



Portable Blast & Recovery Equipment



SAFE SYSTEMS, INC.
MODEL MSH-4-24-2

Mobile Abrasive Blasting and Recovery System
Features Include

- 4-Outlet Blast Vessel, 30 cu. ft., 150 PSI
- Continuous Closed Loop Recovery System
- Rotary Screen Separator Removes Debris and Fines
- Fountain Separator Further Cleans Abrasive
- Safety Interlock with SAFE Systems vacuums
- Forklift Pockets
- Skid Mounted
- Vacuum Dust Collectors Rated for -30" Hg
- MERV-11 or MERV-15 filters available
- 120V Electrical Control Center
- Sloped Hopper Top
- Certified Lifting Eyes

Optional Features Include:

- Magnetic Separator
- Air Induction Vacuum
- Abrasive Spreader inside Hopper to Maximize Total Hopper Capacity
- S4C valves for safer operation
- Short Circuit Protection for Deadman system
- Stainless Steel Electrical Enclosure



SAFE Systems, Inc.

MODEL MSV-4-40-2



Mobile Abrasive Blasting and Recovery System

Features Include:

- ◆ 40-ton system with 4 blast outlets
- ◆ ASME Code Single Chamber Blast Vessel
- ◆ Rotary Screen Separator for removal of large debris and fines
- ◆ Secondary Air Wash Classifier
- ◆ Trash Discharge into 55 gallon drums
- ◆ Skid mounted with forklift pockets
- ◆ Certified Lifting Eyes
- ◆ Electrical Control Center, 120V
- ◆ Vacuum Dust Collectors rated for -30" Hg

Optional Features Include:

- ◆ Hopper Abrasive Spreader for increased capacity
- ◆ Magnetic Separator
- ◆ Short Circuit protected Deadman Switch System
- ◆ Snorkel Box for improved grit recovery
- ◆ 6 or 8 outlet Blast Vessel
- ◆ S4C Valves for safer operation
- ◆ Stainless Steel Electrical Enclosure
- ◆ Air Induction Vacuum

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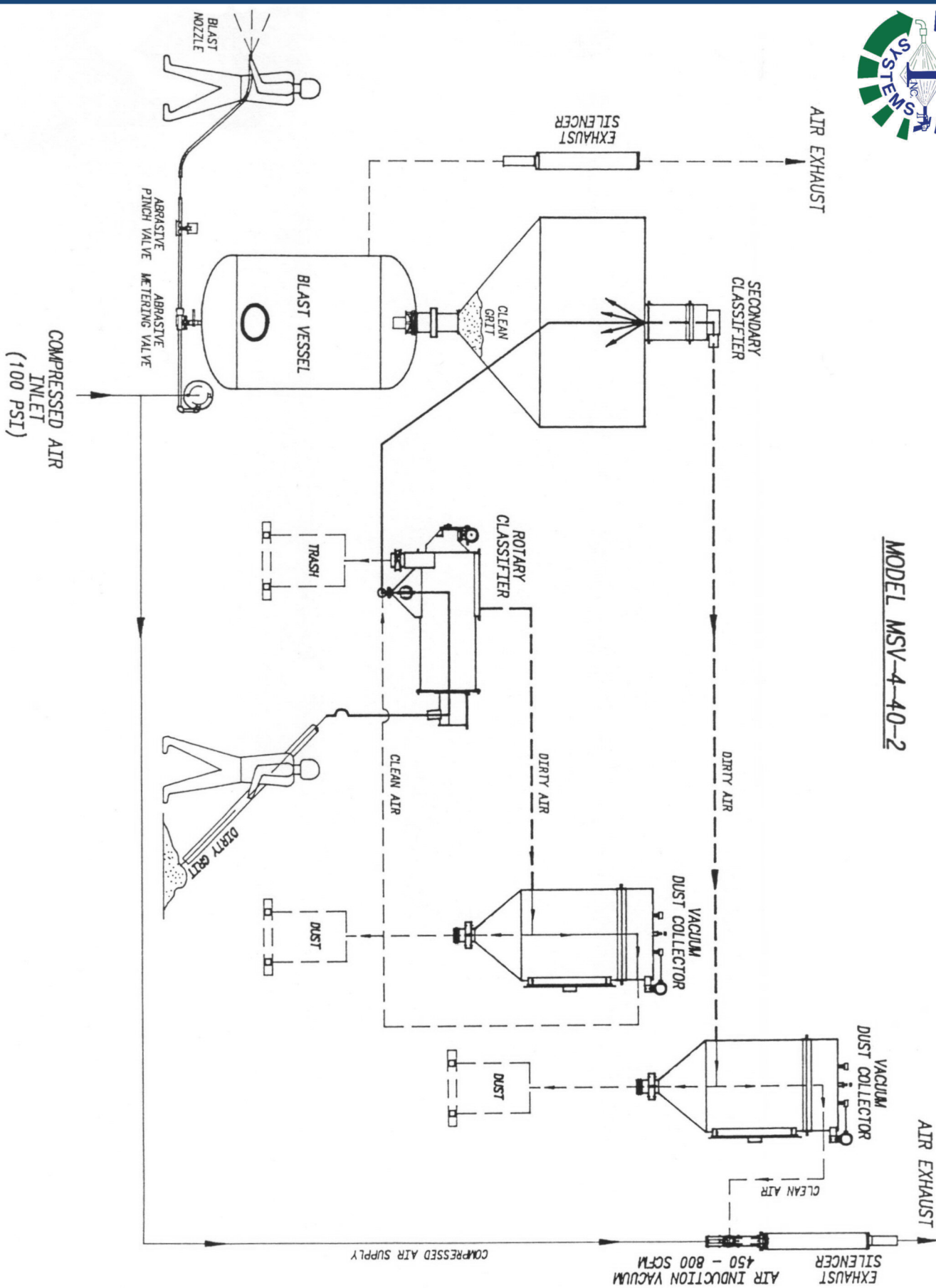
Fax: (425) 251-8683

