

(763) 420-3844 FAX: (763) 420-2542 7631 COMMERCE STREET P.O. BOX 238 HAMEL, MINNESOTA 55340

"THE SYSTEM THAT WORKS"

□ AVISTA TECHNOLOGIES

SPECIALTY CHEMICALS AND CLEANERS FOR RO/MF/UF MEMBRANE SYSTEMS

□ BLOWER SILENCERS & FILTRATION

INLET & INLINE FILTERS, INLET & DISCHARGE SILENCERS FOR BLOWERS, FANS & VENT SILENCERS (MANUFACTURERS INCLUDED: SOLBERG, UNIVERSAL AND BELMAR)

□ GARDNER DENVER, INC.

SUTORBILT LEGEND
DUROFLOW
CYCLOBLOWER
HELIFLOW
ROBUSCHI
IQ ENCLOSED PACKAGES

VACUUMS TO 27" HG, PRESSURES TO 36 PSIG, 10 CFM TO 14,570 CFM COMPLETE / ENCLOSED BLOWER PACKAGES

□ GARDNER DENVER CENTRIFUGAL

HOFFMAN & LAMSON
BLOWERS
EXHAUSTERS
ENGINEERED SYSTEMS
CENTRAL VACUUM SYSTEMS

□ KNIGHT CORP.

LIQUID BAG FILTERS, PRESSURE VESSELS

□ OSECO, INC.

OVER-PRESSURE PROTECTION WITH RUPTURE DISCS, DISC HOLDERS, AND EXPLOSION VENTS

□ PARKER | VELCON

INDUSTRIAL AND UTILITY OIL PURIFICATION SYSTEMS, REPLACEMENT ELEMENTS & FILTER SEPARATORS

□ STANDARD XCHANGE - XYLEM

HEAT EXCHANGERS (SHELL & TUBE, PLATE & FRAME)
COMPACT BRAZED & AIR COOLED HEAT EXCHANGERS

□ SUEZ - WATER TECHNOLOGIES & SOLUTIONS

HYTREX CARTRIDGE FILTERS RO MEMBRANES

STOCKING DISTRIBUTOR FOR SPUN & PLEATED FILTERS
MEMBRANES AND MEMBRANE SYSTEMS

□ WATER SYSTEMS CONSULTING & SERVICE

WATER PURIFICATION SYSTEMS, INCLUDING DEIONIZERS, ION EXCHANGE, REVERSE OSMOSIS, ULTRAFILTRATION AND MICROFILTRATION. RETROFIT OF EXISTING EQUIPMENT WITH CONTROLS & MANIFOLDS.

□ WHITTIER FILTRATION, INC.

FILTRATION TECHNOLOGIES, "AUTO-JET" PRESSURE LEAF FILTERS, PRE-COAT AND SCREEN, UPFLOW PRESSURE FILTERS

DATE 02/2018

WEB SITE: www.cemerynelson.com

CONVERSION FACTORS (Cont'd)

