

Gases and Equipment for Wine Production



**NIPPON
SANSO**

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For more than 90 years (including more than 40 years serving wineries) MATHESON has provided gases, equipment, and expertise to a wide range of industries – including food/beverage, laboratory research, industrial production, medicine, and many others .

At MATHESON, we are a group that is dedicated to gases, chemicals, and equipment of special importance to wine producers . We offer many of these specialized products with off-the-shelf delivery, plus, our specialists can help you choose and use these tools for optimum results .

Count on MATHESON for Quality, Purity, On-time Delivery, and Safety.

Gases and Equipment for Wine Making

Wine Making Applications	Indirect Applications
Refrigeration	Laboratory Instruments
Blanketing	Vineyard Maintenance
Pressure Transfer	Facility Maintenance
Sparging	Construction Fabrication
Purging	Heating
Preservation	Power Generation

Different grades/purities of gases may be chosen, depending upon the application, such as Food Grade Gases, Beverage Gases, Specialty Gases, Industrial Gases, and Welding Gases (including our exclusive MATHESON Select® Welding Mixtures) .

MATHESON's full range of container types for gas or liquid supply, including dry ice, ensures that you will get exactly what you need for your application .



Dry Ice



Cylinders



Liquid Containers



MicroBulk



Cryogenic Tanks

Gas Handling Equipment and Delivery Systems

MATHESON has 90 plus years of experience in gas handling and delivery systems and offers a complete line of products, including regulators and flowmeters specifically designed for the wine production industry . Consult your MATHESON representative to determine the system best suited to your application .

Specialty Products for Wine Production and Facility Maintenance

Beyond gases, specialty items of interest to the wine maker can be found in this catalog .

- Sulfurous Acid Solution
- Specialty Gas Dispensing Tools
- Sanitary Fittings & Valves
- Sanitary Tools & Hoses

Cleaning and Sanitizing Products

MATHESON offers a complete line of specialty cleaning and sanitizing products for use in your winery, including FDA registered and food-grade products .

Safety Equipment and Supplies

MATHESON offers an extensive line of safety equipment from world class manufacturers, everything from basic personal protection to the most advanced programmable safety devices .

Welding Equipment & Supplies

MATHESON is your source for welding power sources, consumable products, equipment and supplies . Our MATHESON Select® premium brand of filler metals, welding accessories and safety supplies offers the highest quality and reliable consistent performance . At every MATHESON store you will find the brands you know and trust, and a professional MATHESON staff that's experienced, trained and committed to help with solutions for your requirements for gas, equipment and supplies .

Commitment to the Wine Industry

- ASEV (American Society for Enology and Viticulture) member for over 40 years
- R & D department in Santa Rosa, CA for winery gas applications, equipment, supplies and fittings
- Sonoma County Wine Technical Group member for over 30 years

Gas & Liquid Solution Applications

Wine Making

	Controlling Fruit Temperature in the Vineyard during Harvest and Transport	Must Stabilization	After Pressing	Temperature Control During Fermentation in Tanks or Open Tops	Aging Wine	Pressure Transfer from Barrels to Tanks
Argon - Gas					•	•
Carbon Dioxide - Gas					•	
Carbon Dioxide - Liquid	•		•	•	•	
Carbon Dioxide - Dry Ice	•		•	•		
Nitrogen - Gas					•	•
Nitrogen - Liquid						
Sulfur Dioxide - Gas						
Sulfur Dioxide - Liquid						
Beverage Gas 1 (85% N ₂ / 15% CO ₂)						
Beverage Gas 2 (75% N ₂ / 25% CO ₂)						
Beverage Gas 4 (50% N ₂ / 50% CO ₂)						
Beverage Gas 6 (85% Ar / 15% CO ₂)						
Beverage Gas O (Oxygen)				•*		
Sulfurous Acid Solution 6%		•			•	

* Used for Micro-oxygenation

Wine Lab

	Laboratory Instrument Support Gases
Air, Zero	•
Argon UHP	•
Helium UHP	•
Hydrogen UHP	•
Nitrogen UHP	•

Blanketing of Storage Tanks	Sparging of Wine during Storage or Blending	Stabilization of Wine at Bottling Stage	Blanketing of the Bottling Tank	Bottle Purging during the Filling Process	Barrel Microbial Management	In the Tasting Room
•			•	•		•
•	•		•	•		•
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Winery and Vineyard Facility Maintenance

	Welding	Heating	Cutting	Brazing
Acetylene	•	•	•	•
Argon	•			
Carbon Dioxide	•			
MATHESON Select® C-25	•			
MATHESON Select® He-25	•			
MATHESON Select® HC-925	•			
Oxygen	•	•	•	•
Propane		•	•	•

Gas & Liquid Solution Specifications

Wine Making

Argon	AR300	300	2400	Cylinder	300 cf	580
	AR250	250	2265	Cylinder	250 cf	580
	AR230LMP	L230	350	Liquid Container	230 lt	580

Carbon Dioxide	CD50	50	830	Cylinder	50 lb	320
	CD50S	50S**	830	Cylinder	50 lb	320
	CD20	20*	830	Cylinder	20 lb	320
	CD20A	20A+	830	Cylinder	20 lb	320
	CD180LHP	L180++	350	Liquid Container	180 lt	320

* Does not include siphon tube

** Includes siphon tube for liquid withdrawal

+ Includes carrying handle; does not include siphon

++ 160 and 200 liter liquid containers also available; consult your local MATHESON representative

Solid Carbon Dioxide - Dry Ice (Pellet & Rice)	CD DRYICEPLT	N/A	N/A	N/A	***	N/A
	CD ICE-RICE500	500 lb	N/A	Box*	500 lb	N/A
	CD ICE-RICE600	600 lb	N/A	Box**	600 lb	N/A
	CD ICEBOX500	500 lb	N/A	Box*	500 lb	N/A
	CD ICE-BOX600	600 lb	N/A	Box**	600 lb	N/A

N/A - Not Applicable

● Insulated Dry Ice box

* Insulated Dry Ice box on wheels

* Dry Ice pellets sold by the pound Other container sizes available .

Nitrogen	NI250	250	2265	Cylinder	250 cf	580
	NI 180LMP	L180	350	Liquid Container	180 lt	580
	NI 200LMP	L200	350	Liquid Container	200 lt	580
	NI 230LMP	L230*	350	Liquid Container	230 lt	580
	NI 265LMP	L265	350	Liquid Container	265 lt	580

* On wheels Other liquid container sizes available . Low pressure liquid containers also available .

Sulfur Dioxide (Supplied in California)	SD GAS150CA	150 lb	34	Cylinder	150 lb	660
	SD GAS25CA	25 lb	34	Cylinder	25 lb	660
	SD LIQ150CA	150 lb	34	Cylinder	150 lb	660
	SD LIQ25CA	25 lb	34	Cylinder	25 lb	660

* Gas withdrawal

** Includes siphon tube for liquid withdrawal

⚠ WARNING: This product can expose you to chemicals including Sulfur Dioxide, which is known to the State of California to cause birth defects or other reproductive harm . For more information go to [www .P65Warnings .ca .gov](http://www.P65Warnings.ca.gov) .

Ⓒ Contents shown are approximate . Actual contents are based on temperature and pressure at time of fill . Except for Carbon Dioxide and Sulfur Dioxide, which are filled by weight .



Wine Making - continued

Product		Part Number	Container Size	Pressure psig @ 70°F	Container Type	Content ①	Valve Outlet CGA No.
Beverage Gas 1 (85% Nitrogen / 15% Carbon Dioxide)		BX BV01200	250	2265	Cylinder	200 cf	580
		BX BV0160	60	2015	Cylinder	60 cf	580
Beverage Gas 2 (75% Nitrogen / 25% Carbon Dioxide)		BX BV02200	250	2265	Cylinder	200 cf	580
		BX BV0260	60	2015	Cylinder	60 cf	580
Beverage Gas 4 (50% Nitrogen / 50% Carbon Dioxide)		BX BV04200	250	2265	Cylinder	200 cf	580
		BX BV0460	60	2015	Cylinder	60 cf	580
Beverage Gas 6 (85% Argon / 15% Carbon Dioxide)		BX BV06200	250	2265	Cylinder	200 cf	580
		BX BV0660	60	2015	Cylinder	60 cf	580
Beverage Gas O (Oxygen)		BV OX200	200	2265	Cylinder	200 cf	540
Product	Part Number	Container Size	Working Pressure psig	Container Type	Content ①	Inlet	Outlet

Wine Lab - Instrument Support Gases

Product	Part Number	Container Size	Pressure psig @ 70°F	Container Type	Content ①	Valve Outlet CGA No.
Air, Zero	CA ZERO1L	300	2400	Cylinder	314 cf	590
Argon UHP	AR UHP1L	300	2400	Cylinder	331 cf	580
	AR UHP1A	200	2265	Cylinder	280 cf	580
Helium UHP	HE UHP1L	300	2400	Cylinder	288 cf	580
	HE UHP1A	200	2265	Cylinder	244 cf	580
Hydrogen UHP	HY UHP1L	300	2400	Cylinder	284 cf	350
	HY UHP1A	200	2265	Cylinder	219 cf	350
Nitrogen UHP	NI UHP1L	300	2400	Cylinder	300 cf	580
	NI UHP1A	200	2265	Cylinder	255 cf	580

① Contents shown are approximate. Actual contents are based on temperature and pressure at time of fill. Except for Propane, which is filled by weight.

