

EAGLE

STAINLESS



PRODUCT CATALOG

ISO 9001:2008/ASME CODED

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Leadership Through Innovation and Quality

Since 1990, Eagle Stainless has developed long term relationships with virtually every pharmaceutical and biotechnology company worldwide. We manufacture innovative stainless steel containers, bottles, stability testing bottles, process and pressure vessels. We have become the manufacturer of choice because of our stainless steel fabrication expertise, focus on quality, personalized product support, and custom engineering projects for small scale clinical phase production to commercial production. Our design library includes hundreds of custom engineered products and patented innovations as well as a comprehensive selection of standard designs. Our guiding principle flows from an understanding of the trust our customers place in us and our products. We are committed to supporting you with products that meet every quality standard and certification the pharmaceutical industry requires.

PRODUCTS

Innovation by design

Eagle's shop is equipped with Multi-Axis-CNC mills, lathes, and custom-designed polishing machines. The welding department is fully automated guaranteeing continuity and consistency on every weld. We offer electropolishing, passivation, laser engraving, and engineered modifications as options – where additional features, custom fittings, or other criteria are required, our Engineering Department generates CAD drawings for client approval.



Quality by design

- ISO 9001:2008 certified
- ASME coded
- Traceability/certifications for all stainless steel lots
- Certifications for welding, electropolishing, and engraving
- Coordinate measuring machines to measure tolerances
- Helium leak testing
- Surface finish testing
- Hydrostatic testing
- Dye-penetrant testing



Product Range

Eagle's stainless steel containers and bottles range from 5 mL to 500 L. In addition, Eagle is ready to custom fabricate products to your specifications.



*Our strength is in engineering, fabricating,
and delivering products for:*

*Processing
Containment
Storage
Transport and shipping
Stability testing
Custom applications*

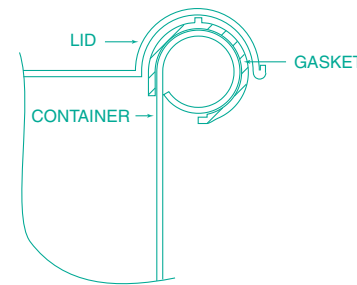
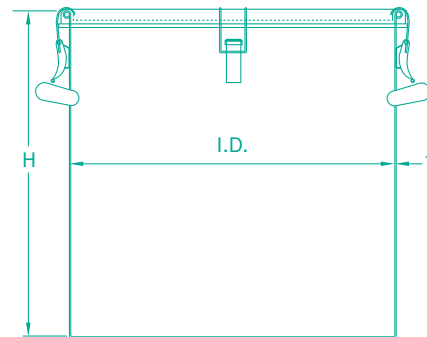
CONTAINERS

CTH Series Containers

- 316L or 304 stainless steel container and lid
- Seamless sanitary interior and exterior with radiused bottom-corners
- 304 stainless steel clips and hollow side handles
- Air/water-tight seal with platinum cured silicone gasket
- 10 Ra finish standard
- Options
 - KM Series dollies are available for size CTH-30 through CTH-635 containers
 - Passivation
 - Electropolished finish (10 Ra or better)
 - Gaskets – EPDM, Viton® , BUNA-N



EAGLE
STAINLESS



Model #	Vol. Nominal		Vol. Actual		ID		Height		Thickness	Weight	
	US gal	L	US gal	L	in	mm	in	mm	mm	lb	kg
CTH-18	1.1	4.0	1.2	4.5	7.09	180	7.09	180	0.7	2.9	1.3
CTH-21	1.8	7.0	1.9	7.1	8.27	210	8.27	210	0.7	3.5	1.6
CTH-24	2.6	10.0	3.0	11.4	9.45	240	9.45	240	0.7	4.4	2.0
CTH-30	5.3	20.0	5.8	21.8	11.81	300	11.81	300	0.8	7.1	3.2
CTH-36	9.5	36.0	9.8	37.1	14.17	360	14.17	360	0.9	11.0	5.0
CTH-43	15.9	60.0	17.2	65.0	16.93	430	17.72	450	1.0	17.4	7.9
CTH-47	19.8	75.0	21.4	81.0	18.50	470	18.50	470	1.2	24.3	10.9
CTH-47H	26.4	100.0	27.2	103.0	18.50	470	23.62	600	1.2	28.0	12.7
CTH-565†	36.98	140.0	39.23	148.5	22.24	565	23.62	600	1.2	37.04	16.8
CTH-565H†	52.83	200.0	59.10	223.7	22.24	565	35.43	900	1.2	48.51	22.0
CTH-635†	79.25	300.0	83.00	314.2	25.00	635	39.37	1000	1.5	77.17	35.0
CTH-77**	105.67	400.0	109.68	415.2	30.32	770	35.43	900	2.0	119.07	54.0
CTH-77H**	132.09	500.0	134.31	508.4	30.32	770	43.31	1100	2.0	136.71	62.0

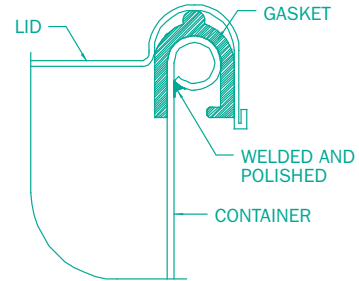
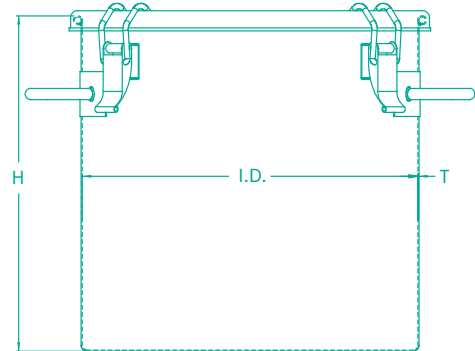
*Special order item

† Only available in 316L



CTH-SMA Series Containers

- 316L stainless steel container and lid
- Seamless sanitary interior and exterior with radiused bottom-corners
- 304 stainless steel clips and solid bar handles
- Container lip is welded shut and polished
- Air/water-tight seal with platinum cured silicone gasket
- 10 Ra finish standard
- Options
 - KM Series dollies are available for size CTH-SMA-30 through CTH-635 containers
 - Passivation
 - Electropolished finish (10 Ra or better)
 - Gaskets – EPDM, Viton® , BUNA-N