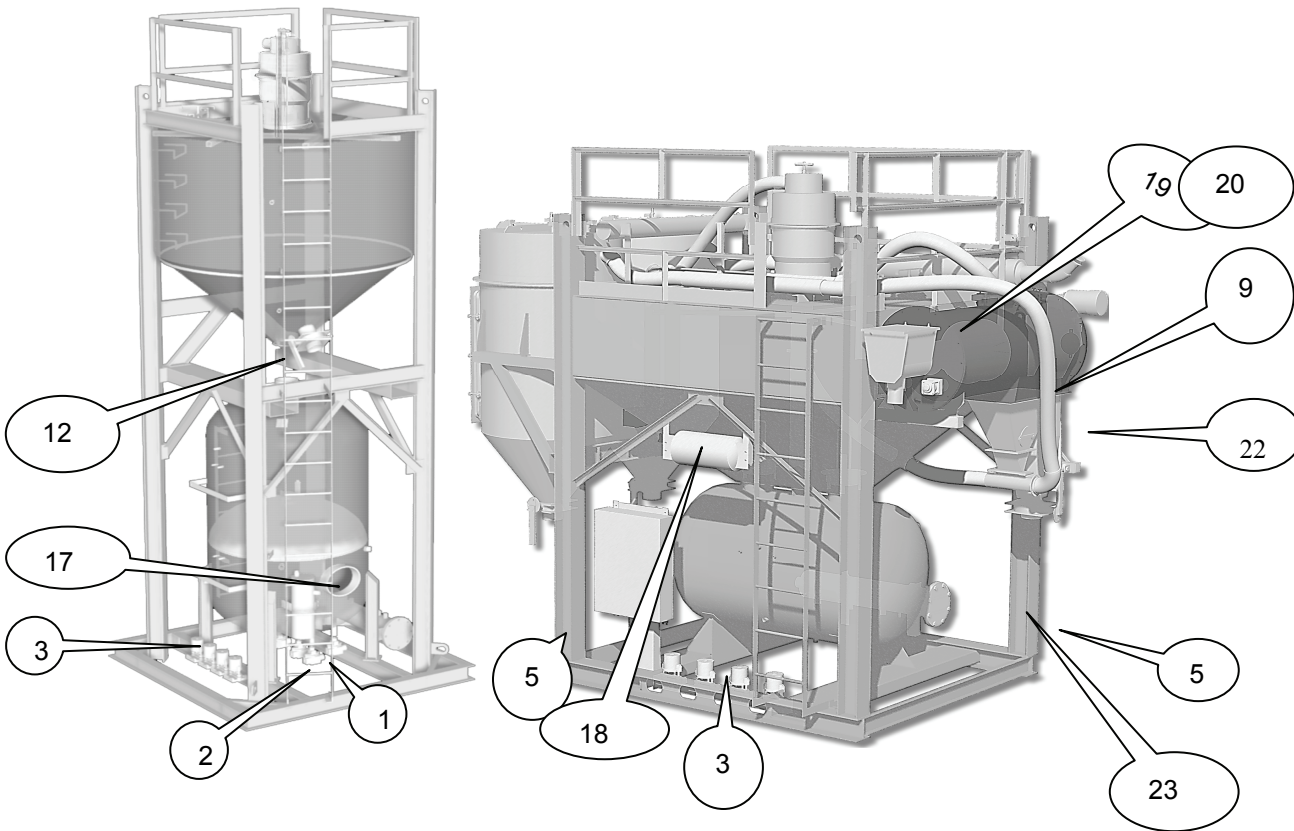
www.safesys.com

info@safesys.com



MODEL MSV-4-40-2





ITEM #	PART NO.	DESCRIPTION
1		S4C Metering/Shutoff Valve
2		AMV, Metering Valve
3		ASV - Pinch Valve ACV - Charge Valve,
5	3100 3706	6" Butterfly Valve
6		Induction (Jet) Vacuum (see page #38)
9	3000 0960	Rotary Separator Gear Box and Motor
10	2100 5613	Probe 12" long (W)
11	2100 5614	Probe 24" long (W) (Alternate lengths are available)
	2100 5610	Probe Box 3E1A (W)
	2100 5612	<i>Level Control Relay Sensor, 500V, 1D1EO, limited availability, replaced by 2100 5622</i>
	2100 5622	Level Control Relay Sensor, 500V, 16MD1B0, Din-mountable
12	3100 3800	8" Butterfly Valve (with gear op and wheel)
	3100 1395	1½" Air-actuated Ball Valve
	3100 1052	1½" Pilot Valve, with N.O. , SAC (AQ)
	3100 1060	2" Air Pilot Valve, with N.C. , SAC (AQ)
	3100 1070	3" Air Pilot Valve, with N.C. , SAC (AQ)
17	44001210	Manway Gasket 11" x 15"
	44001216	Manway Gasket 12" x 16"
18	4900 9065	Air Reserve Tank
19	1461 3060	Magnets (MS) ½" x 6 x 3
20	6901 0210	Wear Plate w/ Magnets
21	3000 0910	Rotary Separator or Spreader Motor, ½ HP, 115 VAC
23	7660 0200	Transfer Tube
	7440 0820	4" NPT Silencer
	6902 2002	Hopper grit shutoff valve assembly, air operated



SAFE SYSTEMS, INC.

