

HEAVY-DUTY
887 Challenger

PRODUCT CATALOG

BUILT FOR HEAVY-DUTY PERFORMANCE

MADE IN
THE USA



Reliable – Efficient – Cost Effective

NVE

National Vacuum Equipment, Inc.

Exclusive Manufacturer

Challenger Series

VACUUM PUMPS & BLOWERS

800-253-5500 | natvac.com



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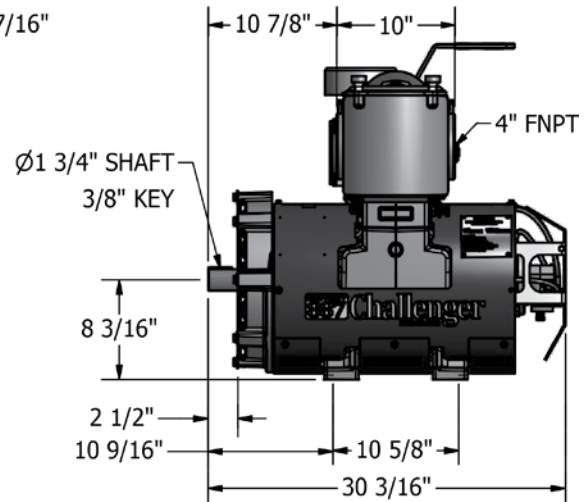
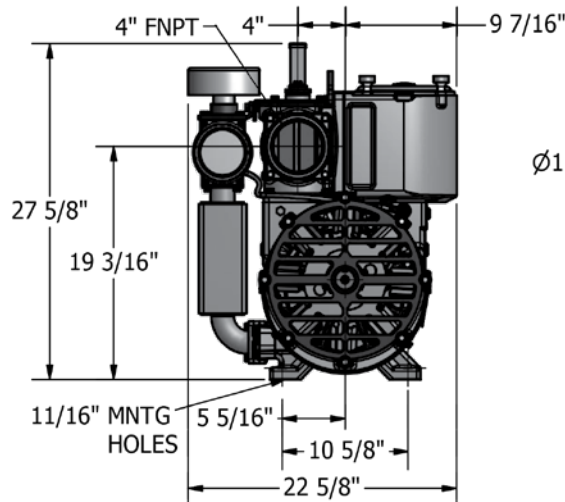
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887 HEAVY DUTY VACUUM PUMP FEATURES

- Proven crash protection allowing all major components to survive a catastrophic failure
- Four point automatic lubrication system
- Multiple drive options
(gearbox and hydraulic)
- Integral, easily accessible, final filter
- Vane flush port with valve
- Vane wear inspection port through the filter
- Enhanced axial load capabilities.
- Lifetime warranty against cracked housing
- Two year warranty against manufacturer defect
- Vacuum-controlled ballast air cooling system
- Attached ballast silencing system
- Enhanced exhaust check for minimal free air obstruction
- Designed, built, and supported in the USA

FAN-COOLED 887 CHALLENGER | SPECIFICATIONS

AIR FLOW - FREE AIR	532 CFM	
MAXIMUM VACUUM	28" Hg	
OPERATING RANGE - RPM	1100	1200
HP REQUIRED @ FULL VACUUM	30	33
HP REQUIRED @ 10 PSI	27	31
HP REQUIRED @ 15 PSI	27	36
HP REQUIRED @ 20 PSI	33	42
HP REQUIRED @ 25 PSI	38	48
HP REQUIRED @ 30 PSI	50	54
PORTING SIZE	4"	
SHAFT SIZE (3/8" KEY)	1 3/4"	
APPROXIMATE WEIGHT	631 lbs	



**Images & specifications for reference only
Please see set up & operation guide for operating parameters.*

PRODUCT DESCRIPTION	PART NUMBER	WEIGHT (estimated)	MSRP
Challenger 887 CW Fan Cooled	103-887-FD	663 lbs	\$5,460.00
Challenger 887 CCW Fan Cooled	103-887-FS	663 lbs	\$5,460.00

