

NRTL CERTIFIED EXPLOSION PROOF INDUSTRIAL VACUUMS

Dust Explosion Proof Industrial Vacuums

Hazardous Locations Equipment for Explosive Atmospheres



Are You OSHA Compliant?

- Are you aware of the new OSHA combustible dust initiative?
- Are you concerned with protecting your employees from a possible secondary dust explosion?
- Are walls, overhead beams, joints, and pipes collecting dust?
- Do you have layers of dust that are thicker than a paper clip?
- Is your dust finer than 420 microns (40 mesh)?
- Could your residual dust be flammable or combustible?
- Do your current vacuums produce a static charge?
- Have you failed to create an internal documented housekeeping procedure?

If you answered YES to any of the above, there is potential for a combustible dust explosion. There are numerous materials that are highly explosive in dust form, and in most combustible dust accidents, employers and employees were not aware such a hazard existed*. OSHA mandates that companies who produce these potentially deadly dusts, implement hazardous dust inspection, testing, housekeeping, and control program. This includes only using vacuums approved for dust collection. Ruwac's FRV Series vacuums are certified for use in the following locations: Class I, Division II, Group D. Class II, Division I, Group F & G. These include the UL 1203 standards, and CSA standards C22.2 No. 30-1986, and C22.2 No. 25-1966.



FRV 110 - DS1000 - EX



FRV 100 - AV1000 - EX

NRTL Certified

*OSHA CPL 03-00-008- Combustible Dust National Emphasis Program 3/11/2008

Ruwac

We vacuum everything.

Call Toll Free: 1-800-614-9598 (U.S. only)

WorkDustFree.com



Ruwac USA is an ISO 9001 certified company. We guarantee that all machines are manufactured to the very highest US manufacturing standards.

ISO 9001 REGISTERED

Protect Employee Safety With Explosion Proof Industrial Vacuums

NRTL Certified
Class I Group D
Class II Groups F&G

FEATURES AND BENEFITS



Vacuum Producer - Single Phase / Three Phase

Multi-stage centrifugal turbine produces more suction using less horsepower than any other in its class. Explosion proof TEFC motor is maintenance free, rated for continuous duty and is completely serviceable at one of many locations nationwide. All motors are UL and CSA listed through their manufacturer and are approved for use in Class II, Dust-Ex locations.

Superior Filtration

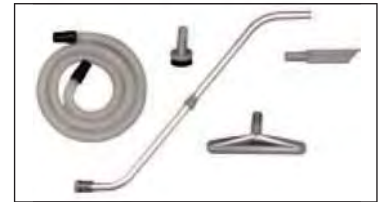
Our state-of-the-art, MicroClean filter provides 13 square feet of filtration 99.9% efficient at 0.5 micron. Primary oversized filter is low loading to prevent air flow constriction and features a reinforced frame and maintenance-free filter system.

Durable Housing

Constructed with 900 tons of pressure, compression cast composite housing will not dent, break or rust. The carbon impregnated housing is chemically neutral and static dissipating (10^{-6} Ohms) to eliminate static discharge. Housing is modular to accommodate filter upgrades and is backed by our lifetime warranty.

Explosion Proof Accessories

Fully conductive non-sparking hoses and utility tools are available for a variety of applications.



SINGLE PHASE SPECIFICATIONS

ELECTRIC

AIR OPERATED / PNEUMATIC

Technical Data	FRV 110	FRV 220	FRV 100*	FRV 200**
Voltage	110 Volts	220 Volts	n/a	n/a
Horsepower	1.5 HP 16 amps	1.5 HP	n/a	n/a
Motor Type	Single Phase	Single Phase	Single Venturi	Dual Venturi
Vacuum Pressure	5.0 Hg	5.0 Hg	13 Hg	16 Hg
Air Flow	135 CFM	135 CFM	150 CFM	275 CFM
Main Filter Area	13 ft ²	13 ft ²	13 ft ²	28 ft ²
Filter Efficiency	99.9% @ .5 micron	99.9% @ .5 micron	99.9% @ .5 micron	99.9% @ .5 micron
Noise Emission	68 dBA	68 dBA	72 dBA	72 dBA
Inlet	2"	2"	2"	2.75"
Weight	150 lbs	150 lbs	100 lbs	133 lbs
L x W x H	32" x 20" x 41"	32" x 20" x 41"	32" x 20" x 41"	32" x 20" x 54"
Accessory Package	151510DEX	151510DEX	151510DEX	202025DEX

