

The EMSE CORPORATION Industrial vacuum system is a completely packaged assembly featuring an oil-lubricated rotary vane vacuum pump, U.L. listed control cabinet, an ASME receiver and the 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 and wiring is complete and operationally tested prior to shipment. Liquid tight conduit, fittings and junction boxes are provided for all control and power wiring.

VACUUM PUMP

The Industrial vacuum pump is a continuous duty, rotary vane, air-cooled, equipped with non-asbestos vanes, having a minimum life of 40,000 hours. The pump is provided with a full recirculated oil supply. The oil separation consists of four stages of oil and smoke eliminators, capable of removing 99.9+% of oil and smoke particles from the exhaust. The vacuum pump is driven by a 3 phase, 60 cycle, TEFC NEMA C-face, motor.

The vacuum pump is supplied with an inlet check valve, inlet isolation valve, built-in anti-suck-back valve, inlet filter screen, oil sight gauge, oil drain valve, exhaust pressure gauge, high discharge temperature switch, inlet and discharge flexible connectors and a shut-off cock for gauge and vacuum switches.

RECEIVER

The system includes a vacuum receiver of ASME construction rated for 200 PSI MWP. The tank includes a vacuum gauge, and manual tank drain.

CONTROL PANEL

The UL listed control panel is supplied in a NEMA 12 enclosure. Externally operable circuit breakers with a door interlock, control circuit transformer with fused primary and secondary coil, H-O-A switches, magnetic starters with 3 leg overload protection and reset switches are standard. The control panel uses relay logic and vacuum switches to provide on off operation. It includes minimum run timers to prevent short cycle operation and run time indicators. The visual alarm will stay on until manually reset. The panel includes a set of dry contacts for connection to the master alarm.

EMSE Standard Control Panel: 4.3” Touchscreen HMI

The control system provides automatic lead/lag sequencing and automatic alternation of all vacuum pumps based on first-on/first-off principle with provision for simultaneous operation if required.

The control panel features:

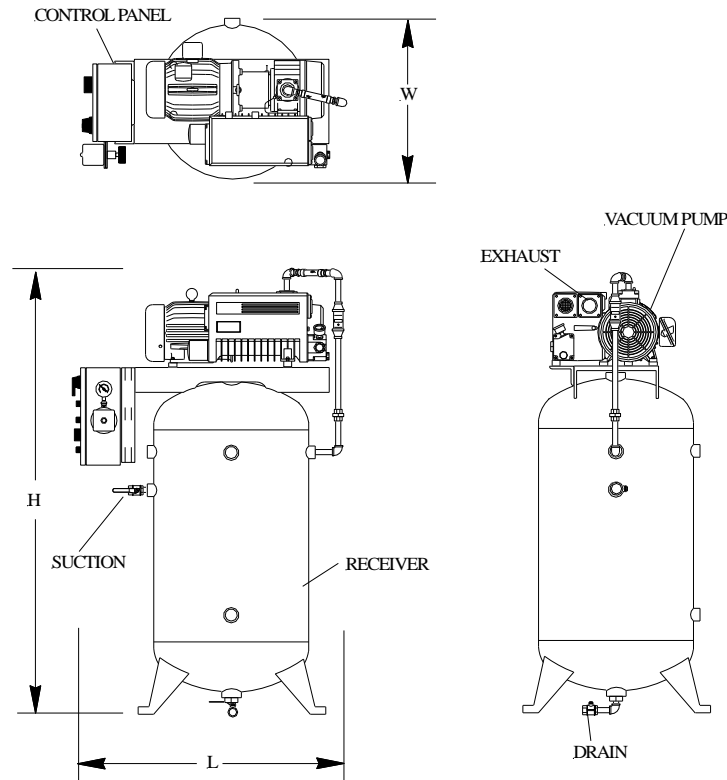
- A 4.3” Touchscreen with screen displays inclusive of:
 - Service alerts, runtime hour meters, system status, system vacuum level
 - Visual/audible alarm indications with isolated contacts for all standard remote alarms
 - Event log recording alarms and system activity
- NEMA 12 control panel enclosure
- Circuit breaker disconnects for each motor with external operators
- Full voltage motor starters with overload protection
- Vacuum level controlled by a vacuum transducer
- Vacuum switches are provided as a back-up to the vacuum transducer in the event of failure
 - **Options:**
 - 24V Control Circuit
 - VFD
 - Ethernet connectivity and embedded web page for remote monitoring of alarms and system status
 - BacNet Gateway
 - Modbus

WARRANTY

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

Optional System Accessories

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| <input type="checkbox"/> Oxygen Assured Vacuum Pumps | <input type="checkbox"/> Exhaust Muffler |
| <input type="checkbox"/> Rust protection receiver lining | <input type="checkbox"/> Receiver gauge glass |
| <input type="checkbox"/> Galvanized receiver | <input type="checkbox"/> Bacteria inlet filter with flask |



System Model	HP	Capacity at 19" Hg (SCFM)		Inlet NPT	Outlet NPT	Tank (gallon)	Dimensions (inches)			Weight (lbs.)	Sound level dB(A)	System FLA		
		Pump	System				L	W	H			208V	230V	460V
1SRB1.5T30V	1.5	7	7	1 1/4"	1 1/4"	30	34	24	60	365	66	4.5	4	2
1SRB1.5T60V	1.5	7	7	1 1/4"	1 1/4"	60	42	27	70	380	66	4.5	4	2
1SRB1.5T80V	1.5	7	7	1 1/4"	1 1/4"	80	42	30	69	395	66	4.5	4	2
1SRB2T30V	2	11	11	1 1/4"	1 1/4"	30	34	24	65	380	67	4.5	4	2
1SRB2T60V	2	11	11	1 1/4"	1 1/4"	60	42	27	70	395	67	6.5	6	3
1SRB2T80V	2	11	11	1 1/4"	1 1/4"	80	42	30	69	420	67	6.5	6	3
1SRB3T80V	3	17	17	1 1/4"	1 1/4"	80	42	30	71	400	68	8.4	8	4
1SRB3T120V	3	17	17	1 1/4"	1 1/4"	120	53	35	72	600	68	8.4	8	4
1SRB5T120V	5	26	26	1 1/4"	1 1/4"	120	53	35	78	690	70	15	14	7
1SRB5HT120V	5	37	37	1 1/4"	1 1/4"	120	53	35	78	710	70	15	14	7
1SRB7.5T120V	7.5	52	52	2"	2"	120	53	35	85	1000	74	21	20	10

NOTES:

1. To convert free air capacity (SCFM) to expanded air capacity (ACFM), multiply SCFM by 2.74
2. Maximum ambient temperature: 100°F for standard systems, 90°F if equipped with variable speed drive
3. Allow 36 in front of control panel and 24 inches around all other sides
4. Dimensions are subject to change