GPM)	Reject (GPM)	System Piping Connections			Approx. Ship Wt.
	GPD	GPM				Inlet Feed	Permeate	RO Reject	
LCNF-45K-8H	45,000	31	6	33	2	1 1/2" Flg.	1 1/2" Flg.	1" Flg.	3000 lb.
LCNF-60K-8H	60,000	42	9	44	2	2" Flg.	1 1/2" Flg.	1" Flg.	3300 lb.
LCNF-90K-8H	90,000	63	12	66	3	2" Flg.	1 1/2" Flg.	1" Flg.	3300 lb.
LCNF-115K-8H	115,000	80	16	84	4	2" Flg.	2" Flg.	1" Flg.	3500 lb.
LCNF-140K-8H	140,000	97	20	102	5	2 1/2" Flg.	2" Flg.	1 1/2" Flg.	3900 lb.
LCNF-180K-8H	180,000	125	24	132	7	2 1/2" Flg.	2 1/2" Flg.	1 1/2" Flg.	4100 lb.
LCNF-225K-8H	225,000	156	30	164	8	2 1/2" Flg.	2 1/2" Flg.	1 1/2" Flg.	4500 lb.
LCNF-270K-8H	270,000	188	36	197	9	3" Flg.	3" Flg.	2" Flg.	4900 lb.
LCNF-320K-8H	320,000	222	42	234	12	3" Flg.	3" Flg.	2" Flg.	5100 lb.
LCNF-360K-8H	360,000	250	48	263	13	4" Flg.	3" Flg.	2" Flg.	5500 lb.
LCNF-410K-8H	410,000	285	54	300	15	4" Flg.	4" Flg.	2" Flg.	5900 lb.
LCNF-450K-8H	450,000	313	60	329	16	6" Flg.	4" Flg.	3" Flg.	6600 lb.
LCNF-530K-8H	530,000	368	72	387	19	6" Flg.	4" Flg.	3" Flg.	6600 lb.

* Contact factory for flow rates beyond 368-gpm.

OVERALL SYSTEM DIMENSIONS



Model No.	Length* A	Width B	Height C
LCNF-45K-8H	146"	40"	82"
LCNF-60K-8H	146"	40"	82"
LCNF-90K-8H	146"	40"	82"
LCNF-115K-8H	194"	46"	82"
LCNF-140K-8H	194"	46"	82"
LCNF-180K-8H	194"	46"	94"
LCNF-225K-8H	274"	50"	86"
LCNF-270K-8H	274"	50"	94"
LCNF-320K-8H	274"	60"	86"
LCNF-360K-8H	274"	70"	86"
LCNF-410K-8H	274"	76"	86"
LCNF-450K-8H	274"	76"	86"
LCNF-530K-8H	274"	76"	86"

* Requires minimum of 45" additional length on each side of the skid for membrane installation or removal.

Additional non-chemical and chemical pathogen control systems can be packaged with the Legionella Annihilator™ nanofiltration system to control Legionella, viruses and other harmful pathogens. Consulting for defensible water management programs are also available.

NON-CHEMICAL AUXILIARY LEGIONELLA CONTROL SYSTEMS

- Pre Ultra-violet (UV) Sterilization System
- Post Ultra-violet (UV) Sterilization System
- Copper-silver ionization

CHEMICAL AUXILIARY LEGIONELLA CONTROL SYSTEMS

- Mixed Oxidant Generation System
- Chlorine Dioxide Generation System
- Advanced Oxidation Process (AOP)
- Chlorine Injection
- Monochloramine Injection