

Submittal Data Sheet

Features

Tri-Tech Medical Inc. Dry Rotary Claw Medical Vacuum Systems are completely packaged systems that are designed to meet health care facility requirements.

- MADE IN THE U.S.A.
- Meet all NFPA 99 and NEC requirements
- Lowest maintenance of all vacuum systems
- Energy efficient
- Oil free precision contactless pump operation
- Suitable for WAGD waste anesthesia systems
- UL listed electrical control panel
- ASME construction rated receiver tank
- Designed for ease of installation – the only field connections are single point inlet, exhaust per pump, and the power connection
- Includes audible and visual alarms, and dry contacts for remote alarm connection
- Completely tested prior to shipment
- Vacuum system guaranteed 18 months and bare pumps 36 months from date of shipment against defects in design, materials, and construction

Specifications

Each vacuum pump is a continuous duty, high efficiency, oil-less, frictionless, compression rotary claw, with intake filters and exhaust silencers. Each pump is driven by a 3 phase TEFC NEMA C-face motor. Each pump includes inlet check valve, inlet isolation valve, safety relief valve, inlet filter, vacuum switch, flexible connectors, and a shut-off cock for gauge and vacuum switches.

The vacuum receiver tank is of ASME construction rated for 200 psi MWP. The tank is equipped with a vacuum gauge, valved by-pass, and manual tank drain.

BASIC NEMA 12 UL listed NFPA Control Panel features externally operable circuit breakers with door interlock, control circuit transformers with fused primary and secondary coils, H-O-A switches, run light, hour meters, magnetic starters with 3 leg overload protection and reset switches with minimum run timers to prevent short cycle operation as standard. A plug-in type programmable controller with removeable terminals allows quick and easy replacement in the field. The system is designed to function even if the PLC fails. The system is also supplied with forced time alternation if the pump cannot



Stack-Mounted Model TMV7.5CL200S1
Your system can look different

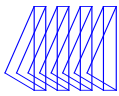
satisfy the demand in 30 minutes, and reverts to normal operation once the condition is corrected. Local “Backup in Use” audible and visual alarms are provided per NFPA 99, and include a “silence” button for the audible alarm. Dry alarm contacts for connection to a separately provided master alarm are also included. Control switches are pre-set for correct lead-lag sequencing.

The medical vacuum system and its component parts undergoes a complete electric and pneumatic test prior to shipment.

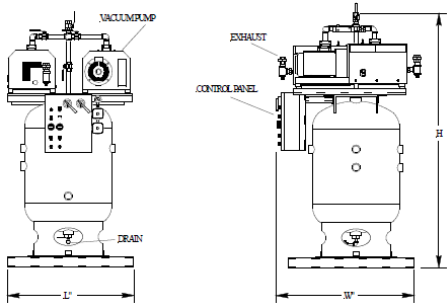
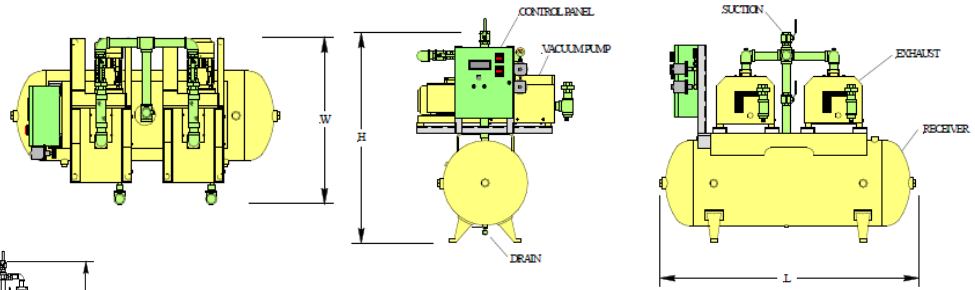
OPTIONS INCLUDE:.

- Level 1 4.3” HMI touch screen includes service alerts, current status of system, all alarm indications, event log, and trend graphs.
- Level 2 5.7” HMI touch screen includes all of the above plus Ethernet connection with embedded web page for remote monitoring of alarms and system status, and electronic notifications of alarms and warning.
- BacNet gateway
- Variable Frequency Drive (VFD)
- Oxygen Assured

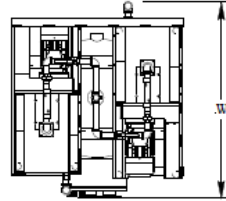
System can be provided in different mountings and configurations, and can be expandable. Can also provide industrial and laboratory type systems.