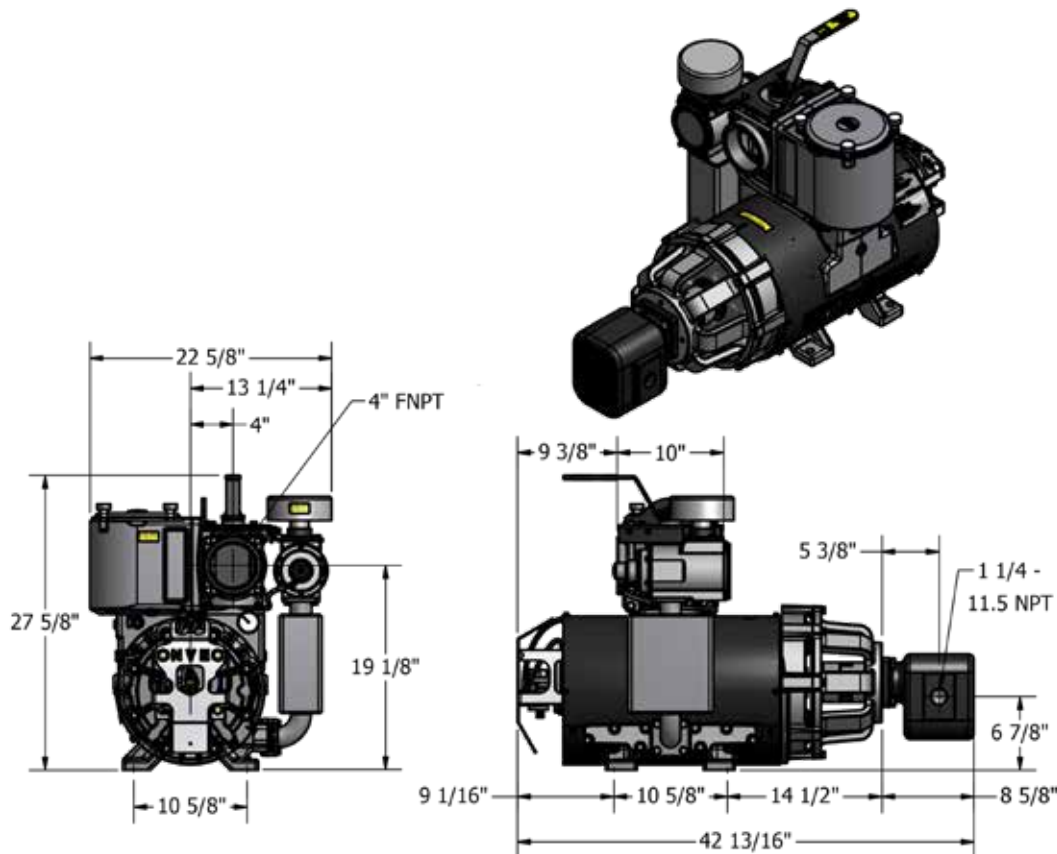
887 Hydraulic Motor Drive

FEATURES

- Heavy-duty automatic alignment bracket
- SAE B face 2 and 4 bolt flange
- Coupler set
- Designed, built, and supported in the USA

HYDRAULIC MOTOR SPECS

- Mount = SAE 4 BOLT "B" FLANGE
- Shaft = 1.25" with 5/16" Keyway
- Side Ports = 1.25" NPT
- Cubic Inch Displacement = 8.088³/REV
- Max working pressure = 2500 psi
- Hydraulic pump should supply 46-48 gpm @ 2000 psi to turn the 887 at 1200 rpm
- Customer must install a case drain and plumb back to tank