Model #	Vol. Nominal		Vol. Actual		ID		Height		Thickness	Weight	
	US gal	L	US gal	L	in	mm	in	mm	mm	lb	kg
CTHSMA-24S*	1.6	6.0	1.7	6.5	9.45	240	5.87	149	1.0	5.5	2.5
CTHSMA-24	2.6	10.0	3.0	11.4	9.45	240	9.45	240	1.0	6.6	3.0
CTHSMA-30	5.3	20.0	5.8	21.8	11.81	300	11.81	300	1.0	9.5	4.3
CTHSMA-36	9.5	36.0	9.8	37.1	14.17	360	14.17	360	1.0	13.2	6.0
CTHSMA-43	15.9	60.0	17.2	65.0	16.93	430	17.72	450	1.0	19.0	8.6
CTHSMA-47	19.8	75.0	21.4	81.0	18.50	470	18.50	470	1.2	25.8	11.7
CTHSMA-47H	26.4	100.0	27.2	103.0	18.50	470	23.62	600	1.2	29.8	13.5

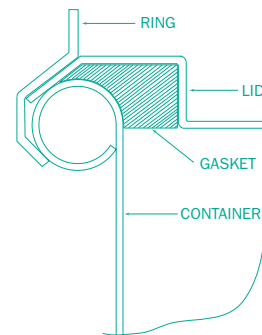
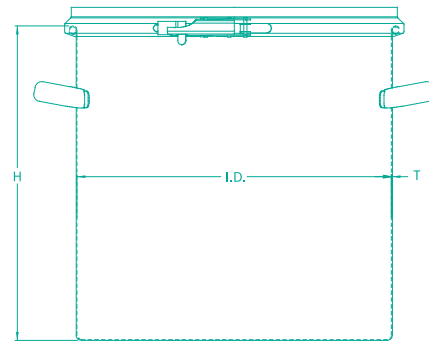
*Special order item

CONTAINERS



CTL Series Containers

- Stackable 316L or 304 stainless steel container and lid
- Seamless sanitary interior and exterior with radiused bottom-corners
- 304 stainless steel lock-lever/squeeze ring which can accept a tamper evident seal
- Hollow side handles
- Air/water-tight seal with platinum cured silicone gasket
- 10 Ra finish standard
- Options
 - KM Series dollies are available for size CTL-30 through CTL-635 containers
 - Passivation
 - Electropolished finish (10 Ra or better)
 - Gaskets – EPDM, Viton® , Teflon® , BUNA-N



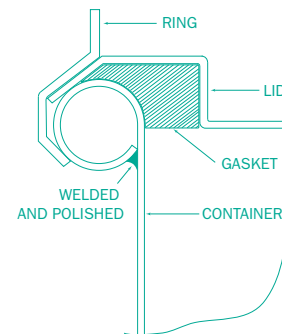
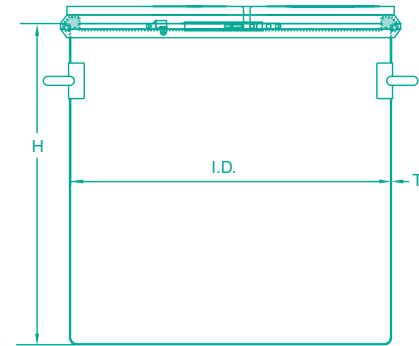
Model #	Vol. Nominal		Vol. Actual		ID		Height		Thickness	Weight	
	US gal	L	US gal	L	in	mm	in	mm	mm	lb	kg
CTL-24	2.6	10.0	3.0	11.4	9.45	240	9.45	240	0.7	4.6	2.1
CTL-30	5.3	20.0	5.8	21.8	11.81	300	11.81	300	0.8	7.3	3.3
CTL-36	9.5	36.0	9.8	37.1	14.17	360	14.17	360	0.9	11.2	5.1
CTL-43	15.9	60.0	17.2	65.0	16.93	430	17.72	450	1.0	18.1	8.2
CTL-47	19.8	75.0	21.4	81.0	18.50	470	18.50	470	1.2	23.8	10.8
CTL-47H	26.4	100.0	27.2	103.0	18.50	470	23.66	600	1.2	27.6	12.5
CTL-565*	36.98	140.0	39.23	148.5	22.24	565	23.62	600	1.2	37.04	16.8
CTL-565H*	52.83	200.0	59.10	223.7	22.24	565	35.43	900	1.2	48.51	22.0
CTL-635*	79.25	300.0	83.00	314.2	25.00	635	39.37	1000	1.5	77.17	35.0

*Only available in 316L



CTL-SMA Series Containers

- Stackable 316L stainless steel container and lid
- Seamless sanitary interior and exterior with radiused bottom-corners
- 304 stainless steel lock-lever/squeeze ring which can accept a tamper evident seal
- Solid bar handles
- Container lip is welded shut and polished
- Air/water-tight seal with lock-lever ring and platinum cured silicone gasket
- 10 Ra finish standard
- Seamless sanitary interior and exterior
- Options
 - KM Series dollies are available for size CTL-SMA-30 through CTL-635 containers
 - Passivation
 - Electropolished finish (10 Ra or better)
 - Gaskets – EPDM, Viton® , Teflon® , BUNA-N