MODEL MSVAD-6-40-2

Mobile Abrasive Blast and Recovery System

Standard Features Include:

- ◆ **40-ton Blast and Recovery System**
- ◆ **Continuous Closed Loop**
- ◆ **Two Skid System Allows Continuous Vacuum Recovery During Blasting**
- ◆ **6-outlet Dual Chamber Blast Vessel**
- ◆ **Rotary Screen Separator remove large debris and fines**
- ◆ **Fountain Separator provides Secondary Air Wash**
- ◆ **Vacuum Dust Collectors rated for -30" Hg**
- ◆ **Skid mounted with forklift pockets and certified lifting eyes**
- ◆ **Electrical Control Center, 120V**
- ◆ **Trash Discharges into 55 gallon drums**



Optional Features Include:

- ◆ **4, 6 or 8 Blast Outlets**
- ◆ **Stainless Steel Electrical Enclosure system**
- ◆ **Magnetic Separator**
- ◆ **Hopper Abrasive Spreader for increased capacity**
- ◆ **Snorkel Box for improved grit recovery**
- ◆ **Short Circuit Protection for Deadman**
- ◆ **S4C valves for safer operation**
- ◆ **Productive Vacuum Equipment (PD or Liquid Ring)**

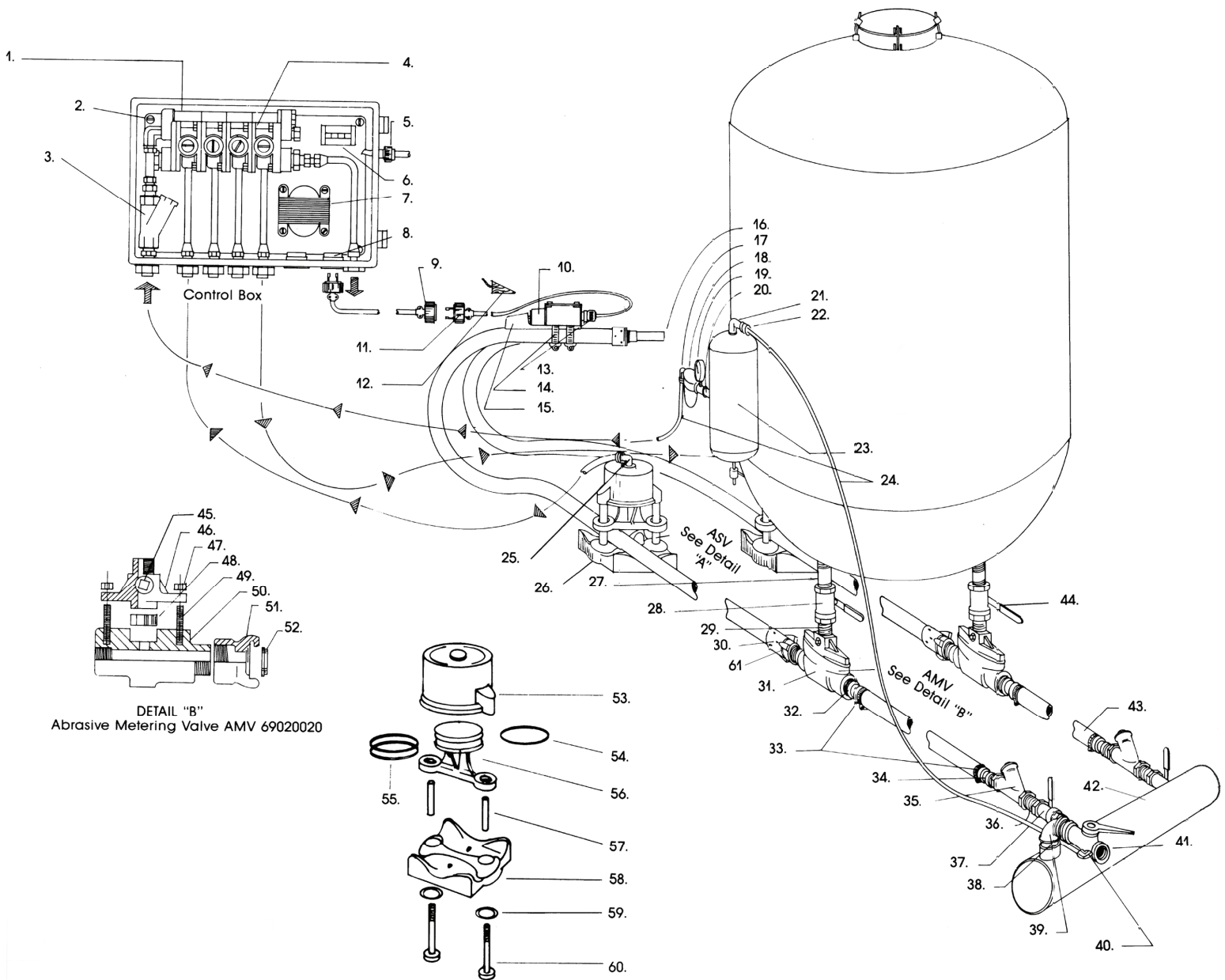


MODEL SYSTEMS III MST-4-20-3

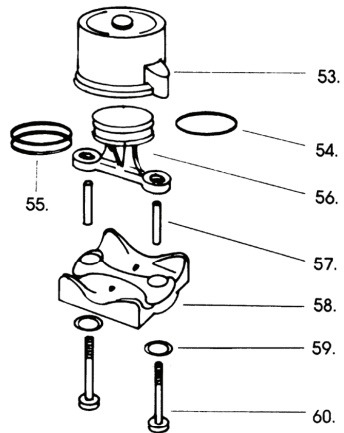
- | | |
|---|---|
| <input type="checkbox"/> 4-Outlet Blast Vessel, 30 cu. ft., 150 PSI | <input type="checkbox"/> Trailer Mounted |
| <input type="checkbox"/> Continuous Closed Loop Recovery System | <input type="checkbox"/> Vacuum Dust Collectors Rated for -30" Hg |
| <input type="checkbox"/> Rotary Screen Separator Removes Debris and Fines | <input type="checkbox"/> MERV-11 or MERV-15 filters available |
| <input type="checkbox"/> Fountain Separator Further Cleans Abrasive | <input type="checkbox"/> 120V Electrical Control Center |
| <input type="checkbox"/> Safety Interlock with SAFE Systems vacuums | <input type="checkbox"/> Sloped Hopper Top |
| <input type="checkbox"/> Forklift Pockets | <input type="checkbox"/> Certified Lifting Eyes |

Optional Features Include:

- | | |
|---|---|
| <input type="checkbox"/> Shown with Magnetic Separator | <input type="checkbox"/> Shown with Optional On-board 2100 cfm Vacuum |
| <input type="checkbox"/> Air Induction Vacuum | <input type="checkbox"/> S4C Valves for safer operation |
| <input type="checkbox"/> Stainless Steel Electrical Enclosure | <input type="checkbox"/> Short Circuit Protection for Deadman system |