Gas & Liquid Solution Specifications

Winery and Vineyard Facility Maintenance

Product	Part Number	Container Size	Pressure psig @ 70°F	Container Type	Content ①	Valve Outlet CGA No.
Acetylene	AC LG310VL	LG310	250	Cylinder	300-340 cf	510
	AC SMVL	SM	250	Cylinder	110-140 cf	510
Argon	AR 300	300	2400	Cylinder	300 cf	580
	AR 250	250	2265	Cylinder	250 cf	580
Carbon Dioxide	CD 50	50	830	Cylinder	50 lb	320
Oxygen	OX 250	250	2265	Cylinder	250 cf	540
	OX 125	125	2265	Cylinder	125 cf	540
Propane*	FG PR100	100	240	Cylinder	95 lb	510
	FG PR60	60	240	Cylinder	57 lb	510
	FG PR33FL	33	240	Cylinder	31 lb	510
	FG PR20	20	240	Cylinder	15 lb	510
MATHESON Select® C-25	MX AWSC25300	300	2400	Cylinder	300 cf	580
MATHESON Select® HC-925	MX AW-SHC925300	300	2400	Cylinder	300 cf	580

*Other sizes available

① Contents shown are approximate. Actual contents are based on temperature and pressure at time of fill. Except for Acetylene, Carbon Dioxide, and Propane, which are filled by weight.

Common Container Dimensions

Standard High Pressure Cylinders

APPROXIMATELY



6 Ft. 5 4 3 2 1



Size	60	60A	80	125	150	200	250	300
Volume (cf)	60	60	80	125	150	200	250	300
Tare Weight (lbs)	29	22.6	47	58	61	117	117	139
Height (inches)	23	28	32	43	47	51	51	55
Diameter (inches)	7	7	7	7	7	9	9	9

All values are approximate

Tare weight includes valve but excludes cap. Standard cap is 5 inches in length and 2 pounds in

Carbon Dioxide Cylinders



6 Ft.
5 4 3
2 1

APPROXIMATELY



Size	20	20S*	20A	50	50S*
Volume (lbs)	20	20	20	50	50
Tare Weight (lbs)	48	50	24	104	106
Height (inches)	23	23	28	51	51
Diameter (inches)	7	7	7	9	9

* Includes siphon tube for liquid withdrawal

All values are approximate

Tare weight includes valve but excludes cap. Standard cap is 5 inches in length and 2 pounds in

Sulfur Dioxide Cylinders

APPROXIMATELY



6 Ft. 5 4 3 2 1



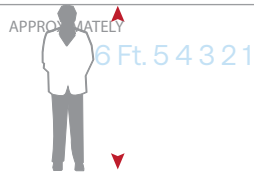
Size	25 lb	150 lb
Volume (lbs)	25	150
Tare Weight (lbs)	34.5	62
Height (inches)	25	49
Diameter (inches)	12	10

All values are approximate

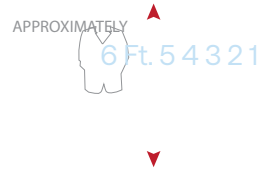
Tare weight includes valve but excludes cap. Standard cap is 5 inches in length and 2 pounds in weight

Common Container Dimensions

Propane Cylinders



Acetylene Cylinders

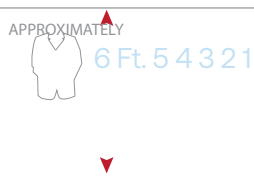


Size	20	33	60	100	Size	SM	LG310
Volume (lbs)	20	33	60	100	Volume (cf)	110-140	300-340
Tare Weight (lbs)	26	36	48	77	Tare Weight (lbs)	70	168
Height (inches)	19	27	44	49	Height (inches)	34	41

All values are approximate Tare weight includes valve but excludes cap. Standard cap is 5 inches in length and 2 pounds in weight

All values are approximate Tare weight includes valve but excludes cap. Standard cap is 5 inches in length and 2 pounds in weight

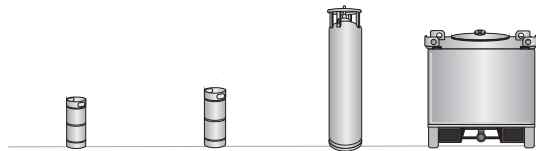
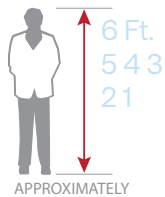
Liquid Containers



Size	L160	L180	L200	L230	L265
Volume (lt)	160	180	200	230	265
Tare Weight (lbs)	210-280	210-300	210-300	305-367	353-430
Height (inches)	60	64	67	57	59.5
Diameter (inches)	20	20	20	26	26

All values are approxi-

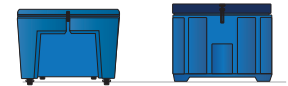
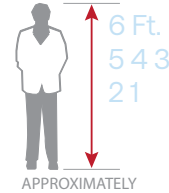
Sulfurous Acid Solution Containers



Size	5 Gallon	6 Gallon	42 Gallon	330
Volume (gal)	5	6	42	330
Tare Weight (lbs)	13	14	323	475
Height (inches)	24	30	64	51
Diameter (inches)	9	9	20	*
Material of Construction	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel

All values are approximate *
Width 48" and Length 42"

Insulated Dry Ice Boxes



Size	500	600
Volume (lbs)	500	600
Width (inches)	36	41
Length (inches)	36	37
Height (inches)	35	40

All values are approximate



Model 1250 Series Dual-Stage Brass Regulator

High purity regulators constructed for use with non-corrosive gases.

Applications:

- Pressure transfer from barrels to tanks
- Pressure transfer for Sulfurous Acid Solution containers
- Gas blanketing and positive pressure systems
- Supply of carrier gas/detector support gas for gas chromatography applications
- Applications where a constant delivery pressure is required
- Applications with high duty cycle/demanding operating conditions

Design Features/Components:

- Forged brass body
- Stainless steel diaphragms (1st and 2nd stages)
- 2" inlet and delivery pressure gauges
- 1/4" FNPT outlet connection
- One-piece encapsulated seat with (10 μ) internal filter to protect against contamination

Materials of Construction:

Gauges:	Chrome plated brass
Body:	Chrome plated forged brass
Bonnet:	Chrome plated zinc die cast (1st and 2nd stages)

Specifications:

Maximum Inlet Pressure:	3000 psig (20,700 kPa)
Typical Max Flow (100 psi del . press.):	7 SCFM-N2
Flow Capacity (Cv):	0.15
Operating Temperature:	-20°F to 140°F (-29°C to 60°C)

Ordering Information

Part Number	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
SEQ1251NV CGA	2-15 psig	-30" Hg - 0 - 30 psi	0-4000 psig
SEQ1252NV CGA	4-50 psig	-30" Hg - 0 - 100 psi	0-4000 psig
SEQ1253NV CGA	10-125 psig	-30" Hg - 0 - 200 psi	0-4000 psig

*Note: For ordering, replace letters "CGA" with the valve outlet CGA number for the gas cylinder you are using. Some CGA limitations may apply.



**Model 18 Series
Single-Stage General Purpose Brass Regulator**

General purpose regulators with rugged construction for use with non-corrosive gases .

Applications:

- Pressure transfer from barrels to tanks
- Pressure transfer for Sulfurous Acid Solution containers
- Gas blanketing and positive pressure systems
- Applications with high duty cycle/demanding operating conditions

Design Features/Components:

- Forged brass body
- Neoprene diaphragm
- 2" inlet and delivery pressure gauges
- 1/4" FNPT outlet connection
- Porous metal filter to protect seat from contamination

Materials of Construction:

- Gauges: Brass, painted steel covers
- Body: Forged brass
- Bonnet: Chrome plated zinc die cast

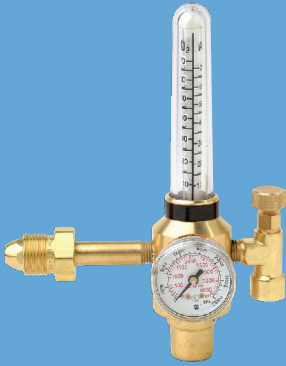
Specifications:

- Maximum Inlet Pressure: 3000 psig (20,700 kPa)
- Typical Max Flow (100 psi del . press): 15 SCFM-N2 (420 SLPM)
- Flow Capacity (Cv): 0.17
- Operating Temperature: -20°F to 140°F (-29°C to 60°C)
- Porting (Regulator Body): 1/4" FNPT
- Porting Configuration: 2 High, 2 Low
- Shipping Weight: 4 lbs

Ordering Information

Part Number	Delivery Pressure Range	Delivery Pressure Gauge	Cylinder Pressure Gauge
SEQ18BNV CGA	0-15 psig	0-30 psig	0-4000 psig
SEQ18NV CGA	2-50 psig	0-60 psig	0-4000 psig
SEQ18LNV CGA	4-100 psig	0-150 psig	0-4000 psig
SEQ18HNV CGA	10-200 psig	0-400 psig	0-4000 psig

**Note: For ordering, replace letters "CGA" with the valve outlet CGA number for the gas cylinder you are using. Some CGA limitations may apply.*



