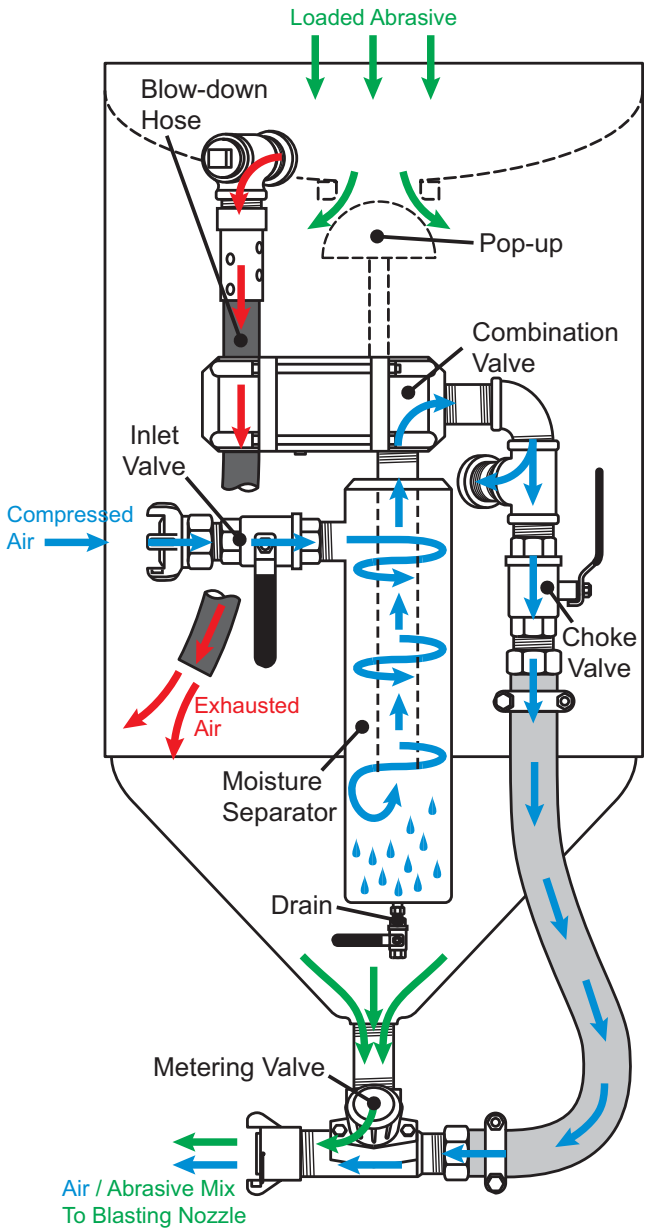
HOW IT WORKS

S-SERIES 3.5/6.5 CU FT PRESSURE RELEASE (SPR) SYSTEMS

WARNING: This section of the manual is designed to give you a general understanding of how the Abrasive Blaster functions. **All** sections of this manual must be read and understood before operating the equipment.

ADDING ABRASIVE

Abrasive is added through the hole in the top of the Abrasive Blaster where the Pop-up and its seat are located. When abrasive is added, it flows down through the hole, around the Pop-up, and down to the bottom of the pressure vessel where it will exit through the Metering Valve when blasting is started.



PRESSURIZATION

When a compressed air source (such as an air-compressor) is connected to the inlet of the Abrasive Blaster and the Inlet Valve is opened, compressed air flows through the Moisture Separator and reaches the Combination Valve where it is stopped. When the control handle is activated, the Combination Valve pinches the Blow-down Hose and air flows through the Combination Valve into the pressure vessel causing the Pop-up (located internally) to seal against its seat. The pressure vessel is now sealed and pressurized. Air will also continue past the Choke Valve to the Metering Valve where it is mixed with abrasive. The mixture of compressed air will now exit the Abrasive Blaster through a blast hose and nozzle connected to the coupling on the Metering Valve and blasting begins. It is important to note that in SPR abrasive blasters equipped with MPV Metering Valves, some abrasive will collect at the base of the valve causing the blast hose to pulsate and spray abrasive erratically for a short time when blasting is started. This is normal and will not hurt the Abrasive Blaster.

DEPRESSURIZATION (BLOW-DOWN)

When the control handle is released in a pressure release (SPR) system, the Combination Valve automatically closes stopping the flow of compressed air and releasing the Blow-down Hose. The compressed air remaining in the pressure vessel is released through the Blow-down Hose and blasting ends.

- Flow of Compressed Air
- Flow of Abrasive
- Flow of Exhaust Air During Blow-down