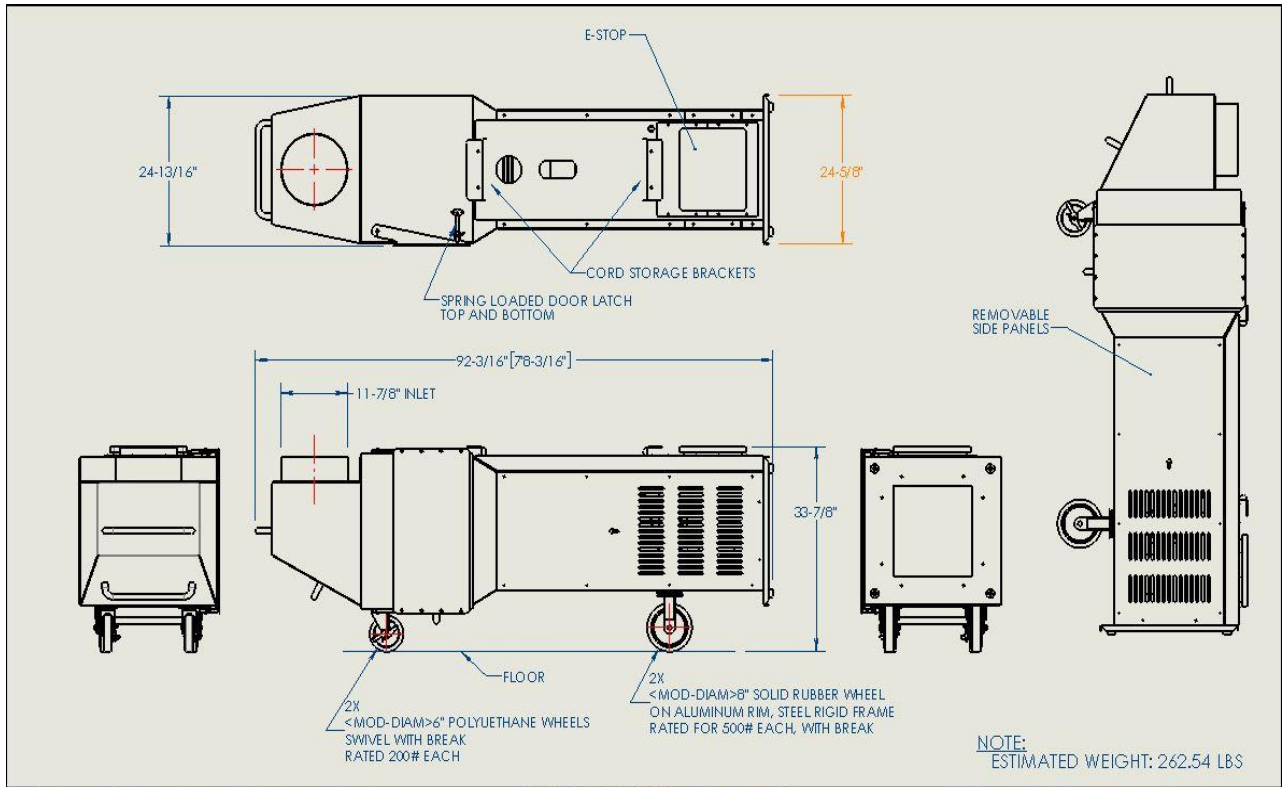




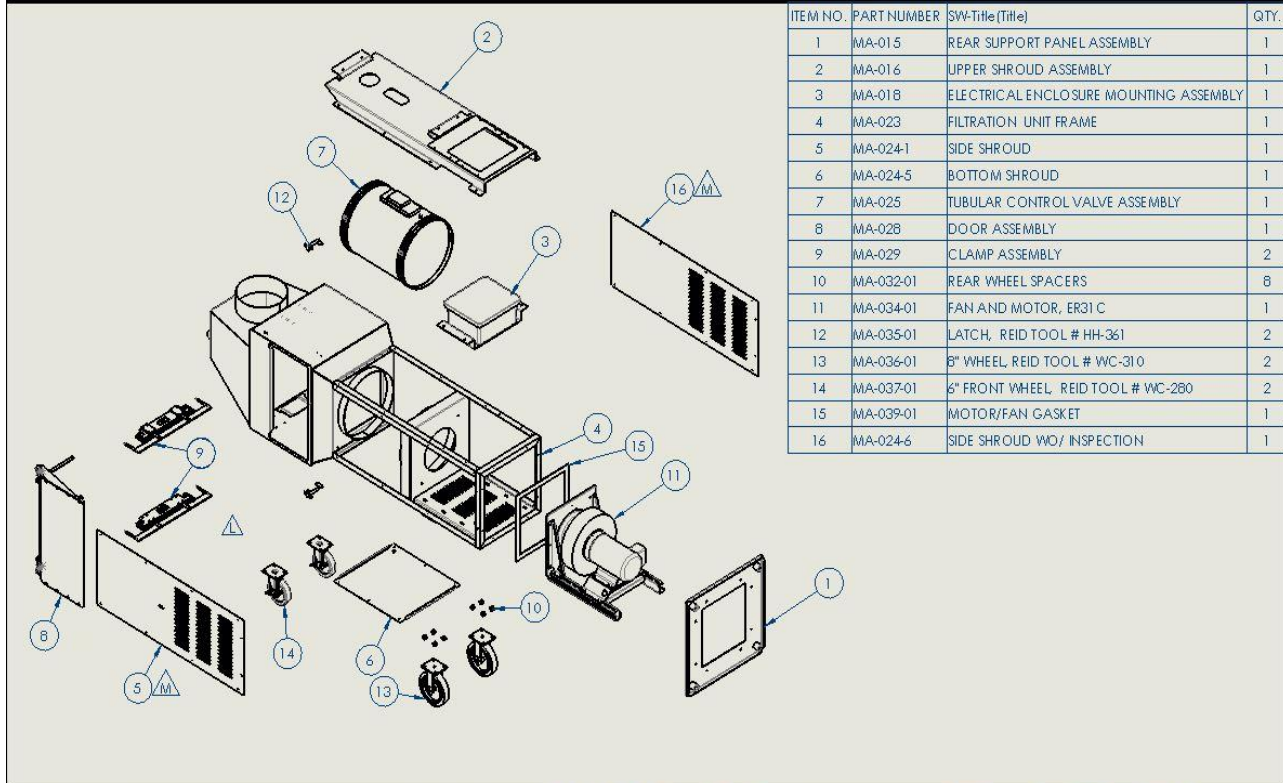
H2O Mechanics LLC is a custom engineering design and manufacturing company. Founded as an S Corporation in 2011 we contracted with a company to build them an air purifier that would perform better than anything they had previously tested or used in their plant. The company's manufacturing process involved periodic cleaning which exposed airborne particles of a regulated contaminant. This caused employees to have to wear hazmat suits for extended periods of time 3 to 4 times a year (depending on cleaning schedules). Once the cleaning operations were complete the manufacturing area had to be aired out until contaminant subsided to acceptable levels.

H2O Mechanics over a two year period produced what is now the Max Air 2000. This unit is made of 5052-H32 aluminum and the filter chamber is hermetically sealed (no leaks during a smoke test). What separates our filter from others is our automatic clamping system that is actuated by closing the filter chamber door. The clamp action compresses the filter seal against a seamless metal lip that doesn't allow particles to find an alternate path due to pressure drop across the filter. Another valuable feature is the low leakage air valve that we manufacture for this product to regulate air velocity to the filter manufacturers recommended flow rate. We can also set any velocity and the Max Air system will automatically keep that velocity until the filter pressure loss indicates it's time to change filters. The Max Air is capable of flow rates > than 3000 cu ft/min with a MERV/15 24x24x11 inch filter. We typically use a Baldor 3hp 3450 rpm motor and an extremely efficient fan assembly manufactured in Switzerland. Every unit is tested for performance in our plant. We build, test and crate every system right here in Newbury Ohio. We have equipment in the USA, Malaysia and Vietnam.