* FRV 100 requires 71 PSI and 65 CFM with a 1/2" unrestricted airflow to operate.

** FRV 200 requires 100 PSI and 100 CFM with a 1" unrestricted airflow to operate.



Latta Equipment
330 East Hebron St. Ste J
Charlotte, NC 28273

ISO 9001 Registered



Phone: (704) 752-7944
Fax: (704) 414-6811
WorkDustFree.com

Toll Free: 1-800-614-9598 (U.S. only)

Did you know...

We also offer Class II Dust-Ex vacuums with the same, intrinsically safe features in an air operated version. Our pneumatic (air operated) FR V vacuums are maintenance free and feature no moving parts. The vacuum and components comply with hazardous location requirements: Class II - Groups F & G. Please contact us for more information.

FRV SERIES - EXPLOSION PROOF

Certified for use in Hazardous Locations

OF THE FRV SERIES

More Power, More Filtration

Need anything more? For applications with higher demands, the FR V Series also includes models that offer both increased horsepower and filter area for collecting hazardous dust. For more information about customizing a FR V Series vacuum to suit your application needs, please contact Ruwac using the information provided below.

Air Diffuser / Silencer

The exhausted air from the turbine is diffused to prevent the re-entrainment of laden dust. The motor deck silencer provides a quiet working environment, even in continuous use.

Easy to Empty Dustpan

Large dustpan drops down with a foot lever for easy emptying without lifting a heavy motor deck. Our filtration system has no messy pre-filters, consumables or bags to change. Dustless emptying leaves filter untouched to prevent recontamination of area.

Sturdy Base

The heavy duty 3" double casters, counterbalanced base, and low inlet provide stability and easy maneuverability. All components have electrical continuity to eliminate static loading.

Modular Construction

Easily upgradeable and expandable to meet future requirements.



THREE PHASE SPECIFICATIONS

ELECTRIC

Technical Data	FRV 1150	FRV 1220	FRV 1400
Voltage	203, 230-460 Volts	208, 230-460 Volts	208, 230-460 Volts
Horsepower	2.0 HP	3.0 HP	5.0 HP
Motor Type	Three Phase	Three Phase	Three Phase
Vacuum Pressure	5.0 Hg	5.7 Hg	6.2 Hg
Air Flow	180 CFM	180 CFM	300 CFM
Main Filter Area	13 ft ²	13 ft ²	28 ft ²
Filter Efficiency	99.9% @ .5 micron	99.9% @ .5 micron	99.9% @ .5 micron
Noise Emission	68 dBA	68 dBA	72 dBA
Inlet	2"	2"	2.75"
Weight	155 lbs	155 lbs	200 lbs
L x W x H	32" x 20" x 35"	32" x 20" x 35"	32" x 20" x 50"
Accessory Package	151510DEX	151510DEX	202025DEX

Ruwac Dust Ignition Proof Industrial Vacuums are rated for and meet the specifications required to operate in the following locations:

Class II
Atmospheres where the hazardous location is due to the presence of combustible dust.

Division 1
Where the hazardous environments would only be expected to be present during abnormal conditions such as breakage, leakage or accidental rupture.

Class II, Group F
Atmospheres containing carbon black, coal or coke dust.

Class II, Group G
Atmospheres containing flour, starch or grain dust; combustible dusts having resistivity of 10⁸ Ohm-centimeter or greater.