**Model 200-1
Flowmeter Regulator**

Applications:

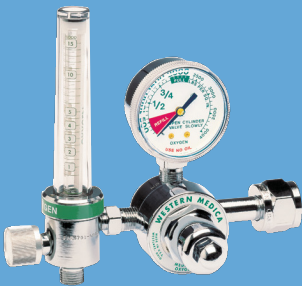
- Flowmeter Regulator designed to give precise flow control for in-line sparging applications

Design Features/Components:

- Regulator is pre-set at 20 psig
- Construction incorporates regulator and flowmeter into one compact unit
- Flow tube and float are easily changed for different gases
- Sensitive needle valve for fingertip control
- One-piece encapsulated seat design, with an internal filter and PTFE Teflon seat
- Durable, easy-to-read flow tube and cover (0-100 scfh)

Ordering Information

Part Number	Model Number	Stage	Gauge	Gas	Inlet
SEQRFM-2001BO	200-1	Single	2" Steel	Air, Nitrogen	CGA580



**Model M1-540-15FM
Single-Stage Flowmeter Regulator**

Applications:

- Flowmeter Regulator used for micro-oxygenation applications

Design Features/Components:

- Chrome-plated brass body with all brass high-pressure chamber
- Maximum rated inlet pressure 3000 psi
- Durable neoprene diaphragm
- Internal reseating relief valve protects against over-pressurization
- Sintered filter for additional safety and extended regulator life
- 2" diameter gauge

Ordering Information

Part Number	Model Number	Stage	Gauge	Gas	Inlet	Flow Range
WES M1-540-15FM	M1-540-15FM	Single	2" Chrome-plated Brass	Oxygen	CGA 540	1/2 - 15 LPM

Specialty Equipment



Carbon Dioxide Snow Horn

CO₂ snow horns are used with liquid and dip tube cylinders to produce CO₂ snow for temperature control and the effective purging of tanks, tankers, barrels, and gondolas .

Ordering Information

Part Number	Height	Diameter	Hose Length	Ship Weight
MWB BVHOSEASSY15	15"	4"	15'	5 lb
MWB BVHOSEASSY25	15"	4"	25'	7 lb
MWB BVHOSEASSY50	15"	4"	50'	10 lb



Gas Blanketing Device

Gas Blanketing Devices diffuse the directional energy of the gas flow in tanks and tankers and allow the molecular weight of the gas to blanket gently (laminar flow) .

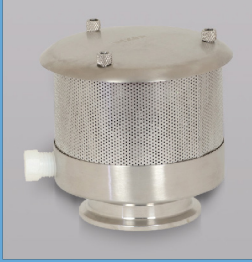
Blanketing devices can be used with Argon, Nitrogen, Carbon Dioxide, and Beverage Gas mixtures . These blanketing devices reduce oxygen levels in minutes .

Available in 4" (stainless steel) and 1-1/2" (stainless steel) .

Ordering Information

Part Number	Height	Diameter	Ship Weight
MWB GASBLANKET4S	5"	4"	6 lb
MWB GASBLANKET15	5"	1-1/2"	4 lb

Specialty Equipment



Tri-Action Tank Safety Vent

The Tri-Action Tank Safety Vent is used as a pressure relief device to avoid vacuum or over pressurization inside a tank or piping system .

- Standard 2" Tri-clamp connection
- Large 1/4" FNPT gas port
- Stainless steel construction
- Can be used with positive pressure system
- Other sizes and connections available

Sealer

Through the unique design of the Tri-Action Tank Safety Vent, the tank is automatically sealed from ambient air once blanketing, bottling, or pumping operations have ceased .

Pressure Relief

The Tri-Action Tank Safety Vent is designed to relieve pressure within the tank at 1 psi .

Vacuum Breaker

The Tri-Action Tank Safety Vent drops to a safe working vacuum of 0 .09 psi .

Part Number	Pressure Rating @ 70°F	Flow	Ship Weight
DIX TVPC200300	3 psi	250 GPM	2 .6 lb



In-Line Sparger with Check Valve

Adjust the Oxygen and Carbon Dioxide accurately and effectively with our In-Line Sparger!

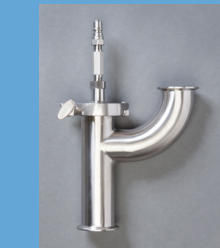
The In-Line Sparger's unique design allows the wine to pass on top and around the diffuser surface generating turbulence and very small bubbles .

When used with a nitrogen regulator/flowmeter, you can sparge very effectively with the least amount of stripping of volatiles and aromatics .

Features:

- 10 micron stainless steel diffuser
- Standard 2" Tri-clamp connection
- Clean out ports on both ends of stainless steel diffuser
- Other sizes and connections available

Part Number	Height	Diameter	Length	Ship Weight
MWB 2SPARGERASSY	8"	2"	7"	8 lb



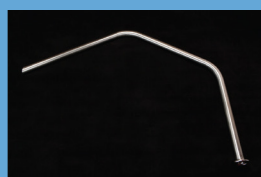
Specialty Equipment



Swivel Racking Arm

- Used to transfer wine from tanks for blending or bottling
- Clamps in racking port and swivels for safe and efficient racking of tanks
- Available in 2" Tri-clamp connection

Part Number	Length	Diameter	Width	Ship Weight
MWB RACKARMSWIVL	36"	2"	10"	10 lb



Long Radius Racking Arm

- Used to transfer wine from barrels in place
- Stainless steel construction
- Shown with 1-1/2" Tri-clamp connection
- Custom lengths and sizes available

Part Number	Length	Diameter	Width	Ship Weight
MWB RACKARMLONG	36"	1"	18"	6 lb



Standard Racking Arm

- Used to transfer wine from barrels or kegs
- Easy to use with a single level of barrels
- Stainless steel construction
- Shown with 1-1/2" Tri-clamp connection
- Custom lengths and sizes available

Part Number	Length	Diameter	Width	Ship Weight
MWB RACKINGARM	34"	1"	3"	8 lb



Deluxe Racking Arm

- Used to transfer wine from barrels or kegs
- Site glass
- Adjustable foot
- Stainless steel construction
- Shown with 1" full port stainless steel ball valve
- Custom lengths and sizes available

Part Number	Length	Diameter	Width	Ship Weight
MWB DLXRACKNGARM	36"	1"	7"	8 lb

Specialty Equipment



Shown with SO₂ Wrench and SO₂ Hose

SO₂ Barrel Gassing Unit

Prepare barrels for storage quickly and easily by controlling the bacteria and mold . The SO₂ Barrel Gassing Unit is designed to put measured amounts of SO₂ into empty barrels prior to storage .

Ordering Information

Part Number	Height	Width	Hose Length	Ship Weight
MWB SO2BGU25	5"	12"	25'	8 lb
MWB SO2BGU50	5"	12"	50'	10 lb
MWB SO2BGU75	5"	12"	75'	14 lb



1,000 gm 5,000 gm

Pure SO₂ Dispenser

SO₂ dispensers allow accurate measurement of pure liquid SO₂ additions to wine . These 316L stainless steel pressure vessel dispensers have a fill valve, liquid valve, and a gas/vent valve .

The dispensers also have a recessed graduated cylinder for easy viewing of the SO₂ level and a bottom drain port for easy cleaning .

Available in two sizes:

- 1000 gram dispenses in 10 gram increments
- 5000 gram dispenses in 50 gram increments
- Replacement parts available

Part Number	Height	Width	Ship Weight
CAD ALPEDISP1000	22"	10"	16 lb
CAD ALPEDISP5000	25"	9"	25 lb

Specialty Equipment



H₂SO₃ Digital Solution Dispenser with 5 Gallon Cart

H₂SO₃ Digital Solution Dispenser

This programmable digital dispenser will deliver a 6% Sulfurous Acid Solution (H₂SO₃) in millili-

The dispenser can be used at the crusher during harvest or connected directly to the must

The dispenser is also used for barrel addi-

The dispenser allows the operator to remotely start H₂SO₃ additions using a digital radio transmitter .

The batch controller automatically shuts off the H₂SO₃ flow when the desired quantity is measured by the flowmeter .

Features:

- Remote controlled activation
- Accurate, reliable, safe
- Can be used to dispense any liquid solution, such as tartaric acid
- Maintains a constant solution percentage and exact metered measurement
- Closed dispensing system minimizes exposure to acid gas vapors
- Wetted surfaces stainless steel construction
- 110 A/C or rechargeable battery

Ordering Information

Part Number	Height	Width	Depth	Ship Weight
MWB SO2DISPENSER*	10"	12"	4"	15 lb
MWB SO2DISPENSBU**	10"	12"	4"	23 lb

* 110 A/C

** Rechargeable

Options:

- 5 gallon stainless steel cart allows the operator to move between narrow barrel rows
- 42 gallon liquid cylinder cart allows the operator to easily and safely move the liquid cylinder around the winery

Ordering Information

Part Number	Description	Height	Width	Depth	Ship Weight
MWB SS5GTOPCART	5 Gallon Cart	41"	18"	24"	32 lb
ANT 87U-4	42 Gallon Cart	46"	28"	N/A	92 lb
ANT 6114	Folding Rear Assembly *	46"	15"	N/A	30 lb

* Large 4" replacable rear caster, heavy gauge toeplate, 10" solid rubber tires secured with locknets (no cotter pins)



42 gallon liquid cylinder



Pressure Transfer Device for Sulfurous Acid Solution

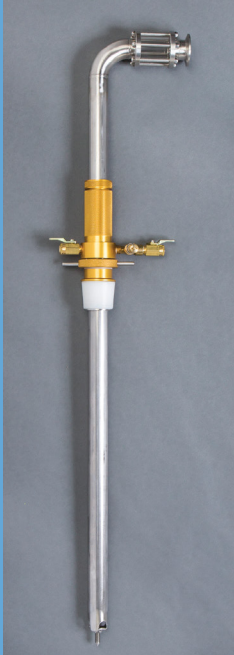
Features:

- 2" Tri-clamp connection
- 1/4" male stainless steel quick connections
- Stainless steel construction
- Used with inert gas
- Stainless steel 15 psi pressure relief valve

Ordering Information

Part Number	Length	Width	Ship Weight
MWB KEGASSY	29"	8"	8 lb

Specialty Equipment



Gentle Giant

The Gentle Giant uses inert gas pressure to transfer wine allowing easily controlled, gentle flow without agitation or oxidation .