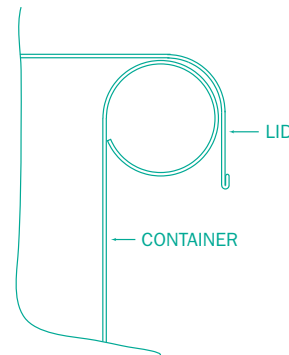
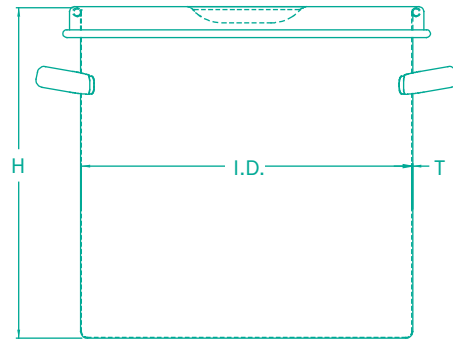
Model #	Vol. Nominal		Vol. Actual		ID		Height		Thickness	Weight	
	US gal	L	US gal	L	in	mm	in	mm	mm	lb	kg
CTLSMA-24S*	1.6	6.0	1.7	6.5	9.45	240	5.87	149	1.0	5.5	2.5
CTLSMA-24	2.6	10.0	3.0	11.4	9.45	240	9.45	240	1.0	6.6	3.0
CTLSMA-30	5.3	20.0	5.8	21.8	11.81	300	11.81	300	1.0	9.5	4.3
CTLSMA-36	9.5	36.0	9.8	37.1	14.17	360	14.17	360	1.0	13.4	6.1
CTLSMA-43	15.9	60.0	17.2	65.0	16.93	430	17.72	450	1.0	19.8	9.0
CTLSMA-47	19.8	75.0	21.4	81.0	18.50	470	18.50	470	1.2	26.0	11.8
CTLSMA-47H	26.4	100.0	27.2	103.0	18.50	470	23.62	600	1.2	30.0	13.6

*Special order item

CONTAINERS

ST Series Containers

- 316L or 304 stainless steel container and loose fit lid
- Seamless sanitary interior and exterior with radiused bottom-corners
- 304 stainless steel hollow side handles
- 10 Ra finish standard
- Options
 - KM Series dollies are available for size ST-30 through ST-635 containers
 - Passivation
 - Electropolished finish (10 Ra or better)



Model #	Vol. Nominal		Vol. Actual		ID		Height		Thickness	Weight	
	US gal	L	US gal	L	in	mm	in	mm	mm	lb	kg
ST-24	2.6	10.0	3	11.4	9.45	240	9.45	240	0.7	3.7	1.7
ST-30	5.3	20.0	5.8	21.8	11.81	300	11.81	300	0.8	6.6	3.0
ST-36	9.5	36.0	9.8	37.1	14.17	360	14.17	360	0.9	10.3	5.7
ST-43	15.9	60.0	17.2	65.0	16.93	430	17.72	450	1.0	16.3	7.4
ST-47	19.8	75.0	21.4	81.0	18.50	470	18.50	470	1.2	22.7	10.3
ST-47H	26.4	100.0	27.2	103.0	18.50	470	23.62	600	1.2	28.2	12.0
ST-565*	36.98	140.0	39.23	148.5	22.24	565	23.62	600	1.2	37.04	16.8
ST-565H*	52.83	200.0	59.10	223.7	22.24	565	35.43	900	1.2	48.51	22.0
ST-635*	79.25	300.0	83.00	314.2	25.00	635	39.37	1000	1.5	77.17	35.0
ST-77**	105.67	400.0	109.68	415.2	30.32	770	35.43	900	2.0	114.66	52.0
ST-77H**	132.09	500.0	134.31	508.4	30.32	770	43.31	1100	2.0	132.30	60.0

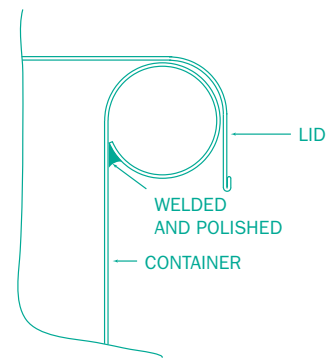
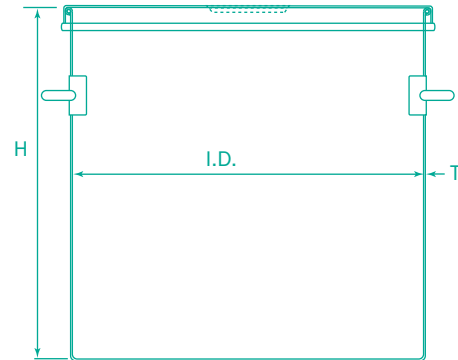
*Special order item

† Only available in 316L



ST-SMA Series Containers

- 316L stainless steel container and loose fit lid
- Seamless sanitary interior and exterior with radiused bottom-corners
- 304 stainless steel solid bar handles
- Container lip is welded shut and polished
- 10 Ra finish standard
- Options
 - KM Series dollies are available for size ST-SMA-30 through ST-635 containers
 - Passivation
 - Electropolished finish (10 Ra or better)



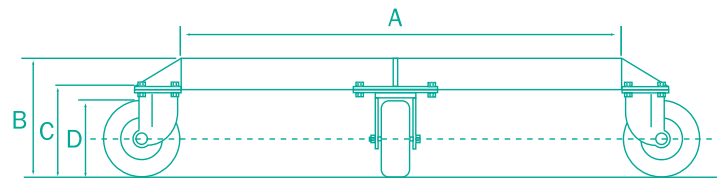
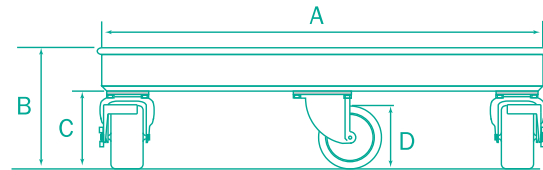
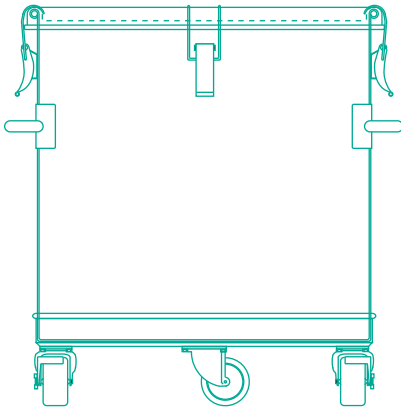
Model #	Vol. Nominal		Vol. Actual		ID		Height		Thickness	Weight	
	US gal	L	US gal	L	in	mm	in	mm	mm	lb	kg
STSMA-24S*	1.6	6.0	1.7	6.5	9.45	240	5.87	149	1.0	5.5	2.5
STSMA-24	2.6	10.0	3.0	11.4	9.45	240	9.45	240	1.0	6.0	2.7
STSMA-30	5.3	20.0	5.8	21.8	11.81	300	11.81	300	1.0	9.0	4.1
STSMA-36	9.5	36.0	9.8	37.1	14.17	360	14.17	360	1.0	12.6	5.7
STSMA43	15.9	60.0	17.2	65.0	16.93	430	17.72	450	1.0	17.9	8.1
STSMA-47	19.8	75.0	21.4	81.0	18.50	470	18.50	470	1.2	24.5	11.1
STSMA-47H	26.4	100.0	27.2	103.0	18.50	470	23.62	600	1.2	28.2	12.8

*Special order item

DOLLIES

Eagle dollies are sized to fit the CTL, CTH, and ST Series containers.