Multiply	Ву	To Obtain	Multiply	Ву	To Obtain	Multiply	Ву	To Obtain
Kilowatts	56.92	B. T. Units/min.	Milligrams	10-3	Grams	Pounds/cubic inch	27.68	Grams/cubic cm.
Kilowatts Kilowatts	4.425x10 ⁴ 737.6	Foot-lbs./min. Foot-lbs./sec.	Milliliters	10-3	Liters	Pounds/cubic inch Pounds/cubic inch	2.768×10 ⁴ 1728	Kgs./cubic meter Lbs./cubic foot
Kilowatts	1.341	Horse-power		0.1				
Kilowatts Kilowatts	14.34 10 ³	Kgcalories/min. Watts	Millimeters Millimeters	0.1 0.03937	Centimeters Inches	Pounds/foot Pounds/inch	1.488 178.6	Kgs./meter Grams/cm.
Kilowatt-hours	3415	British Thermal Units	Milligrams/liter	.1	Parts/million	Pounds/sq. foot	0.01602	Feet of water
Kilowatt-hours Kilowatt-hours	2.655×10 ⁶ 1.341	Foot-Ibs. Horse-power-hrs.	Million gals./day	1.54723	Cubic ft./sec.	Pounds/sq. foot Pounds/sq. foot	4.883x10 ⁻⁴ 6.945x10 ⁻³	Kgs./sq. cm. Pounds/sq. inch
Kilowatt-hours Kilowatt-hours	860.5 3.671x10 ⁵	Kilogram-calories Kilogram-meters	Miner's inches	1.5	Cubic ft./min.	Pounds/sq. inch	0.06804	Atmospheres
Liters	103	Cubic centimeters	Minutes (angle)	2.909x10 4	Radians	Pounds/sq. inch Pounds/sq. inch	2.307	Feet of water Inches of mercury
Liters	0.03531	Cubic feet	Ounces	16	Drams	Pounds/sq. inch	0.07031	Kgs./sq. cm.
Liters	61.02	Cubic inches	Ounces	137.5	Grains			
Liters	10 3	Cubic meters	Ounces	0.0625	Pounds	Quarts (dry)	67.20	Cubic inches
Liters Liters	1.308x10 ⁻³ 0.2642	Cubic yards Gallons	Ounces Ounces	28.349527 0.9115	Grams Ounces (troy)	Quarts (liq.)	57.75	Cubic inches
Liters	2.113	Pints (liq.)	Ounces	2.790x10-5	Tons (long)	Quintal, Argentine	101.28	Pounds
Liters	1.057	Quarts (liq.)	Ounces	2.835x10-5	Tons (metric)	Quintal, Brazil	129.54	Pounds
Liters/min.	5.886x10-4	Cubic ft./sec.		400	•	Quintal, Castile, Peru	101.43	Pounds
Liters/min.	4.403x10 ³	Gals./sec.	Ounces, troy	480 20	Grains Pennyweights (troy)	Quintal, Chile	101.41	Pounds
	7. 100×10		Ounces, troy Ounces, troy	0.08333	Pounds (troy)	Quintal, Mexico	101.47	Pounds
Lumber Width (in.) x			Ounces, troy	31.103481	Grams	Quintal, Metric	220.46	Pounds
Thickness (in.)	Length (ft.)	Board Feet	Ounces, troy	1.09714	Ounces (avoir.)	11	8.0208	Overflow rate
12			· · · · · ·			Sq. ft./gal./min.		(ft./hr.)
Meters	100	Centimeters	Ounces (fluid)	1.805	Cubic inches	T (*0.) 0.70	,	
Meters	3.281	Feet	Ounces (fluid)	0.02957	Liters	Temp. (°C.) + 273 Temp. (°C.) + 17.78	1	Abs. temp. (°C.)
Meters	39.37	Inches	Ounces/sq. inch	0.0625	Lbs./sq. inch	Temp. (°F.) +460	1.8	Temp. (°F.) Abs. temp. (°F.)
Meters	10-3	Kilometers	•		•	Temp. (°F.)-32	5/9	Femp. (°C.)
Meters	103	Millimeters	Parts/million	0.0584	Grains/U. S. gal.	Temp: (1:7-32	3/3	TEMP. (C./
Meters	1.094	Yards	Parts/million	0.07016	Grains/Imp. gal.	Tons (long)	1016	Kilograms
Meters/min.	1.667	Centimeters/sec.	Parts/million	8.345	Lbs./million gal.	Tons (long)	2240	Pounds
Meters/min.	3.281	Feet/min.	Pennyweights (troy)	24	Grains	Tons (long)	1.12000	Tons (short)
Meters/min.	0.05468	Feet /sec.	Pennyweights (troy)	1.55517	Grams	Tana (madaia)	101	W:1
Meters/min. Meters/min.	0.06 0.03728	Kilometers/hr. Miles/hr.	Pennyweights (troy)	0.05 4.1667x10 ³	Ounces (troy)	Tons (metric) Tons (metric)	10 ³ 2205	Kilograms Pounds
	196.8	Feet/min.	Pennyweights (troy)		Pounds (troy)	Tons (short)	2000	Davis da
Meters/sec. Meters/sec.	3.281	Feet/sec.	Pounds	16	Ounces	Tons (short)	32000	Pounds Ounces
Meters/sec.	3.6	Kilometers/hr.	Pounds	256	Drams	Tons (short)	907.18486	Kilograms
Meters/sec.	0.06	Kilometers min.	Pounds	7000	Grains	Tons (short)	2430.56	Pounds (troy)
Meters/sec.	2.237	Miles hr.	Pounds	0.0005	Tons (short)	Tons (short)	0.89287	Tons (fong)
Meters/sec.	0.03728	Miles min.	Pounds	453.5924	Grams	Tons (short)	29166.66	Ounces (troy)
Microns	10-6	Meters	Pounds Pounds	1.21528 14,5833	Pounds (troy) Ounces (troy)	Tons (short)	0.90718	Tons (metric)
Miles	1.609x105	Centimeters	Pounds (troy)	5760	Grains	Tons of water/24 hrs.	83.333	Pounds water/hou
Miles	5280	Feet	Pounds (troy)	240	Pennyweights (troy)	Tons of water/24 hrs.		Gallons/min.
Miles	1.609	Kilometers	Pounds (troy)	12	Ounces (troy)	Tons of water/24 hrs.	1.3349	Cu. ft./hr.
Miles	1760	Yards	Pounds (troy)	373.24177	Grams	Watts	0.05692	B. T. Units/min.
	44.70	0 4" 4 7	Pounds (troy)	0.822857	Pounds (avoir.)	Watts	44.26	Foot-pounds/min.
Miles/hr.	44.70	Centimeters/sec. Feet/min.	Pounds (troy)	13.1657 3.6735x10-4	Ounces (avoir.) Tons (long)	Watts	0.7376	Foot-pounds/sec.
Miles/hr.	. 88 . 1.467	Feet/sec.	Pounds (troy) Pounds (troy)	4.1143x10-4	Tons (short)	Watts	1.341x10-3	Horse-power
Miles/hr. Miles/hr.	1.609	Kilometers/hr.	Pounds (troy)	3.7324x10-4	Tons (metric)	Watts	0.01434	Kgcalories/min.
Miles/hr.	0.8684	Knots	,			Watts	10-3	Kilowatts
Miles/hr.	26.82	Meters min.	Pounds of water	0.01602	Cubic feet	Watt-hours	3.415	British Thormatti
			Pounds of water	27.68	Cubic inches	Watt-hours Watt-hours	2655	British Thermal Un Foot-pounds
	2682	Centimeters/sec.	Pounds of water	0.1198	Gallons	Watt-hours	1.341x10 ⁻³	Horse-power-hour
Miles/min.						i		THE PONCE THOU
Miles/min.	88	Feet/sec.	Pounds of water/min	2 670x10-4	Cubic ft /sec.	Watt-hours	0.8605	Kilogram-calories
Miles/min. Miles/min.	88 1.609	Kilometers/min.	Pounds of water/min.	2.670x10-4	Cubic ft./sec.	Watt-hours Watt-hours	0.8605 367.1	Kilogram-calories Kilogram-meters
Miles/min.	88		Pounds of water/min. Pounds/cubic foot Pounds/cubic foot	2.670x10-4 0.01602 16.02	Cubic ft./sec. Grams/cubic cm. Kgs./cubic meter			Kilogram-calories Kilogram-meters Kilowatt-hours



