



Operation Manual CAD Series Loader

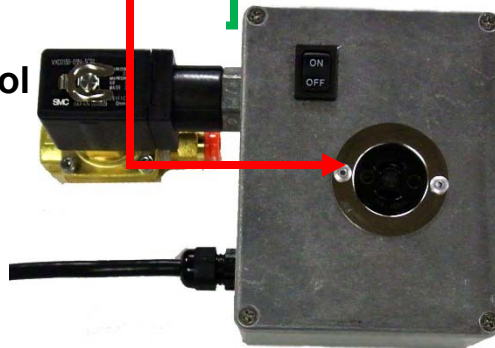
AAE



**Drying Hopper
Adaptor**

Standard Control

No-Load alarm is recommended



Compressed Air



3 In One Wand

Stainless wand
Grinder Spike
Direct connect



Wand with Fluidizer

For difficult materials.

Vibrators are also available.

PRINCIPALS OF OPERATION

Compressed air is directed to the accelerator on the bottom of the material wand. The accelerator creates a strong airflow that draws material into the wand and blows it to the receiver. Once in the receiver the material falls into the sight glass and the air exits via the air filter. The load cycle is initiated by the level switch and continues until the switch signals full. Fines pass through the perforated tube into the felt bag.

INSTALLATION INSTRUCTIONS

1. Mount compressed air filter regulators on a secure mounting surface within 10 feet of both material sources and the level switch.
2. Securely mount the receiver on the machine flange or magnet.
3. Connect flex hose to the wands and the receiver inlets. Secure with hose clamps.
Note-Always put the clamp on the hose with the screw on the top and the deflector down. You can see from the outside that the deflector is in the correct position.
4. Install material level switch on the sight glass in the top position. Connect switch to control with supplied cable.
5. Connect 3/8 inch compressed air hose to the solenoid valves and accelerators. Slide the compressed air hose inside the vent tube on the material wand and over the accelerator tube on the bottom.
6. Set Compressed air pressure at 50 PSI to start.
7. Make sure that system is properly grounded. Monitor for presence of static electricity and ground system to prevent discharge.

OPERATING INSTRUCTIONS

Do not jam wands into material. They will draw into the material as they start to load. If material fails to flow pull the wand out slightly and flow will start again.

Adjust compressed air pressure as needed for good conveying. Compressed air pressure normally will be between 40 and 80 PSI. Lower compressed air consumption by operating at the lowest compressed air pressure that result in reliable material transfer.

Extend control relay life by reducing material cycling and filter pulse to minimize cycles.

General Maintenance

Super-Flex Loaders require inspection and observation to prevent failure. Inspect the following items as needed. If defects or potential contamination is observed discontinue use until repaired.

Filters – Filters fail due to imbedded particles over time. The smaller the particles being conveyed the shorter the filter life will be. Moisture also can cause premature filter failure. The filter should be clean at all times. Clogged filters waste compressed air and eventually cause loading failure. Inspect filters on a regular basis and clean as necessary. Clean by blowing compressed air from the outside of the filter toward the center. Wear proper safety equipment, including eye protection, when cleaning with compressed air. If filter cannot be cleaned replace the filter as needed. Inspect filter for wear and possible contamination and replace as necessary.

Compressed Air Filter – The useful life of the compressed air filters is dependent on the quality of the supplied compressed air. Check compressed air filters and replace as needed.

Flex Hose – Inspect Flex Hose for wear and possible contamination as needed. The life of Flex Hose will be less with abrasive material. Check for contamination in Flex Hose caused by material. Replace and repair flex hose as needed.

Gaskets and Seals – Make sure gaskets and seals are properly installed. Inspect as needed for wear and replace as needed.

Material Deflector and Clamped Hose Tube - Inspect for wear as needed. If wear is observed replace.

Material Wand and Accelerator – Inspect Material Wand and Accelerator for wear and possible contamination as needed. The life of Material Wand and Accelerator will be less with abrasive material. Check for contamination in Material Wand and Accelerator caused by material. Replace and repair Material Wand and Accelerator as needed.

Static Electricity

Static electricity can be generated during conveying plastic materials. Some material can generate dangerous levels of static electricity. Monitor the conveying system for the presence of static electricity. If static electricity is present ground the system too adequately to provide safe operation.

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Trouble Shooting Guide

Problem	Cause	Solution
Not Loading No Compressed Air	No control signal	Identify and repair
	No Compressed Air	Identify and repair
	Failed Valve	Identify and repair
	Level Switch	Adjust or replace
Not Loading Compresses Air Present	Clogged Filter Loader	Clean or replace
	Clogged Filter compressed air	Clean or replace
	Clogged Accelerator	Clear
	Excessive Load Time	Reduce load Times
	Incorrect deflector position	Turn deflector to down position
Reduced Rate	Low air pressure	Increase air pressure
	Clogged Filter Loader	Clean or replace
	Clogged Filter compressed air	Clean or replace

CAD PLC Settings



Cycle on and off time

The CAD can be run for long periods of time with many materials. Long load times can be set up to 10 minutes without stopping to clear. Stopping the loader allows the perforated cylinder to clear by gravity.

Some materials separate better when the loader is cycled more frequently.

You can also reduce the load on your compressor by cycling the loader to match your compressed air availability.

Cycle on time is set in seconds. Set from 20 to 9999.

```
CYCLE ON TIME  
D02= 00005  
CYCLE OFF TIME  
D01= 00005
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CA Delay is the delay time that the compressed air starts after the vac. This allows time for the vac to come up to speed before the material flows.

```
CA DELAY  
D03= 00002  
NO LOAD TIME  
D04= 00025
```

NO-Time is only available on a CADL. The No-Load time is the delay before the no-load alarm sounds if material does not arrive in the sight glass. Set at 10-30 seconds. The only way to turn off the No-Load alarm is to turn the loader off. If you are loading a bin the time can be set to allow time to fill the bin.