- 304 stainless steel construction
- Chrome-plated or stainless steel casters
- White non-marking nylon wheels
- Four swivel casters, two with brakes, for models KM-30 through KM-565
- Five swivel casters, three with brakes, for model KM-635
- Phenolic wheels optional



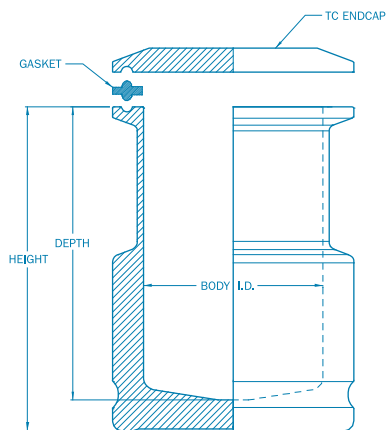
Model #	Available Container	A		B		C		D		Weight	
		in	mm	in	mm	in	mm	in	mm	lb	kg
KM-30	ST, CTH, CTL-30	12.05	306	4.13	105	2.87	73	1.97	50	2.9	1.3
KM-36	ST, CTH, CTL-36	14.37	365	4.80	122	3.54	90	2.56	65	6.4	2.9
KM-43	ST, CTH, CTL-43	17.13	435	5.43	138	4.06	103	2.95	75	7.7	3.5
KM-47	ST, CTH, CTL-47	18.78	477	5.43	138	4.06	103	2.95	75	9.3	4.2
KM-565	ST, CTH, CTL-565	22.76	578	6.69	170	5.31	135	3.94	100	18.3	8.3
KM-635	ST, CTH, CTL-635	25.59	650	8.07	205	6.69	170	4.92	125	26.5	12.0

BOTTLES



STB Series Bottles

This series of bottles, US Patent 7,469,792 B1, is designed for stability studies where storage of the sample in stainless steel is required. The STB Series radiused interior increases its cleanability and optional fill, vent tubes may be added to the endcap.



- 316L stainless steel bottle and endcap
- Machined from ASME SA-479 certified solid-bar 316L stainless steel
- Traceability/certifications for all stainless steel lots
- Heat/lot numbers are laser engraved on each bottle
- Available in sizes from 1 mL to 750 mL platinum-cured silicone gasket (standard)
- Air/water-tight design
- 10 Ra or better electropolished interior finish
- 316L endcap, two-segment heavy-duty clamp
- Options
 - 304, 317L stainless steel, Hastelloy or others upon request
 - EPDM, Teflon®, BUNA-N or Viton® gaskets
 - Type III DMF

Model #	Vol. Nominal	Vol. Actual	Height		Depth		Body ID		Tri-Clamp	Weight (bottle only)	
	mL	mL	in	mm	in	mm	in	mm	in	lb	kg
STB-1*	1.0	1.5	2.50	63.50	0.56	14.22	0.50	12.7	1.0	1.73	0.78
STB-2*	2.0	2.5	2.50	63.50	0.31	7.87	0.87	22.1	1.0	1.71	0.77
STB-5	5.0	6.3	2.50	63.50	0.87	22.10	0.87	22.1	1.0	1.66	0.73
STB-10	10.0	13.0	2.50	63.50	0.87	22.10	0.87	22.1	1.0	1.54	0.70
STB-25*	25.0	30.0	2.50	63.50	1.32	33.50	1.37	34.8	1.5	1.22	0.55
STB-55	55.0	56.0	2.50	63.50	2.40	60.96	1.37	34.8	1.5	0.78	0.35
STB-110	110.0	133.0	3.38	85.73	3.06	77.72	1.87	47.5	2.0	1.70	0.77
STB-250	250.0	281.0	4.25	107.95	4.03	102.24	2.37	60.2	2.5	2.57	1.17
STB-500	500.0	557.0	5.63	142.88	5.38	136.53	2.87	72.9	3.0	2.77	1.26
STB-750*	750.0	815.0	4.75	120.65	4.50	114.30	3.83	97.3	4.0	4.11	1.86

*Special order item

BOTTLES



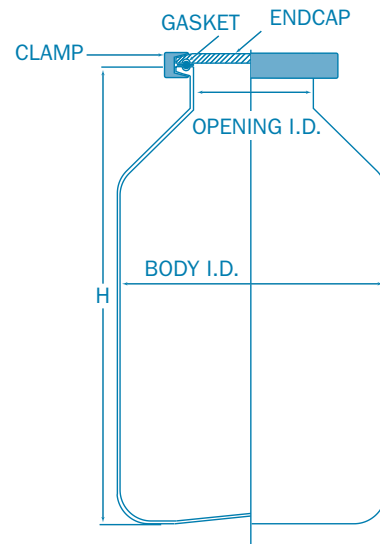
BTB Series Bottles

BTB Series bottles have a large tri-clamp opening (2", 3" or 4") which facilitates access to bottle contents.

