

1. **Why do you say not to use Clemco or Abec's remote control valves?**
 - a. Bleeder-style remote controls can cause an unintentional start-up that can cause serious personal injury.
2. **The pot starts up fine when you press the remote control but will not stop. Why?**
 - a. Check the twin-line hose, it might be crossed or twisted
 - b. Excessive length of the twin-line hose (which could slow the speed of stopping)
 - c. Electric remote control – shorted
 - d. Improper remote control (not Axxiom/Schmidt)
3. **What do you do about moisture problems?**
 - a. Incorporate moisture separators, after coolers, dryers and/or refrigerated dryers
4. **Why would an abrasive valve wear out too fast?**
 - a. Differential Pressure
 - b. Incorrect sleeve for abrasive type (Urethane vs. Tungsten Carbide)
 - c. Counterfeit valve
5. **Why does the new equipment not do as much work as the old equipment?**
 - a. Worn nozzle on old equipment. The systems are not comparable.
 - b. Undersized hose, nozzle or air pressure issue
6. **Why does a new Axxiom/Schmidt pot clog up more often than our old Clemco pots?**
 - a. Clogging (abrasive flow problems) are typically caused by moisture in the compressed air which contaminates the abrasive. Clemco has a built-in differential pressure that forces wet material out. This results in lost production and premature wear to the metering valve.
 - b. The best option is to install a moisture separator or AirPrep system to remove moisture from the compressed air and operate the blast pot without differential pressure.
7. **What would be the reason(s) for the combo valve not pinching off the blow down hose?**
 - a. Too large of a blast nozzle selected for the available air supply resulting in low system pressure while blasting. The consequence of low system pressure is a weak (insufficient) air signal pressure in the control line that forces the Combovalve to close.
 - b. From continued use the blast nozzle becomes worn resulting dropping the blast pressure and the same impact as above.
 - c. Faulty remote control
 - d. Defective Combovalve piston seal.
 - e. Blow-down hose worn by abrasive.
 - f. Obstruction blocking one or both twin-line hoses. This is typically caused by abrasive back flow.

8. What would cause the material to back up in the controls, clog the moisture trap, and sometimes cause the pop-up to stick in the up position?

- a. When the blast pot is connected to a common air supply source upstream demand can drop the supply pressure resulting in reverse differential pressure. The higher pressure at the blast pot will back flow air to balance the pressure. The back flow will carry abrasive resulting in contamination of moisture separator and controls.
- b. In pressure hold systems, venting the compressed air at the source in lieu of shutting the blast pot inlet ball valve and depressurizing locally will result in back flow.
- c. In back flow conditions abrasive is carried into the blast pot internal popup piping. The abrasive in the piping will jam the popup and not allow it to drop when the blast pot is depressurized.

9. Which should you use, polyurethane or a tungsten carbide sleeve?

- a. It depends on the customer and/or application.
- b. Economics may result in the decision to use the less expensive polyurethane valve.
- c. Choice of abrasive is the most common reason for selection of valve sleeve type. Harder abrasives such as aluminum oxide warrant the use of tungsten carbide valve for extended life.

10. How do you manage a job where you have to blast 200'–300' straight up?

- a. Under this condition starting and stopping the blast operation will result in sluggish startup because of the abrasive that drops out in the blast hose. In these applications remote abrasive cutoff should be used so that the abrasive is purged from the blast hose prior to stopping the blast operation. This results in an efficient blast startup.

11. If you are using a robot and the start and stop need to be cleaner, what should you do?

- a. Purge the system to remove any leftover media from the hose for a clean start up. After completing the cycle, allowing the media valve to close and allow the blast air to continue blasting until the media is purge from the hose. Then the blast air is turned off to complete the process. Next start up should be cleaner.

12. How many PSI does it take to operate Axxiom/Schmidt control valves and systems?

- a. Minimal pressure should be 55 PSI.

13. What needs to be considered when deciding on what degree you need with cone-bottom tanks?

- a. It is determined by the number of outlets.

14. If you need a short tank with more volume, why not just make it bigger all around?

- a. An angle of repose can become an issue; a short and wider vessel could limit the flow of your abrasive.

15. Can you put steel grit in small pots, bulk blasters, and hoppers?

- a. Yes. However, be careful of the weight. Engineers may need to redesign legs for extra weight.

16. Why won't the hopper hold as many tons as we said it would?

- a. Weight of the media. We talk in cubic feet versus tons or pounds. This is the difference between total volume and working volume. The total volume is the full capacity of the hopper. The working volume is the amount of abrasive that will fit into the hopper as it is limited by the angle of repose.