Features:

- Adjustable foot and bung for use with various sizes of barrels and kegs
- Stainless steel construction
- Built-in 15 psi stainless steel safety relief valve to prevent over pressurization
- 1-1/2" Tri-clamp connection
- Used with Nitrogen or Argon
- Shown with short Sight Glass
- Custom lengths available

Part Number	Length	Diameter	Width	Ship Weight
MWB BARRELMASTER	36"	1"	12"	10 lb
MWB BRLMASTER114	36"	1-1/4"	12"	10 lb



Keg Pressure Transfer Device

Used for pressure transfer of wine from kegs or drums .

Features:

- 2" and 4" Tri-clamp connection
- 1/4" MNPT connections
- Stainless steel construction
- Used with inert gas
- Custom lengths and sizes available

Part Number	Length	Width	Ship Weight
MWB SSKEGASSY2 (2")	28"	8"	7 lb
MWB SSKEGASSY4 (4")	28"	10"	8 lb



Barrel Topping Gun

Used to top-off wine barrels

Features:

- 1/2" FNPT connection
- Stainless steel construction
- Spring loaded handle
- Removable plug for easy cleaning
- Rebuild kit available*

Part Number	Length	Diameter	Width	Ship Weight
MWB TOPGUNSTD SS	10"	1/2"	5"	2 lb

* Rebuild Kit (p/n BRA BTGKIT)

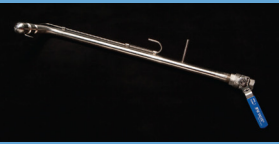
Specialty Equipment



Barrel Cleaning Wand with Foot

- Used with a 7" barrel rack
- Stainless steel construction
- Shown with rotating spray head and 3/4" full port stainless steel ball valve

Part Number	Height	Diameter	Length	Ship Weight
MWB BCWANDFOOT	19"	1"	19"	8 lb



Spring Loaded Barrel Cleaning Wand

- Used with any barrel rack
- Spring loaded for hands free operation
- Stainless steel construction
- Shown with rotating spray head and 3/4" full port stainless steel ball valve

Part Number	Length	Diameter	Width	Ship Weight
MWB WASHWANDSPR	28"	1"	5"	8 lb



Spray Balls

Spray balls are the most widely used tank and barrel cleaning method for sanitary applications .

Features:

- Durable stainless steel construction
- Stationary and rotating
- 3/4" FNPT and pinned connections
- Easy mounting
- Photo shows sizes and styles available
- Rebuild kit available*

Part Number	Height	Diameter	Ship Weight
SSP 2	3"	1-1/4"	2 lb

* Rebuild Kit (p/n SSP REBUILDKIT)

Specialty Equipment

Stirring Wands

Stirring wand ensures that the lees and the additions are completely mixed into the wine .

- Stainless steel construction
- Custom lengths and sizes avail-



Single

Single Handle

- For use with single level barrels (unstacked)

Ordering Information

Part Number	Length	Width	Ship Weight
MWB BARRELWAND	36"	4"	4 lb



Double

Double Handle

- Curved to allow insertion between barrels stacked in racks

Ordering Information

Part Number	Length	Width	Ship Weight
MWB BARRELWANDDB	5"	8"	8 lb



Punch Down Device

- Used for punching down and mixing the must cap during fermentation
- 1-1/2" stainless steel construction
- Base: 10"x10" with perforations
- Handle: 12"
- Custom sizes and styles available

Ordering Information

Part Number	Height	Ship Weight
MWB PUNCHDWN-SHRT	66"	14 lb

Specialty Equipment



Kegs for Wine Storage or Topping Barrels

Two Sizes available:

- 5.17 gallon stainless steel keg comes with 2" Tri-clamp connection
- 15.5 gallon stainless steel keg comes with 2" or 4" Tri-clamp connection

Part Number	Height	Diameter	Ship Weight
KEG SS5.17GAL2TC (2")	24"	10"	15 lb
KEG SS15.5GAL2TC (2")	24"	17"	20 lb
KEG SS15.5GAL4TC (4")	24"	17"	20 lb



5.17 Gallon Keg Cart

Keg Carts for Topping Barrels

- Compact design to fit between barrel rows
- Available with a 5.17 Gallon Keg or a 15.5 Gallon Keg

Ordering Information

Part Number	Height	Width	Depth	Ship Weight
MWB SS5GTOPCART	41"	18"	24"	32 lb
MWB SS15GKEGCART	34"	17"	28"	26 lb



Stainless Steel Pails

- Available in 3.5 and 5 gallon sizes

Part Number	Description	Height	Diameter	Ship Weight
TWM 5055PAIL09HL	3.5 Gallon	14"	12"	5 lb
TWM 5055PAIL18H	5 Gallon	14"	16"	10 lb

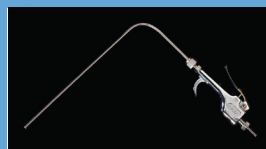
Specialty Equipment



Shown with regulator and 10 micron diffuser



O₂ Regulator Flow-



Micro-Oxygenation Equipment

The micro-oxygenation process is diffusing tiny gas bubbles using a microporous sintered stainless steel diffuser, along with an oxygen regulator/flowmeter that has been calibrated in liters per minute .

The use of a high purity food grade gas such as “Beverage Gas O” for Oxygen or Compressed Air is recommended to avoid any risk of wine contamination .

Features:

- Regulator calibrated in liters per minute
- Stainless steel diffuser available in 10 micron

Ordering Information

Part Number	Description	Height	Width	Ship Weight
WES M1-540-15FG	Regulator	8"	8"	5 lb
MWB DIFFUSER410	10 Micron Diffuser	4"	1"	2 lb
WES M1-540-15FM	O ₂ Regulator Flowmeter	10"	6"	5 lb

A Frame Parts Board

Used to store and clean winery parts .

Features:

- Perforated stainless steel allows for various layout of parts
- Stainless steel construction
- Two lockable swivel stainless steel casters for easy maneuverability
- Open center allows for multiple storage
- Designed to fit through 36" doorways
- Custom configurations available
- Stainless steel pegs sold separately

Ordering Information

Part Number	Height	Width	Length	Ship Weight
MWB PARTSBOARD	52"	34"	52"	175 lb

Bottle Blanketing Device

Used to blanket open bottles of wine to prevent oxidation and wine spoilage. When used with Beverage Gas mixtures the device produces a blanket of protective atmosphere on the wine’s surface and displaces oxygen.

Features:

- Single hand operation
- Thumb operated gassing valve
- Stainless steel blanketing tube
- Different hose lengths available

Part Number	Width	Length	Ship Weight
MWB 601GASINGGUN	1"	10"	1 lb

Quick-Connect Couplers

These Quick-Connect couplers are ideal for compressed gas applications due to their unique eight stainless steel ball bearing seal system, which prevents leaks. They are machined components that are manufactured using brass and stainless steel bar stock. They also have stainless steel ball retaining rings and springs, which maximize corrosion resistance and extend the service life.