NOTE:  
ESTIMATED WEIGHT: 262.54 LBS

M	3/16/19	CHANGE QTY OF MA-024-1 FROM 2 TO 1, ADDED MA-024-6	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCH DO NOT SCALE DRAWING X .000 FRACTIONS 1/16" XX .030 ANGLES 5 XXX .065 Last Saved by: H20 3/16/2019 9:13:55 PM C:\Users\Owner\Documents\H20-CAIR 2019	 THIRD ANGLE PROJECTION	DESIGNED: MOBILE FILTRATION UNIT DRAWING: SEE DRAWING PROJECT: MAX-AIR 2000 DRAWN BY: Steve Hoopes DATE: 7/28/2012 PART: MA-01-0 QTY: 1 OF 2 REV: M
L	1-27-19	REMOVED MA-031-01 (FRONT WHEEL SUPPORT)			
K	4-29-13	ADDED MOTOR/FAN GASKET			
REV	DATE	DESCRIPTION			



ITEM NO.	PART NUMBER	SVW-Title (Title)	QTY.
1	MA-015	REAR SUPPORT PANEL ASSEMBLY	1
2	MA-016	UPPER SHROUD ASSEMBLY	1
3	MA-018	ELECTRICAL ENCLOSURE MOUNTING ASSEMBLY	1
4	MA-023	FILTRATION UNIT FRAME	1
5	MA-024-1	SIDE SHROUD	1
6	MA-024-5	BOTTOM SHROUD	1
7	MA-025	TUBULAR CONTROL VALVE ASSEMBLY	1
8	MA-028	DOOR ASSEMBLY	1
9	MA-029	CLAMP ASSEMBLY	2
10	MA-032-01	REAR WHEEL SPACERS	8
11	MA-034-01	FAN AND MOTOR, ER31 C	1
12	MA-035-01	LATCH, REID TOOL # HH-361	2
13	MA-036-01	8" WHEEL, REID TOOL # WC-310	2
14	MA-037-01	6" FRONT WHEEL, REID TOOL # WC-280	2
15	MA-039-01	MOTOR/FAN GASKET	1
16	MA-024-6	SIDE SHROUD W/O INSPECTION	1

SEE SHEET 1 FOR REVISION HISTORY			UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCH DO NOT SCALE DRAWING X .000 FRACTIONS 1/16" XX .030 ANGLES 5 XXX .065 Last Saved by: H20 3/16/2019 9:13:55 PM C:\Users\Owner\Documents\H20-CAIR 2019	 THIRD ANGLE PROJECTION	DESIGNED: MOBILE FILTRATION UNIT DRAWING: SEE DRAWING PROJECT: MAX-AIR 2000 DRAWN BY: Steve Hoopes DATE: 7/28/2012 PART: MA-01-0 QTY: 1 OF 2 REV: M			
REV	ECN	DATE			DESCRIPTION	DFT.	ENG.	MFG.
H20 MECHANICS								
Steve Hoopes 7/28/2012 MA-01-0 M								

To date we have built 87 system and all of them are in service. In the picture below there are six systems completed waiting for crating (our shop in Newbury Ohio).



The system is very adaptable to any intake/outlet configuration. This allows the customer freedom to design what is needed to satisfy any particular use. The units are capable of operating horizontally or in a vertical position to save available space. The units below (not completed) are an example of standing vertical taking up just 24.375 inches square of space.



This product is well suited for any type of reclamation where hazardous materials need to be removed from the air space. Asbestos for example is one area where you need a filter housing to give you the same quality that your HEPA filter is giving you. I say this because protecting the workers is of the highest priority and the Max Air 2000 can give you absolute perfect performance being no leakage due to pressure drop across the filter during operation which tends to cause leakage of harmful particles by-passing the filter and circulating into the air space.



The picture above shows an actual installation of the Max Air 2000 in operation removing a regulated contaminant so that people in the plant are protected. The machine is hooked up to a tent like tarp which covers the actual production equipment that needs the periodic cleaning. The machine is running at approximately 1500 cubic feet/minute and the goal is to keep negative pressure under the tent. All of the air that is filtered through the machine is exhausted right back into the plant. This saves a tremendous amount of money because the air does not need to be conditioned again. In this particular plant there are alarms that monitor the contaminant level should something malfunction. It is my experience that having redundancy (multiple filters per line) there has never been a problem with controlling the air quality.

If you need a commercial HEPA filter that will;

1. Hold recommended velocity through the complete filter cycle
2. Give you optimum performance due to no bypass from psi drop
3. Alarm signal when your filter reaches a specific pressure loss which eliminates over running that can cause filter membrane damage.

If you have any questions regarding the material in this manual please don't hesitate to call Chris Hansen at H2O Mechanics.

Chris Hansen/H2O Mechanics LLC – 1-440-554-9515  
12381 Kinsman Rd. Newbury, Ohio 44065