



## Multi Stage Pumps Do's and Don'ts

### Pump Series: MS

#### DO:

---

1. Consult the engine & pump manufacturer's instructions before starting the unit
2. Follow all safety, health & environmental rules and procedures.
3. Make sure all guards and shields are in place and secured before starting engine.
4. Ensure that the pump is level, stable and secure before starting.
5. Keep suction lift to a minimum and support all hoses & piping as needed.
6. Avoid air traps in the suction & discharge lines and make sure that suction line is designed with a slight slope to the pump.
7. Tighten all suction connections properly - use pipe compound or Teflon tape on all threads.
8. Use only good hose gaskets and good quality, reinforced suction hose.
9. Use a foot valve and keep it clean and free from obstructions.
10. Adjust packing as necessary.
11. Check fuel supply – verify adequate fuel level & check for contamination.
12. Follow the maintenance schedule as specified in the manual.
13. Drain the pump and all hoses & piping during extended periods of non-usage or during freezing weather.
14. Allow the pump to cool prior to disconnecting any hoses or draining the pump.

#### DON'T:

---

1. Allow inexperienced personnel to operate equipment unless they are supervised.
2. Forget safety, health & environmental precautions.
3. Lift the pump with suction or discharge hoses attached.
4. Attempt suction lifts over twenty-five feet.
5. Allow the suction line to become clogged or mired in mud.
6. Operate the unit while a discharge valve is closed or the discharge line is obstructed.
7. Operate the pump at an excessive angle of inclination.
8. Run the engine faster or slower than the recommended operating speed range.
9. By-pass or disconnect any safety shutdown switches or gauges.
10. Over tighten packing.
11. Allow the engine to run out of fuel.
12. Neglect periodic service and maintenance.
13. Perform any service or repairs while the engine or the pump end is running or is hot.
14. Remove any hose, cover plate or plugs on an overheated pump.
15. Pump sand, abrasive liquids or solids.
16. Bypass or disconnect any safety shutdown switch or gauge.
17. Overfill the fuel tank.