

# SELF-CONTAINED FILTER BAG DUMP STATIONS

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Young Industries has been supplying Self-Contained Filter Bag Dump Stations for dust control since 1976. We saw the need for a system that would offer dust control when dumping paper bags, but not have loss and disposal of valuable powder that is typical when using a central dust collection system. We integrated a fan, pulse jet filter with silencing chamber into a dump hopper that offered a solution to most applications.



**ADVANCED  
TECHNOLOGY  
PROVEN DESIGN**

Over the last 40+ years we have supplied thousands of Bag Dump Stations for the users in the Food, Pharmaceutical, and Chemical Industries. We have been constantly expanding our line to cover the current needs of our users.

Young Industries now offers Six (6) standard size stations to cover a wide range of applications for dumping paper bags or drums. The size of the station is determined by the width of the inlet opening. With the range of units offered, the user can determine what size station is needed based on the physical size of the paper bags to be dumped in combination with the number of bags to be dumped per batch. Our units have a rugged tubular grating to allow the operator to place the bag on the grating, cut the bag and dump the contents into the hopper below.

Young Industries Self-Contained Filter Bag Dump Stations utilize pulse jet filter technology to continuously clean the filter bags or cartridges. Each unit has an integral fan and silencing chamber mounted within the housing. The fan draws dust from the bag dumping operation to the filter media located on the back interior of the stations. The dust is pulsed from the filter media and falls back into the hopper below. **NO LOSS OF PRODUCT TO A CENTRAL DUST COLLECTION SYSTEM.** We offer our units with Filter Bags or Filter Cartridges. The Filter bags are mounted horizontally for easy access. The filter cartridges are mounted vertical and are also easy to access.

# SELF-CONTAINED FILTER BAG DUMP STATIONS

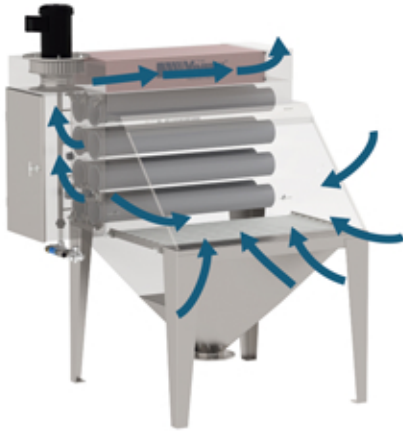
## BASIC OPERATION



Cartridge Style

During operation, the bag is placed on the bag grating. The operator opens the bag and dumps the material through the grate to the discharge hopper below. An air draw from the fan creates an inward air flow velocity at the station opening of 135 to 235 feet per minute. Dust particles from the bag dumping operation are carried by the air flow into the filter section where the dust particles are collected on the filter media.

## SELF CLEANING UNI-CAGE PULSE JET FILTER



Filter Bag Style

The filter section of the Self-Contained Filter Bag Dump Station is equipped with Young Industries' Uni-Cage filter system. The pulse jet's are controlled by a solid-state timer which progressively energizes solenoid valves to introduce pulses of compressed air through nozzles located over each bag or cartridge. The cleaning cycle alternates continuously, allowing those bags or cartridges that are not in the cleaning mode to continue filtering the air stream. The dust particles pulsed from the filters drops into the hopper section below so there is no loss of powder from the system. The clean air that discharges through the filter elements is ducted through a silencing chamber and goes back into the room. Various types of filter media are available to meet the need of the application. All Young Industries Self-Contained Filter Bag Dump Stations are available with secondary HEPA filtration to back up the primary filters of the unit.

## Model FBD24-6

The Model FBD24-6 Bag Dump Station is sometimes referred to as our Minor Ingredient Dump Station. It has a 24" wide inlet opening which is used for dumping small bags, or pails. Many time's this unit will be supplied in a flange mounted configuration, mounted directly to a bin or mixer. This unit has a 650 CFM fan with horizontally mounted filter bags for easy access.



## Model FBD30-6

The Model FBD30-6 Bag Dump Station is a mid-size unit with 32" wide inlet opening. This station is normally used for dumping bags and small drums. The width of this unit makes it versatile for many dumping applications. This unit has a 650 CFM fan with horizontally mounted filter bags for easy access.

# SELF-CONTAINED FILTER BAG DUMP STATIONS

## Model FBD10-2-C

Like the Model FBD30-6 Bag Dump Station, this is a mid-size unit with 32" wide inlet opening. This station is normally used for dumping bags and small drums. The width of this unit makes it versatile for many dumping applications. This unit has a 650 CFM fan with vertically mounted filter cartridges. It is often used when there is minimum floor space available for positioning a Filter Bag Dump Station.



## Model FBD10-3-C

The Model FBD10-3-C Bag Dump Station offers a 38" wide inlet opening which is a comfortable width for handling most paper bags, or drums, or those applications where larger batches of bags are to be dumped into a process, the width of this unit allows for comfortable and quick dumping of most size paper bags. This unit has a 1200 CFM fan with vertically mounted filter cartridges.

## Model FBD42-8

The Model FBD42-8 Bag Dump Station has a 45" wide inlet opening. This size station makes it an excellent choice for applications where dumping larger quantities of paper bags or drums is needed. The width of the unit easily handles most bags. This unit has a 1200 CFM fan with horizontally mounted filter bags for easy access.



## Model FBD10-8-C

The Model FBD10-8-C Bag Dump Station has a 54" wide inlet opening. With the additional width of the unit we also included 8 filter cartridges for the maximum amount of cleanable filter media. This station is used for light fluffy products like fumed silica that require a wider opening due to the size of the bag to be dumped. This unit has a 2600 CFM fan with vertically mounted filter cartridges.

## CONSTRUCTION

Young Industries Filter Bag Dump Stations can be constructed or carbon steel, or 300 series stainless steel as standard. When needed, we can also manufacture units with other special metals and coatings.



16 PAINTER STREET, MUNCY, PA 17756

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# SELF-CONTAINED FILTER BAG DUMP STATIONS

## DESIGN VARIATIONS

Young Industries custom designs our stations to meet the exact needs of the application. Some of our standard designs include:

- ▶ Hopper type with hopper size, capacity, and discharge as needed.
- ▶ Flanged type for mounting directly to mixers or large hoppers
- ▶ Low headroom units for those applications where headroom is minimal
- ▶ Portable units with either casters or fork-lift channels when a single station is needed for multiple locations
- ▶ One Station Does It All – We provide Filter Bag Dump Stations that can handle paper bags, drums, and bulk bags in the same station. This offers the flexibility to handle most any container that needs to be emptied into the process. Offered in several sizes and configurations this station does it all! If you are not sure how your bulk material will be added to the process consider this “One Station Does It All” unit.
- ▶ Metering and Conveying Systems – We have been providing systems to meter, weigh, and convey powders from Self Contained Filter Bag Dump Stations for 40+ years. Our Mechanical and Pneumatic Convey Systems give us the versatility to convey powders any distance required.
- ▶ Workstations – Our station can be supplied with interior shelf so operators can handle powders within the station for dust containment.



One Station Does It All



Bag Dump Station With Product Pump



Bag Dump Station With Transvair-Aero  
Mechanical Conveyor

# SELF-CONTAINED FILTER BAG DUMP STATIONS

## Portable Bag Dump Station

When a single station is needed for use at multiple locations, Young Industries can provide Filter Bag Dump Stations with casters for portability. This includes Bag Dump Stations with Bag Compactors, or stations that have conveying or metering systems attached.



Drum Loaded Into Dumper



Dumper Chute Tipped Into Bag Dump Station

## Drum Dumper

For Filter Bag Dump Stations with inlet openings 32" and wider, Young Industries can provide a Portable Drum Dumper. The Dumper can easily handle drums weighing up to 750 lbs. and drum sizes up to 55-gallon. In operation the Dumper is positioned directly in front of the Dump Station. A drum is loaded into the dumper and clamped in place. The Drum Dumper then tilts the drum to a 45-degree angle so the contents discharge down the dumper chute into the Filter Bag Dump Station.

Dumpers are available with electric motor driven hydraulic system or pneumatic motor driven hydraulic system for positioning the drum. Dumper chutes are carbon steel, or various grades of 300 series stainless steel.

The addition of the Portable Dumper makes it easy to handle drums and or paper bags in the same Filter Bag dump Station.



Hopper Type Bag Dump Station



Flange Mounted Station

## "NIOSH" Tested

Young Industries Filter Bag Dump Station was tested by The National Institute for Occupational Safety and Health (NIOSH) Complete report available.



# SELF-CONTAINED FILTER BAG DUMP STATIONS

## EMPTY BAG COMPACTORS

Young Industries Empty Bag Compactors offer an efficient method to dispose of empty paper bags. Our bag compactors are pneumatically operated and can be attached to the side of any Filter Bag Dump Station. When the compactor is used in combination with the Filter Bag Dump Station, the bag compactor chute attaches to the side of the bag dump station. The operator slides the empty paper bag into the compactor through the chute, never having to remove the bag from the dust containment area. When the compactor's chamber is filled with empty bags, the operator initiates the compaction cycle through the pneumatic control panel provided.

The compactor is safety-interlocked with the bag dump station so that the charge door of the station must be closed for the compactor to operate. The compaction cycle is brief, and the paper bags are compressed into a heavy-duty plastic bag for disposal. A large side access door on the compactor allows for easy removal of the plastic bag.

Young Industries Empty Bag Compactors are provided in two standard sizes. The Model BC-1 compacts up to 120 bags per bundle while the larger BC-2 unit compacts up to 240 bags per bundle.