17. Why do pots with hoppers have more abrasive coming out when they blow down?

- a. Typically, this happens when the pot blows down and releases some pressure from the pop-up opening. In cases where lids are involved it can be even more extreme because the lid isn't vented properly to allow the pressure to be dispersed.

18. Why do we make trailers for the highway that you can't pull full?

- a. The axels aren't designed to handle the additional weight.

19. Your customer has a brand-new unit, and they pulled it 100 miles and a wheel came off. How do you keep this from happening?

- a. QC and floor supervisors need to ensure the lugs are tight upon inspection and leaving the facility. Periodically checking the torque on the lugs is also recommended.

20. Why would a pop-up valve not seal right?

- a. Foreign material getting between the pop up and gasket. Misalignment of the pop up. Worn gasket or pop up. Not enough pressure to ensure a proper seal. Weight of abrasive sitting in the top head on top of the pop up. Leaking blow down hose or faulty combo valve.

21. If an old vessel loses the name plate, does the pot need to be re-certified?

- a. IT DOES NOT NEED TO BE RECERTIFIED, BUT BURT NEEDS TO BE INVOLVED TO REPLACE THE PLATE. WE CAN ONLY REPLACE THE PLATE ON AXXIOM VESSELS, NOT SCHMIDT VESSELS. THERE IS A LIST PRICE OF \$360.00 FOR A NEW PLATE. THERE IS A FORM THAT NEEDS TO BE FILLED OUT AND SENT TO US. WE NEED SERIAL NUMBER FROM VESSEL—THERE IS A STAMP ON HANDWAY TO HELP IN THIS IF CUSTOMER/DISTRIBUTOR DOES NOT KNOW THE SERIAL NUMBER. WE CAN MAIL THE PLATE TO DISTRIBUTOR AND CUSTOMER CAN PUT ON VESSEL, BUT WE NEED PICTURES AFTER PLATE IS INSTALLED. IF WE ARE NOT SURE THAT THIS IS ACTUALLY GOING ON AXXIOM VESSEL, WE MAY HAVE TO GO TO THE SITE TO SEE THE PLATE INSTALLED ON OUR VESSEL.

22. Does anything change with altitude? Explain

- a. At 5,000 feet above sea level, there is a 20% loss of pressure. Production rates drop.

23. Why doesn't Axxiom/Schmidt offer manual pots?

- a. OSHA REQUIRES THAT BLAST POTS USE A REMOTE CONTROL TO START AND STOP. THESE INCREASE OPERATOR SAFETY BECAUSE USUALLY 2 ACTIONS ARE REQUIRED FOR THE BLAST OPERATION TO START AND A MAINTAINED GRIP ON THE REMOTE CONTROL TO CONTINUE THE BLAST. IF THE BLASTER DOES NOT MAINTAIN GRIP ON THE REMOTE CONTROL, THE BLASTING OPERATION STOPS.

24. What can you do to reduce the time it takes to stop blasting after releasing the remote control?

- a. CONVERT TO AN ELECTRIC REMOTE CONTROL SYSTEM.

25. Is it possible to use blast hoses that are too large?

- a. YES. LARGER IN DIAMETER HOSES THAN THE PIPING ON THE BLAST TANK WILL CAUSE A PRESSURE DROP WHEN THE AIR FLOW REACHES THE BLAST HOSE. THE RESULT IS A DECREASE IN VELOCITY AND PRODUCTIVITY.

26. Can we blast at 25 PSI with my blaster?

- a. Yes, but you must make sure you have full line pressure going to the Combovalve and then regulate down to 25 PSI.

27. A customer calls and says he has a 3.5 cuft blaster equipped with a combo/micro valve. He is wearing out the pipe nipple attached to the micro valve in 2 days. What is the problem?

- a. Differential pressure

28. I have a combo valve on my blaster. As soon as I open the inlet ball valve on the blaster, air blows through the blow-down hose. Why?

- a. The Combovalve plug assembly needs to be replaced.

29. The Combovalve on my blaster pinches the hose completely, so I can blast for a few seconds, and it depressurizes. What is the problem?

- a. Not enough air.

30. I have a Thompson Valve System. I get plenty of blast air out of my nozzle, but the abrasive will not come out.

- a. The pot has run dry, there's a worn piston seal or an obstruction in the metering valve.

31. How large of a compressor (CFM) is required to run a BRS?

- a. It depends on the blast nozzle and eductor nozzle orifice size and type of operation (closed cycle or open cycle).

32. What type of abrasive can be used in a PMB blaster?

- a. All types