- Air/water-tight design
- 316L stainless steel bottle and endcap
- Traceability/certifications for all stainless steel lots
- Heat/lot numbers are laser engraved on each bottle
- 10 Ra finish standard on interior and exterior
- For processing, storage, and shipping
- Side and bottom wall thickness, 18 gauge, .05" (1.2 mm)
- 304 stainless steel two-segment heavy-duty clamp
- Platinum-cured silicone gasket
- For available custom modifications see pages 26-28

Options

- EPDM, Viton®, Teflon®, and BUNA-N gaskets
- Optional 304 stainless steel solid bar handles on BTB-27H, BTB-27, BTB-21, and BTB-16
- Electropolished finish
- Type III DMF



Model #	Vol. Nominal		Vol. Actual		Height		Body ID		Opening ID		Tri-Clamp	Weight	
	US gal	L	US gal	L	in	mm	in	mm	in	mm	in	lb	kg
BTB-7	0.13	0.5	0.17	0.6	5.906	150.0	3.15	80.0	1.88	47.8	2.0	0.80	0.36
BTB-10	0.26	1.0	0.32	1.2	7.087	180.0	3.94	100.0	2.85	72.3	3.0	1.20	0.54
BTB-12	0.53	2.0	0.61	2.3	8.976	228.0	4.72	120.0	3.84	97.6	4.0	1.98	0.90
BTB-16	1.32	5.0	1.45	5.5	12.323	313.0	6.30	160.0	3.84	97.6	4.0	3.55	1.61
BTB-21	2.64	10.0	2.83	10.7	14.291	363.0	8.27	210.0	3.84	97.6	4.0	5.17	2.35
BTB-27	5.28	20.0	5.71	21.6	17.441	443.0	10.63	270.0	3.84	97.6	4.0	8.31	3.77
BTB-27H*	7.93	30.0	8.98	34.0	26.156	664.3	10.63	270.0	3.84	97.6	4.0	12.84	5.82

*Special order item

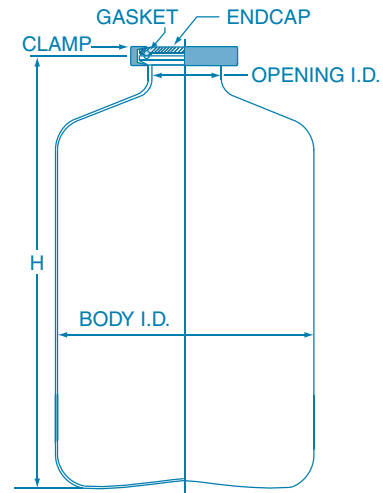


PSF Series Bottles

The PSF-316L Series bottles have a 1.5" or 2.0" tri-clamp opening

- Air/water-tight design
- 316L stainless steel bottle and endcap
- Traceability/certifications for all stainless steel lots
- Heat/lot numbers are laser engraved on each bottle
- 10 Ra finish standard on interior and exterior
- For processing, storage, and shipping
- Side and bottom wall thickness, 18 gauge, .05" (1.2 mm)
- 304 stainless steel two-segment heavy-duty clamp
- Platinum-cured silicone gasket
- For available custom modifications see pages 26-28

- Options
 - EPDM, Viton®, Teflon®, and BUNA-N Gaskets
 - Optional 304 stainless steel solid bar handles on PSF-18, PSF-22, and PSF-27
 - Electropolished finish
 - Type III DMF



Model #	Vol. Nominal		Vol. Actual		Height		Body ID		Opening ID		Tri-Clamp	Weight (Bottle only)	
	US gal	L	US gal	L	in	mm	in	mm	in	mm		in	lb
PSF-6	0.05	0.2	0.06	0.24	4.13	105.0	2.36	60.0	1.36	34.5	1.5	0.46	0.21
PSF-8	0.13	0.5	0.18	0.7	6.61	168.0	3.15	80.0	1.36	34.5	1.5	0.91	0.41
PSF-10	0.26	1.0	0.37	1.4	8.19	208.0	3.94	100.0	1.86	47.2	2.0	1.39	0.63
PSF-12	0.53	2.0	0.63	2.4	9.96	253.0	4.72	120.0	1.86	47.2	2.0	2.01	0.91
PSF-18	1.32	5.0	1.66	6.3	11.73	298.0	7.09	180.0	1.86	47.2	2.0	3.71	1.68
PSF-22	2.64	10.0	3.22	12.2	15.08	383.0	8.66	220.0	1.86	47.2	2.0	5.62	2.55
PSF-27	5.28	20.0	6.05	22.9	18.43	468.0	10.63	270.0	1.86	47.2	2.0	8.83	4.00

BOTTLES

ASME Pressure Vessels

Eagle Stainless Mini Pressure Vessels have sanitary tri-clamp openings in sizes ranging from 0.5 L to 20 L. Eagle's 316L stainless Mini Pressure Vessels can be customized to your needs. Custom fabrications include: multiple ports (to allow for temperature probes or other monitoring devices), pressure gauges, safety valves, flow shutoff valves, and hose barb connectors on the lid.

- Sanitary, polished interiors
- 316L stainless steel vessel and endcap
- Helium leak testing available
- 0.5 L to 20 L



- No visible interior or exterior welds
- Multiple ports and connectors
- Passivation and electropolishing standard

Model #	Volume		Height in	Body OD in	Opening Tri-Clamp Size in	Maximum Operating Temp.		Maximum Allowable Pressure	
	US gal	L				°F	°C	PSI	BAR
EPV500E	0.132	0.5	6.71	3.0	2"	100	37.8	200	13.8
EPV1A	0.264	1.0	12.74	3.0	2"	100	37.8	200	13.8
EPV1E	0.264	1.0	7.64	4.0	3"	125	51.2	195	13.4
EPV2E	0.528	2.0	13.24	4.0	3"	125	51.2	195	13.4
EPV5E	1.32	5.0	14.38	6.0	4"	150	65.6	185	12.8
EPV10B	2.64	10.0	13.97	8.9	4"	150	65.6	185	12.8
EPV20F	2.64	20.0	23.76	8.9	4"	150	65.6	185	12.8

ASME Clamp

The ASME clamp is designed for pressure vessels, filter housings, and other applications. Sizes are available from 1" to 12".