C.Emery Nelson, Inc.

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"THE SYSTEM THAT WORKS"

C.Emery Nelson, Inc.

WAREHOUSE STOCK

...GARDNER DENVER BLOWERS

...FILTERS (CARTRIDGE, BAG, PLEATED) **CHECK OUR STOCK**

PACKAGING

OF ...GARDNER DENVER BLOWER SYSTEMS (STANDARD, CUSTOM, OR SANITARY) ...OF SOUND ENCLOSURES

...OF FILTERING SYSTEMS FOR LIQUIDS

REPAIR

...OF ALL MAKES OF BLOWERS

...PARTS STOCKED

CONSULTING SERVICES

...TO OPTIMIZE YOUR

WATER TREATMENT SYSTEM

...PROBLEM SOLVING...MODERNIZATION

POWER PLANT EQUIPMENT -

DEMINERALIZERS HEAT EXCHANGERS PUMPS SILENCERS WATER TREATMENT **VENT SILENCER** AIR FILTRATION

PROCESS EQUIPMENT

AIR INTAKE FILTERS BLOWERS / BLOWER PKGS **BLOWER SILENCERS FILTERS HEAT EXCHANGERS PUMPS** VACUUM SYSTEMS VACUUM RELIEF VALVES PRESSURE RELIEF VALVE RUPTURE DISKS / EXPLOSION VENTS **VENT SILENCERS** WATER TREATMENT

