



DUPLEX SPACE SAVER HIGH EFFICIENCY DRY CLAW MEDICAL VACUUM SYSTEMS 2 THROUGH 8.7 HP

The EMSE CORPORATION continuous duty space saver Medical Vacuum system is a completely packaged NFPA 99 and NEC compliant assembly featuring high efficiency dry claw vacuum pumps, a U.L. listed electrical control cabinet, an ASME receiver and the necessary accessories required to meet and exceed the current code requirements.

All components are pre-piped and pre-wired to single-point service connections. The only field connections are air intake, air discharge and power connection 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.

VACUUMPUMPS

The medical vacuum pumps are continuous duty, high efficiency, oil-less and frictionless compression claw type, equipped with intake filters and exhaust mufflers.

Each vacuum pump is driven by a 3 phase, 60 cycle, TEFC NEMA C-face motor.

Also included as standard equipment for each vacuum pump are: inlet check valve, inlet isolation valve, safety relief valve, inlet filter, vacuum control switch, bronze or stainless steel flexible connectors on inlet and discharge lines as well as copper tubing with shut-off cock for gauge and vacuum switches.

RECEIVER

The system includes a vacuum storage tank of ASME construction rated for full vacuum service. The tank is equipped with a vacuum gauge, valved by-pass and manual tank drain.

CONTROL PANEL

The UL listed control panel is supplied in a NEMA 12 enclosure and includes short circuit, single phase and thermal overload protection. Externally operable circuit breakers with a door interlock, control circuit transformers with fused primary and secondary coils, H-O-A switches, magnetic starters with 3 leg overload protection and reset switches are standard.



The Programmable Logic Controller provides automatic alternation and lead-lag control with the option to select either one of the pumps as a permanent lead for periods of pump maintenance.

It includes minimum run timers to prevent short cycle operation. Human Machine Interface (HMI) display includes pump run indication, accumulated run time and alarm conditions.

Local "Backup in use" audible and visual alarms are provided per NFPA 99. The audible alarm can be acknowledged with the "Silence" button. The visual alarm will stay on until manually reset.

All controls and alarms will function even if one of the pumps is shut down for maintenance or repairs.

The panel includes a set of dry contacts for connection to the master alarm.

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 one of the other vacuum pumps fails to operate.

The Medical Vacuum system and its component parts will undergo a complete electric and pneumatic test prior to shipment.

WARRANTY

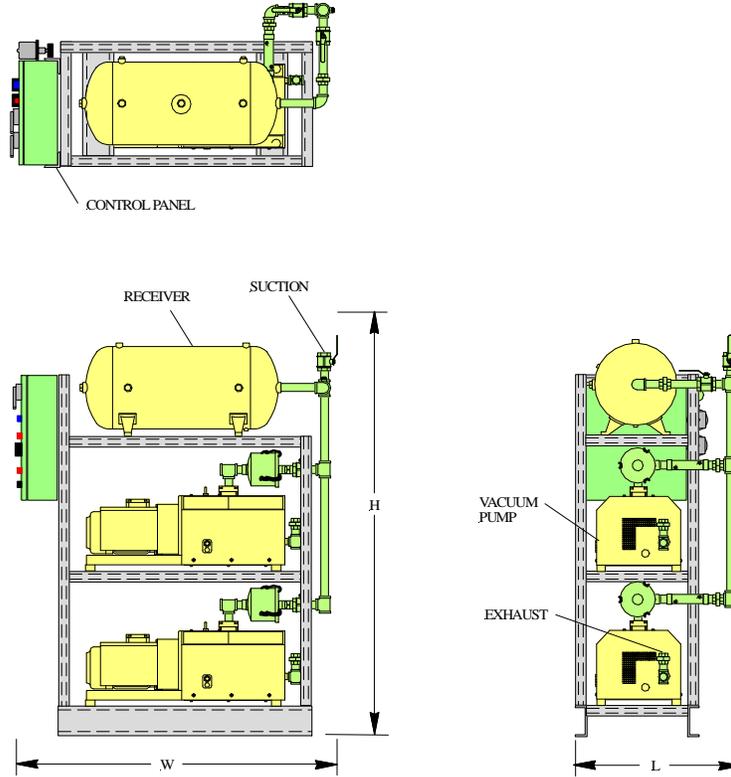
The Medical Vacuum system is guaranteed by the manufacturer for a period of 24 months from the date of start-up or 30 months from the date of shipment (whichever comes first) against defects in design, materials, or construction.

Optional System Accessories

(only checked options will be supplied)

- Touch Screen HMI (Ethernet ready) including vacuum level display, pump status indication, accumulated run time, all alarm displays and scheduled maintenance reminder
- Touch screen interface with ethernet connectivity, embedded web page for remote monitoring and electronic notifications of alarms and warnings
- Rust protection receiver lining
- Galvanized receiver
- External intake filters
- Thermal malfunction shut-down with manual reset and alarm lights
- Oxygen assured
- Variable speed drive

DUPLEX SPACE SAVER HIGH EFFICIENCY DRY CLAW MEDICAL VACUUM SYSTEMS 2 THROUGH 8.7 HP LAYOUT AND PERFORMANCE TABLE



System Model Number	Horsepower		Capacity SCFM (Each Pump) @ 19" Hg	Suct. Conn.	Exh. Conn.	Tank (Gal.)	Dimensions, In.			Weight Lbs.
	Each	Total					L	W	H	
1DCB2S30H	2.0	4.0	16	1-1/4"	1"	30	32	68	83	1250
1DCB3S30H	3.0	6.0	21	1-1/4"	1"	30	32	68	83	1290
1DCB4S30H	4.0	8.0	29	1-1/4"	1"	30	32	68	83	1290
1DCB5.4S30H	5.4	10.8	38	1-1/4"	1"	30	32	68	83	1330
1DCB6.4S30H	6.4	12.8	52	2"	1"	30	34	68	83	1580
1DCB7.5S30H	7.5	15.0	69	2"	1"	30	34	71	83	1595
1DCB8.7S30H	8.7	17.4	77	2"	1-1/4"	30	34	74	83	1690

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:

(Two) _____ HP Motors, 3 Phase 60 Hertz 208 v 230 v 460 v