# TRIPLEX STACK MOUNTED HIGH EFFICIENCY DRY CLAW MEDICAL VACUUM SYSTEMS 5 THROUGH 10 HP



The GENTEC® Corporation stack mounted Medical Vacuum system is a completely packaged NFPA 99 and NEC compliant assembly featuring high efficiency dry claw vacuum pumps, a U.L. listed control cabinet, an ASME receiver and the necessary accessories required to meet and exceed the current code requirements. All components are piped and wired to single-point service connections. The only field connections are air intake, air discharge and power at the control panel. All interconnecting piping as well as wiring is completed and operationally tested prior to shipment. Liquid tight conduit, fittings and junction boxes are provided for all control and power wiring.

The medical vacuum pumps are continuous duty, high efficiency, oil-less, frictionless, compression rotary claw, with intake filters and exhaust silencers. Each vacuum pump is driven by a 3 phase, 60 cycle, TEFCNEMACface motor. The system includes a vacuum receiver of ASME construction rated for 200 PSI MWP. The tank is equipped with a vacuum gauge, valved by-pass and manual tank drain. Also, included as standard equipment for each vacuum pump are: inlet check valve, inlet isolation valve, safety relief valve, inlet filter, vacuum control switch, inlet and discharge flexible connectors and a shut-off cock for gauge and vacuum switches.

The system includes a UL labeled control panel in a NEMA 12 enclosure. The panel includes the following standard accessories for each pump: externally operable circuit breaker with a door interlock, control circuit transformer with fused primary and secondary coils, H-O-A switch, run light, hour meter, magnetic starter with 3 leg overload protection and reset switch and minimum run timer to prevent short cycle operation. A plug-in type programmable controller with removable terminals allows quick and easy replacement in the field. The system is designed to function even if the PLC fails. If one of the pumps is out of service the system control shall omit that pump from the alternating cycle, automatically alternating between remaining pumps. The system shall revert to normal automatic alternation when the condition is corrected. The system is also supplied with forced time alternation in the event the pump is unable to satisfy the demand in 30 minutes.

Local "Backup in use" audible and visual alarms are provided per NFPA 99. The alarm includes an indicating light as well as the horn. The audible alarm can be acknowledged with the "Silence" button. The visual alarm will remain energized until the problem has been corrected. Each alarm function includes a set of dry contacts for connection to the master alarm. All control and alarm functions will remain energized while any vacuum pump in the system remains electrically on-line. Field adjustable control switches are pre-set to operate the lead vacuum pump between 19" Hg and 23" Hg. The stand-by vacuum pump will automatically start at 16" Hg if the lead vacuum pump fails to operate.

The Medical Vacuum system is guaranteed by the manufacturer for a period of 24 months from the date of start-up or 30 months from the date of shipment (which-ever comes first) against defects in design, materials, or construction.

### **Optional System Accessories**

(only checked options will be supplied)

- □ Touch screen interface with ethernet connectivity, embedded web page for remote monitoring and electric notification of alarms and warnings
- $\hfill\square$  Rust protection receiver lining
- □ Galvanized receiver
- External intake filters
- Thermal malfunction shut-down with manual reset and alarm lights
- □ Oxygen assured
- Variable speed drive







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## Triplex Stack Mounted High Efficiency Dry Claw Medical Vacuum Systems 5 Through 10 HP Layout and Performance Table

System Model Number	Horsepower		Capacity SCFM (Each Pump)	Suct. Conn.	Exh. Conn.	xh. Tank onn. (Gal.)	Dimensions, In.			Weight Lbs.
	Each	Total	19" Hg				L	w	н	
1TCB5S120	5	15	38.0	2"	1"	120	56	56	80	2545
1TCB7.5S200	7.5	22.5	52.0	3"	1"	200	64	56	90	3010
1TCB7.5HS200	7.5	22.5	69.0	3"	1"	200	64	56	90	3040
1TCB8.5S200	8.5	25.5	77.0	3"	1-1/4"	200	64	56	90	3060
1TCB10S200	10	30	89.4	3"	1-1/4"	200	64	56	90	3180

### Notes:

1. To convert Free Air Capacity (SCFM) to Expanded Air Capacity (ACFM):

at 19" Hg multiply SCFM by 2.74

2. Maximum ambient temperature: 100° F for standard systems, 90° F if equipped with variable speed drive.

#### **Power Requirements:**

(Three) \_\_\_\_\_ HP Motors, 3 Phase 60 Hertz 208 v 230 v 460 v