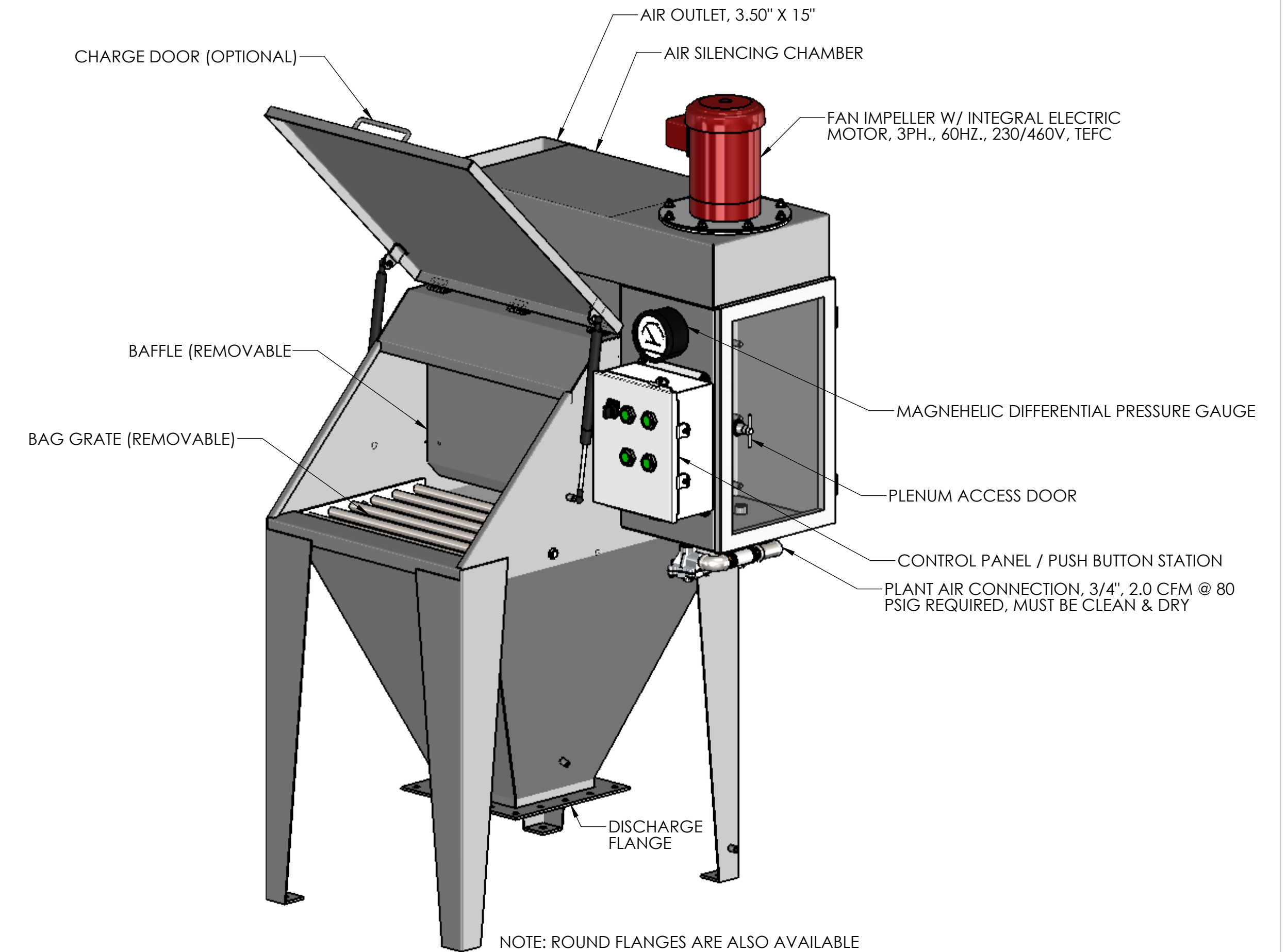
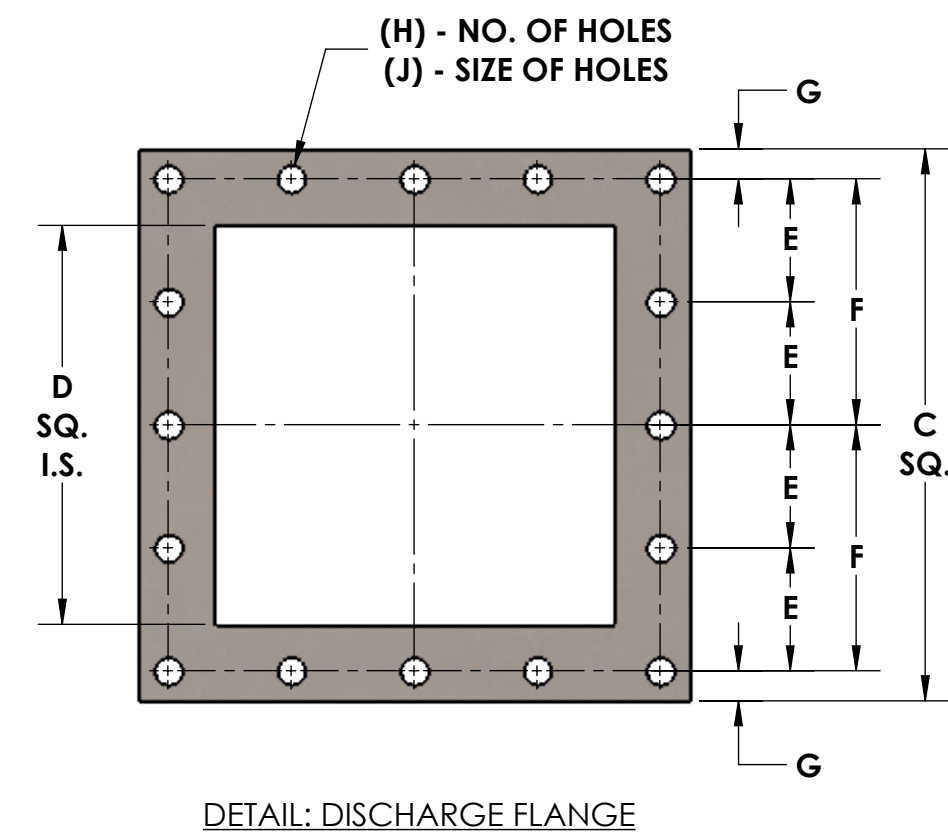
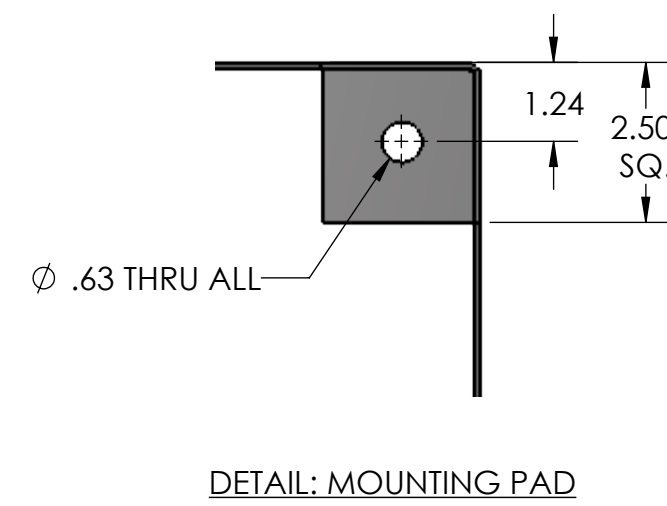
The standard compactor is constructed of carbon steel, but when needed can be provided of 300 series stainless steel. Since the unit is pneumatically operated it has no electrical connection and can be safely used in hazardous areas.



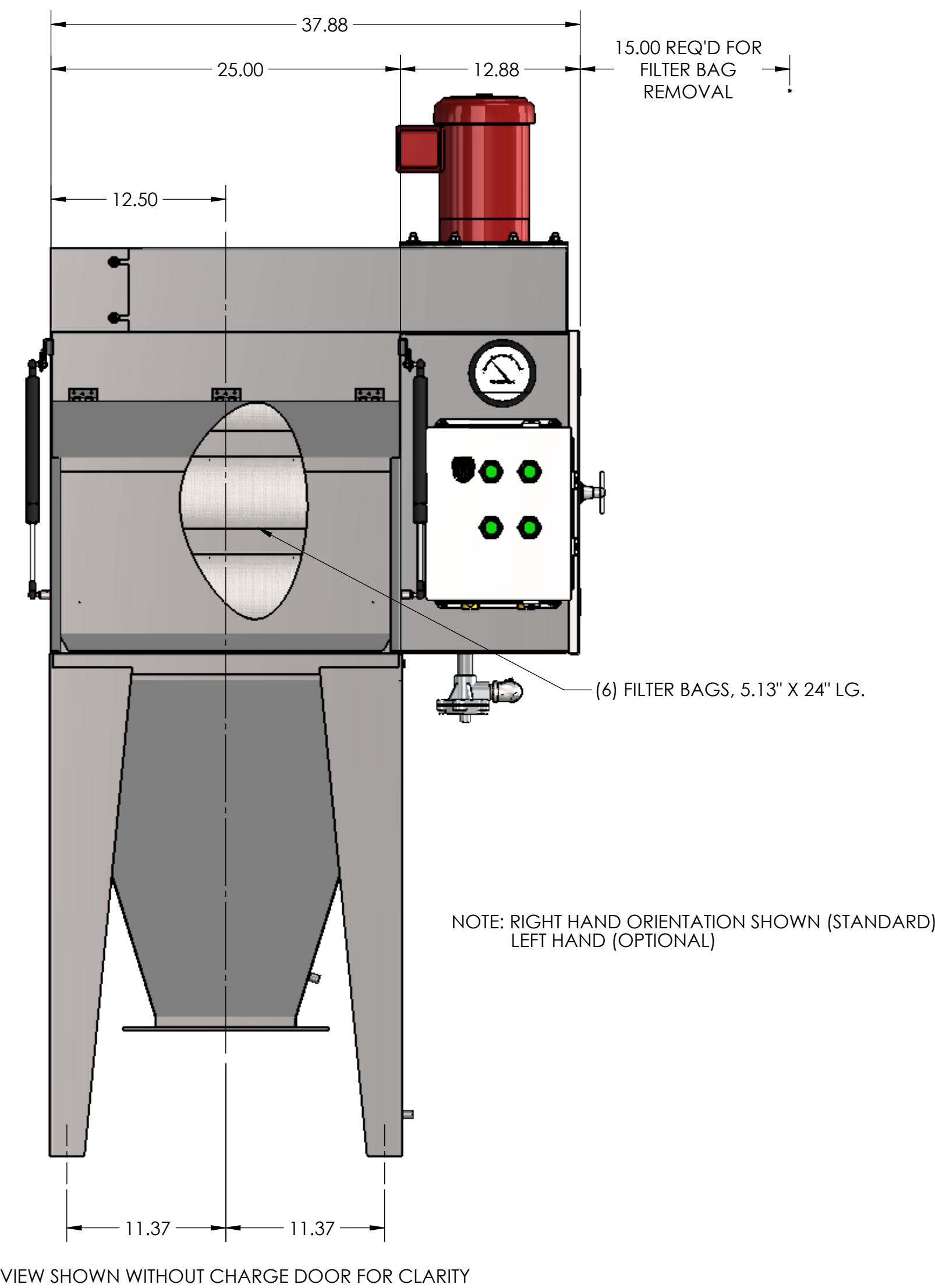
## FREE STANDING BAG COMPACTORS

Young Industries Empty Bag Compactors are available as a free-standing unit without the connection to a Bag Dump Station. The Compactor is provided with a hinged loading door for loading paper bags. These compactors are also available with casters for portability.

