

Impactor Pipe Bursting Support Equipment Checklist

For most pipe bursting projects, the following equipment should be supplied by the contractor to be on sight, or readily accessible from the contractors fleet or from a rental yard.

1. Shoring- as required by code for depth of launch and receiving pit (if required)
2. Compressor – with sufficient CFM to run tool (See owners manual for correct CFM) must be capable of supplying 110 psi **at the tool**. See compressor selection chart.
3. Excavator (Track Hoe and/or Back Hoe)
4. Bypass pumping equipment capable of handling volume, designed for sewer
5. Sewer plugs
6. Hand tools to re-connect main line to laterals and mainline into the manhole,
7. Pipe Fusion Equipment (arrange with pipe supplier for fusing or training)
8. Sawzall or other to cut Impactor off the pipe in the manhole.
9. ½ inch and 3/8 drive ratchet. (An impact can be beneficial)
10. 10-foot chain(s) with hooks or other lifting equipment and rigging.
11. ½ inch chuck electric or cordless drill.
12. Generator or other power source.
13. A jet or vac truck can greatly speed up clean up time.
14. Radios (3) please don't forget to charge them
15. Jack Hammer for enlarging invert and bench to receive drill head and Impactor into manhole. (A 20 lb. Air hammer is advised)
16. Road Plates to place over lateral pits, or as the site requires.
17. Traffic control cones and barricades as needed.
18. Shovel, rake, digging bar, other hand tools.

Supplies

1. Duct tape
2. Cement grout or material specified by contracting authority for patching up void between manhole wall and new pipe and repairing the drill rod entry point
3. Fittings to plumb compressor to 2 inch npt
4. Anti -Seize
5. 2x4's, 4x4's, other dunnage

Pneumatic Impactor Pipe Bursting System Checklist

Vermeer supplied equipment (may vary depending on system)

1. Pneumatic Impactor
2. Starter Rod
3. HDPE adaptor for Impactor to correct size DIPS or CIPS pipe
4. Replaceable bladed shield
5. HammerHead Mole oil (205156-001)
6. High Capacity oiler
7. 2 inch air supply hoses
8. Fittings kit to plumb air hoses to drill

The following should be considered before mobilizing equipment and personnel:

- Have all permits been reviewed, sent in, and approved?
- Have British Gas reporting requirements been met
- Have all utility locates been made for the drill bore path, pits, burst run and new pipe entry pit or bore?
- Have preparations been made to meet OSHA standards for trench shoring, confined space entry?
- Know that the required minimum length of the entry pit is 2.5 times the depth of the existing utility for a horizontally run line. Example: 10' deep utility = 25' long pit. This is to accommodate the bend radius of the HDPE pipe. A longer pit may be required to accommodate the bend radius of the drill rod
- The first run should be under 300'. This will allow you to see how this particular ground condition is responding to the burst.

AGENDA FOR FIRST BURST

- Meet with crew, go over site lay out. Review everything that will be taking place during the burst.
- Review all supplies and equipment necessary.
- Check fuel and fluid levels in compressor, drill, lube system and all other support equipment.
- Check oil level in tool oiler.
- Dig pits: entry, laterals, and, if warranted, exit pit. To save time, pits may be planned and dug the day before. Follow OSHA and contracting authority for overnight safety precautions. *Note: all third party utilities within 2' of line being burst must be exposed to avoid damaging them.*
- Fuse pipe. Attach Impactor to new product pipe
- Prepare manhole penetrations, inverts and benches to receive larger diameter of the Impactor and the new product pipe
- Prepare entry points in the manholes at either end for the drill head
- Pull lube hose thru new pipe if using rear fed lube system
- Organize where compressor (and lube tank) will be stationed during burst.
- Set up drill in appropriate location.
- Drill to manhole or utility entrance point
- Push drill stem out thru old utility pipe. Use attachments to pre-clean and/or pre-video the pipe
- Drill to the surface, or if entering pipe thru a launch pit, lift drill rod to meet Impactor at the front of the pipe
- Connect air compressor, hoses, and oiler to drill
- Disconnect drill head from drill rod and **blow air thru rod to make sure it is clean.**
- Connect drill rod to Impactor

- Begin burst
- When burst is complete, disconnect drill rod from Impactor.
- Cut pipe behind Impactor or remove bolts from Impactor
- Lift Impactor out of manhole or exit pit
- Reconnect new pipe to live line and connect any laterals.
- Wrap up equipment, or prepare for next burst.