- Meets ASME Section VIII appendix 24 of the pressure vessel code
- Stainless steel construction



OPTIONS & ACCESSORIES

Caps and Cap Assemblies

316L, sanitary tri-clamp endcaps with or without knobs are available in 0.5" to 12" sizes. The product contact surface is electropolished to a 10 Ra or better finish. These endcaps can be laser-engraved or custom finished to your specifications. Eagle Stainless specializes in the design and manufacturing of custom cap assemblies which include dip tubes, NPT fittings, and hose barbs.



Knob-Handle Sanitary Tri-Clamp Endcaps (Size 1/2" to 6")

Eagle Stainless offers machined solid endcaps with easy-lift stainless knobs. The product contact surface is electropolished to a 10 Ra or better finish.



Sanitary Tri-Clamp Endcaps (sizes 1/2" to 12")

Eagle produces sanitary tri-clamp endcaps with an electropolished product contact surface finish of 10 Ra or better.

Custom-Welded Cap Assemblies

Fittings can be welded to the caps, including: hose barbs, valves, dip tubes, sanitary tri-clamp thermowells, and sightglasses. Eagle also has the unique capability of polishing the inside and outside of each weld to a sanitary finish.



OPTIONS & ACCESSORIES



Machined Cap Assemblies

Cap assemblies machined from solid bar stainless steel offer more consistent dimensional and surface quality and a solid, compact profile. Individually machined to specification, these cap assemblies are stronger, safer, and less expensive than assemblies where fittings are welded in place.



Hose Barbs

Eagle offers 316L stainless steel hose barbs in sizes from 1/8" to 1/2" with 1/2" or 3/4" tri-clamp connections. An electropolished finish is standard.

Hose barbs are available in the following sizes:

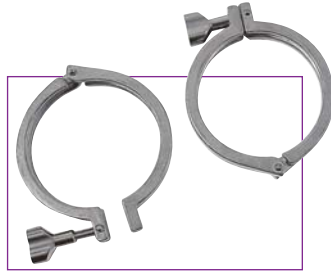
1/2" TC x 1/8"	1/2" TC x 1/2"
1/2" TC x 1/4"	3/4" TC x 5/8"
1/2" TC x 3/8"	3/4" TC x 3/4"





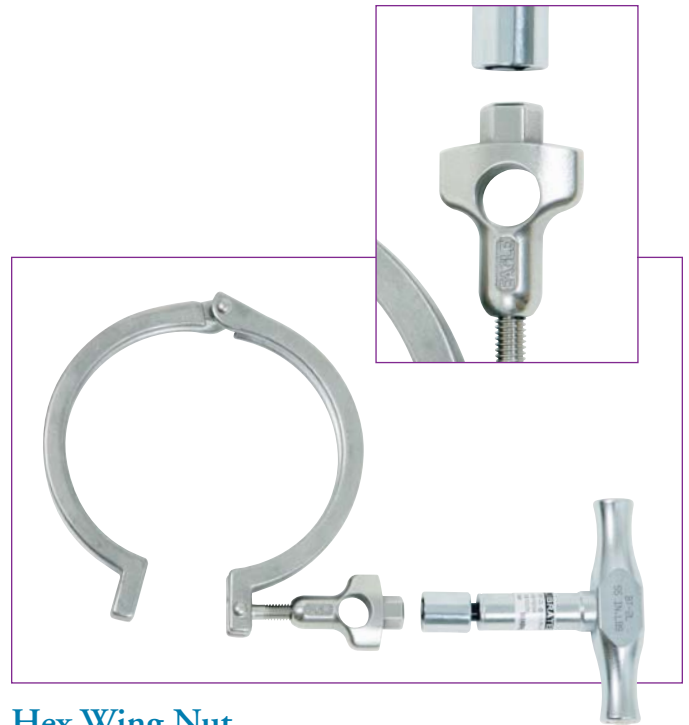
Clamps

- Two-segment heavy-duty clamps (Standard for BTB, PSF, and STB Series bottles)
- Two-segment high-pressure clamps
- Two-segment ASME clamps
- Two-segment light-duty clamps
- Three-segment heavy-duty clamps



Torque Nut

Spring loaded cartridges maintain a constant torque on the clamp in the event of thermally induced expansion and contraction.



Hex Wing Nut

The Advantage wing nut brings precision, consistency, and speed to clamp systems. The Advantage wing nut enables a torque wrench to measure how far the clamp has been tightened.

- 316 cast stainless steel
- Allows the use of a calibrated torque wrench
- Improves consistent container closure integrity
- Calibrated torque wrench available

OPTIONS & ACCESSORIES



Reducers

Concentric reducers are available in a variety of tri-clamp sizes. 316L stainless steel, reducers allow for easy adaptability of existing tri-clamp connections to newer or changing ones.



Beakers

BK-SMA Series beakers are made from 316L stainless steel and available in capacities of 1, 2, 3, and 5 liters. Beakers have solid bar sanitary handle, easy-pouring beaker-spout, and graduation marks. Like all Eagle Stainless containers, the BK Series beakers have a seamless sanitary interior and standard 10 Ra finish.

Size	Large Opening ID	Small Opening ID	Height
	in	in	in
1" x .50"	0.87	0.37	1.25
1" x .75"	0.87	0.62	1.25
1.5" x .50"	1.37	0.37	1.25
1.5" x .75"	1.37	0.62	1.25
1.5" x 1"	1.37	0.87	1.25
2" x .5"	1.87	0.37	1.25
2" x .75"	1.87	0.62	1.25
2" x 1"	1.87	0.87	1.25
2" x 1.5"	1.87	1.37	1.25
3" x .50"	2.87	0.37	1.25
3" x .75"	2.87	0.62	1.25
3" x 1"	2.87	0.87	1.25
3" x 1.5"	2.87	1.37	1.25
3" x 2"	2.87	1.87	1.25
4" x .50"	3.83	0.37	1.25
4" x .75"	3.83	0.62	1.25
4" x 1"	3.83	0.87	1.25
4" x 1.5"	3.83	1.37	1.25
4" x 2"	3.83	1.87	1.25
4" x 3"	3.83	2.87	1.25