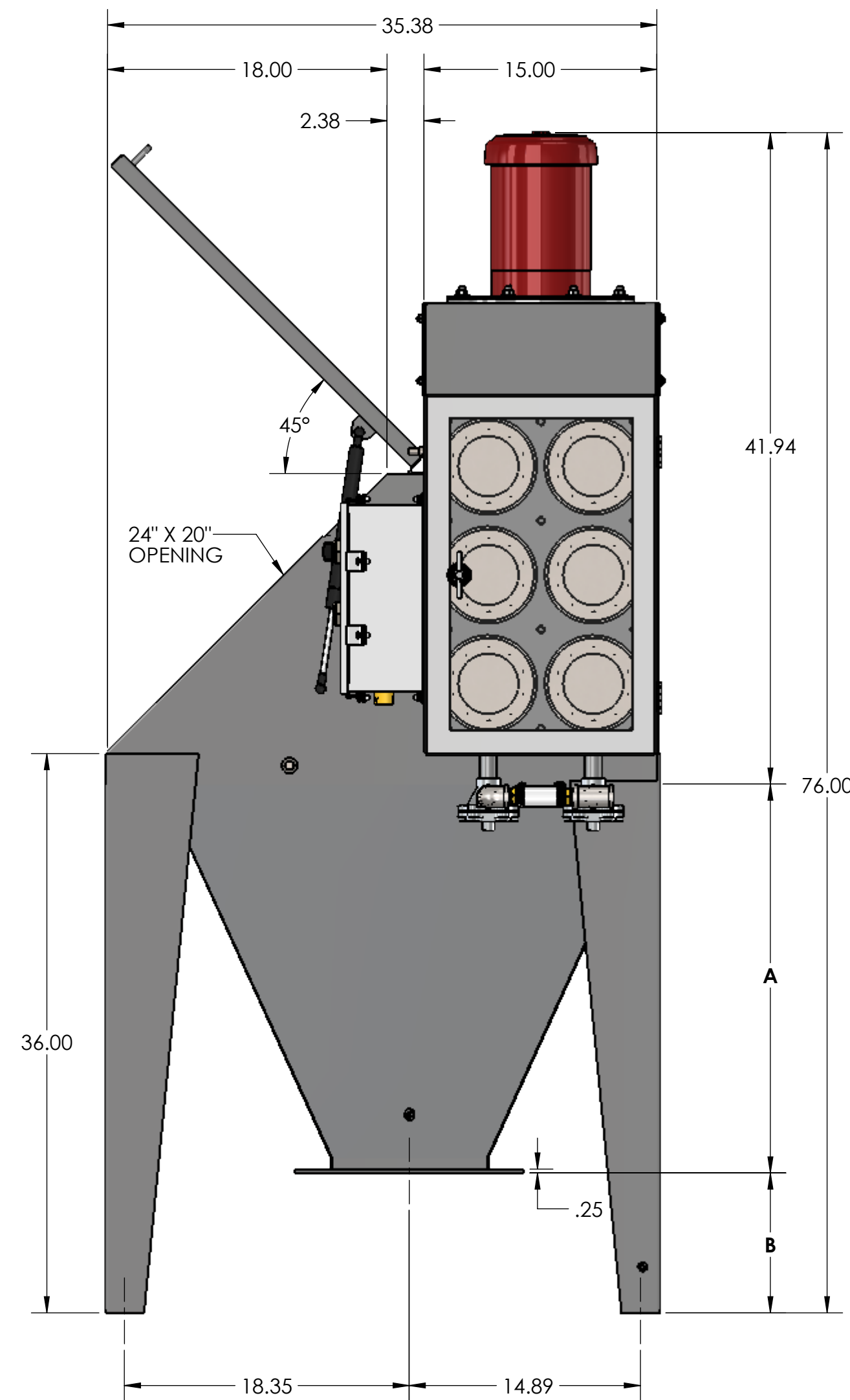
NOTE: THE INTENT OF THIS DRAWING IS TO SHOW STANDARD DIMENSIONS & FEATURES. ACTUAL DIMENSIONS & FEATURES MAY CHANGE DEPENDING ON APPLICATION REQUIREMENTS. NOT FOR FABRICATION.



NOTE: ROUND FLANGES ARE ALSO AVAILABLE



NOTE: RIGHT HAND ORIENTATION SHOWN (STANDARD)  
LEFT HAND (OPTIONAL)



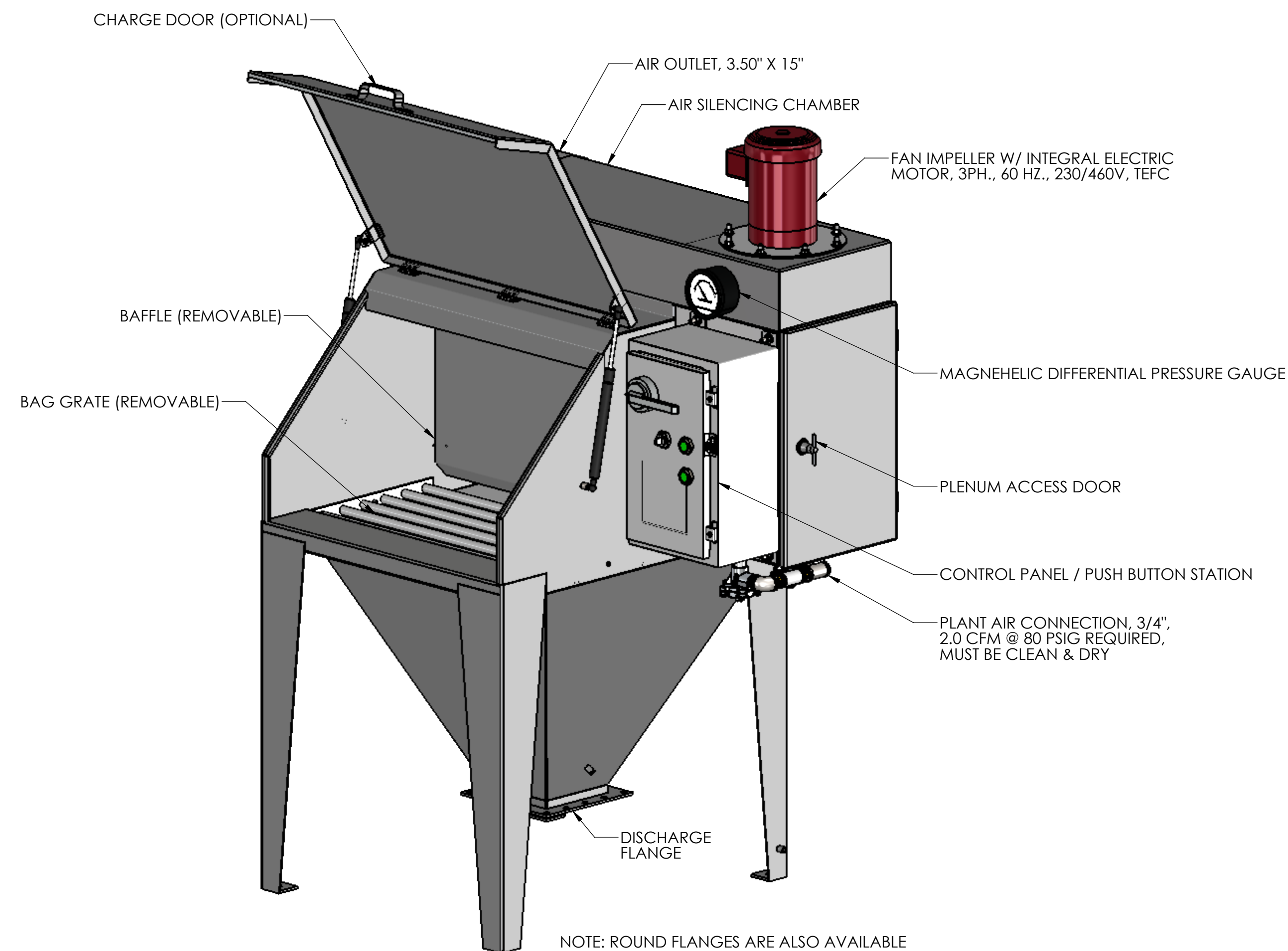