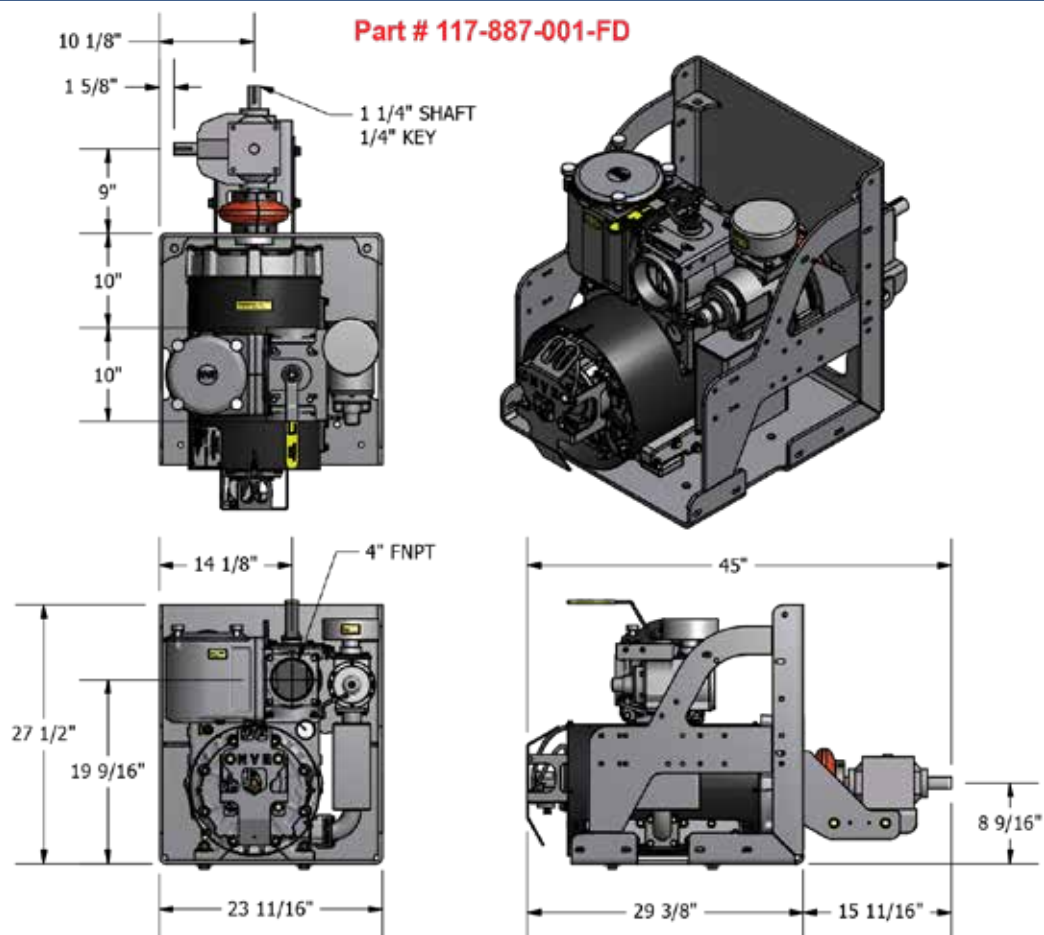


PRODUCT DESCRIPTION	PART NUMBER	WEIGHT (estimated)	MSRP
887 Fan Cooled CW w/HYD Drive	117-887-HYD-FD	761 lbs	\$7,083.00
887 Fan Cooled CCW w/HYD Drive	117-887-HYD-FS	761 lbs	\$7,083.00

887 Pump Stand Complete Packages

FEATURES

- Vacuum pump included; specify rotation
- Rugged 3/8" construction, powder coat painted, pump stand
- 400 series three-shaft gearbox accommodates clockwise and counterclockwise rotation
- Coupler set with shear protection
- Easy-align, adjustable gearbox bracket
- Also available with hydraulic drive
- Designed, built, and supported in the USA