Features:

- EPDM seals provide a temperature range of -40°F to 250°F
- Valve seals are crimped in place to ensure integrity during excessive flow and pressurized conditions
- Check valves are standard and built-in
- 1/4" stainless steel couplers have a PTFE anti-extrusion ring
- 1/4" brass couplers have a redundant O-ring sealing system (dual O-rings; no PTFE back-up ring)
- Other body sizes available with or without check valves

Male Quick-Connect Couplers

Ordering Information

Part Number	Body Size	Material	Threads	Length	Maximum OD	Hex Inch
DIX PH2F2B	1/4"	Brass	1/4" - 18 FNPT	1.55"	0.83"	3/4"
DIX PH2F2S	1/4"	Stainless Steel	1/4" - 18 FNPT	1.55"	0.83"	3/4"
DIX H6F6B	3/4"	Brass	3/4" - 14 FNPT	3.55"	1.12"	2.22"
DIX H6F6S	3/4"	Stainless Steel	3/4" - 18 FNPT	3.55"	1.12"	2.22"



Female Quick-Connect Couplers

Ordering Information

Part Number	Body Size	Material	Threads	Length	Maximum OD	Hex Inch
DIX P2HF2B	1/4"	Brass	1/4" - 18 FNPT	2.26"	1.12"	7/8"
DIX P2HF2S	1/4"	Stainless Steel	1/4" - 18 FNPT	2.26"	1.12"	7/8"
DIX 6HF6B	3/4"	Brass	3/4" - 14 FNPT	3.55"	1.12"	2.22"
DIX 6HF6S	3/4"	Stainless Steel	3/4" - 18 FNPT	3.55"	1.12"	2.22"



Clamp Ferrules

Short Weld Ferrules - 14WMP

Ordering Information

304 Stainless Steel Part Number	Tube OD	A	B	C
BRA 14WMPG100	1"	.500	.870	1.000
BRA 14WMPG150	1½"	.500	1.370	1.500
BRA 14WMPG200	2"	.500	1.870	2.000
BRA 14WMPG250	2½"	.500	2.370	2.500
BRA 14WMPG300	3"	.500	2.870	3.000
BRA 14WMPG400	4"	.625	3.834	4.000

Long Weld Ferrules - L14AM7

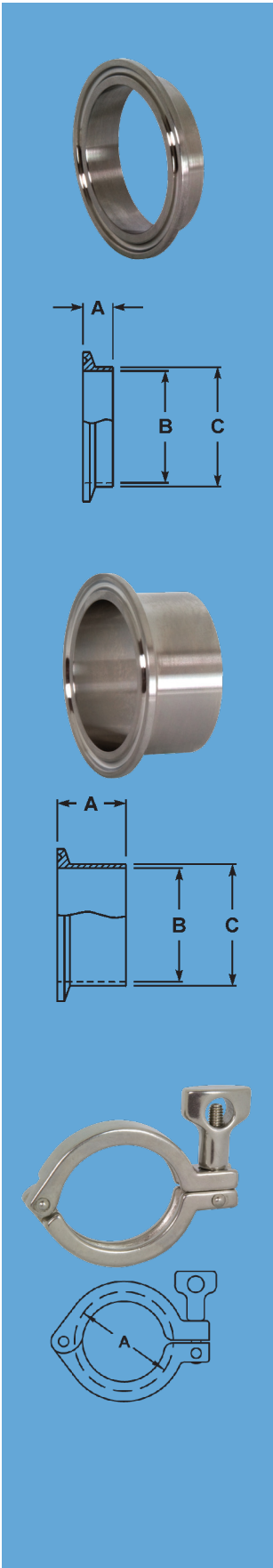
Ordering Information

304 Stainless Steel Part Number	Tube OD	A	B	C
BRAL14AM7G100	1"	1.125	.870	1.000
BRAL14AM7G150	1½"	1.125	1.370	1.500
BRAL14AM7G200	2"	1.125	1.870	2.000
BRAL14AM7G250	2½"	1.125	2.370	2.500
BRAL14AM7G300	3"	1.125	2.870	3.000
BRAL14AM7G400	4"	1.125	3.834	4.000

Single Pin Heavy Duty Clamps with Cross Hole Wing Nut - 13MHHM

Ordering Information

Part Number	Tube OD	Service Pressure Rating @ 70°F	Service Pressure Rating @ 250°F	A
BRA 13MHHM100150	1" - 1½"	500	300	2.122
BRA 13MHHM200	2"	450	250	2.654
BRA 13MHHM250	2½"	400	200	3.185
BRA 13MHHM300	3"	350	175	3.717



Sanitary Fittings & Valves

Clamp Elbows

90° Clamp Elbows - B2CMP

Ordering Information

304 Stainless Steel Part Number	Tube OD	A	R
BRA B2CMPG100	1"	2.000	1.500
BRA B2CMPG150	1½"	2.750	2.250
BRA B2CMPG200	2"	3.500	3.000
BRA B2CMPG250	2½"	4.250	3.750
BRA B2CMPG300	3"	5.000	4.500
BRA B2CMPG400	4"	6.625	6.000

Clamp Gaskets

Buna-N Clamp Gaskets - Black

Features:

- Color code: red dot
- Meets 21CFR 177 .2600

Ordering Information

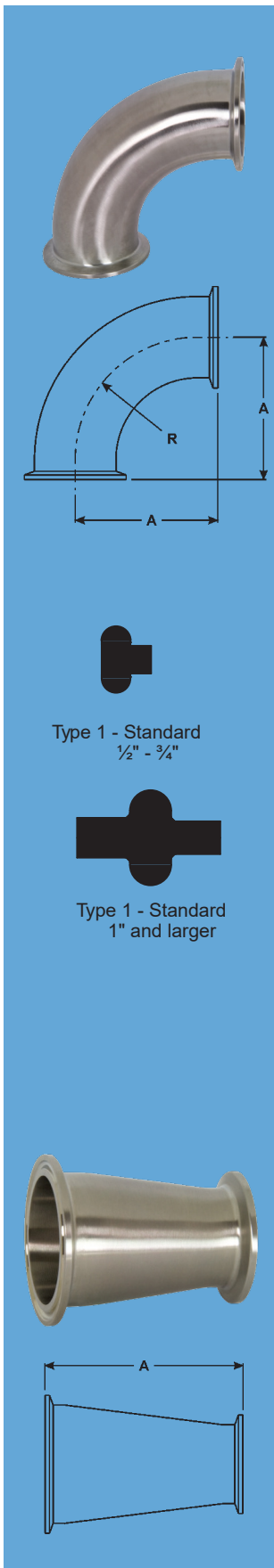
Part Number	Size
BRA 40MPU100	1"
BRA 40MPU150	1½"
BRA 40MPU200	2"
BRA 40MPU250	2½"
BRA 40MPU300	3"
BRA 40MPU400	4"

Clamp Reducers

Clamp Concentric Reducers - B3114MP

Ordering Information

304 Stainless Steel Part Number	Tube OD	A
BRA B3114MPG2015	2" x 1½"	3.000
BRA B3114MPG2502	2½" x 2"	3.000
BRA B3114MPG3015	3" x 1½"	7.000
BRA B3114MPG3020	3" x 2"	5.000
BRA B3114MPG3025	3" x 2½"	3.000
BRA B3114MPG4020	4" x 2"	9.125
BRA B3114MPG4030	4" x 3"	5.125



Clamp Elbows

45° Clamp Elbows - B2KMP

Ordering Information

304 Stainless Steel Part Number	Tube OD	A	R
BRA B2KMPG150	1½"	1.437	2.250
BRA B2KMPG200	2"	1.750	3.000

Miscellaneous Clamp Configurations

Clamp Laterals - B28AMP

Ordering Information

316L Stainless Steel Part Number	Tube OD	A	B	C
BRA B28AMP100	1"	7.000	1.500	5.500
BRA B28AMP150	1½"	8.375	1.688	6.688
BRA B28AMP200	2"	9.750	2.125	7.625
BRA B28AMP300	3"	11.750	2.375	9.375
BRA B28AMP400	4"	14.062	2.640	11.312

Clamp True Wyes - B28BMP

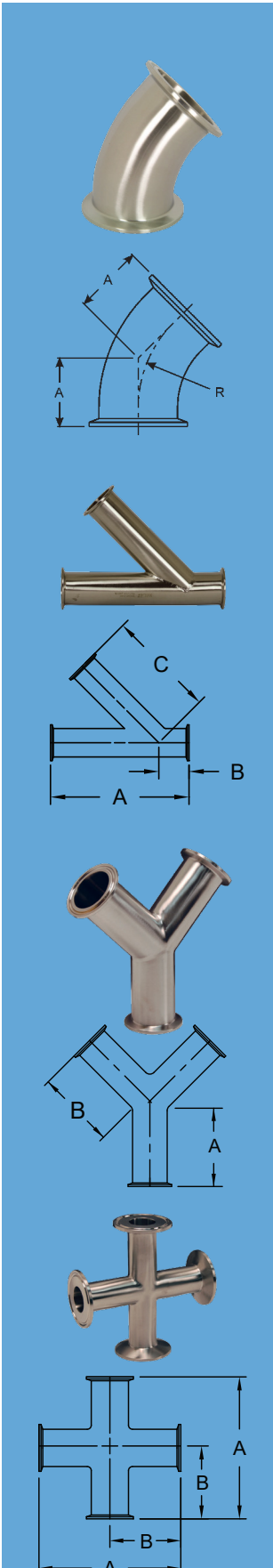
Ordering Information

316L Stainless Steel Part Number	Tube OD	A	B
BRA B28BM100	1"	2.500	2.938
BRA B28BM150	1½"	2.500	2.938
BRA B28BM200	2"	3.125	3.750
BRA B28BM300	3"	4.500	5.375
BRA B28BM400	4"	6.000	6.000

Clamp Crosses - B9MP

Ordering Information

304 Stainless Steel Part Number	Tube OD	A	B
BRA B9MPG100	1"	4.750	2.375
BRA B9MPG150	1½"	5.500	2.750
BRA B9MPG200	2"	7.000	3.500
BRA B9MPG300	3"	7.500	3.750
BRA B9MPG400	4"	9.000	4.500



Miscellaneous Clamp Configurations

Clamp Tees - B7MP

Ordering Information

304 Stainless Steel Part Number	Tube OD	A	B
BRA B7MPG100	1"	4.750	2.375
BRA B7MPG150	1½"	5.500	2.750
BRA B7MPG200	2"	7.000	3.500
BRA B7MPG300	3"	7.500	3.750
BRA B7MPG400	4"	9.000	4.500

