

Design Change Notification

Date: January 21, 2016

Document #: DCN-100-MicroBulk Storage Systems

Subject: Perma-Cyl[®] MicroBulk Storage System models to obsolete and new lab base specs.

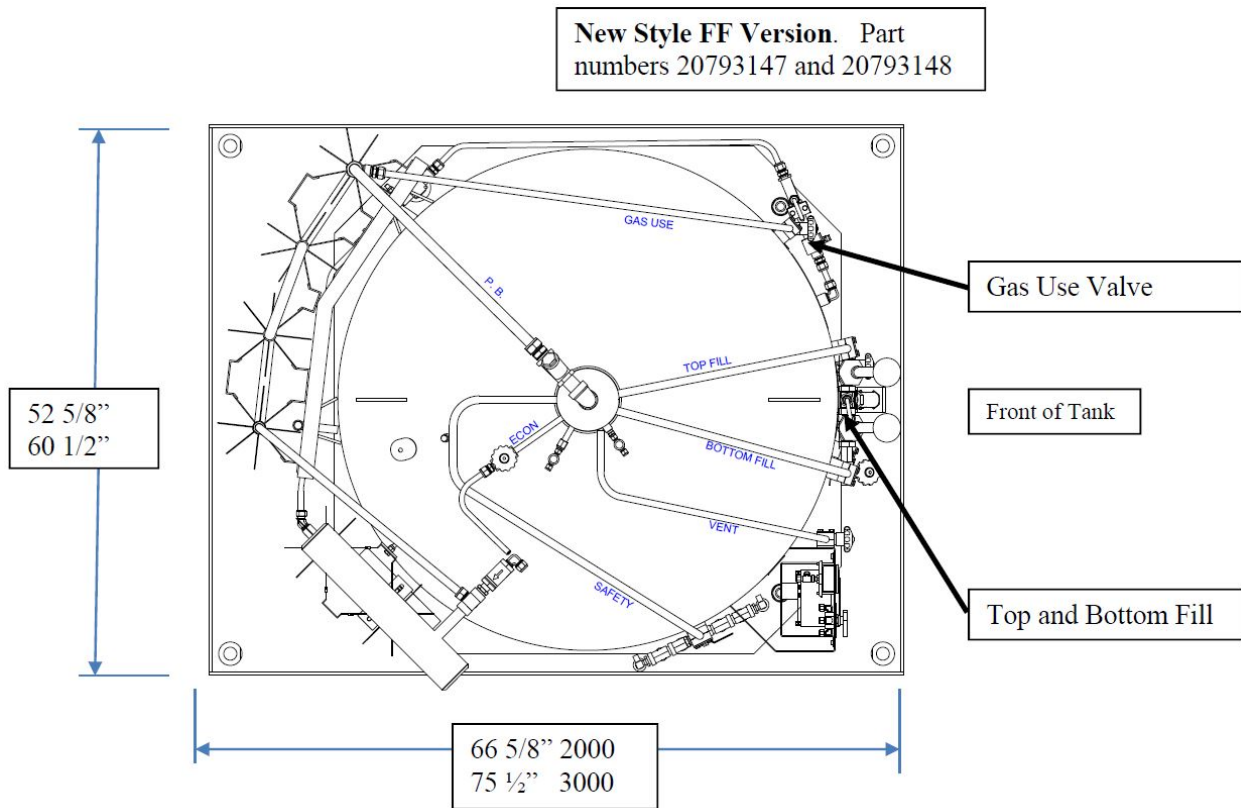
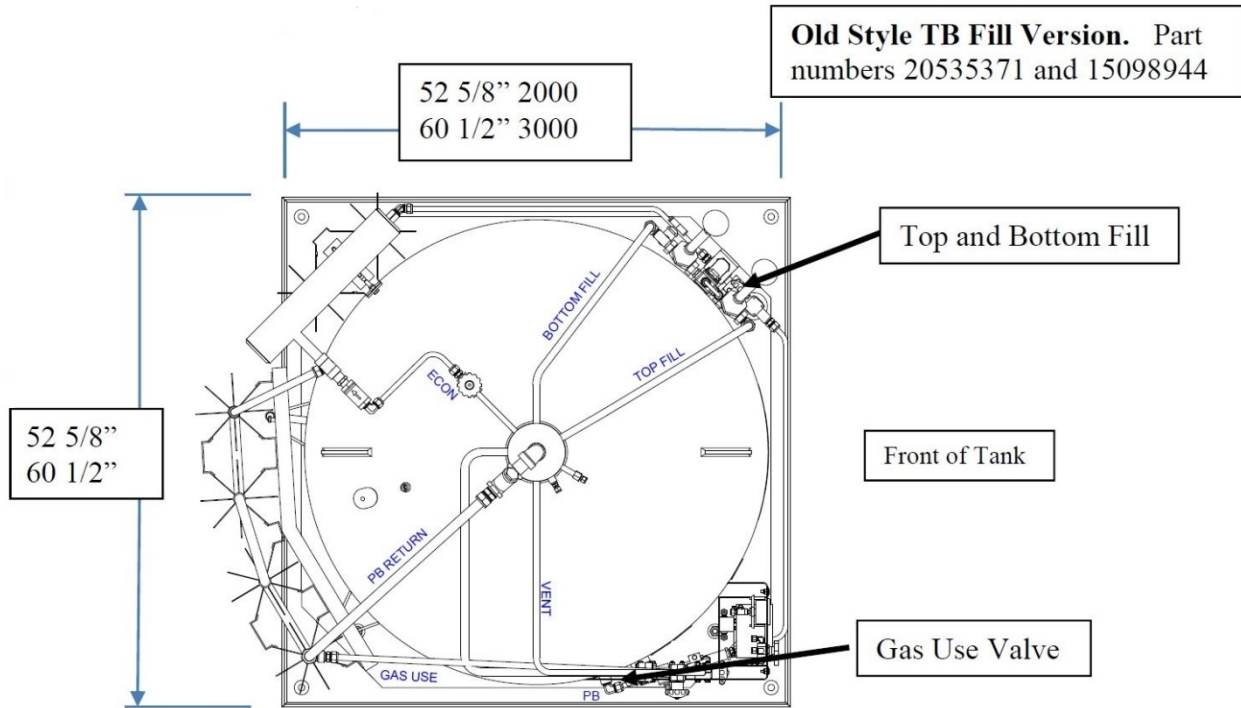
Background: Chart's continuous attention to product improvement and customer satisfaction has resulted in the design modification presented in this Technical Service Bulletin. We will continue to listen to our customers and look for ways to improve our designs and streamline our processes.