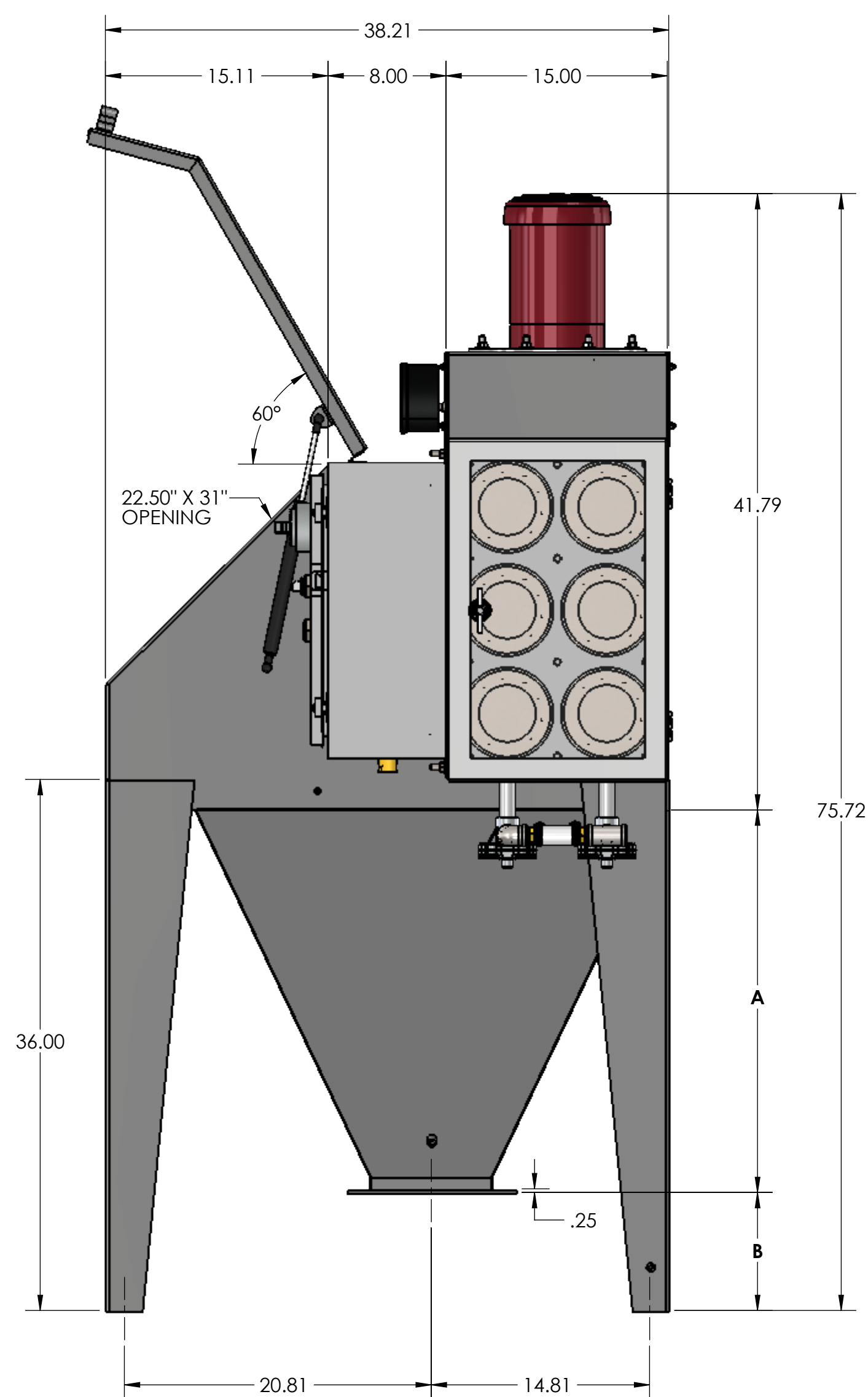
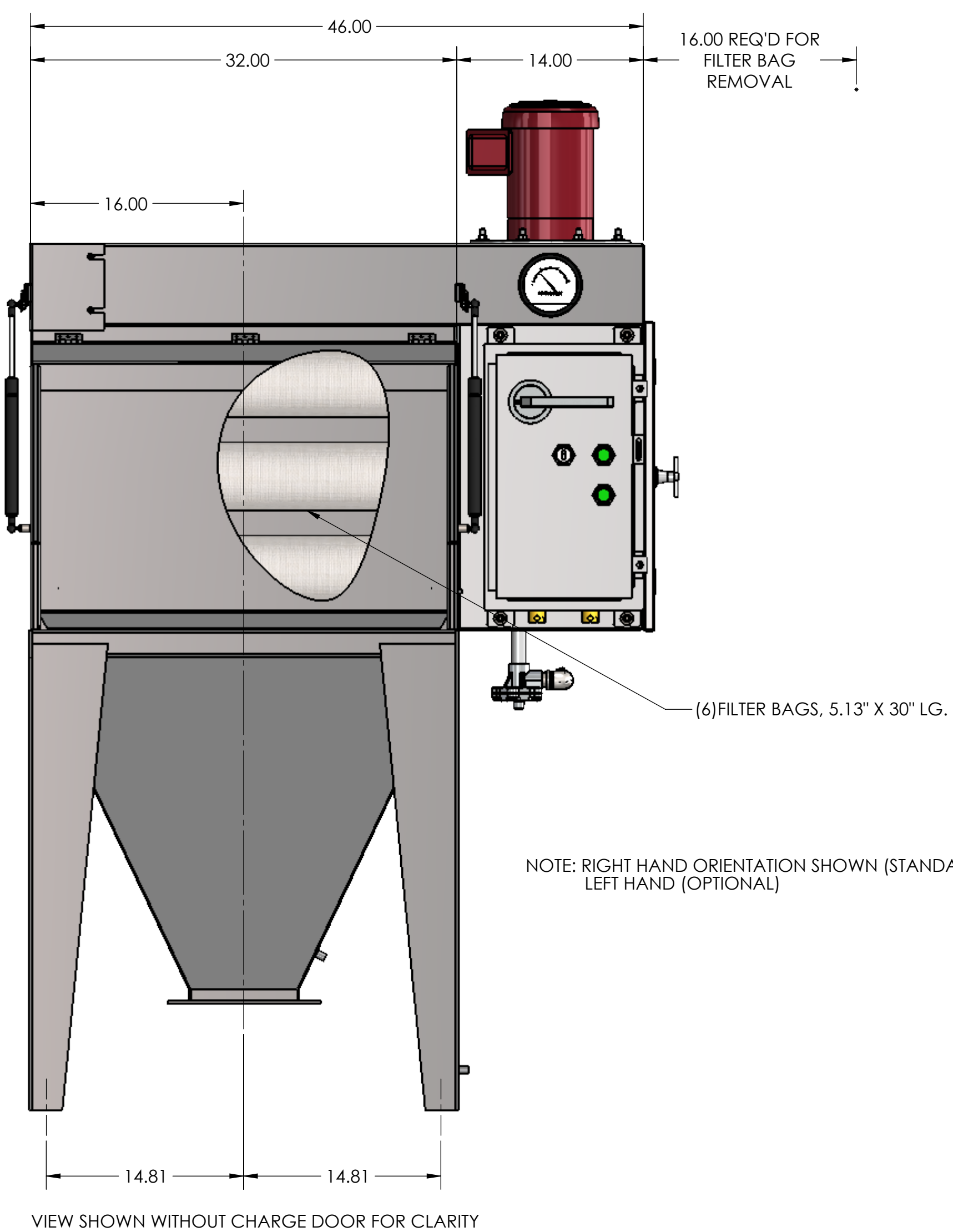
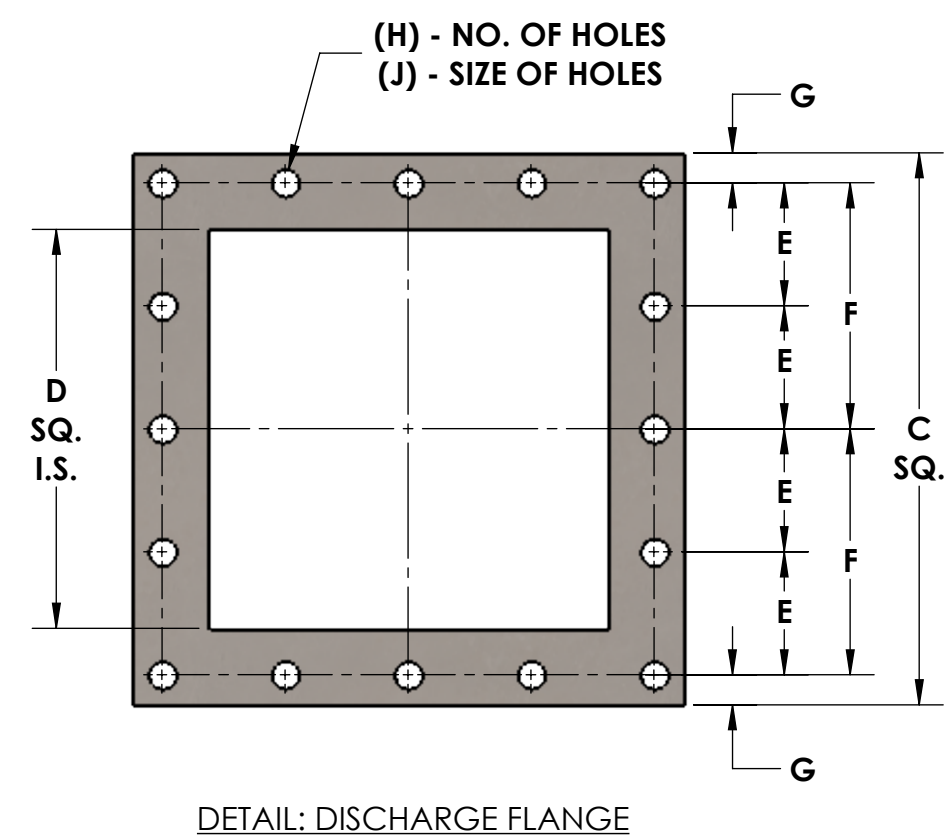
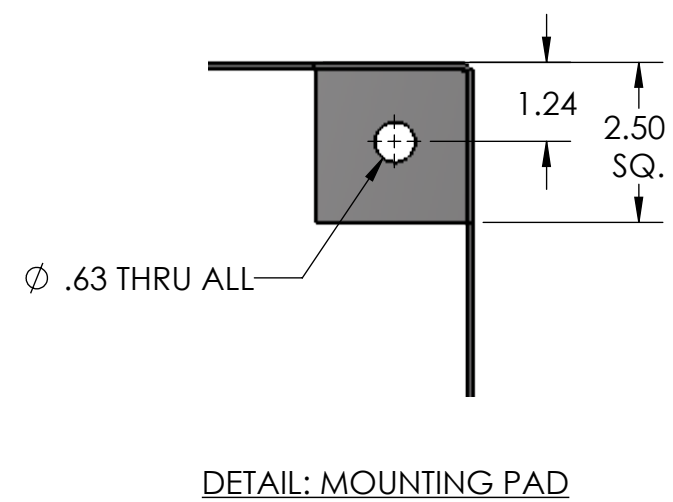
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6 X 6	27"	7"	9.5"	6"	-	4.12"	.62"	8	.56"
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NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTIFICATION

GENERAL TOLERANCES	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY	
MACHINING - .XX= .02 .XXX= .005 ANGLE= .50°	
SURFACE ROUGHNESS HEIGHT 63 MICRONS OR LESS	
FABRICATION - UNDER 6 6 TO 24 24 TO 60 OVER 60	
± .06 ± .12 ± .19 ± .25	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	

REV. NO.	DESCRIPTION	DATE	BY
REVISIONS			
CUSTOMER:			
CUSTOMER PO NUMBER:			
YOUNG JOB NUMBER:			
TITLE			
FILTER BAG DUMP STATION, HOPPER STYLE, MODEL FBD 24-6			
INDUSTRIES, INC. MUNICIPALITY, PENNSYLVANIA 17756 TELEPHONE: 570-546-3165			
DRAWN BY: BMF		DATE: 05/16/19	
CHECKED BY:		SCALE=1:8	
DRAWING NUMBER		SHEET	REV:
S-21118-02		1 OF 1	00

NOTE: THE INTENT OF THIS DRAWING IS TO SHOW STANDARD DIMENSIONS & FEATURES. ACTUAL DIMENSIONS & FEATURES MAY CHANGE DEPENDING ON APPLICATION REQUIREMENTS. NOT FOR FABRICATION.



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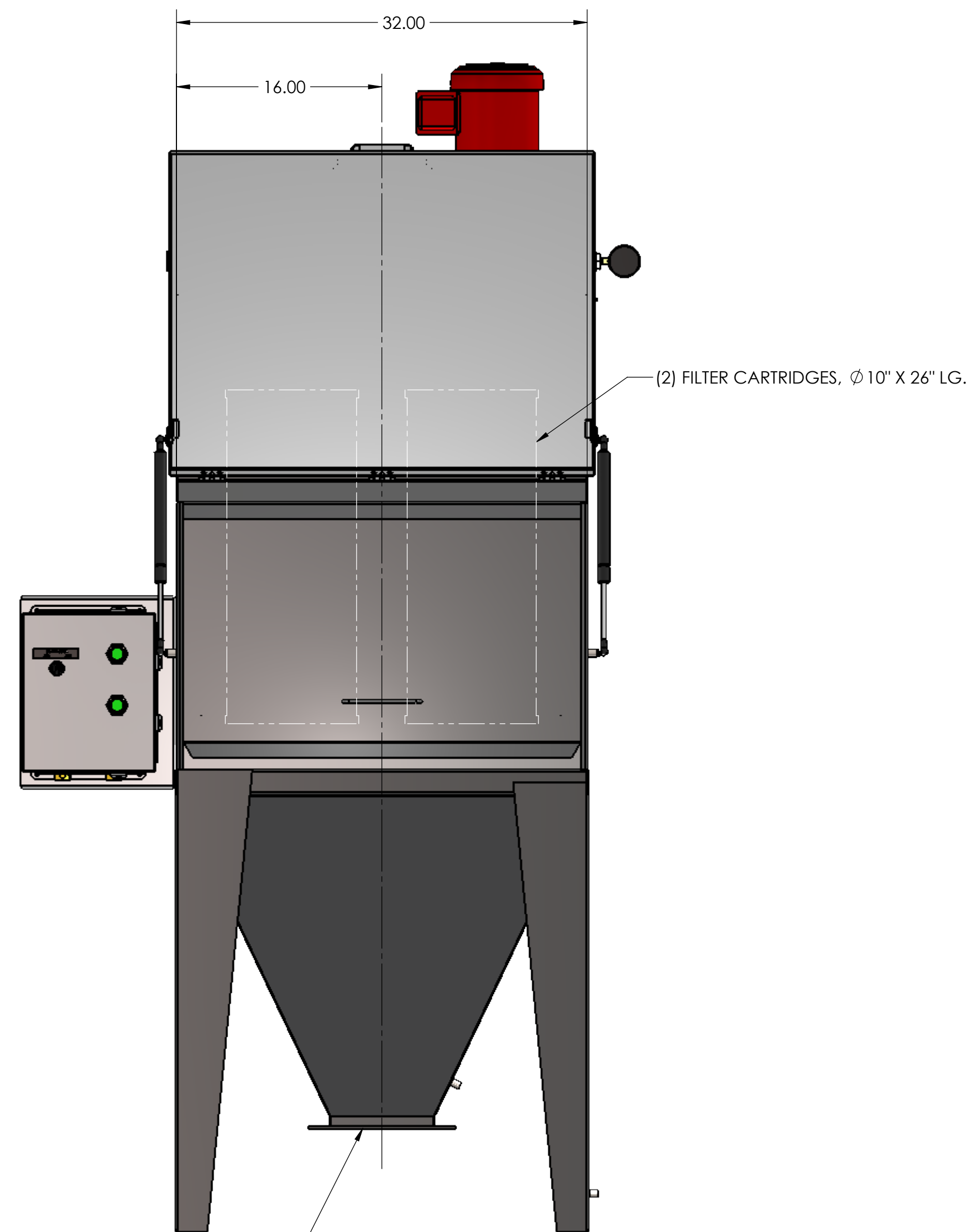
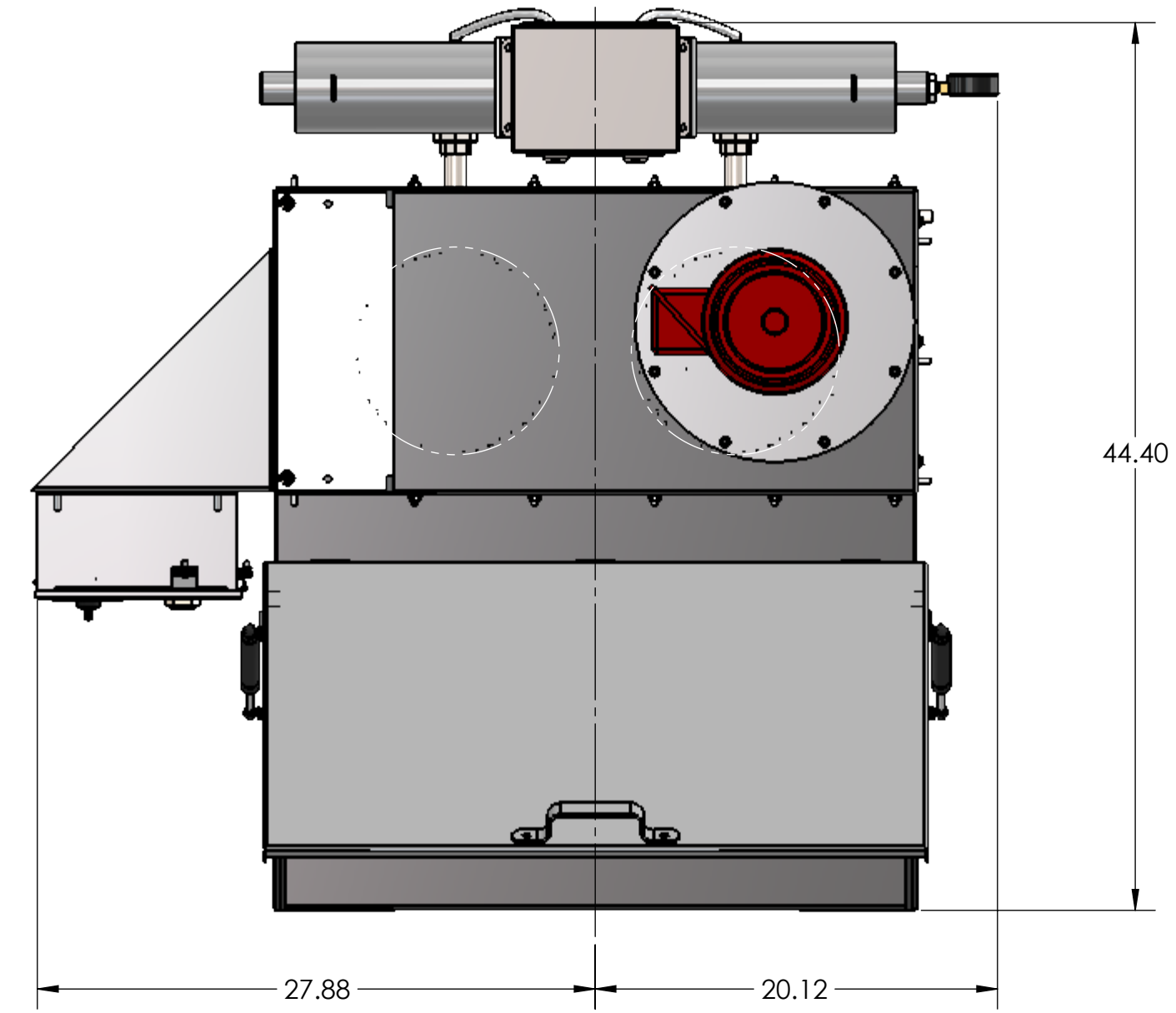
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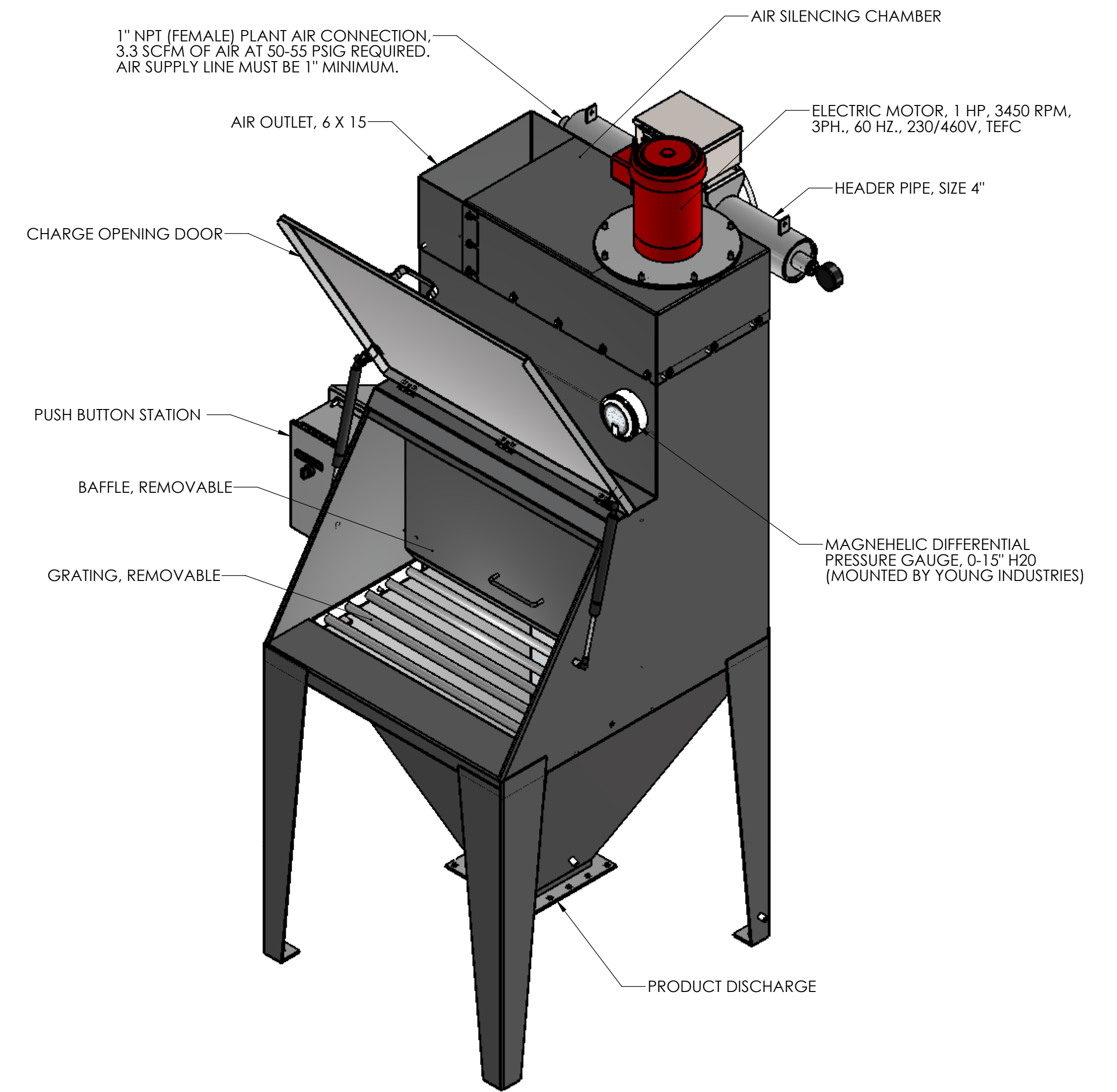
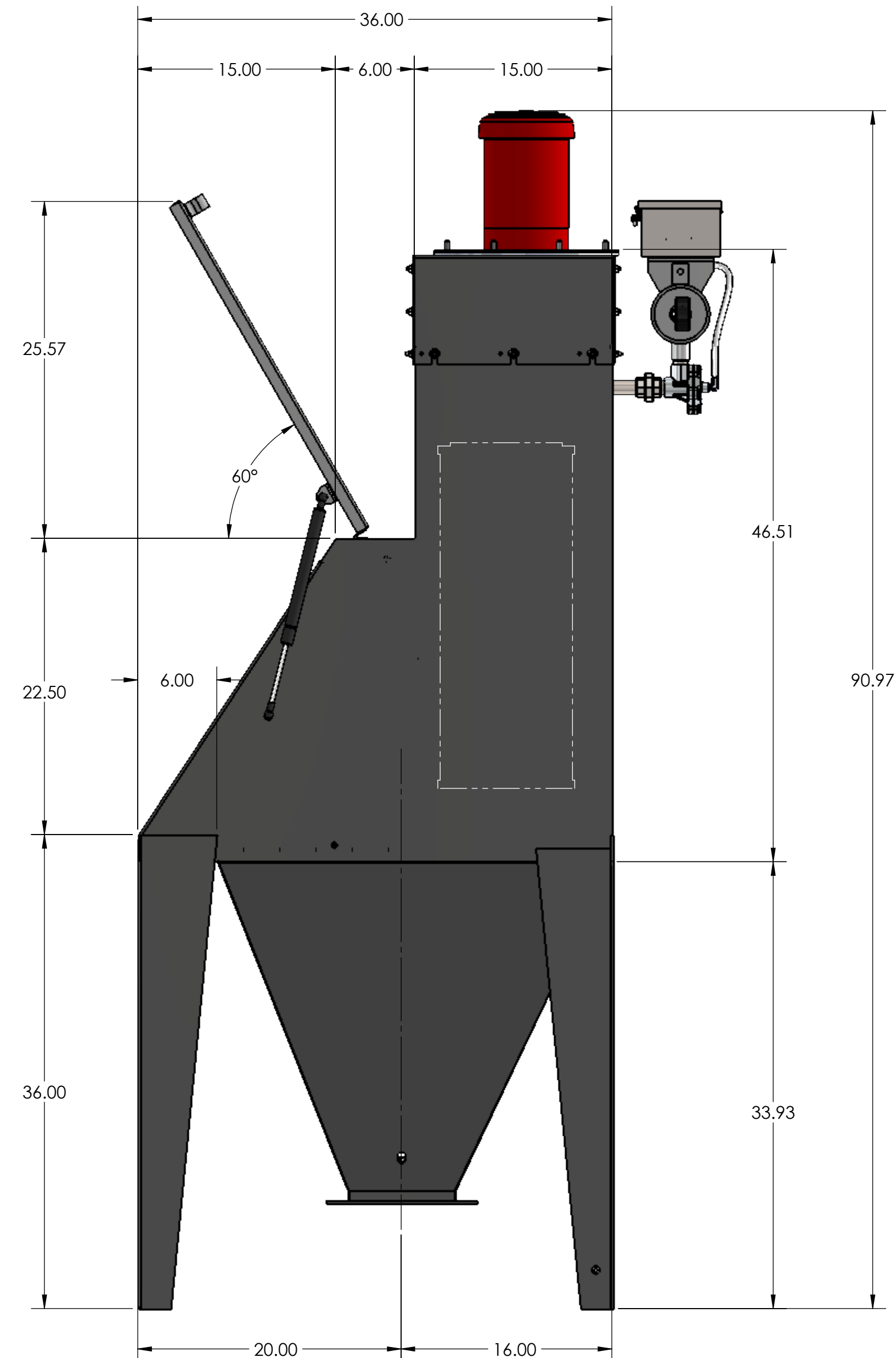
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TITLE			
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INDUSTRIES, INC. MUNICIPALITY, PENNSYLVANIA 17756 TELEPHONE: 570-546-3165			
DRAWN BY: BMF		DATE: 05/15/19	
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DISCHARGE FLANGE SIZE & LOCATION AS NEEDED