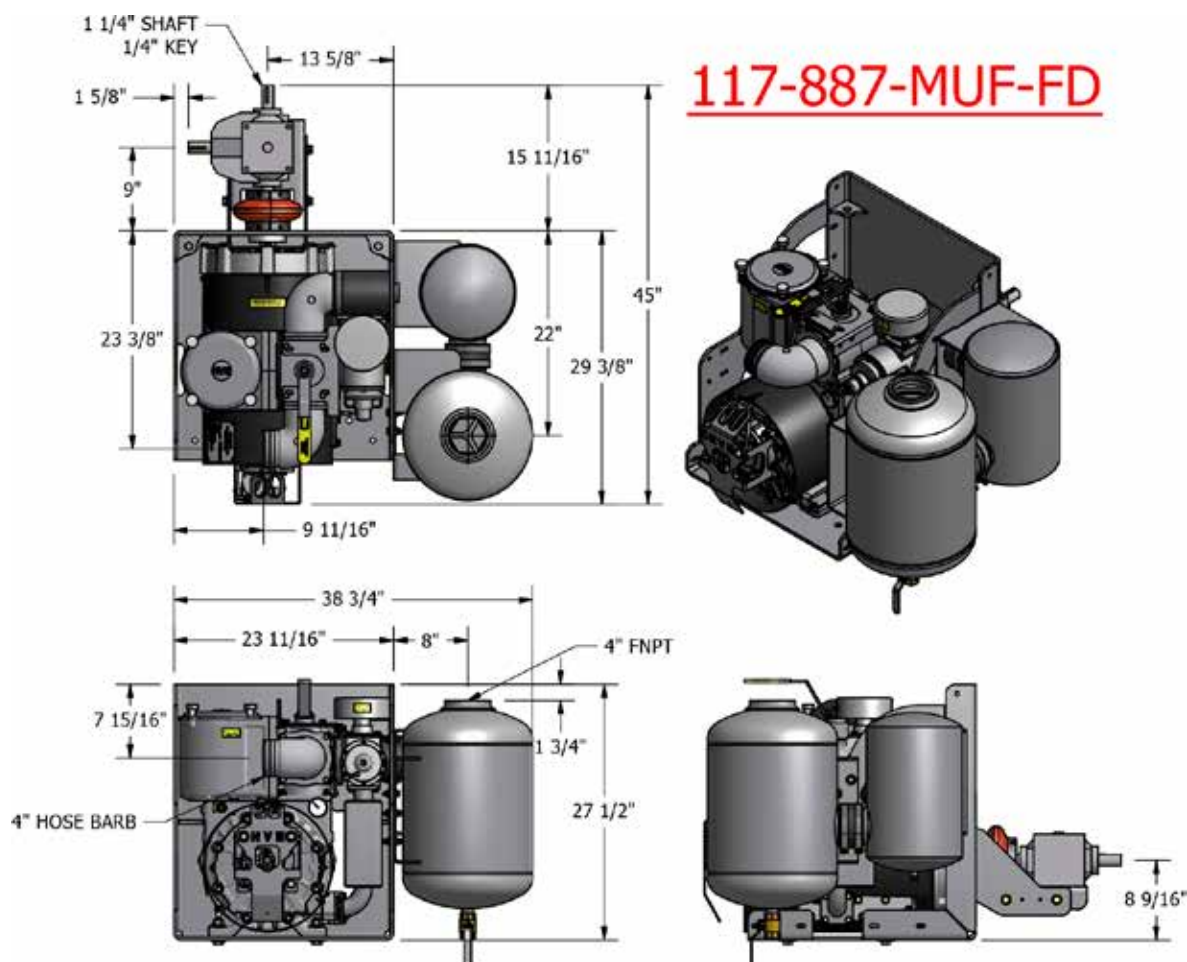
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT (estimated)	MSRP
887 Fan Cooled CW Pump Stand Complete w/ Gearbox	117-887-001-FD	887 lbs	\$6,869.10
887 Fan Cooled CCW Pump Stand Complete w/ Gearbox	117-887-001-FS	887 lbs	\$6,869.10
887 Fan Cooled CW w/HYD DR Pump Stand Complete	117-887-001H-FD	960 lbs	\$7,665.00
887 Fan Cooled CcW w/HYD DR Pump Stand Complete	117-887-001H-FS	960 lbs	\$7,665.00

887 Muffler Packages

FEATURES

All features included in the Pump Stand Complete plus:

- Vacuum pump included; specify muffler location
- 14" round oil catch muffler
- 1" Drain Valve
- All elbows, fittings and high temp hoses are factory connected
- Designed, built, and supported in the USA