DETAIL "B"
Abrasive Metering Valve AMV 69020020



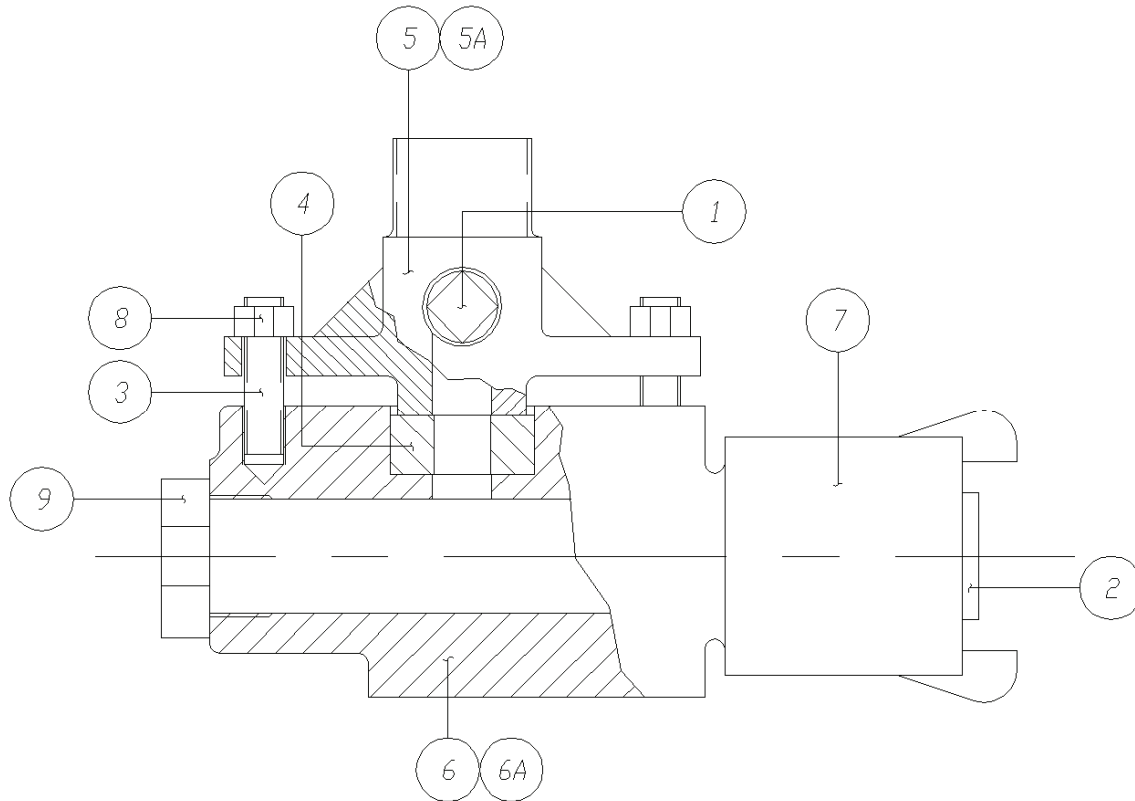
DETAIL "A"
Pinch Valve ASV 69020015

BLAST CIRCUIT COMPONENTS

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>PARTS for CONTROL BOX</u>
1		Coil 24 VAC specify manufacturer and model, Coil 12 VDC specify manufacturer and model,
2	3270 3660	¼" Bulkhead fitting
3	3100 2910	¾" Air Intake Strainer
4		Solenoid Valve 24 VAC specify manufacturer and model,
4		Solenoid Valve 12 VDC specify manufacturer and model,
5		Indicator Light, Specify voltage
6	2903 4240	Green Lens (CH)
7	2201 2260	Transformer 110 VAC Primary / 12 VAC Secondary (Omit with 12 VDC)
8	2709 1030	Female Flush Receptacle #7526
	2201 2265	Transformer 110 VAC Primary / 24 VAC Secondary
<u>PARTS for REMOTE CONTROL SWITCH</u>		
9	2709 2504	Female Receptacle Weather-tight, 2 prong
	6911-0000	SAFE Remote Control Switch w/ 5' cord
10	6203 1001	Remote Control Switch Only – WT
10A	6912-0000	SAFE Switch with 125 ft. cord
11	2709 2404	Male Connector Weather-tight, 2 prong
12	6911-0007	Ball and Chain - SAFE
	6911 0025	Bat and Chain
14	3901 0025	#32 Holder-to-Hose Clamp, ½" wide

MISCELLANEOUS - Control System Components

16		Blast Nozzle
18	3100 8007	¼" NPT Lubricator
19	3100 8160	0-160 Pressure Gauge
22	3100 0450	¾" NPT Check Valve
23	4900 9065	Air Reserve Tank
24	1535 4510	¾" Plastic Tubing
25	3270 4060	¾" T x ¼" Fitting, Brass
26	6902-0015	ASV- Abrasive Shut-Off (Pinch) Valve Detail "A"
27	3240 1700	Nipple, 1¼" NPT x 6" Sch 80
28		1¼" NPT Abrasive Shut-off Valve, Heavy Duty, Full Port
	3100 0390N	
	3100 0395	1½" Ball Valve, Std Port/Reduced Port
	3100 0310	1½" Ball Valve, Full Port
30	6203 0065	C-1 Hose Coupling 1¼" NPT, <i>Import</i>
31	6902-0020	AMV- 1-1/4" complete w/o cleanout plugs
32	3263 8200	1¼" NPT Hose-to-Pipe Fitting x 7" long
	3263 8040	1½" NPT Hose-to-Pipe Fitting x 7" long
33	3901 0007	Bandit Clamp, 1¼"
	3901 0008	Bandit Clamp, 1½"
35	3100 1055	1¼" NPT Check Valve
	3100 1056	1½" NPT Check Valve
38	3210 2010	2" NPT Close Nipple
39	3211 2080	2" NPT 90 Elbow NPT 150 lb.
40	3100 3910	2" NPT Threaded Air Supply Plug Valve
	3100-3930-M	3" Threaded Air Supply Plug Valve w/ wrench, tapped for control air
41	3100 3940-M	4" Flanged Air Supply Plug Valve, tapped for control air
42		Air Manifold
43	1547 5000	1¼" 2-Braid Air Hose
	1547 5025	1½" 2-Braid Air Hose
45 - 52		<u>AMV - Abrasive Metering Valve, Detail "B"</u> Item Nos. 45 - 52:
		<u>ASV - Pinch Valve Detail "A"</u>
53 - 60		Item Nos. 53 - 60:
61	7462 0013	Q-3 1¼" diameter Hose Coupling, Aluminum