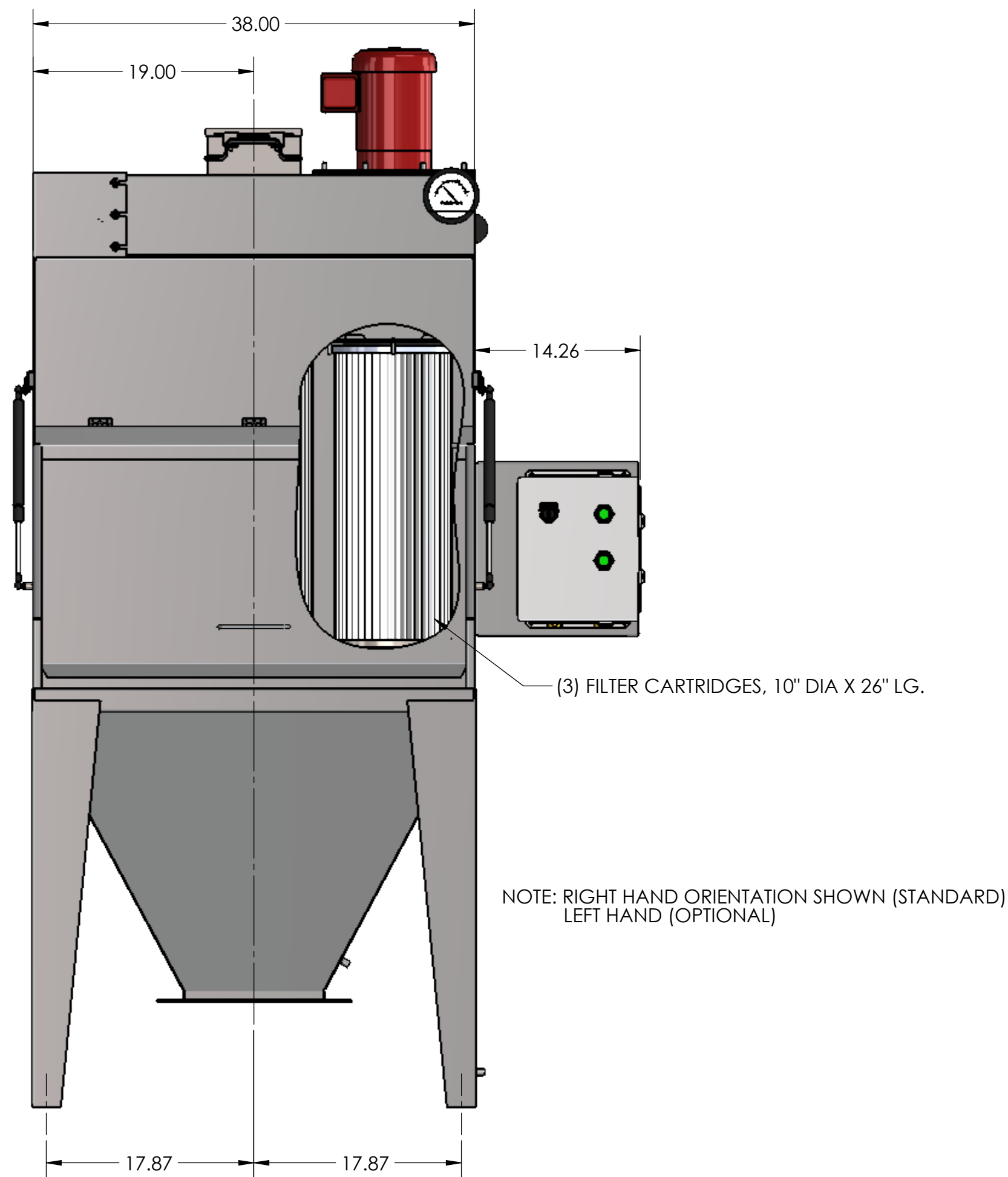
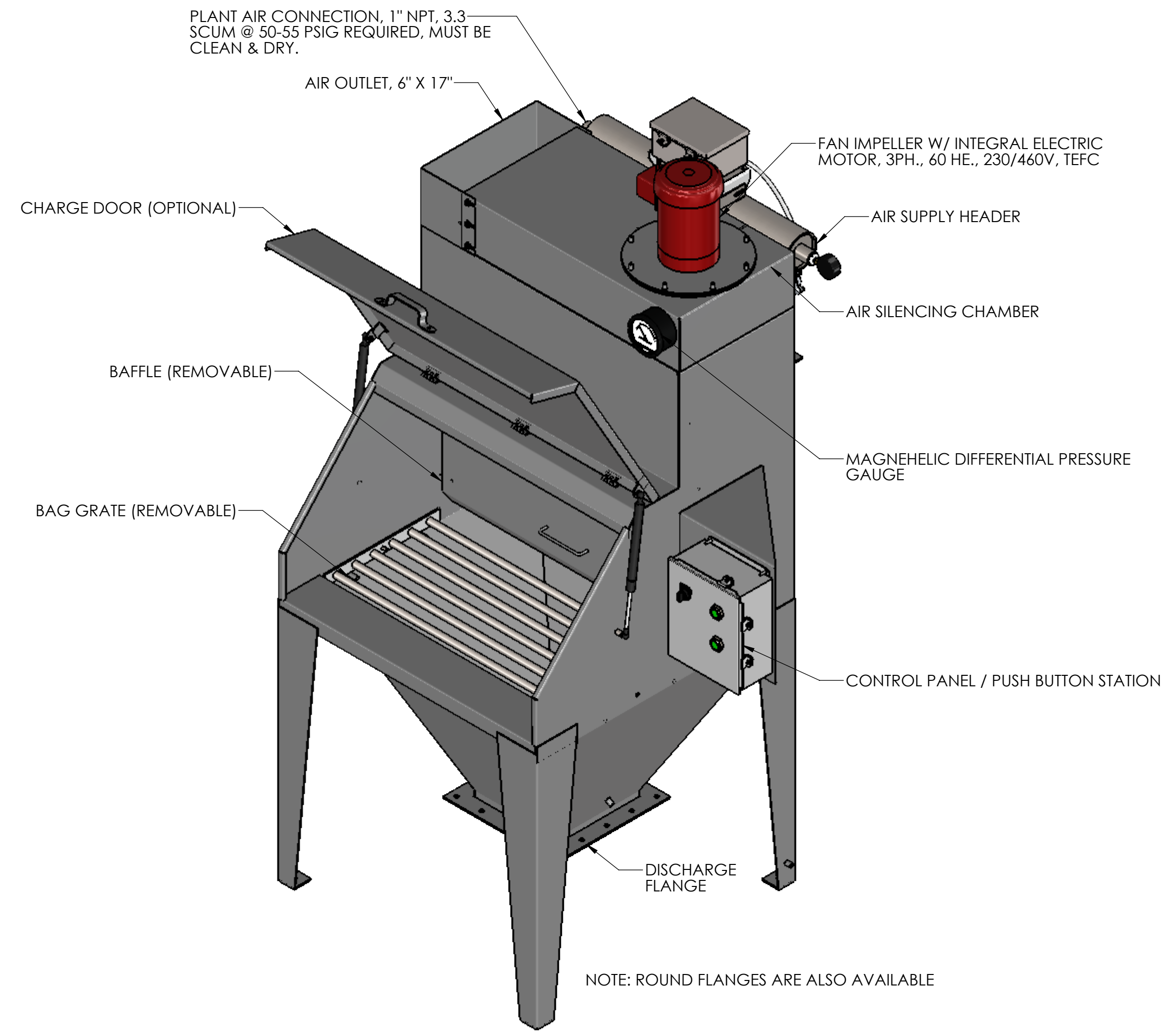
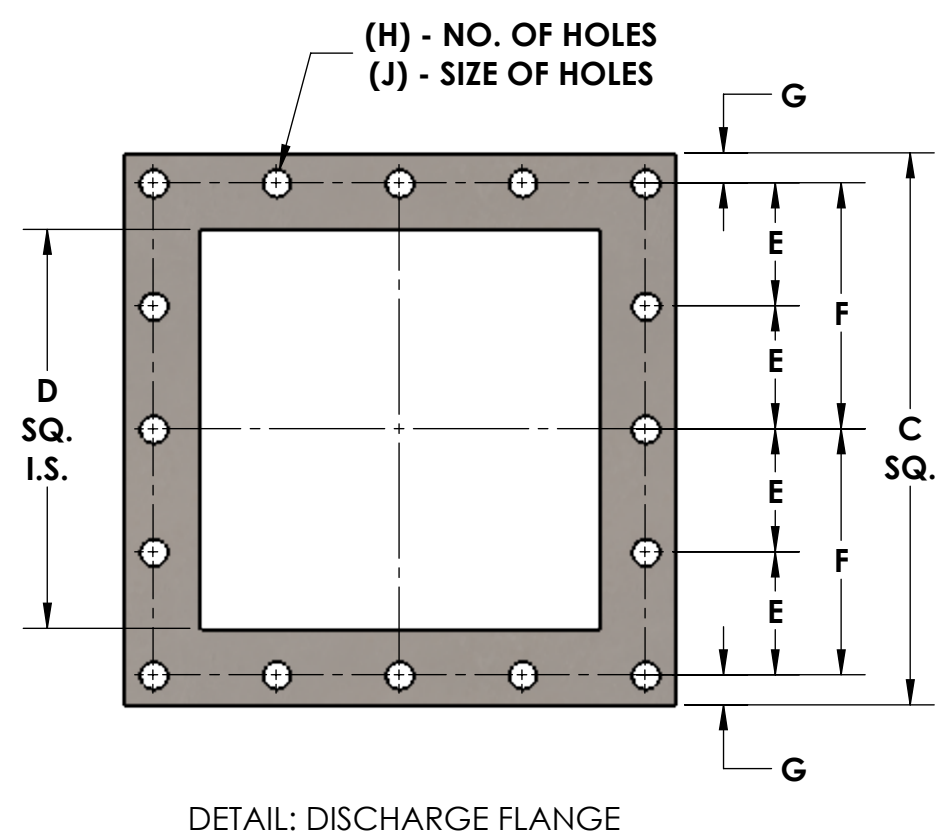
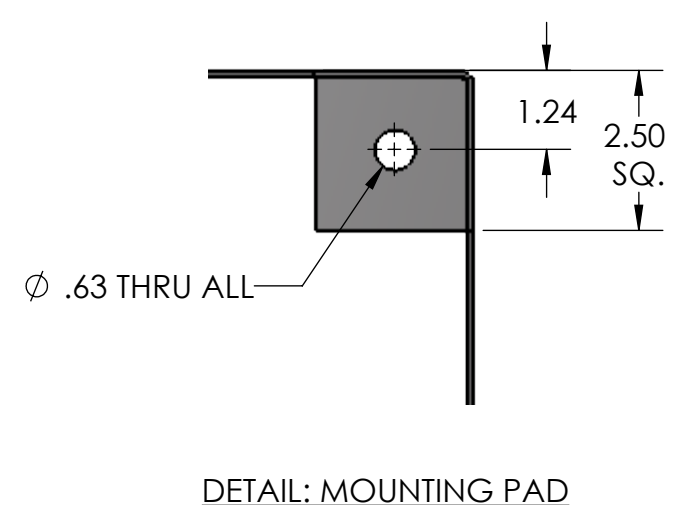