Horizontal Tankmount



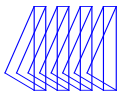
Vertical Tankmount



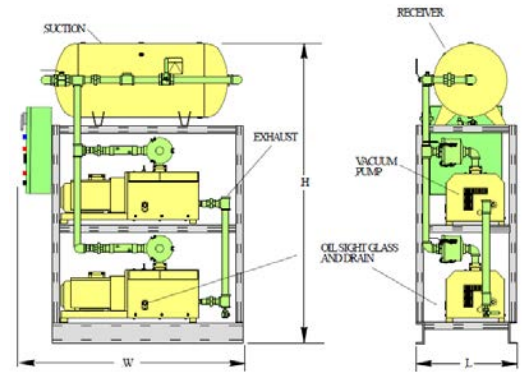
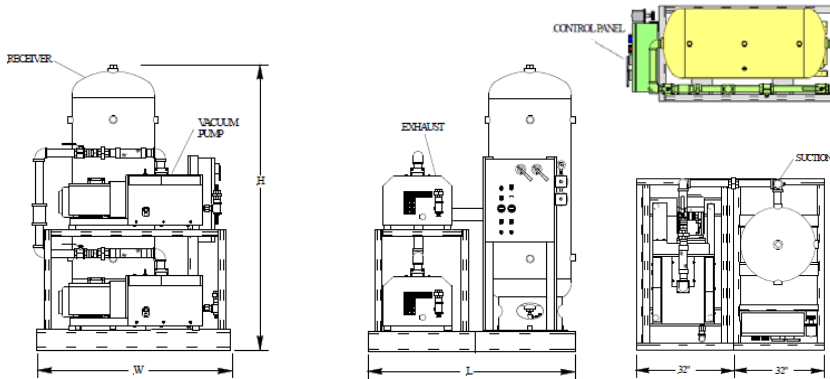
DRY ROTARY CLAW TANKMOUNT NFPA MEDICAL VACUUM SYSTEMS

Model	HP	SCFM @ 19" Hg ea.	NFPA Capacity	Tank Gallon	Dimensions			Inlet	Exhaust	Weight (LBS)	System FLA		
					L	W	H				208V	230V	460V
DUPLIX HORIZONTAL TANKMOUNT													
DMV2CL80HT1	2 (2)	16	16	80	72"	48"	60"	1-1/4"	1"	1100	20	18	9
DMV2CL120HT1	2 (2)	16	16	120	72"	48"	60"	1-1/4"	1"	1455	20	18	9
DMV3CL80HT1	3 (2)	21	21	80	72"	48"	60"	1-1/4"	1"	1250	26	23	12.5
DMV3CL120HT1	3 (2)	21	21	120	72"	48"	60"	1-1/4"	1"	1465	26	23	12.5
DMV4CL120HT1	4 (2)	29	29	120	72"	55"	60"	1-1/4"	1"	1460	30	27	13.5
DMV5.4CL120HT1	5.4 (2)	38	38	120	72"	55"	60"	2"	1"	1475	37	33	16.5
DMV6.4CL120HT1	6.4 (2)	52	52	120	88"	60"	70"	1-1/4"	1"	1755	45	44	22
DUPLIX VERTICAL TANKMOUNT													
DMV2CL80VT1	2 (2)	16	16	80	44"	47"	84"	1-1/4"	1"	1298	20	18	9
DMV2CL120VT1	2 (2)	16	16	120	44"	47"	88"	1-1/4"	1"	1470	20	18	9
DMV3CL80VT1	3 (2)	21	21	80	44"	47"	84"	1-1/4"	1"	1318	26	23	12.5
DMV3CL120VT1	3 (2)	21	21	120	44"	47"	88"	1-1/4"	1"	1490	26	23	12.5
DMV4CL80VT1	4 (2)	29	29	80	44"	47"	84"	1-1/4"	1"	1316	30	27	13.5
DMV4CL120VT1	4 (2)	29	29	120	44"	47"	88"	1-1/4"	1"	1488	30	27	13.5
DMV5.4CL120VT1	5.4 (2)	38	38	120	44"	47"	88"	1-1/4"	1"	1490	37	33	16.5
DMV6.4CL120VT1	6.4 (2)	52	52	120	44"	47"	88"	2"	1"	1870	45	44	22
DMV7.5CL120VT1	7.5 (2)	65	65	120	60"	52"	88"	2"	1"	1890	53.4	45.8	22.4
DMV9CL120VT1	9 (2)	77	77	120	60"	52"	88"	2"	1-1/4"	2095	60.2	53	26