Chart currently offers two different styles of 2000/3000 VHP Flex Fill Perma-Cyl tanks. The original top and bottom (TB) style tank will be obsolete effective January 31, 2016. New lab bases have already been incorporated into the Perma-Cyl[®] MicroBulk Storage System product line.

Products Affected: The two models that will be eliminated are PN 20535371 and 15098944. All Perma-Cyl 700 liter models and above will have larger anchoring holes on the base plates and larger pallet bases.

Description: Early versions of this new design (see drawings on next page) had the top and bottom fill valves located in the corner of the pallet base and the gas use valve was on the left side of the tank next to the liquid level gauge bracket. The new design flex fill tanks moved the top and bottom fill valves to the front center of the tank and the PB and process vaporizers were switched around so the gas use now comes down the right side of the tank. The pallet base was also lengthened to better accommodate the valves and vaporizers and keep them within the footprint of the pallet base. In addition, the bolt hole sizes on both the bottom base of the Perma-Cyl tank and the pallet base have increased in diameter for high seismic zones. These same pallet bases are now standard for all styles of 2000 and 3000 liter Perma-Cyl models. These changes have no impact on the operating specifications of these tanks.

Drawings:



New Bolt Hole Diameters for Bottom Head and Pallet Bases

Hole Diameters – **Current** Configuration

Perma-Cyl tank size	Bottom Head Mounting Holes	Lab Base Mounting Holes	Pallet Base Access Hole for Anchors	Pallet Base Anchor Holes	Perma-Cyl Mounting Bolt/Nut Size	Pallet Base Dimensions
450	.688" (11/16)	.875" (7/8)	1.5"	.688" (11/16)	SS 5/8-11 x 2-1/2	36" x 36"
700	.688"	.875"	1.5"	.688"	SS 5/8-11 x 2-1/2	46-5/8" x 46-5/8"
1000	.688"	.875"	1.5"	.688"	SS 5/8-11 x 2-1/2	46-5/8" x 46-5/8"
1500	.688"	.875"	1.5"	.688"	SS 5/8-11 x 2-1/2	52-5/8" x 52-5/8"
2000	.688"	.875"	1.5"	.688"	SS 5/8-11 x 2-1/2	52-5/8" x 52-5/8"
3000	.688"	.875"	1.5"	.688"	SS 5/8-11 x 2-1/2	60-9/16" x 60-9/16"

Hole Diameters – **New** Configuration

Perma-Cyl tank size	Bottom Head Mounting Holes	Lab Base Mounting Holes	Pallet Base Access Hole for Anchors	Pallet Base Anchor Holes	Perma-Cyl Mounting Bolt/Nut Size	Pallet Base Dimensions
450	.688" (11/16)	.875" (7/8)	1.5"	.688"	SS 5/8-11 x 2-1/2	36" x 36"
700	.813" (13/16)	1"	1.625" (1-5/8)	1"	SS 3/4-10 x 2-1/2	46-5/8" x 50-5/8"
1000	.813" (13/16)	1"	1.625"	1"	SS 3/4-10 x 2-1/2	46-5/8" x 50-5/8"
1500	1.063" (1-1/16)	1-1/4"	2.25"	1-1/4"	SS 1-8 x 2-1/2	52-5/8" x 66-5/8"
2000	1.063" (1-1/16)	1-1/4"	2.25"	1-1/4"	SS 1-8 x 2-1/2	52-5/8" x 66-5/8"
3000	1.063" (1-1/16)	1-1/4"	2.25"	1-1/4"	SS 1-8 x 2-1/2	60-1/2 x 75-1/2

Contact: If you have questions or concerns relative to this action, please contact your Chart Customer Service Representative at (800) 400-4683. Thank you for depending on Chart to provide high product quality and service.