

Submittal Data Sheet

Features

Tri-Tech Medical Inc. Dry Rotary Vane 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
- Uses a rotor with bearings, coupling, sliding vanes to achieve vacuum without any additional lubrication
- 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 continuous duty, oil-less, rotary vane, and air cooled. Each pump is driven by a 3 phase TEFC NEMA C-face motor. Each pump includes inlet check valve, inlet isolation valve, inlet filter screen, 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 enclosed UL listed NFPA Control Panel includes short circuit, single phase, and thermal overload protection. It features externally operable circuit breakers with 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 with minimum run timers to prevent short cycle operation as 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. Minimum run timers prevent short cycle operation. HMI display includes pump run indication, accumulated run



Stack-Mounted Model TMV7.5DR200S1
Your system can look different

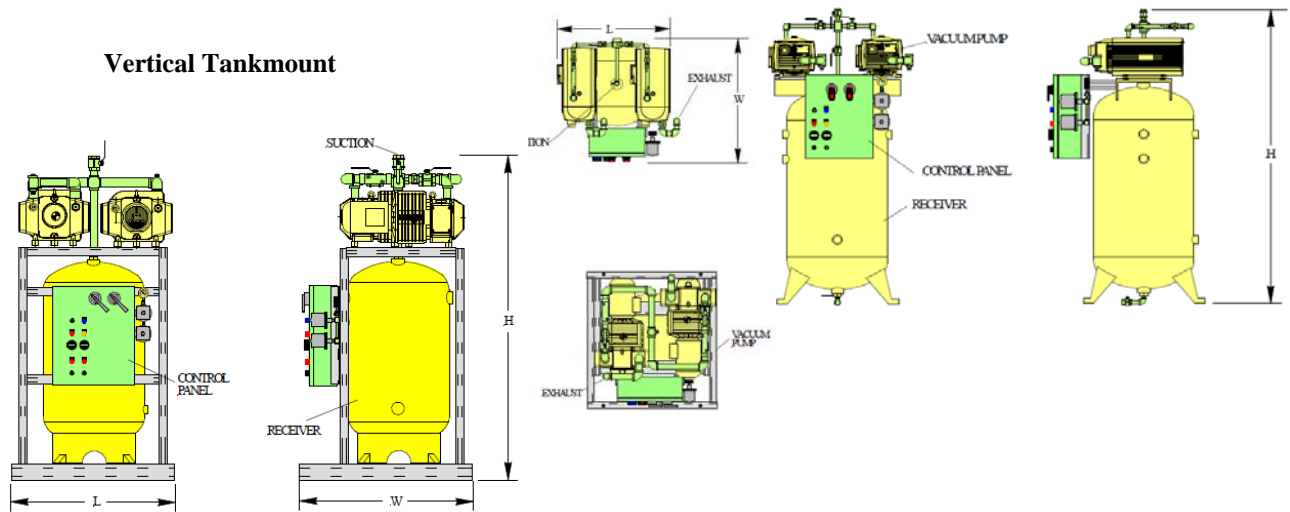
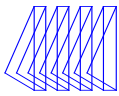
time, and alarm, conditions. Local “Backup in Use” audible and visual alarms are provided per NFPA 99, and include a “silence” button for the audible alarm. Dry alarm contacts for connection to a separately provided master alarm are also included. Field adjustable control switches are pre-set for correct 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

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



DRY ROTARY VANE 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 VERTICAL TANKMOUNT													
DMV1.5DR30VT1	1.5 (2)	5.3	5.3	30	26"	34"	63"	1"	1"	630	14	14	8
DMV1.5DR60VT1	1.5 (2)	5.3	5.3	60	32"	38"	78"	1"	1"	630	14	14	8
DMV1.5DR80VT1	1.5 (2)	5.3	5.3	80	32"	38"	78"	1"	1"	630	14	14	8
DMV1.5DR120VT1	1.5 (2)	5.3	5.3	120	32"	38"	86"	1"	1"	630	14	14	8
DMV2DR30VT1	2 (2)	8	8	30	26"	34"	63"	1"	1"	680	18	17	9
DMV2DR60VT1	2 (2)	8	8	60	32"	38"	78"	1"	1"	520	18	17	9
DMV2DR80VT1	2 (2)	8	8	80	32"	38"	78"	1"	1"	590	18	17	9
DMV2DR120VT1	2 (2)	8	8	120	32"	38"	86"	1"	1"	740	18	17	9
DMV3DR80VT1	3 (2)	13.5	13.5	80	31"	51"	78"	1-1/4"	1-1/4"	960	22	20	10
DMV3DR120VT1	3 (2)	13.5	13.5	120	33"	52"	79"	1-1/4"	1-1/4"	1108	22	20	10
DMV5DR80VT1	4 (2)	17	17	80	33"	51"	78"	1-1/4"	1-1/4"	1010	31	29	14.5
DMV5DR120VT1	4 (2)	17	17	120	34"	52"	79"	1-1/4"	1-1/4"	1160	31	29	14.5
DMV5HDR80VT1	5.4 (2)	21	21	80	35"	51"	78"	1-1/4"	1-1/4"	1320	35	34	17
DMV5HDR120VT1	5.4 (2)	21	21	120	35"	52"	79"	1-1/4"	1-1/4"	1470	35	34	17

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
 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

DIFFERENT CONFIGURATIONS AND WIDER RANGE OF PUMP SIZES ARE AVAILABLE
(DUPLIX, TRIPLEX, QUADPLEX, PENTAPLEX, EXPANDABLE)
(HORIZONTAL TANK-MOUNTED, TANK-OVER STACKMOUNT, STACKMOUNT, INDUSTRIAL, LABORATORY)
CONSULT TRI-TECH MEDICAL INC. FOR MORE INFORMATION

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