NFPA capacities shown with one vacuum pump in reserve, and are based on 60 Hz electrical at sea level
 Maximum ambient temperature is 100 degrees F for standard systems (90 degrees F for VFD)
 Standard electrical is 3 phase, 60 Hz, 208/230/or 460 volt and 3 phase, 50 Hz, 380 volt
 Please confirm electrical requirement and elevation when ordering
 Allow 24" clearance on all sides, and 36" for the front of the control panel per NFPA
 DIMENSIONS, EXACT CONFIGURATION, AND SYSTEM WEIGHT ARE SUBJECT TO CHANGE



Duplex Horizontal Tank-Over Stackmount

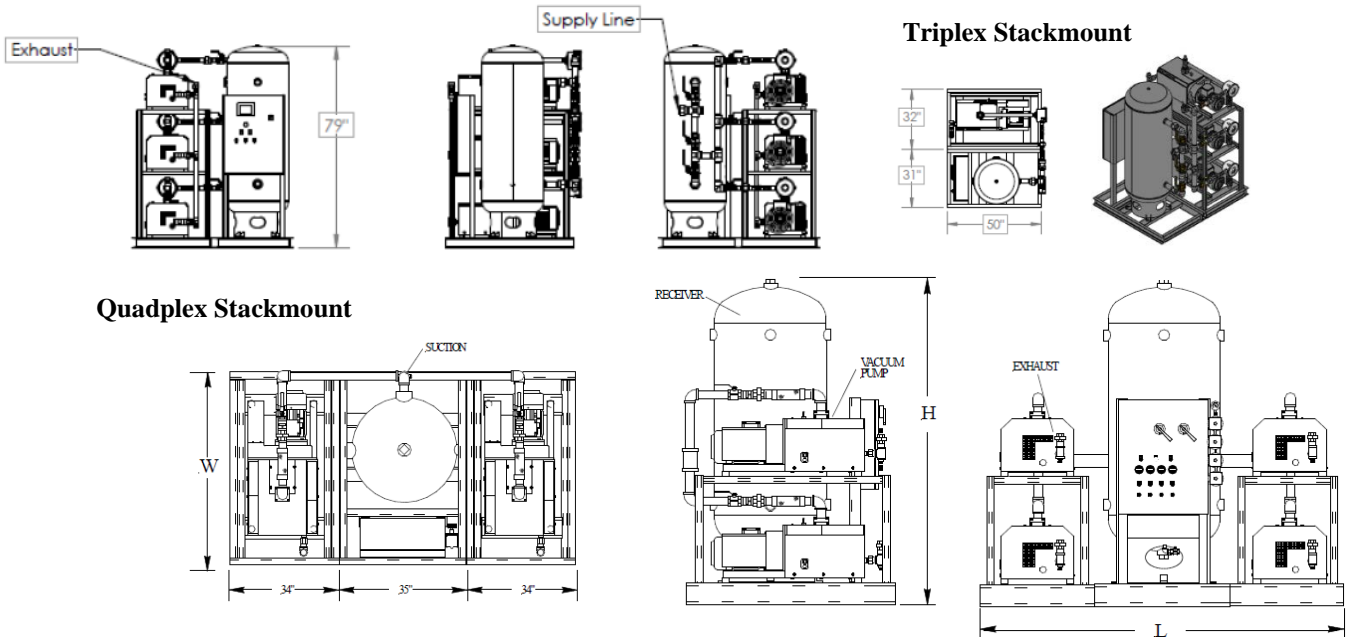
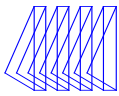