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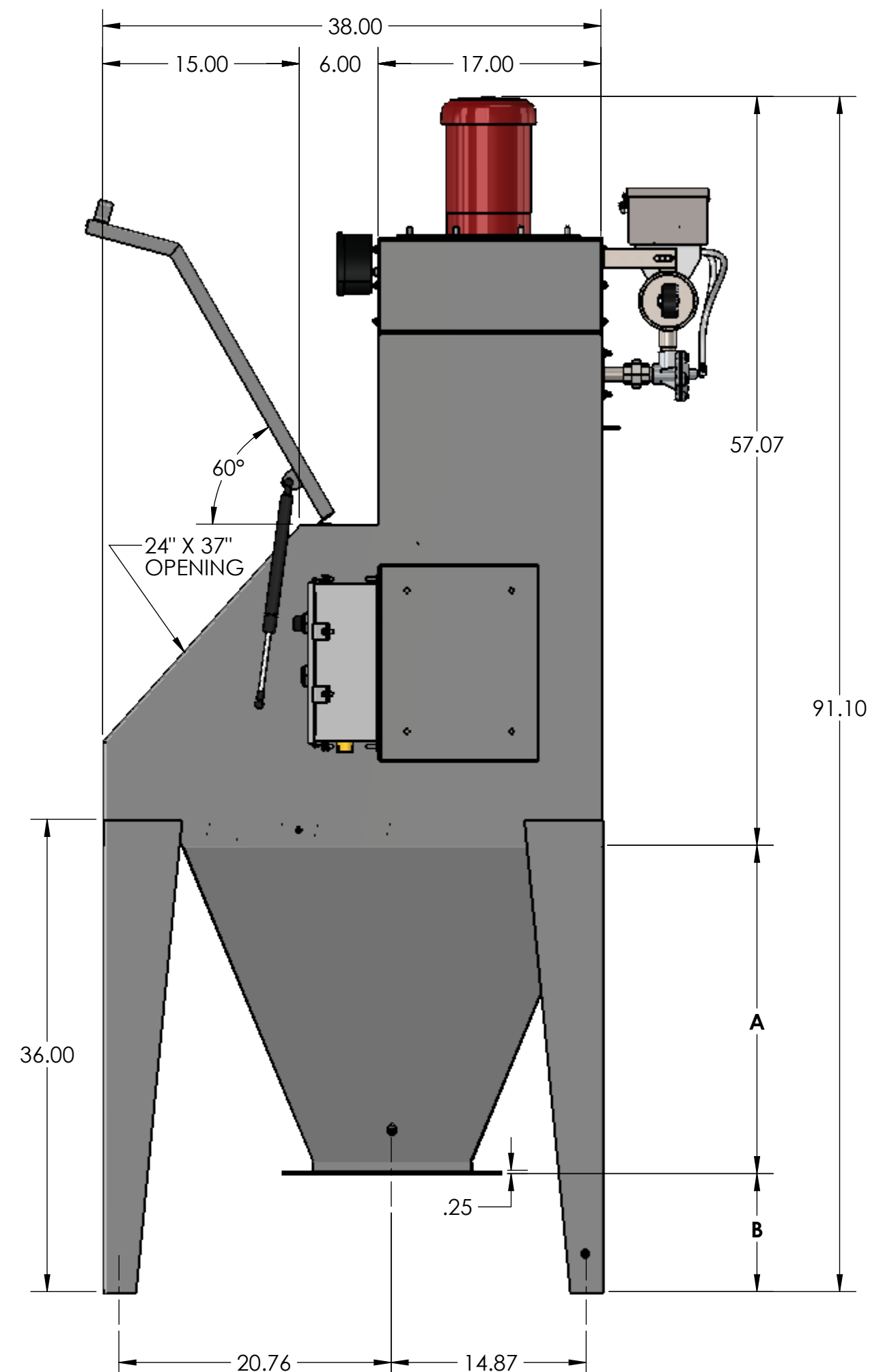
UNIT WEIGHT  
LBS

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CUSTOMER PO NUMBER:			
YOUNG JOB NUMBER:			
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THE YOUNG INDUSTRIES, INC. HUNCY, PENNSYLVANIA 17756 TELEPHONE: 570-546-3165			
DRAWN BY: BMF		DATE DRAWN: 03/21/17	
CHECKED BY:		SCALE=1:8	
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VIEW SHOWN WITHOUT CHARGE DOOR FOR CLARITY