FILTRATION EQUIPMENT

CARTRIDGE FILTRATION - LIQUID BAG FILTRATION - LIQUID OIL FILTRATION AND WATER SEPARATION LARGE FLOW LIQUID FILTRATION - MULTI-MEDIA SAND FILTERS MEMBRANE SYSTEMS CROSSFLOW FILTRATION AUTO-JET PRESSUE LEAF FILTERS AUTO-PULSE & AUTO-SHOK TUBULAR FILTERS

WATER TREATMENT **EQUIPMENT**

COMPLETE WATER SYSTEMS PRETREATMENT SYSTEMS CARBON/PARTICULATE PRETREATMENT IRON REMOVAL SYSTEMS RO PRETREATMENT CHEMICALS MEMBRANE TREATMENT SYSTEMS - REVERSE OSMOSIS, ULTRA - FILTRATION ION EXCHANGE SYSTEMS - SOFTENERS, DEIONIZATION **DEALKALIZERS** UV STERILIZATION AND TOC REMOVAL **EDI - ELECTRONIC DEIONIZATION**

WASTEWATER TREATMENT EQUIPMENT

AERATION BLOWERS BATCH TREATMENT SYSTEM CHEMICAL REACTION SYSTEM OIL/WATER SEPARATOR SOLIDS SEPARATOR **NEUTRALIZATION SYSTEM** ELECTROLYTIC HEAVY METALS RECOVERY SYSTEM INDUSTRIAL WASTEWATER ION EXCHANGE METAL SCAVENGING ION EXCHANGE SYSTEM WATER RESOURCE RECOVERY, RECYCLE, REUSE & ZERO LIQUID DISCHARGE