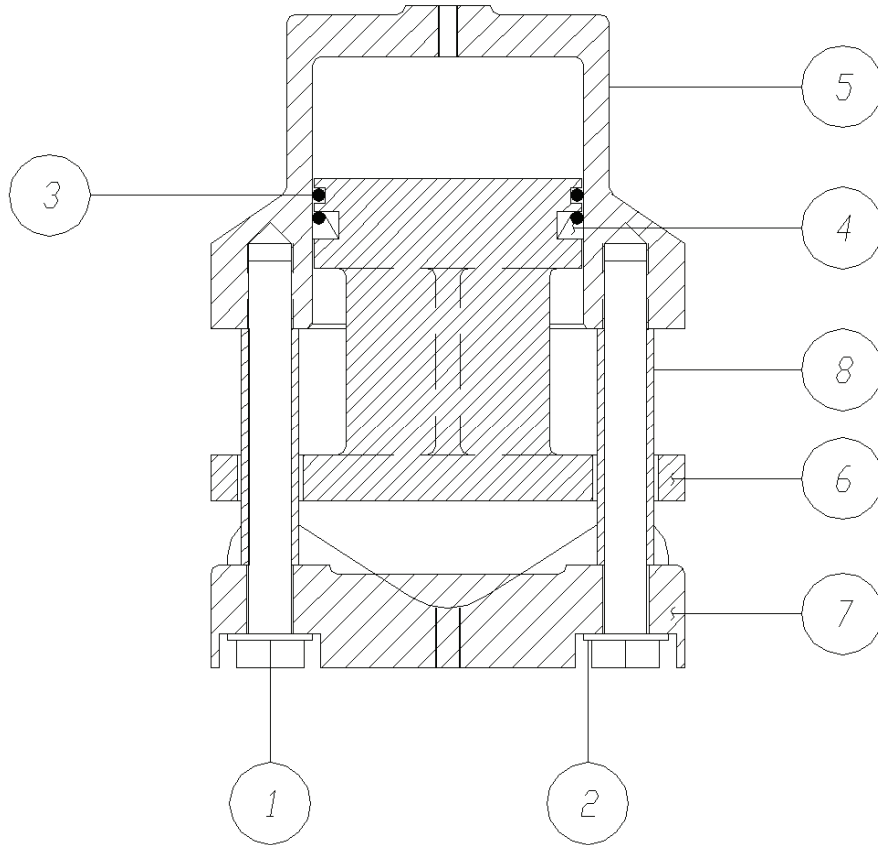


ABRASIVE METERING VALVE - AMV

ITEM #	PART NO.	DESCRIPTION
1	3220 6050	AMV-4 1" Clean-out Plug (new valves do not have this)
2	3500 0050	Urethane Q-G Washer (more durable)
2A	3500 0040	Rubber Q-G Washer
3	4300 4500	½"-13 X 2-½" Stud
4	4400 1780	AMV-3 Washer
5	6203-0005	AMV-1 Top
6	6203-0010	AMV-2 Base (1¼" dia. NPT) (No C-1)
6A	6203-0011	AMV-2 Base (1½" dia. NPT) (No C-1)
7	6203 0065	C-1 Hose Coupling w/ Rubber Q-G Washer, <i>Import</i>
8	7420 0011	½"-13 Hex Nut
9	3210 7070	1½" - 1¼" Reducer Bushing

COMPLETE METERING VALVES

