Design Change Notification

Date: March 7, 2019

Document #: DCN-120 – New and Obsolete Trifecta Models

- *Subject:* Chart is currently in the process of fielding several new Trifecta[®] Gas Supply System models and obsoleting some of the older and smaller models.
- **Background:** As the laser market continues to grow and lasers become more powerful, the trifecta continues to be the most popular piece of equipment to serve this market. Chart has also found that the 15X trifectas can best serve the market for the lower flowrates where the 5X and 10X were previously specified. The fact that the 15X trifectas have more pressure build capacity is actually an advantage for accounts with low flowrates, particular through the colder winter months. In addition, the demand for the smaller trifectas has dropped off by a considerable number.

Products Affected:

OBSOLETE NOW (No longer available)

Part Number	Description	
1312395	Trifecta 5K X-Series 500 psig LIN	
13440689	Trifecta 5K X Series 500 psig LIN	
	230 VAC	
13440671	Trifecta 10K X Series 500 psig LIN	
	230 VAC	
13440662	Trifecta 15K X Series 500 psig LIN	Transformer
	230 VAC	now available
13500872	Trifecta 5K X Series 350 psig LOX	
13500881	Trifecta 10K X Series 350 psig LOX	
13500899	Trifecta 15K X Series 350 psig LOX	
20538067	Trifecta 10K X Series 600 psig LIN	
20679790	Trifecta 15K X Series 600 psig LIN	

Part	Description	Obsolete	Available
Number		Date	Date
11907767	Trifecta 10K X-Series 500 PSI Lin	31 Dec 2019	
11862511	Trifecta 15K X-Series 500 PSI Lin	31 Dec 2019	
21260759	Trifecta 15K X-Series 500 PSI AR	31 Dec 2019	
20614842	Trifecta 15K X-Series 500 PSI Lox	31 Dec 2019	
21371779	Trifecta XPro LIN-500 15K		1 Feb 2019
21364969	Trifecta XPro LAR-500 15K		1 Feb 2019
21371782	Trifecta XPro LOX-500 15K		1 Feb 2019
20900990	Trifecta XPro LIN-600 15K		Current Model



- **Description:** As the older models become obsolete, Chart is introducing new models of trifectas with numerous changes and upgrades. These new models, as detailed in the above table, are the new Trifecta X/Pro Series. Key changes to these models from the old X series are outlined below. In addition, Chart is developing a new control panel that will have remote monitoring capabilities. This new control panel will be an optional upgrade and marketed as the Trifecta Pro Series. The Pro Series will be available in mid to late 2019.
 - New frame that is larger and modified to allow for easier access to components and better circulation for the PB vaporizers.
 - No Dip Tube. Process liquid will be drawn off the bottom of each tank.
 - Eliminated check valve coming off the bottom PB withdrawal on 15K units and replaced with extended stem ball valve.
 - Design allows the user to easily add an additional valve on bottom and top of each vessel to tie in auxiliary PB vaporizer (electric/ambient).
 - Added an additional valve on top in order to be able to isolate the PB solenoid.
 - Pressure and liquid level transmitters have been changed from Honeywell to Rosemount.
 - Panel mounted 4-way isolation valves have been added that isolate the Rosemount transmitters, analog liquid level gauge, and tank pressure gauge.
 - Electrical conduit and fittings have been upgraded to sealtite type HC with metal reinforcement.
 - Each set of transmitter wires are ran in separate conduit to the main control panel for easier field replacement.
 - Relocated vacuum pump out port to the front of the tank to keep it away from areas of high ice build up.
 - Added needle valves for purging to the safety tree.
 - Added an analog liquid level gauge to each tank.
 - Added stainless steel muffler plate below the main muffler to prevent damage to slab and frame.
 - Removed economizer regulators from the liquid process line.
 - Added a separate connection for the "Vent to Bulk" line in case the customer wants to pipe this into the bulk tank's vapor space. It comes tied into the liquid side as standard.
 - Optional 12" and 18" extension stands to raise Trifecta up higher off the ground.

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 quality products and service.