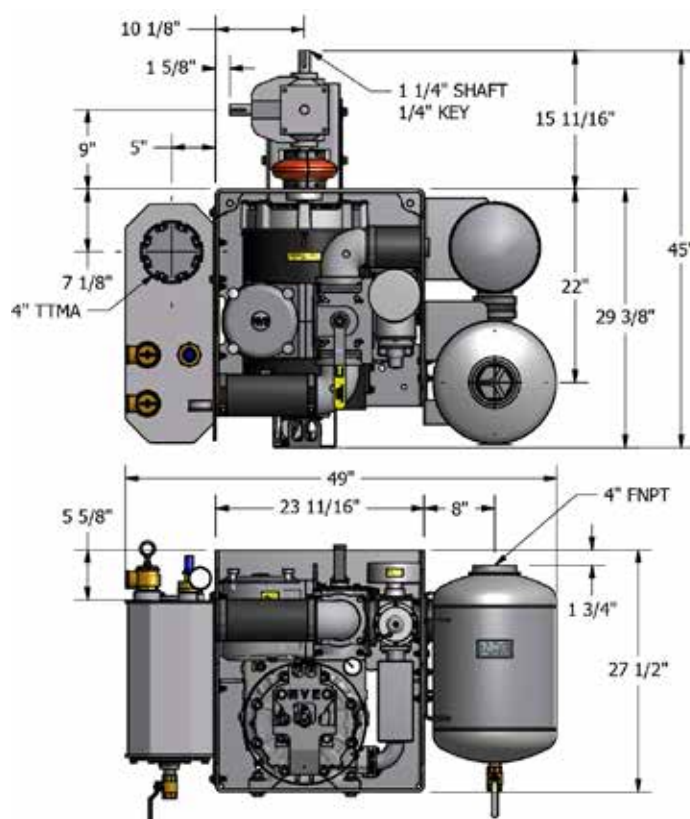
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT (estimated)	MSRP
887 Fan Cooled Right Hand CW Muffler Package	117-887-MUF-FD	992 lbs	\$7,402.00
887 Fan Cooled Left Hand CCW Muffler Package	117-887-MUF-FS	992 lbs	\$7,402.00
887 Fan Cooled Right Hand CW w/Hydraulic Drive Muffler PKG	117-887-MUF-FDH	1073 lbs	\$8,200.00
887 Fan Cooled Left Hand CCW w/Hydraulic Drive Muffler PKG	117-887-MUF-FSH	1073 lbs	\$8,200.00

887 Max Packages

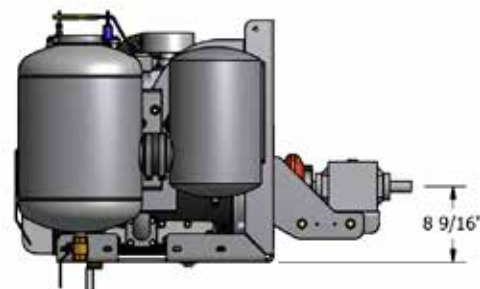
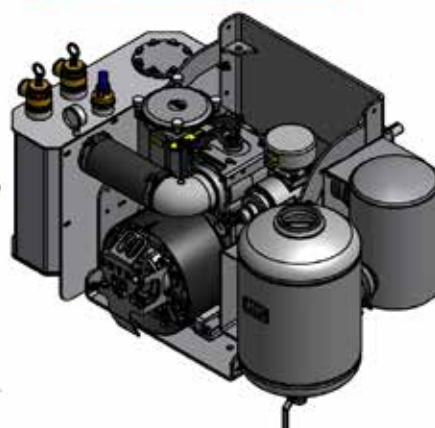
FEATURES

All features included in the Pump Stand Complete plus:

- Vacuum pump included: specify muffler location (left or right)
- 14" round oil catch muffler
- High efficiency aluminum moisture trap
 - Accessible 6" stainless steel float ball
 - BUNA positive shut-off ball seat
 - 2" lever drain valve
- Blank intake flange standard (other fittings available)
- Vacuum/pressure relief valve and gauge
- Stainless steel mesh filter
- All elbows, fittings and high temp hoses are factory connected
- Right-hand or left-hand muffler location available
- High-efficiency intake exhaust silencer
- Designed, built, and supported in the USA