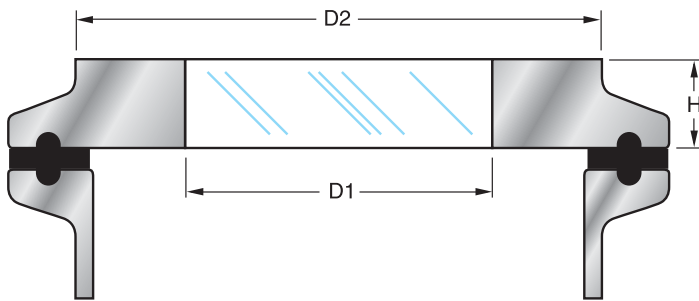
Model #	Volume Nominal		Volume Actual		Height		Body ID		Weight	
	US gal	L	US gal	L	in	mm	in	mm	lb	kg
BKSMA-1	0.26	1.0	0.32	1.2	5.3	135	4.33	110	1.3	0.6
BKSMA-2	0.53	2.0	0.63	2.4	6.3	160	5.51	140	2.0	0.9
BKSMA-3	0.79	3.0	0.87	3.3	7.9	200	5.91	150	2.4	1.1
BKSMA-5	1.32	5.0	1.53	5.8	9.1	230	7.09	180	3.1	1.4



Sightglasses for Tri-Clamp Openings



An assembly of Pyrex® or borosilicate glass and platinum-cured silicone gasket that fits into a stainless steel tri-clamp ferrule adapter piece.



Size	D1		D2		H	
	in	mm	in	mm	in	mm
1/2" & 3/4"	0.39	10	0.71	18	0.41	10.5
1" & 1-1/2"	0.98	25	1.61	41	0.28	7
2"	1.18	30	2.05	52	0.28	7
2-1/2"	1.38	35	2.72	69	0.39	10
3"	1.57	40	2.99	76	0.39	10
4"	2.17	55	4.02	102	0.47	12
6"	2.87	73	5.98	152	0.63	16
8"	3.94	100	7.80	198	0.63	16
10"	4.72	120	9.65	245	0.71	18
12"	5.51	140	11.81	300	0.79	20



Slotted Sightglasses

Slotted sightglass for easy attachment of a cordless tank illuminating device. 4" slotted sightglass allows for viewing with the light attached.

Cordless Tank Illuminating Device

- Detachable, high performance 120 lumens - LED Cordless Tank Illuminator
- 316L construction making it corrosion and moisture resistant
- Includes two CR123 3V batteries

OPTIONS & ACCESSORIES

Thermocouple/Thermowell

Eagle's thermowells are fabricated from 316L stainless steel with a 24 Ra surface finish standard or optional 15 Ra electropolished finish. Our thermowell assembly conveniently attaches to and detaches from any standard 3/4" or 1/2" tri-clamp connection. The thermowell allows for the insertion of a temperature probe to monitor the internal contents of the bottle.



Gaskets

Sanitary Tri-Clamp Gaskets

High purity pharmaceutical gaskets: Platinum-cured silicone sanitary tri-clamp gaskets are available in sizes ranging from 0.5" to 12". Pass: USP Class VI and cytotoxicity testing; Meet: FDA 21 CFR, 177.2600 and 3-A standards. Our gaskets are certified to be animal-derived ingredient free.



SERVICES

Ultrasonic Cleaning

All of Eagle's products go through the automated ultrasonic cleaning machine. Products are soaked in the first and second tanks in two separate detergents. The third tank rinses the product with regular water, followed by a final rinse of the product with DI water. The last operation is a hot air dryer. All tanks are equipped with ultrasonic generators and heated to a temperature of 120°F except the air dry chamber @ 250°F.



Electropolishing and Passivation Service

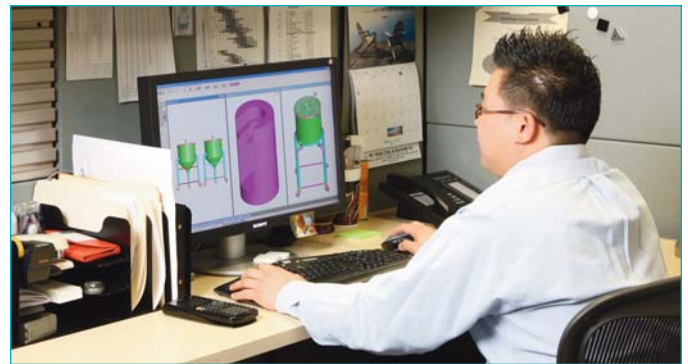
Eagle offers passivation and electropolishing services. Electropolishing improves surface finish with a brighter appearance and higher corrosion resistance. Parts that have been electropolished are also more easily cleaned.



Laser Engraving

Laser engraving capabilities provide fast, precise engraving for Eagle's products.

- Any computer graphic can be engraved
- Customer supplied artwork or information can be laser engraved



Engineering

Eagle's engineering department can develop CAD drawings for your approval.

SERVICES

Manufacturing

- Manual and CNC machines
- Orbital welding
- Automated and manual mechanical polishing
- Electropolishing and passivation
- Laser engraving
- Wire & RAM EDM



Eagle's modern CNC machine centers ensure precise dimensions and the best possible surface finishes.



Manual Lathes



Eagle takes pride in keeping a clean manufacturing facility.



Testing

- Dye penetrant testing
- Helium leak test
- Surface finish
- Hydrostatic pressure tests
- Vacuum testing
- Coordinate Measuring Machine (CMM) and Optical Comparator for accurate dimensional tests

Helium Leak Testing



Eagle provides the service of helium leak testing as an option upon customer's request.

Coordinate Measuring Machine



Eagle uses a Coordinate Measuring Machine (CMM) to check the dimension and tolerance of the parts.

Optical Comparator



Another method of data measurement.

Profilometer



Roughness Average (Ra) is measured using a surface testing instrument.

CUSTOM MODIFICATIONS

Custom Design

We have a long history of creating individualized solutions for specific challenges and welcome the opportunity to create and manufacture a custom design for you as well.

Listed below are some examples of our custom modifications.