Unpolished Elbows

Unpolished 90° Weld Elbows - B2WCL

Ordering Information

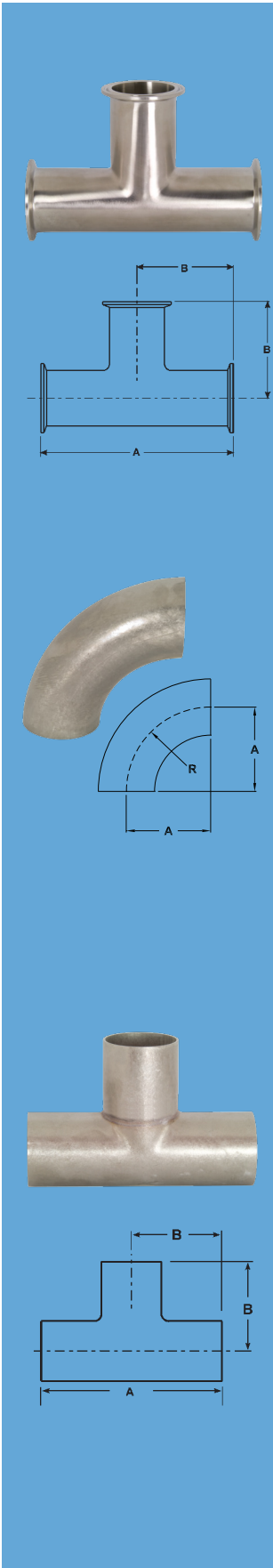
304 Stainless Steel Part Number	Tube OD	A	R	Nominal Wall
BRA B2WCLG100U	1"	1.500	1.500	.065
BRA B2WCLG150U	1½"	2.250	2.250	.065
BRA B2WCLG200U	2"	3.000	3.000	.065
BRA B2WCLG300U	3"	4.500	4.500	.065
BRA B2WCLG400U	4"	6.000	6.000	.083

Unpolished Tees

Unpolished Long Weld Tees - B7W

Ordering Information

304 Stainless Steel Part Number	Tube OD	A	R	Nominal Wall
BRA B7WG100U	1"	3.750	1.875	.065
BRA B7WG150U	1½"	4.500	2.250	.065
BRA B7WG200U	2"	6.000	3.000	.065
BRA B7WG300U	3"	6.500	3.250	.065
BRA B7WG400U	4"	7.750	3.875	.083



Sanitary Fittings & Valves

Miscellaneous Unpolished Configurations

Unpolished Weld Laterals - B28WA

Ordering Information

316L Stainless Steel Part Number	Tube OD	A	B	C	Nominal Wall
BRA B28WAR100U	1"	6.000	1.000	5.000	.065
BRA B28WAR150U	1½"	7.375	1.188	6.188	.065
BRA B28WAR200U	2"	8.750	1.625	7.125	.065
BRA B28WAR300U	3"	10.750	1.875	8.875	.065
BRA B28WAR400U	4"	12.812	2.015	10.750	.083

Unpolished Weld True Wyes - B28W

Ordering Information

316L Stainless Steel Part Number	Tube OD	A	B	Nominal Wall
BRA B28WR100U	1"	2.000	2.438	.065
BRA B28WR150U	1½"	2.000	2.438	.065
BRA B28WR200U	2"	2.625	3.250	.065
BRA B28WR300U	3"	4.000	4.875	.065
BRA B28WR400U	4"	5.375	5.375	.083

Clamp Adapters

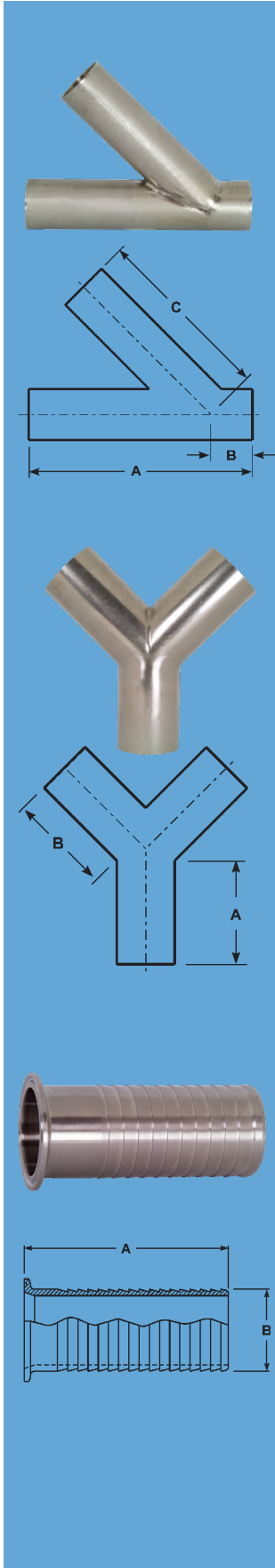
Hose Barb Adapters - 14MPHRL

Features:

- Suitable for use with band clamps

Ordering Information

304 Stainless Steel Part Number	Size	A	B
BRA 14MPHRL100	1"	3.500	1.045
BRA 14MPHRL150	1½"	5.000	1.545
BRA 14MPHRL200	2"	5.000	2.045
BRA 14MPHRL300	3"	5.500	3.045
BRA 14MPHRL400	4"	5.500	4.045



I-line/Q-line Ferrules

Male I-Line Short Weld Ferrules - 14WI

Ordering Information

304 Stainless Steel Part Number	Tube OD	A
BRA 14WIG100	1"	.600
BRA 14WIG150	1½"	.765
BRA 14WIG200	2"	.790
BRA 14WIG300	3"	.906
BRA 14WIG400	4"	1.031

Female I-Line Short Weld Ferrules - 15WI

Ordering Information

304 Stainless Steel Part Number	Tube OD	A
BRA 15WIG100	1"	.785
BRA 15WIG150	1½"	.950
BRA 15WIG200	2"	1.040
BRA 15WIG300	3"	1.220
BRA 15WIG400	4"	1.350

I-line/Q-line Clamps

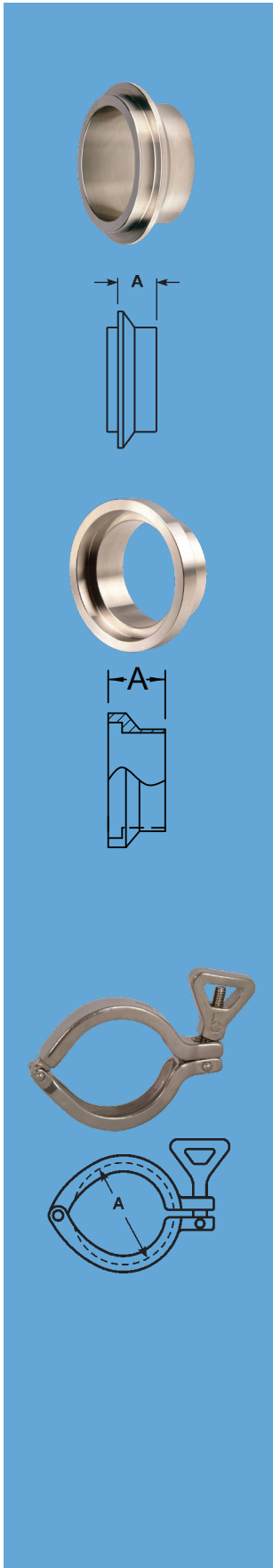
Heavy Duty Clamps - 13ILH

- Q-line service pressure rating for all sizes: 150 PSI @ 70°F and 125 PSI @ 250°F

Ordering Information

Part Number	Tube OD	Service Pressure Rating @ 70°F _{F1}	Service Pressure Rating @ 250°F _{F1}	A
BRA 13ILH100150	1-1½"	700	250	2.122
BRA 13ILH200	2"	450	250	2.654
BRA 13ILH300	3"	350	150	3.717
BRA 13ILH400	4"	200	125	4.820

wing nut tightened to 25 in. lb. of torque





I-Line Gaskets

Buna-N I-Line Gaskets - Black 3/32"

Features:

- Color code: red dot
- Meets 21CFR 177 .2600

Part Number	Size
BRA 40IH100	1"
BRA 40IH150	1½"
BRA 40IH200	2"
BRA 40IH300	3"
BRA 40IH400	4"

ASTM-A270 Polished ID and OD Tubing



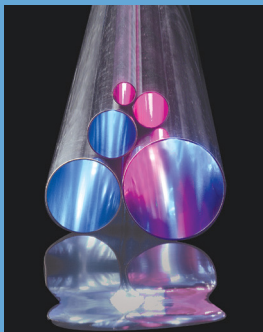
Polished ID and OD - ASTM-A270

Ordering Information

304 Stainless Steel Part Number	Size
BRA A270G100P	1"
BRA A270G150P	1½"
BRA A270G200P	2"

Available in 20' lengths

ASTM-A269 Unpolished ID and OD Tubing



Unpolished ID and OD - ASTM-A269

Ordering Information


304 Stainless Steel Part Number	Size
BRA A269G100U	1"
BRA A269G150U	1½"
BRA A269G200U	2"

Available in 20' lengths

Washdown Accessories

Spray Nozzle - Aluminum

Features:

- For low pressure cleaning and sanitation applications
- Rear mounted levers - reduce hand fatigue and offer smooth lever action
- Variable spray patterns; adjustable from fan spray to solid stream
- Water conservation is assured upon release of lever by the drip-free automatic shutoff feature
- ½" FNPT inlet
- Rating: 150 PSI / 200°F (93°C) 

Ordering Information

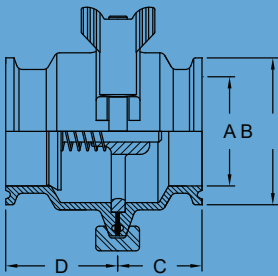
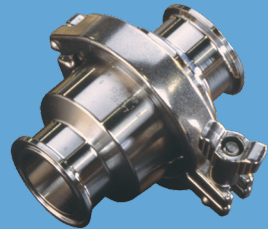
Part Number	Cover Color
SWP150Alb	Light Blue



Spring Check Valves

Features:

- 3A Standards 58-00, Check Valves and Vacuum Breakers
- Full size flow plate
- Long stem bushing for increased cycle life
- Suitable for low and medium viscosity fluids
- Field serviceable (no special tools required) various end connections available
- Sizes from ½" thru 4"
- Operating temperature range: 15°F to 200°F
- Maximum operating pressure: 145 PSI



316L Stainless Steel Part Number	Size	A	B	C	D
BRA B46MPR100	1"	0.87	1.99	1.37	1.92
BRA B46MPR150	1½"	1.37	1.99	1.44	1.92
BRA B46MPR200	2"	1.87	2.52	1.44	1.92

Sanitary Tools

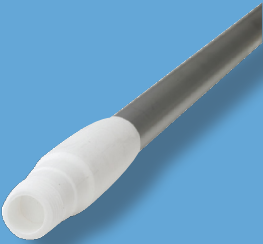


Vikan Hygienic Rake Head

Features:

- The Hygienic rake is used for various winery applications
- It requires a European-thread handle

Part Number	Length	FDA Compliant Raw Material	Material	Weight	Color
REM 56915	8"	Yes	Polypropylene	1 lb	White



Vikan Handle for Hygienic Rake Head

Ordering Information

Part Number	Length	Handle Diameter	FDA Compliant Raw Material	Material	Other Material	Weight	Color
REM 29595	57.48"	0.98"	Yes	Aluminum	Polypropylene	0.57 lb	White

This standard handle can be used with the Hygienic Rake



Vikan Small Utility Brush-Stiff

Features:

- This small, light-weight brush has a broad head and an ergonomically angled handle
- Used for cleaning small surface areas on production equipment, tables, etc

Part Number	Length	FDA Compliant Raw Material	Block Material	Bristle Material	Weight	Color
REM 30895	10.5"	Yes	Polypropylene	Polyester	2 lb	White

Sanitary Tools

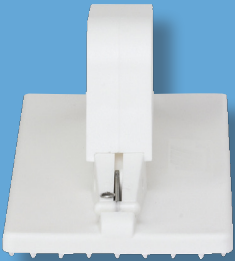


Vikan Shovel

Features:

- This one-piece, heavy duty polypropylene shovel is tough, lightweight, and hygienic
- Used for various winery applications

Part Number	Length	Width	FDA Compliant Raw Material	Material	Weight	Color
REM 69825	42"	14"	Yes	Polypropylene	4 lb	White



Vikan Handheld Pad Holder

Features:

- This hand-held pad holder is an excellent tool for cleaning walls and tanks
- The clip mechanism is stainless steel, which prevents the pad from falling off once heavy with water

Ordering Information

Part Number	Length	FDA Compliant Raw Material	Material	Weight	Color
REM 55105	9"	Yes	Polypropylene	5 lb	White



Vikan Pad

Features:

- This soft pad is gentle enough to clean stainless steel tanks

Part Number	Length	Weight	Color
REM 5525	10"	1 lb	White

Hos-

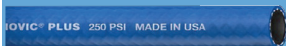


Continental Vintner™ Reserve Hose

Primarily used for liquid transfer in wineries .

- Construction Tube: White Chlorobutyl tube won't impart rubbery tastes or smells
- Cover: Gray EPDM synthetic rubber (wrapped)
- Reinforcement: Spiral-plyed synthetic fabric with monofilament helix
- Working/Burst Pressure: 250 PSI/1000 PSI
- Temperature Range: -30°F to 220°F
- Packaging: Sold per foot; maximum 100' length

Part Number	Inside Diameter	Outside Diameter	Working Pressure	Bend Radius	Vacuum HG	Weight
CTT 20943391	1"	1.56"	250 psi	3"	27"	0.60 lb/ft
CTT 20943392	1-1/2"	2.06"	250 psi	4"	27"	0.83 lb/ft
CTT 20943393	2"	2.61"	250 psi	7"	27"	1.18 lb/ft



Continental Pliovic® Plus Hose

Lightweight, economical general purpose hose for carrying air, water and many spray solu-

- Construction Tube: Pliovic®, ARPM Class B (Medium Oil Resistance)
- Cover: Blue, Pliovic®, ARPM Class B (Medium Oil Resistance)
- Reinforcement: Spiral synthetic yarn
- Working/Burst Pressure: 250 PSI/1000 PSI
- Temperature Range: -10°F to 158°F
- Packaging: Sold per foot; maximum 450' length

Part Number	Inside Diameter	Outside Diameter	Working Pressure	Bend Radius	Vacuum HG	Weight
GDY 20012678	3/4"	1.11"	250 psi	3"	27"	0.28 lb/ft

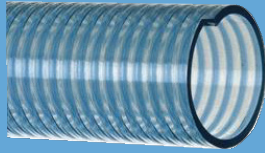


Continental Horizon Wash Down Hose

A multi-purpose industrial hose for medium pressure wash down .

- Construction Tube: Versigard synthetic rubber, RMA class C (Limited Resistance)
- Cover: Red Versigard synthetic rubber
- Reinforcement: Spiral synthetic yarn
- Temperature Range: -40°F to 190°F
- Packaging: Sold per foot; maximum 500' length

Part Number	Inside Diameter	Nominal Outside Diameter	Maximum Working Pressure	Weight
GDY 20026290	3/4"	1.12"	200 psi	0.34 lb/ft



Kanaflex 210 HFG Suction Hose

Heavy-duty food grade suction hose for bottling and pressure trans-

- Construction: Produced entirely of compounds in compliance with FDA and 3-A nontoxic specifications, flexible PVC, rigid PVC helix, smooth bore, and smooth O .D .
- Temperature Range: -13°F to 140°F
- Packaging: Sold per foot; maximum 100' length

Part Number	Inside Diameter	Nominal Outside Diameter	Pitch	Minimum Bend Radius (72° F)	Working Pressure (72° F)	Vacuum Rating (72° F, in HG)	Weight
KAN 210HFG1	1"	1.25"	0.22"	1.9"	86 psi	29.8	0.26 lb/ft
KAN 210HFG112	1-1/2"	1.82"	0.30"	2.8"	72 psi	29.8	0.44 lb/ft
KAN 210HFG2	2"	2.39"	0.33"	3.9"	72 psi	29.8	0.74 lb/ft
KAN 210HFG4	4"	4.53"	0.43"	9.1"	55 psi	29.8	2.01 lb/ft



Kanaflex Kanaline FW Suction and Discharge Hose

Heavy-duty food grade suction and discharge hose for bottling and pressure

- Construction: Produced entirely of compounds in compliance with FDA and 3-A nontoxic specifications, flexible PVC, rigid PVC helix, synthetic braiding, smooth bore, and corrugated O .D .
- Temperature Range: -13°F to 140°F
- Packaging: Sold per foot; maximum 100' length

Part Number	Inside Diameter	Nominal Outside Diameter	Pitch	Minimum Bend Radius (72° F)	Working Pressure (72° F)	Vacuum Rating (72° F, in HG)	Weight
KAN FW11/2	1-1/2"	2.03"	0.39"	2.5"	110 psi	28.0	0.56 lb/ft
KAN FW2	2"	2.60"	0.41"	4.0"	100 psi	28.0	0.75 lb/ft
KAN FW3	3"	3.70"	0.59"	6.3"	100 psi	28.0	1.20 lb/ft



Kanaflex Banding Coil

Food grade PVC banding coil designed to fit the corrugation of the Kanaline FW suction and discharge hose . Provides a smooth surface for banding . Sold per foot .

Ordering Information

Part Number	Nominal Outside Diameter
KAN BANCOIL11/2	1-1/2"
KAN BANCOIL2	2"
KAN BANCOIL3	3"
KAN BANCOIL4	4"

Hoses



Unisource Series 2700 Suction and Discharge Hose

Multi-purpose suction and discharge hose designed to handle a variety of transfer applications .

- Construction Tube: White Nitrile (FDA, 3-A, USDA compliant)
- Cover: Gray Nitrile / PVC Cover
- Reinforcement: Multiple textile plies with dual wire helix
- Temperature Range: -25°F to +230°F
- Packaging: Sold per foot; maximum 100' length

Part Number	Inside Diameter	Outside Diameter	Working Pressure	Bend Radius	Weight
UNS 2720100	1"	1.46"	150 psi	3"	0.58 lb/ft
UNS 2720150	1-1/2"	1.97"	150 psi	4"	0.85 lb/ft
UNS 2720200	2"	2.48"	150 psi	4.5"	1.22 lb/ft



Unisource Series 2179 Washdown Hose

Multi-purpose white hose for cold and hot water washing .