CONVERSION FACTORS

Multiply	Ву	To Obtain	Multiply	Ву	To Obtain	Multiply	Ву	To Obtain
Atmospheres Atmospheres Atmospheres Atmospheres Atmospheres Atmospheres	76.0 29.92 33.90 1.0333 14.70	Cms. of mercury Inches of mercury Feet of water Kgssq. cm. Lbssq. inch	Cubic yards/min. Cubic yards/min. Cubic yards/min. Decigrams	0.45 3.367 12.74 0.1	Cubic feet/sec. Gallons/sec. Liters/sec. Grams	Grams Grams Grams Grams Grams	980.7 15.43 10-3 103 0.03527	Dynes Grains Kilograms Milligrams Ounces
Atmospheres	1.058	Tons 'sq. ft.	Deciliters	0.1	Liters	Grams Grams	0.03215 2.205x10-3	Ounces (troy) Pounds
BarrelsOil	42	Gallons Oil	Decimeters	0.1	Meters	Grams/cm.	5.600x10-3	Pounds/inch
British Thermal Units British Thermal Units British Thermal Units	3.927x10 4 107.5	Kilogram-calories Foot-lbs. Horse-power-hrs. Kilogram-meters	Degrees (angle) Degrees (angle) Degrees (angle)	60 0.01745 3600	Minutes Radians Seconds	Grams/cu.cm. Grams/cu.cm.	62.43 0.03613	Pounds/cubic foo Rounds/cubic incl
British Thermal Units B.T.U./min. B.T.U./min. B.T.U./min.	2.928x10 4 12.96 0.02356 0.01757	Kilowatt-hrs. Foot-lbs./sec. Horse-power Kilowatts	Degreés/sec. Degrees/sec. Degrees/sec.	0.01745 0.1667 0.002778	Radians/sec. Revolutions/min. Revolutions/sec.	Grams/liter Grams/liter Grams/liter Grams/liter	58.417 8.345 0.062427 1000	Grains/gal. Pounds/1000 gals Pounds/cubic foo Parts/million
B.T.U./min.	17.57	Watts	Dekagrams Dekaliters	10	Grams Liters	Hectograms	100	Grams
Centares (Centiares)	1	Square meters	Dekameters	10	Meters	Hectoliters	100	Liters
Centigrams	0.01	Grams	Drams	27.34375	Grains	Hectometers	100	Meters
Centiliters	0.01	Liters	Drams	0.0625	Gunces	Hectowatts	100	Watts
Centimeters Centimeters Centimeters	0.3937 0.01 10	Inches Meters Millimeters	Drams Fathoms	1.771845 6	Grams Feet	Horse-power Horse-power	42.44 33,000	B. T. Units/min. Foot-lbs./min.
Centimtrs. of Mercury Centimtrs. of mercury Centimtrs of mercury Centimtrs of mercury Centimtrs of mercury	0.4461 136.0 27.85	Atmospheres Feet of water Kgs. sq. meter Lbs. sq. ft. Lbs. sq. inch	Feet Feet Feet Feet	30.48 12 0.3048 1/3	Centimeters Inches Meters Yards	Horse-power Horse-power Horse-power Horse-power Horse-power	550 1.014 10.70 0.7457 745.7	Foot-Ibs./sec. Horse-pwr. (Metric Kgcalories/min. Kilowatts Watts
	1.969	Feet min. Feet sec.	Feet of water Feet of water Feet of water	0.02950 0.8826 0.03048	Atmospheres Inches of mercury Kgs./sq. cm.	Horse-power (boiler) Horse-power (boiler)	33,479 9.803	B. T. U./hr. Kilowatts
Centimeters/second Centimeters/second Centimeters/second Centimeters/second Cms. sec., sec.	0.036 0.6 0.02237	Kilometers/hr. Meters/min. Miles/hr. Miles/min. Feet/sec./sec.	Feet of water Feet min. Feet/min. Feet/min.	62.43 0.4335 0.5080 0.01667 0.01829	Lbs./sq. ft. Lbs./sq. inch Centimeters/sec. Feet/sec. Kilometers/hr.	Horse-power-hours Horse-power-hours Horse-power-hours Horse-power-hours Horse-power-hours	2547 1.98x10 ⁶ 641.7 2.737x10 ⁵ 0.7457	British Thermal Ur Foot-Ibs. Kilogram-calories Kilogram-meters Kilowatt-hours
Subic centimeters	3.531x10 s	Cubic feet	Feet/min. Feet/min.	0.3048 0.01136	Meters/min. Miles/hr.	Inches	2.540	Centimeters
Cubic centimeters	6.102x10 ² 10 ⁴ 1.308x10 ⁶ 2.642x10 ⁴ 10 ³ 2.113x10 ³	Cubic inches Cubic meters Cubic yards Gallons Liters Pints (lig.)	Feet sec./sec. Feet/sec./sec. Foot-pounds Foot-pounds	30.48 0.3048 1.286×10-3 5.050×10-7	Cms./sec./sec. Meters/sec./sec. BritishThermal Units Horse-power-hrs.	Inches of mercury	0.03342 1.133 0.03453 70.73 0.4912	Atmospheres Feet of water Kgs./sq. cm. Lbs./sq. ft. Lbs./sq. inch