Duplex Stackmount

DRY ROTARY CLAW NFPA MEDICAL VACUUM SYSTEMS

Model	HP	SCFM @ 19" Hg ea.	NFPA Capacity	Tank Gallon	Dimensions			Inlet	Exhaust	Weight (LBS)	System FLA		
					L	W	H				208V	230V	460V
DUPLEX HORIZONTAL TANK-OVER STACKMOUNT													
DMV2CL60SH1	2 (2)	16	16	60	32"	62"	85"	1-1/4"	1-1/2"	1606	17	16.2	7.6
DMV3CL60SH1	3 (2)	21	21	60	32"	62"	85"	1-1/4"	1-1/2"	1639	21.8	20.6	9.8
DMV4CL60SH1	4 (2)	29	29	60	32"	62"	85"	1-1/4"	1-1/2"	1623	29.4	25.8	12.4
DMV5.4CL60SH1	5.4 (2)	38	38	60	32"	62"	85"	1-1/4"	1-1/2"	1644	37	32.2	15.6
DMV6.4CL60SH1	6.4 (2)	52	52	60	34"	80"	85"	2"	2"	1792	40.8	35.2	17.6
DMV7.5CL80SH1	7.5 (2)	65	65	80	32"	80"	85"	2"	1"	1390	54	46	23
DMV8.7CL80SH1	8.7 (2)	77	77	80	34"	80"	96"	2"	1-1/4"	1430	60	52	26
DMV10CL80SH1	10 (2)	87	87	80	34"	80"	96"	3"	2"	2100	60	52	26
DUPLEX STACKMOUNT													
DMV6.4CL120S1	6.4 (2)	52	52	120	64"	66"	81"	2"	1"	2395	42.6	37.4	18.2
DMV6.4CL200S1	6.4 (2)	52	52	200	64"	66"	86"	2"	1"	2628	42.6	37.4	18.2
DMV7.5CL120S1	7.5 (2)	65	65	120	64"	66"	81"	2"	1"	2410	53.4	45.8	22.4
DMV7.5CL200S1	7.5 (2)	65	65	200	64"	66"	86"	2"	1"	2648	53.4	45.8	22.4
DMV8.7CL120S1	8.7 (2)	77	77	120	64"	66"	81"	2"	2"	2660	60.2	53	26
DMV8.7CL200S1	8.7 (2)	77	77	200	64"	66"	81"	2"	2"	2748	60.2	53	26
DMV10CL120S1	10 (2)	87	87	120	64"	68"	82"	3"	3"	2914	59.7	52.1	26.4
DMV10CL200S1	10 (2)	87	87	200	64"	68"	86"	3"	3"	3110	59.7	52.1	26.4
DMV10CL240S1	10 (2)	87	87	240	64"	68"	98"	3"	3"	3164	59.7	52.1	26.4
DMV15CL200S1	15 (2)	129	129	200	64"	68"	86"	3"	3"	3248	74.6	71.3	35.7
DMV15CL240S1	15 (2)	129	129	240	64"	68"	98"	3"	3"	3352	74.6	71.3	35.7

NFPA capacities shown with one vacuum pump in reserve, and are based on 60 Hz electrical at sea level
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					L	W	H				208V	230V	460V
TRIPLEX STACKMOUNT													
TMV2CL120S1	2 (3)	16	32	120	63"	50"	79"	2"	1"	2520	27	25	12.5
TMV3CL120S1	3 (3)	21	42	120	63"	50"	79"	2"	1"	2560	36	33	16.5
TMV4CL120S1	4 (3)	29	58	120	63"	50"	79"	2"	1"	2530	43	39	19
TMV5.4CL120S1	5.4 (3)	38	76	120	63"	50"	79"	2"	1"	2570	53	47	23
QUADPLEX STACKMOUNT													
QMV10CL200S1	10 (4)	87	261	200	103"	73"	86"	4"	2"	4650	119.3	104.1	52.8
QMV10CL240S1	10 (4)	87	261	240	103"	73"	97"	4"	2"	4900	119.3	104.1	52.8
QMV15CL200S1	15 (4)	129	387	200	103"	73"	86"	4"	2"	4750	149.3	142.5	71.4
QMV15CL240S1	15 (4)	129	387	240	103"	73"	97"	4"	2"	5000	149.3	142.5	71.4

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**DIFFERENT CONFIGURATIONS AND WIDER RANGE OF PUMP SIZES ARE AVAILABLE
 (TRIPLEX, QUADPLEX, PENTAPLEX, EXPANDABLE)
 (INDUSTRIAL, OXYGEN ASSURED, VARIABLE FREQUENCY DRIVE)
 CONSULT TRI-TECH MEDICAL INC. FOR MORE INFORMATION**

Tri-Tech Medical Inc.
Improving medical gas systems through innovation!