- Construction Tube: Black EPDM (ARPM Class C ORS)
- Cover: White EPDM (ARPM Class C ORS)
- Reinforcement: Multiple polyester spirals
- Temperature Range: -40°F to +200°F
- Packaging: Sold per foot; maximum 500' length

Part Number	Inside Diameter	Outside Diameter	Working Pressure	Weight
UNS 217934	3/4"	1.17"	300 psi	0.42 lb/ft



Unisource Series 1100 Clear Braided Tubing

Used as sight tubing .

- Construction Tube: Clear non-toxic PVC (FDA Approved)
- Reinforcement: Multiple textile braid
- Temperature Range: -25°F to 150°F
- Packaging: Sold per foot; maximum 100' length

Part Number	Inside Diameter	Outside Diameter	Working Pressure	Weight
UNS 1100-25-100	1/4"	.468"	250 PSI	.05 lb/ft
UNS 1100-38-100	3/8"	.595"	225 PSI	.10 lb/ft
UNS 1100-50-100	1/2"	0.75"	200 PSI	.13 lb/ft
UNS 1100-750	3/4"	1.030"	150 PSI	.19 lb/ft

Cleaning and Sanitizing Products

CELL-R-MASTR

Clean your wine tanks, fermenters, lines, etc. more quickly and effectively than the routine caustic products with CELL-R-MASTR. Ultra rinsability leaves a perfect shine on any metal. CELL-R-MASTR CIP and hand scrub applications can remove protein without the use of caustic or TSP and Citric Acid. Your operation will be safer, quicker and more reliable.

Features

- A powerful detergent blend
- Compatible with stainless steel, aluminum, iron, copper and or steel
- General purpose cleaner

Properties

Part Number	Form	Color	Odor	pH	Foam	Biodegradable	Phosphates	Size	Shipping Weight
CHE 10014845	Powder	White/Tan	Detergent	11.6	Minimal	Yes	Yes	5 Gallon Bucket	50 lb



BIRK-OX

BIRK-OX is an EPA registered (No. 63838-1-10147) 5.6% active peracetic acid (PAA or peroxyacetic acid) liquid sanitizer. BIRK-OX is an excellent post-rinse sanitizer for all previously cleaned surfaces.

Features:

- Reverse osmosis and ultra filtration membrane cleaning and sanitizing
- Sulfide oxidation and odor elimination
- As a sanitizer/disinfectant for use on conveyors, pipelines, equipment, floors, and walls
- As a fog adjunct for high-level microbial control

Properties

Part Number	Form	Color	Odor	pH @ 1%	Foam	Biodegradable	Phosphates	Density	Size	Shipping Weight
CHE 1024705	Liquid	Clear	Pungent	2.5	None	Yes	No	1.121	5 Gallon Bucket	50 lb

ACID BRITE

ACID BRITE #2 is an effective acid cleaner designed especially to enhance the mineralization (scale) removal in facilities that use hard water. Many alkaline products promote the formation of hardness salts and soaps. Use ACID BRITE #2 safely on your equipment or in CIP to remove protein, simple scale and other soils. Properly conditions stainless

Features

- A powerful acid and detergent blend
- Compatible with multiple metals,

Properties

Part Number	Form	Color	Odor	pH @ 1%	Foam	Biodegradable	Phosphates	Density	Size	Shipping Weight
CHE 1000395	Liquid	Clear/Amber	Sharp Detergent	1.9	None	Yes	Yes	1.1	5 Gallon Bucket	50 lb

Note: Cleaning and sanitizing products are available in other sizes; consult your local Nippon Sanso representative.

Cleaning and Sanitizing Products

DIACTOLATE

DIACTOLATE is an FDA Generally Recognized As Safe (G .R .A .S) Features: food grade acid . DIACTOLATE is also effective in neutralizing and reducing pH in water and/or finished product and removing or preventing scale formation .

- Food grade acid
- Alkaline pH neutralizer
- Scale preventative

Properties

Part Number	Form	Color	Odor	pH @ 1%	Foam	Biodegradable	Phosphates	Size	Shipping Weight
CHE I0020245	Powder	White	None	3 .0-3 .5	None	Yes	No	5 Gallon Bucket	50 lb

DYNO-MITE

DYNO-MITE is a low foaming iodophor based sanitizer . DYNO-MITE can be used as a post rinse sanitizer up to 25 ppm . Its low foam makes DYNO-MITE an especially good sanitizer for clean in place applications .

Features

- An iodine based antimicrobial
- Post rinse sanitizing
- Disinfection

Properties

Part Number	Form	Color	Odor	pH	Denisty	Foam	Size	Shipping Weight
CHE I027165	Liquid	Dark Brown	Sharp	1.5	1.03	Low	5 Gallon Bucket	50 lb

PRON-

PRONTO is a premium, non-caustic, multi-metal safe alkaline powder that is appropriate nearly everywhere in the facility . PRONTO is used for food process CIP, and is especially effective against oily and proteinaceous buildups on metals, and is excellent on concrete floors . PRONTO is USDA approved for all surfaces in the facility .

Features

- Widely versatile
- Noncaustic and nonsolvent
- Mild on materials
- Multi-metal safe
- Safer to handle than caustic products

Properties

Part Number	Form	Color	Odor	pH	Foam	Biodegradable	Phosphates	Size	Shipping Weight
CHE I0023045		Light Brown	Soapy	11 .3	High (unstable)	Yes	Yes	5 Gallon Bucket	50 lb

Note: Cleaning and sanitizing products are available in other sizes; consult your local Nippon Sanso representative .

Conversion Data

Argon Conversion

	Weight		Gas		Liquid	
	pounds (lb)	kilograms (kg)	cubic feet (scf)	cubic meters (nm ³)	gallons (gal)	liters (lt)
1 pound	1.0	0.4536	9.671	0.2543	0.08600	0.3255
1 kilogram	2.205	1.0	21.32	0.5605	0.18957	0.7176
1 scf gas	0.1034	0.04690	1.0	0.02628	0.008893	0.03366
1 nm ³ gas	3.933	1.7840	38.04	1.0	0.3382	1.2802
1 gallon liquid	11.630	5.276	112.5	2.957	1.0	3.785
1 liter liquid	3.072	1.3936	29.71	0.7812	0.2642	1.0

Carbon Dioxide Conversion

	Weight			Gas		Liquid	
	pounds (lb)	tons (t)	kilograms (kg)	cubic feet (scf)	cubic meters (nm ³)	gallons (gal)	liters (lt)
1 pound	1.0	0.0005	0.4536	8.741	0.2294	0.11806	0.4469
1 ton	2000.0	1.0	907.2	17,483	458.8	236.1	893.9
1 kilogram	2.205	0.001023	1.0	19.253	0.5058	0.2603	0.9860
1 scf gas	0.1144	–	0.05189	1.0	0.02628	0.013508	0.05113
1 nm ³ gas	4.359	0.00218	1.9772	38.04	1.0	0.5146	1.948
1 gallon liquid	8.470	0.004235	3.842	74.04	1.9431	1.0	3.785
1 liter liquid	2.238	0.001185	1.0151	19.562	0.5134	0.2642	1.0

Nitrogen Conversion

	Weight		Gas		Liquid	
	pounds (lb)	kilograms (kg)	cubic feet (scf)	cubic meters (nm ³)	gallons (gal)	liters (lt)
1 pound	1.0	0.4536	13.803	0.3627	0.1481	0.5606
1 kilogram	2.205	1.0	30.42	0.7996	0.3262	1.2349
1 scf gas	0.07245	0.03286	1.0	0.02628	0.01074	0.04065
1 nm ³ gas	2.757	1.2506	38.04	1.0	0.4080	1.5443

Scf (standard cubic feet) gas measured at 1 atmosphere and 70°F. Nm³ (normal cubic meter) gas measured at 1 atmosphere and 0°C. Liquid measured at 21.42 atmospheres and 1.7°F. Solid measured at -109.25°F. All values rounded to nearest 4/5 significant numbers.

Solid Carbon Dioxide - Dry Ice

7.5 gallons = 1.0 cubic foot volumetric equivalent
 1 pound dry ice = 8.7 cubic feet

Conversion Data

Volume Conversion

Volume	Multiply units in left column by proper factor below:							
	cu in	cu ft	cu yd	cu cm	cu meter	liter	US gallon	Imp gal
1 cu inch	1	–	–	16.387	–	0.0164	0.00433	–
1 cu foot	1728	1	0.0370	28,317	0.0283	28.32	7.481	6.229
1 cu yard	46,656	27	1	–	0.7646	764.6	202.0	168.2
1 cu centimeter	0.0610	–	–	1	–	0.001	–	–
1 cu meter	61,023	35.31	1.308	1,000,000	1	1,000	264.2	220.0
1 liter	61.023	0.0353	–	1,000	0.001	1	0.2642	0.2200
1 US gallon	231	0.1337	–	3785.4	–	3.785	1	0.8327
1 Imperial gallon	227.4	0.1605	–	4546.1	–	4.546	1.201	1

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