Cubic centimeters Subic feet Cubic feet Cubic feet Cubic feet Cubic feet Cubic feet Cubic feet	1.057x10 ⁻³ 2.832x10 ⁴ 1728 0.02832 0.03704 7.48052 28.32	Quarts (liq.) Cubic cms. Cubic inches Cubic meters Cubic yards Gallons Liters	Foot-pounds Foot-pounds Foot-pounds Faot-pounds/min. Foot-pounds/min. Foot-pounds/min.	3 241x10 4 0.1383 3.766x10-7 1.286x10-3 0.01667 3.030x10-3	Kilogram-calories Kilogram-meters Kilowatt-hrs. B. T. Units/min. Foot-pounds/sec. Horse-power	Inches of water	0.002458 0.07355 0.002540 0.5781 5.202 0.03613	Atmospheres Inches of mercury Kgs./sq. cm. Ounces/sq. inch Lbs./sq. foot Lbs./sq. inch
Cubic feet Cubic feet Cubic feet minute	59.84 29.92 472.0	Pints (liq.) Quarts (liq.) Cubic cms./sec.	Foot-pounds/min. Foot-pounds/min. Foot-pounds/sec.	3.241x10 4 2.260x10-5 7.717x10 2	Kgcalories/min. Kilowatts B. T. Units/min.	Kilograms Kilograms Kilograms	980,665 2.205 1.102x10 ⁻³ 10 ³	Dynes Lbs. Tons (short)
Cubic feet/minute Cubic feet, ininute	0.1247 0.4720 62.43	Gallons sec. Liters/sec. Lbs. of water/min.	Foot-pounds/sec. Foot-pounds/sec. Foot-pounds/sec.	1.818x10 ⁻³ 1.945x10 ⁻² 1.356x10 ⁻³	Horse-power Kgcalories/min. Kilowatts	Kilograms Kgs.∉meter	0.6720	Grams Lbs.∕foot
	0.646317 448.831 16.39 5.787x10 4	Million gals. 'day Gallons min. Cubic centimeters Cubic feet	Gallons Gallons Gallons Gallons	3785 0.1337 231 3.785×10-3	Cubic centimeters Cubic feet Cubic inches Cubic meters	Kgs./sq. cm. Kgs./sq. cm. Kgs./sq. cm. Kgs./sq. cm. Kgs./sq. cm.	0.9678 32.81 28.96 2048 14.22	Atmospheres Feet of water Inches of mercury Lbssq. foot Lbssq. inch
Cubic inches	1.639x10 5	Cubic meters	Gallons Gallons	4.95x10 ⁻³ 3.785	Cubic yards Liters	Kgs./sq. millimeter	100	Kgs. 'sq. meter
Cubic inches Cubic inches	2.143x10 ⁵ 4.329x10 ³	Cubic yards Gallons	Gallons Gallons	8 4	Pints (liq.) Quarts (liq.)	Kiloliters	103	Liters
Cubic inches Cubic inches Cubic inches	1.639x10 ² 0.03463 0.01732	Liters Pints (liq.) Quarts (liq.)	Gallons, Imperial Gallons, U.S.	1.20095 0.83267	U. S. Gallons Imperial gallons	Kilometers Kilometers Kilometers	10 ⁵ 3281 10 ³	Centimeters Feet Meters
Cubic meters Cubic meters	10 ⁶ 35.31	Cubic centimeters Cubic feet	Gallons water	8.3453	Pounds of water	Kilometers Kilometers	0.6214 1094	Miles Yards
Cubic meters Cubic meters Cubic meters Cubic meters Cubic meters	61,023 1.308 264.2 10 ³	Cubic inches Cubic yards Gallons Liters	Gallons min. Gallons min. Gallons min.	2.228×10 ⁻³ 0.06308 8.0208	Cubic feet/sec. Liters/sec. Cu. ft./hr.	Kilometers hr. Kilometers/hr. Kilometers/hr. Kilometers/hr.	27.78 54.68 0.9113 0.5396	Centimeters sec. Feet min. Feet sec. Knots
Cubic meters Cubic meters	2113 1057	Pints (lig.) Quarts (lig.)	Gallons water, min.	6.0086	Tons water/24 hrs.	Kilometers, hr.	16.67	Meters min.
Cubic yards Cubic yards Cubic yards	7.646x10 ⁵ 27 46,656 0.7646	Cubic centimeters Cubic feet Cubic inches Cubic meters	Grains (troy) Grains (troy) Grains (troy) Grains (troy)	1 0.06480 0.04167 2.0833x10-3	Grains (avoir.) Grams Pennyweights (troy) Ounces (troy)	Kilometers hr. Kms. hr. sec. Kms. hr. sec. Kms. hr. sec.	0.6214 27.78 0.9113 0.2778	Miles hr. Cms sec. sec. Ft sec sec. Meters sec. sec.
Cubic yards Cubic yards Cubic yards	202.0 764.6	Gallons Liters Pints (lig.)	Grains U.S. gal. Grains U.S. gal.	17.118 142.86	Parts/million Lbs./million gal.			
Cubic yards Cubic yards	1616 807.9	Quarts (liq.)	Grains/imp. gal.	14.286	Parts/million			