- ANSI Flange
- NPT Fittings
- Dome Tops
- Custom Vessels
- Cone Bottom Containers
- Dish Bottom Containers
- Stands
- Mixer Adapters
- Probe Ports
- Hose Barbs
- Mixer Mounts
- Dip Tubes
- Vents
- Fill Tubes
- Sightglasses
- Removable Tank Illuminating Devices
- Sanitary Tri-Clamp Connections
- Sanitary Handles
- Custom Stainless Cap Assemblies
- Stainless Container Jackets
- Drainage Ports
- Valves
- Thermowells

Welding Capabilities



Where high precision welds are required, a welding lathe with a laser seam tracker is used to weld the parts.



A spot welder is used to spot weld some parts onto the larger vessels.



This Automatic Rotating Positioner is used to weld a flange to the vessel.



Modified Bottles



Modified BTB-27 Bottle with fill-vent ports, dip tube cap assembly, and sightglass



Modified BTB Bottle with handles and funnel



Custom configuration of options and fittings



Modified BTB Bottle with shoulder port, bottom port, and bottom valve



Modified BTB Bottles with jackets and ports

CUSTOM MODIFICATIONS

Modified Containers



Modified CTH Container with NPT fittings



Standard Vessel with side-bottom sanitary ports



Modified CTH Container with 45° elbows



Custom Stands



Modified CTL Container with tri-clamp and NPT fittings



Modified CTH-SMA Container with tri-clamp fittings



CTH Container with bottom drainage valve

CUSTOM FABRICATIONS

Special Order Products



Small Vessel Modifications



Hoppers & Cone Tops

Standard vessels with cone top, one with 12" and the other with 4" sanitary opening.



Custom Cone Bottom Mixing Vessel

Custom 3.0 L cone bottom mixing vessel with legs fitted with an air actuated butterfly valve for discharge.



Custom Dome Top Vessel

Two 20 L custom dome top and dished bottom vessels. 4.0" sanitary opening, and 1.0" sanitary diaphragm valve.



Custom 5.0 L Vessel

Custom 5.0 L vessel, dish bottom, 6.0" sanitary opening with two 0.75" sanitary ports on lid and one 0.5" sanitary drainage port in the bottom. Detachable custom stand.



Custom Conical Vessel

Custom 50 L conical vessel with a 4" sanitary opening and solid bar handles.



Custom Vessel with Sanitary Ports

Custom vessel with a 2" sanitary port on top and 4" sanitary port on bottom.



Custom Cone Top Vessel

Standard 70 L vessel with a custom cone top. 6" sanitary opening and two 4" sanitary ports on the shoulder.



Sanitary Custom 20 L Vessel

Custom 20 L vessel with 8" sanitary opening and 0.5" sanitary sampling port.



Custom Buckets

30 L and 20 L custom buckets with spout and swinging handles. 0.5" sanitary port on side bottom.

CUSTOM FABRICATIONS

Special Order Products



Dome Tops

Dome-top CTL Series, lock-lever/ squeeze ring container with dish-bottom and skirt.



Hopper Container with Dome Lid

Heavy-duty flange and wing nut closure. Hopper has a wide array of tri-clamp fittings on the dome lid for inlets, dip tubes, mixer-shaft and sightglass.



Dome-Lid

Dome-lid has two 3" tri-clamp fittings and four 1" tri-clamp fittings welded straight up. Whether tri-clamp, Swagelok®, or Ingold fittings, all welds are ground, polished, and seamless, without pits or crevices.



Dish-Bottom Container

Dish-bottom container set inside custom stand with forklift channels. Viatic sanitary flush valve is clamped onto dish-bottom. Tri-clamp connection for container drainage. Mixer mounting plate and lid with handles are also features of this vessel.



CTH Container

CTH Series container shown here is connected to a peristaltic pump and has a biomixer mounted on top. Other items include a sightglass, sterile air filter, and a container stand.



Dome-Top Bioreactor

Dome-top bioreactor with heavy duty flange and high-pressure wing nut closure. Dome-fittings welded at an angle for optimal mixing. Ingold fittings on container side also welded at an angle and seamless. Asepc zero dead leg ball-valve welded onto container's dished bottom for drainage.



Dome-Top Dish-Bottom Bioreactors

Heavy duty flange and wing nut closure. Dome-top has 2" TC fittings welded straight up and large 6" TC fitting for product entry. Container has 4 legs with braces, phenolic nonmarking wheels, and stainless casters.



Custom processing vessel with tri-clamp ports and bottom valve

ORDERING INFORMATION

**Payments must be made in US Currency.
All prices subject to change without notice.**

Placing Orders

Our experienced sales staff is happy to take your orders over the phone or via fax transmission. Simply call **215-957-9333** and ask for the sales department.

Terms

New accounts require 100% prepayment with your first order. Terms of payment are Net 30 Days with established credit. Custom order items require minimum 50% prepayment. Orders from outside the Continental United States require 100% prepayment. Customs clearance and duty charges are the responsibility of the purchaser.

Payments

We accept payment by Visa®, MasterCard®, the American Express® Card, check, and money order. Our products can be sent C.O.D.

Freight

All orders are F.O.B. Warminster, PA. Freight can be quoted upon request.

Tax

Purchasers shall pay sales and use taxes as required.

Quotations

We reserve the right to correct stenographic errors and to reject orders if credit is unsatisfactory. Prices do not include taxes or freight. Quotations are valid for 60 days (unless otherwise noted).

Returns/Exchanges

If you are not satisfied with your purchase, upon Eagle Stainless' authorization, full credit, equal exchange or money back may be given. A 15% restocking charge may be applicable. All items must be sent back prepaid, unused, and in original condition.

Cancelled Orders

Cancelled orders must be approved by Eagle Stainless with a possible restocking charge of up to 25% of the total cost of the cancelled order.

Claims

A package which is damaged or lost during transit will be the responsibility of the carrier.

Limited Warranty

Seller warrants products to be free from defects in materials and workmanship at the time of shipment and to be in compliance with the pertinent, applicable industry standards. Seller's liability under this warranty shall be solely limited to repair, replacement or credit, at seller's option, with respect to items returned to seller at buyer's expense within forty-five (45) days after shipping. Seller shall not be liable, under any circumstances, for consequential and/or incidental damage, including, but not limited to, personal injury, labor costs or loss of profits.

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