117-887-MAX-FD



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT (estimated)	MSRP
887 Fan Cooled Right Hand CW MAX PKG	117-887-MAX-FD	1092 lbs	\$8,505.00
887 Fan Cooled Left Hand CCW MAX PKG	117-887-MAX-FS	1092 lbs	\$8,505.00
887 Fan Cooled Right Hand CW w/Hydraulic Drive MAX PKG	117-887-MAX-FDH	1150 lbs	\$9,565.00
887 Fan Cooled Left Hand CCW w/Hydraulic Drive MAX PKG	117-887-MAX-FSH	1150 lbs	\$9,565.00

887 Components & Accessories



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Coupler Hub E20 1 1/4"	424-200-125	7.25 lbs	\$46.00
Coupler Hub E20 1 3/4"	424-200-175	7.25 lbs	\$46.00
Coupler Flex Element E20	424-200-E20	4.15 lbs	\$120.00



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Gearbox 400 Series 1:1 Ratio with 1 1/4" shaft	422-400-1	28.30 lbs	\$425.00



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Hydraulic Adapter	120-400-001	17 lbs	\$190.00



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Hydraulic Motor for 887	440-2500-001	100 lbs	\$1250.00



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Coupler Flange L150 x 1 1/4" with 1/4" Keyway	424-150-125-HYD	5.10 lbs	\$35.00
Coupler Flange L150 x 1 3/4" with 3/8" Keyway	424-150-175	4.55 lbs	\$45.26
Coupler Spider L150 NBR	424-150-S	.20 lbs	\$25.00



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Relief Manifold 4" Kit	406-301-4-KIT	8.50 lbs	\$291.28



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Flange 4" Adjustable Elbow	150-063-014	1.50 lbs	\$8.00
O-ring Viton for Elbow	120-064-012	.01 lbs	\$4.90
Elbow 4" 90 Degree Alum. Hose Barb x O-ring	802-063-001	2.00 lbs	\$39.00
Elbow 4" 90 Degree Alum. Hose Barb x Hose Barb	802-063-012	.69 lbs	\$32.50

887 Maintenance Items



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Essential Black Box - Pump Tool Kit	120-0T15	20 lbs	\$698.00

The Essential Black Box is a complete pump tool kit that makes it easier to rebuild the Challenger vacuum pump. It comes with:

- Heavy Duty Carrying Case
- Vacuum/Pressure Testing Gauge
- Reamer
- Infrared Thermometer
- Laser Tachometer
- 607 PRO, 866 & 887 Seal Drivers with Handles
- (4) T-Handles
- Coupler Alignment Tools
- 607 PRO & 866 Shaft Alignment Tools
- (2) Shims and the 607 PRO, 866 & 887 owner's manuals



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Tool Kit for 887		0 lbs	\$0

The Tool kit makes it easier to rebuild the Challenger vacuum pumps and comes **with**:

- Seal driver
- Reamer
- (2) T-Handles
- (2) shims



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Repair Kit 887	115-887-0	11.60 lbs	\$1102.00
Repair Kit 887 (without bearings)	115-887-0B	6.60 lbs	\$1007.00

The NVE Challenger repair kits come with or without bearings and include the seals, gaskets, and vanes required for repair.



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Diesel Flush Kit	320-081-002	2 lbs	\$86.22

The NVE Challenger flush kits come with all the required items to properly flush your Challenger vacuum pumps.



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT	MSRP
Oil Vacuum Pump R&O ISO 68	150-220-VPOIL	7.35 lbs	\$21.39

The NVE Challenger Pump Oil is ISO 68; though this oil is not required, it is recommended to keep your vacuum pump lubricated properly, particularly in extreme conditions. Sold by the case, six (6) gallons per case.

We Are NVE

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120,000 square foot manufacturing facility in Traverse City, Michigan.*

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VACUUM PUMPS & BLOWERS

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