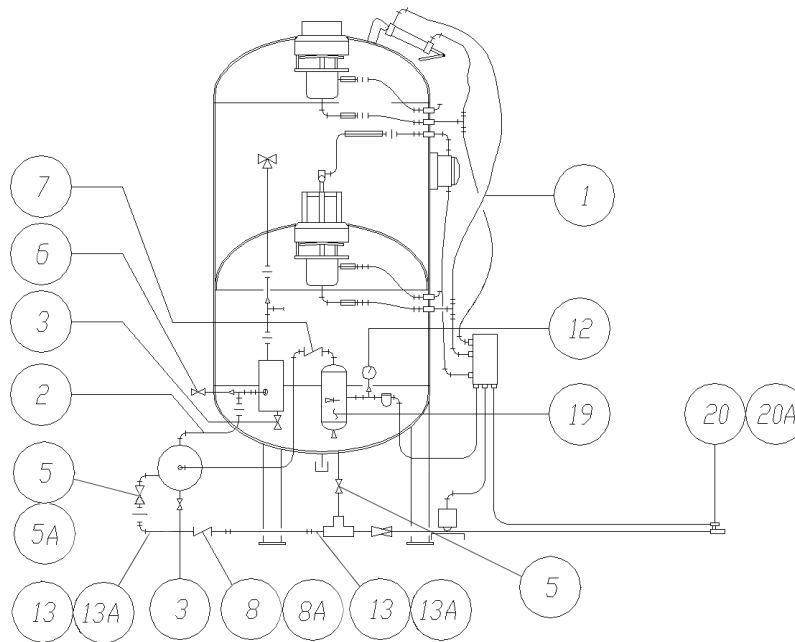
6902-0020	1¼" AMV complete with top
6902-0021	1½" AMV complete with top



PINCH VALVE - ASV

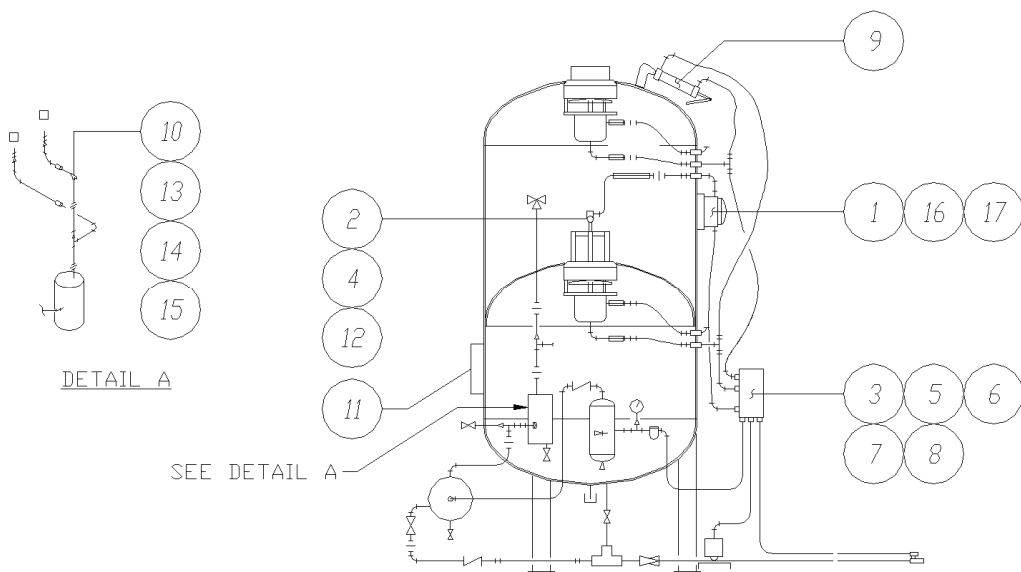
With the heaviest base available for longevity

ITEM #	PART NO.	DESCRIPTION
	6902-0015	ASV (Pinch Valve) - complete
1	4300 0290	5/8" x 5½" Hex Bolt
2	4300 7260	5/8" Internal Starlock Washer
3	4400 0500	4" O-Ring
4	4400 0505	4" U-Cup
	4400-0506	O-Ring/U-Cup Kit, includes #3 & #4
5	6203-0015	ASV-1 Cylinder
6	6203-0020	ASV-2 Piston
7	6203-0025	ASV-3 Base
8	6203 0055	ASV-4 Spacer