WARNING: A HEP A filter used for cleaning atmospheres containing lead must be handled as hazardous waste. Proper safety maintenance and procedures should be followed when coming in contact with HEPA filters labeled as hazardous.

For information regarding other explosion proof industrial vacuums or to use an explosion proof vacuum in a different hazardous environment, please contact a representative at (704) 752-7944.

Absolute Filtration

For special applications that require absolute filtration, we have HEP A (High Efficiency Particulate Air) filters available for all our explosion proof vacuums. Our HEPA filters are individually DOP tested and certified to be 99.997% efficient at collecting and containing particles down to and including 0.3 microns in size. Please contact a Ruwac representative for more information.



Accessories For Explosion Proof Applications

EXPLOSION PROOF ACCESSORY PACKAGES

151510DEX: 10' 1.50" Accessory Kit



consists of:

- 350010 10' Urethane, Static Conductive Hose, 1.50" ID
- 3502 54" Wand, 2-Piece, Aluminum Shaft
- 3507 11" Crevice Tool, Aluminum Body
- 3520C 3" Round Brush, Nylon Bristles, Static Conductive
- 3512AM 14" Floor Brush, Metal Body, Anti-Static Bristles
- 5225-BL Reducer w/ Button Lock, 2" BL Inlet to 1.50" Hose/Tool

151525DEX: 25' 1.5" Accessory Kit



consists of:

- 350025 25' Urethane, Static Conductive Hose, 1.50" ID
- 3502 54" Wand, 2-Piece, Aluminum Shaft
- 3507 11" Crevice Tool, Aluminum Body
- 3520C 3" Round Brush, Nylon Bristles, Static Conductive
- 3512AM 14" Floor Brush, Metal Body, Anti-Static Bristles
- 5225-BL Reducer w/ Button Lock, 2" BL Inlet to 1.50" Hose/Tool

202025DEX: 25' 2.00" Accessory Kit



consists of:

- 504025 25' Urethane, Static Conductive Hose, 2.00" ID
- 5003SS 45" Wand, one Bend, Stainless Steel
- 5060 20" Floor tool w/ Rollers and squeegee, Aluminum Body
- 5016 15" Crevice Tool, Aluminum Body

1560OHDEX: 1.50" Overhead Accessory Kit



consists of:

- 356160 (2) - 60" Wand w/ Tool Coupling Aluminum Shaft
- 3545 4 - 6" Pipe Cleaning Tool, Nylon Bristles, Metal Body
- 3509H 9" Wall Brush Horse Hair Bristles, Aluminum Body

For Increased Capacity . . .



PRE-SEPERATION SYSTEMS

The High Efficiency Cyclone Pre-seperation Systems are proven to effectively remove 97% of debris before reaching the filter. This dramatically improves filter life and vacuum power. The lid is completely removable for easy emptying, and is fully adaptable to any existing application.



ADDITIONAL FEATURES



TIPPING MECHANISM

Allows for quick and easy disposal of collected material

Wet Collection for Explosive Materials

NA35



Immersion Separators are designed to safely collect explosive material, by submerging 100% of material in liquid. This ensures that no outside ignition source will enter the vacuum, causing an explosion. These systems are also fully adaptable to work with an existing explosion proof application.

Common Types of Media that Require Wet Collection

- Aluminum
- TNT
- Titanium
- Magnesium
- Zirconium

FEATURES:

- 9 or 20 Gallon Capacity
- Heavy Duty Carbon Impregnated Housings or 11 Gauge Stainless Steel Housing
- 2.00" or 2.75" Aluminum Inlet Connections
- Lexan Sight Glass For Water Detection
- Stainless Steel Demisting Screen
- Water Main Filter
- Perforated Dispersion Screen
- Easy Filter Maintenance and Replacement

NA250



TRUWAC

For more information on explosion proof vacuums and accessories, contact a representative today (704) 752-7944 or toll free 1-800-614-9598 (U.S. only)