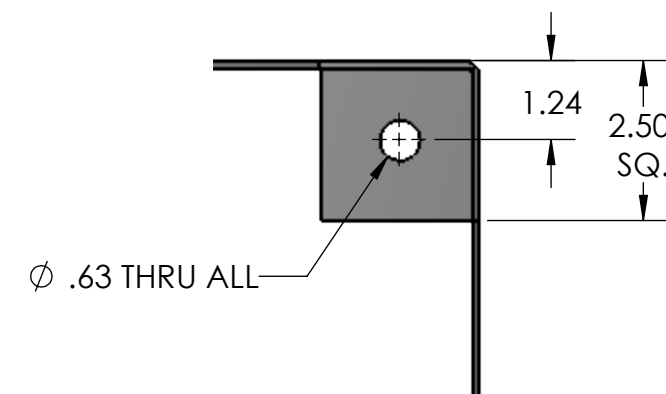
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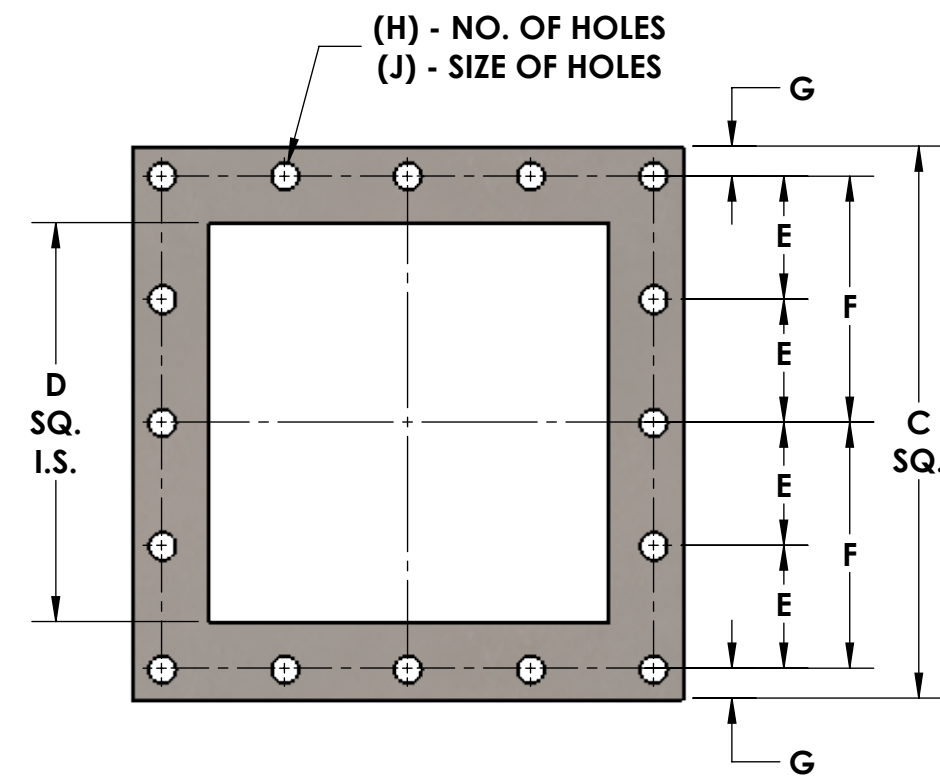
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 THE YOUNG INDUSTRIES, INC. MINICY, PENNSYLVANIA 17756 TELEPHONE: 570-546-3165			
DRAWN BY: BMF		DATE: 05/16/19	
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S-21118-03		1 OF 1	
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GENERAL TOLERANCES			
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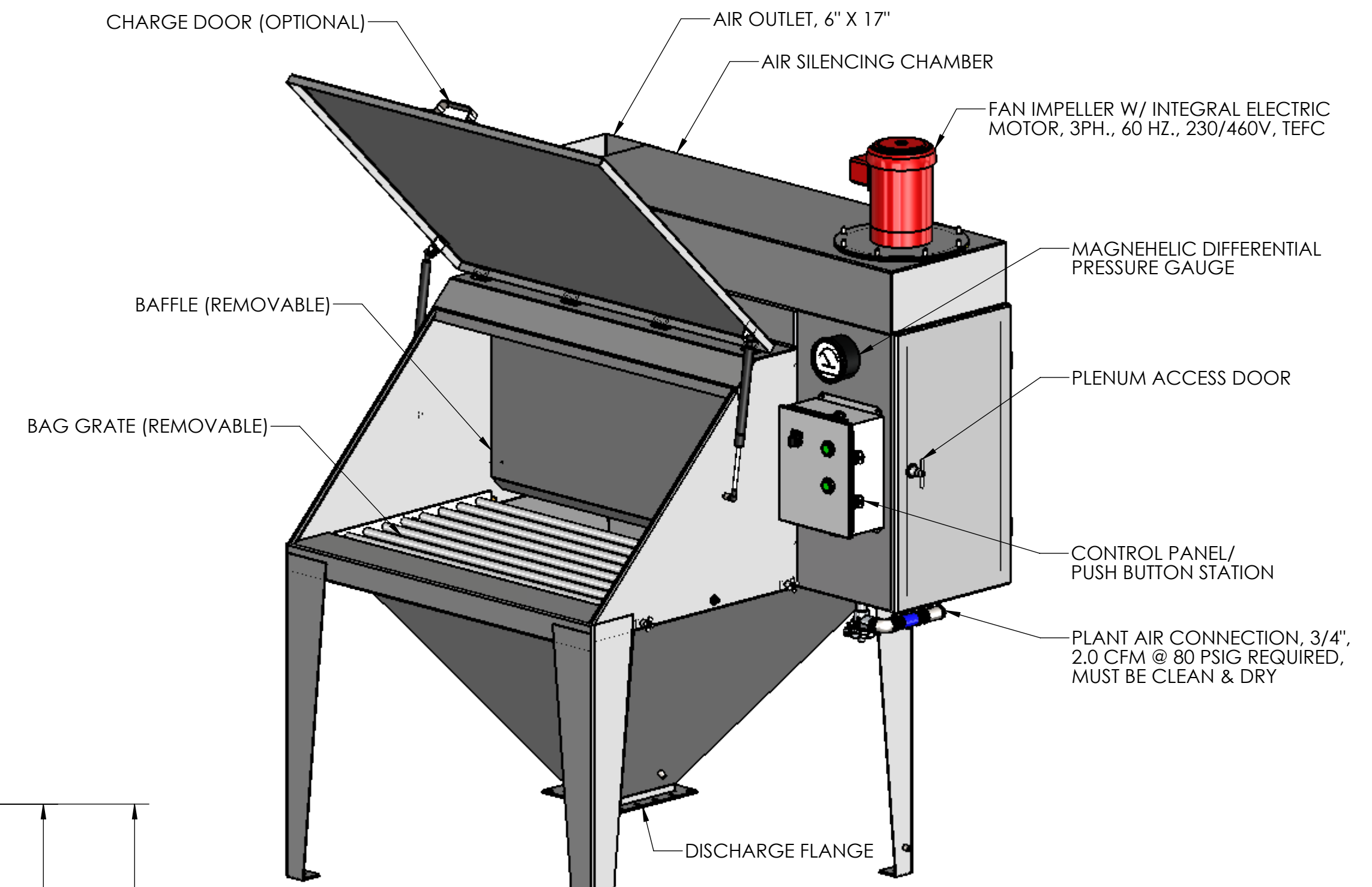
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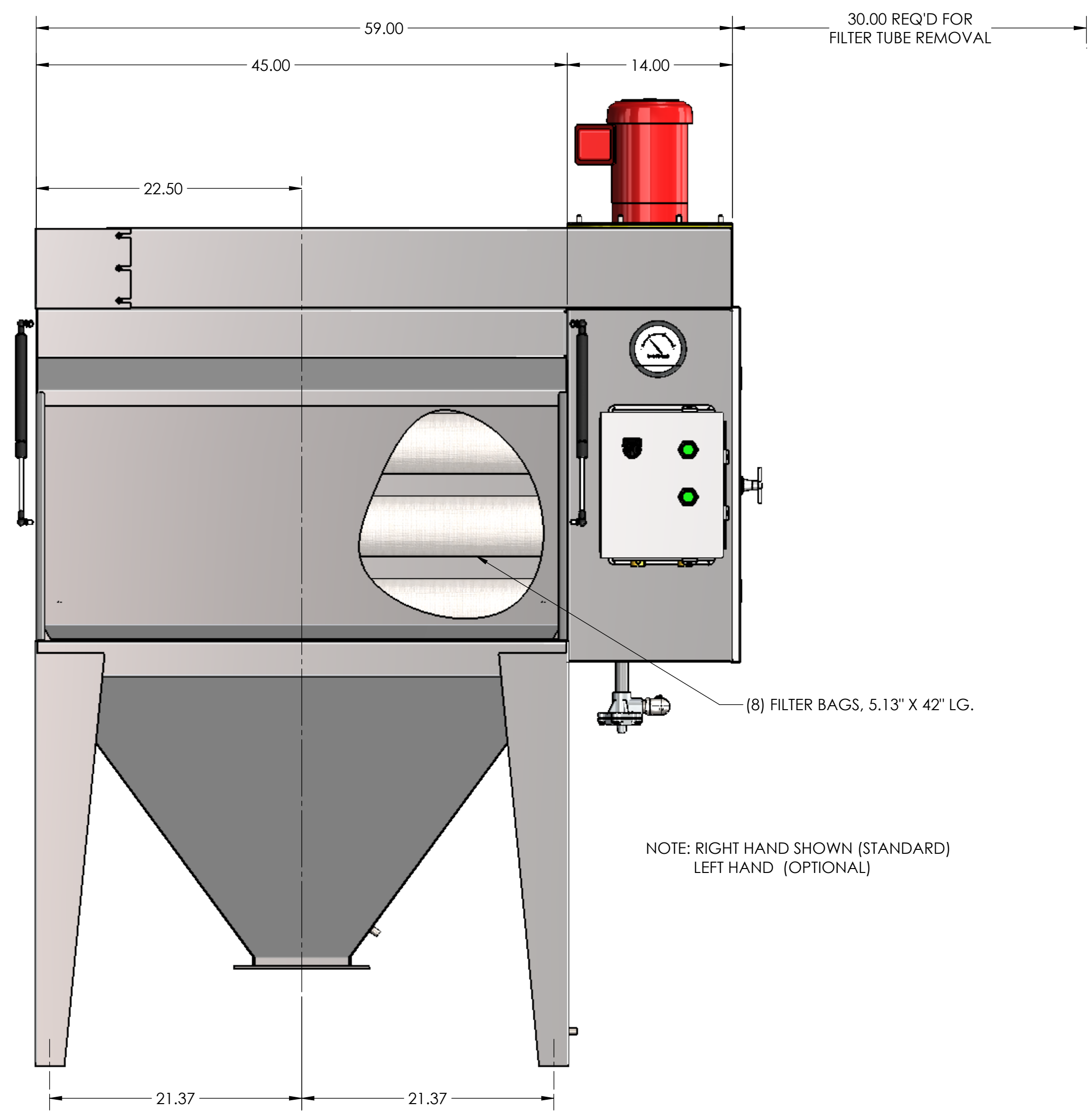
DETAIL: MOUNTING PAD



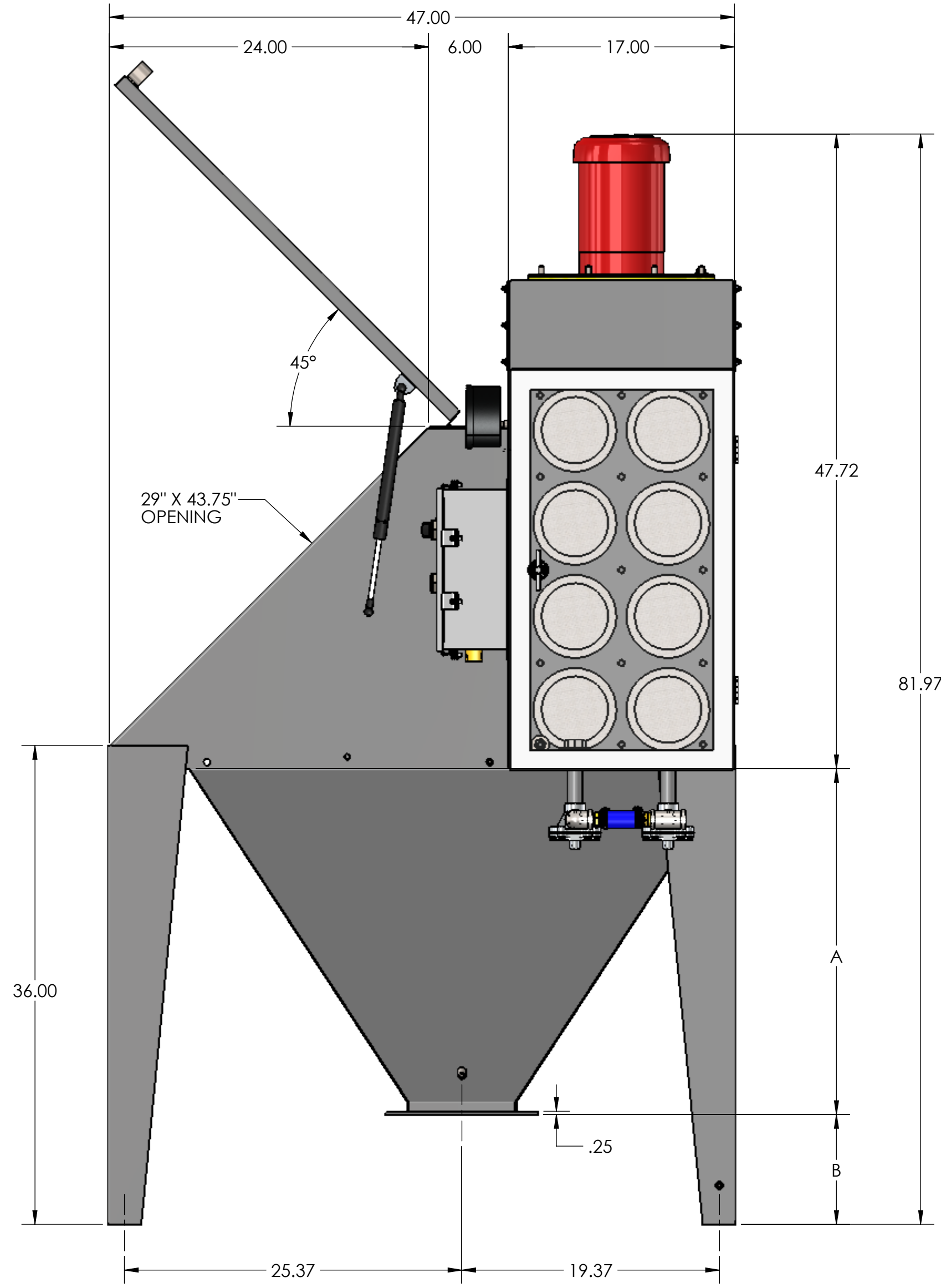
DETAIL: DISCHARGE FLANGE



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 THE YOUNG INDUSTRIES, INC. MUNCY, PENNSYLVANIA 17756 TELEPHONE: 570-546-3165			
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