ITEM #	PART NO.	DESCRIPTION
1	1535 4510	3/8" Plastic Air Line
2	1547 5000	1/4" 2-Braid Air Hose
	1547 5025	1/2" 2-Braid Air Hose
3	3100 0360	1/2" Ball Valve
	3100 0370	3/4" Ball Valve
5	3100 0390N	1/4" Ball Valve, Heavy Duty
5A	3100 0395	1/2" Ball Valve
6	3100 0400	2" Screwed Air Exhaust Ball Valve
7	3100 0450	3/8" Check Valve
8	3100 1055	1/4" Check Valve
8A	3100 1056	1/2" Check Valve
12	3100 8160	0-160 Pressure Gauge
13	3263 8000	1/4" King nipple, Hose-to-Pipe Fitting (short)
	3263 8200	1/4" King nipple, Hose-to-Pipe Fitting (long)
13A	3263 8010	1/2" King nipple, Hose-to-Pipe Fitting (short)
	3263 8040	1/2" King nipple, Hose-to-Pipe Fitting (long)
	3901 0007	Bandit Clamp 1 1/4"
	3901 0008	Bandit Clamp 1 1/2"
19	4900 9065	Air Reserve Tank
20	6912-0000	Blast Switch with 125 ft. of cord (SAFE deadman switch)
21	3100 3800	8" Butterfly Valve w/ Gear & Wheel
<u>"Other Items Not Shown"</u>		
	3100 3910	2" Threaded Air Supply Plug Valve w/ wrench, located @ manifold
	3100-3930-M	3" Threaded Air Supply Plug Valve w/ wrench, located @ manifold
	3100 3940-M	4" Flanged Air Supply Plug Valve w/ wrench, located @ manifold

Locking Handles are available for most of our ball valves



ITEM #	PART NO.	DESCRIPTION
1	2100 6203	Socket for Level Control Unit (D)
2		Level Probe Wire w/ Protective Cover, Provide Length (D)
3	2100 5612	Level Control Sensor Relay, 500V, 1D1EO (W) for steel grit, limited availability, replaced by 2100 5622
	2100 5622	Level Control Sensor Relay, 500V, 16MD1B0, Din-mountable
4	2100 5700	Level Probe, complete (D)
5	2201 0320	Time Relay 7022AF (AG)
6		Fuse
7	2906 5020	2-position Selector Switch w/ contacts
8		2-position Contact Block
9	3000 0840	2.5" x 9" Air Cylinder with clevis and pin
	3000 0850	Rotary Actuator Cylinder w/o mount (replaces cylinder above)
10	3100 3950	1" 3-way Exhaust Ball Valve, bronze
11	4400 1210	11" x 15" Manway Cover Gasket
	4400 1216	12" x 16" Manway Cover Gasket
12	6911 0010	Steel Grit MSA Level Probe
13	7400 0010	3-way Ball Valve Seal Kits
14	7400 0011	Ball for 1" 3-way Ball Valve
15	7400 0012	Stem for 1" 3-way Ball Valve
16	7400 0014	Control Unit only for Level Probe (D)
17	7400 0016	Head and Rod only for Level Probe (D)
18	3000 0850	Actuating Cylinder (Can be used with mount to replace #9)
	3000 0851	Mount for Cylinder # 3000 0850
19	6902-0030	Charge Valve
20	6902-0021	AMV Metering Valve
21	6902-0015	Pinch Valve
22	7440 0815	2" NPT Silencer

"MODEL PD2400E"

Portable Positive Displacement Vacuum System



Features Include

Electric powered

Skid mounted with forklift tubes

Certified lifting eyes

Free air capacity - 2400 CFM

Maximum vacuum 27" HG

Inlet and outlet silencers standard

135 maximum operating HP

Compact design

1550 CFM at 20" HG

Safety filter

Requires no water

Optional Features Include:

HEPA safety filter

Filter monitor

Diesel drive

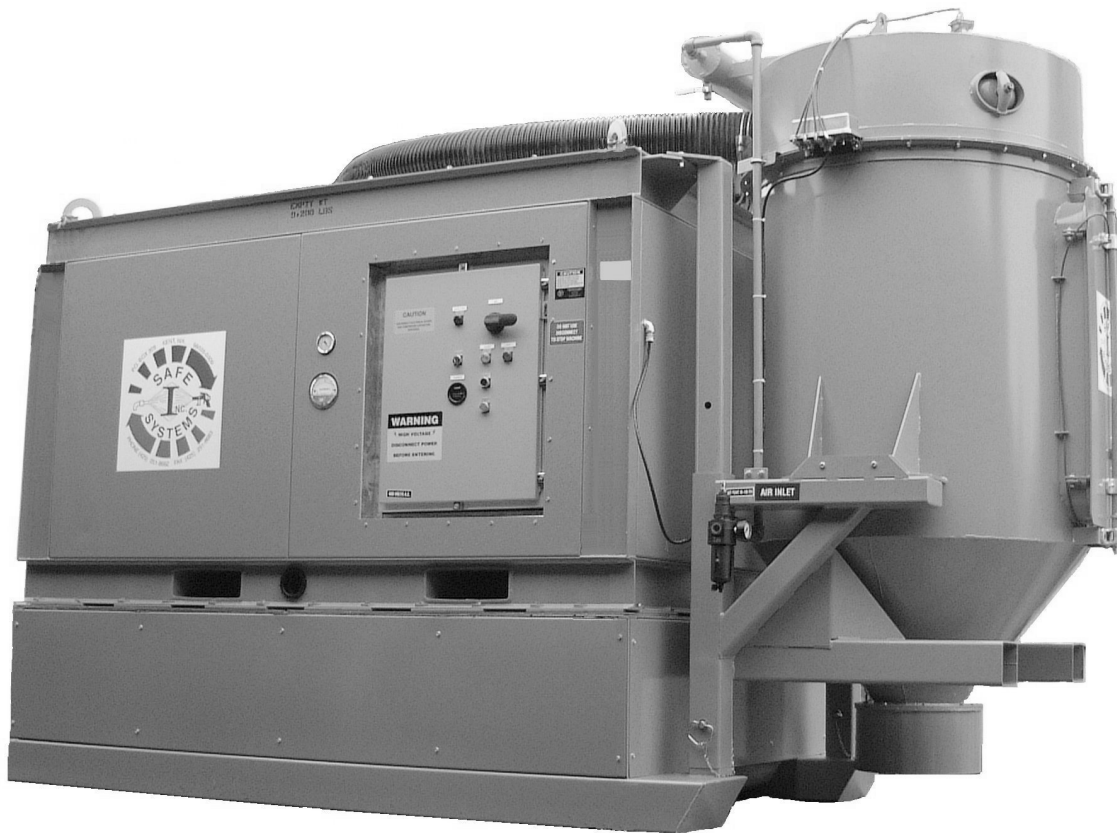
"Quiet" enclosure

Trailer mounted

Vacuum rated dust collector

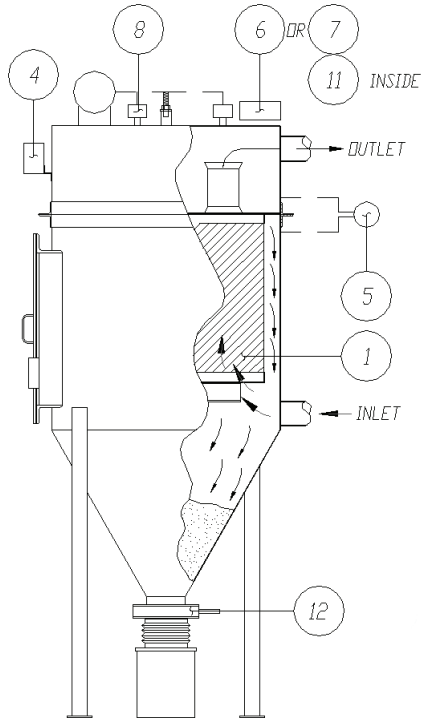
Many other sizes of vacuums available

Stainless Steel control box



ITEM #	PART NO.	DESCRIPTION
1		Vacuum Pump 100-125 HP
2		Vacuum Pump 200 HP
3		Electric Motor 100-200
4		Soft Start
5	1000 0385	Safety Filter 100-125 HP
6	1000 0484	Safety Filter 200 HP
7	1000 1245	VDC Filter Cartridge MERV 11 <i>MERV 15 filters available</i>
8	3200 2020	Magnehelic Gauge 0-20 inches WC
9		Vacuum Pump Belt
10	3402 5310	Vacuum Gauge, 0 – 30" Hg
11	2201 0004	Timer Board, 4-station, 120VAC
12	3104 1817	Solenoid Valve Assembly, 4-station, 120VAC
13	1000 1550	DP Gauge Air Filter w/ Housing, ¼" NPT
14	1000 1551	DP Gauge Polyester Filter Replacement Element Only
15	2200 7608	Compartment Door Limit Switches
16	3100 4430	Diaphragm Valve, ¾" NPT
17	6901 0180	Dump Valve, 10", Counterweighted
18	3100 8039	Filter/Regulator
19	6901 0184	4" Slide Gate
20	6901 0186	6" Slide Gate

Vacuum Hose and Clamps available



ITEM #	PART NO.	DESCRIPTION
1	1000 1245	VDC Filter Cartridge (long, 300 SF) <i>MERV 15 filters available, please call</i>
3	3100 8039	Compressed Air Regulator/Filter 3/4" NPT
4	2201 0004	Timer Board 4-Station
5	3200 2020	Magnehelic Gauge 0-20 inches WC
7	3104 1817	Solenoid Valve Assembly 4-station
8	3100 4430	Diaphragm Valve 3/4" diameter NPT
11	3100 4410	Solenoid (only) 120 VAC
12	3100 3706	6" Butterfly Valve
13	3100 8160	Pressure Gauge 0-160 PSIG
	1000 1550	DP Gauge Air Filter w/ Housing, 1/4" NPT
	1000 1551	DP Gauge Polyester Filter Element Only
	3100 4450	Diaphragm Valve Repair Kit, (1") (Farr)
	3100 4440	Diaphragm Valve Repair Kit (3/4")
	6901 0180	Dump Valve, 10", Counterweighted
	6901 0184	4" Slide Gate
	6901 0186	6" Slide Gate
	1416 0000	Precoat Dust, 50# bag (use approx. 4#/filter)

Collection Tanks & Stands



Certified Lifting Eyes

Options:

Many Sizes Available

Wearplates



Forklift Tubes

Choice of Dump Valve Styles

Access Platforms and Ladders

Spare Parts & Accessories Available

Vacuum Hose Connectors, T's & Y's

Vacuum Hose, many sizes

Vacuum Hose Clamps, CW & CCW

Drum Covers

Hose End Tools, Gulpers, Snorkels, etc. Manway Gaskets