





Pipefitting Technology I Lab

of hand and power tools of the trade and ladder and scaffold safety, selection, construction and the associated hazards. Oxyfuel cutting and associated safety





Pipefitting Technology I Lab

National Center for Construction Education & Research. (2017). *Pipefitting*. Retrieved from National Center for Construction Education & Research:

https://www.nccer.org/workforce-development-programs/disciplines/craft-details/pipefitting

Recommended Course Activities:

Under the supervision of the instructor, the trainee should be able to do the following through worksheets, projects, reading assignments and exercises:

- 1. Identify various pipefitting hand tools.
- 2. Secure a section of pipe in a vise and pipe stand.
- 3. Properly use:
 - a. Straight pipe wrenches
 - b. Offset pipe wrenches
 - c. Chain wrenches
 - d. Strap wrenches
- 4. Properly use:
 - a. Laser level
 - b. Torpedo and larger levels
 - c. Tubing water level
 - d. Center finder
- 5. Check square and level:
 - a. Turn tongue 180 degrees from where it was.
 - b. Flip level to ensure it is level
- 6. Cut pipe using a portable band saw (do not use threading machine).
- 7. Operate a portable grinder.
- 8. Replace dies in a threading machine.
- 9. Cut, ream and thread pipe using a threading machine.
- 10. Cut and thread nipples using a nipple chuck.
- 11. Thread pipe using a portable power drive.
- 12. Identify several types of pipe bevelers.
- 13. Set up oxyfuel equipment.
- 14. Light and adjust an oxyfuel cutting torch.
- 15. Shut down oxyfuel cutting equipment.
- 16. Disassemble oxyfuel equipment.
- 17. Change empty cylinders.
- 18. Perform straight line and square shape cutting.
- 19. Perform piercing and slot cutting.
- 20. Perform bevel cutting.
- 21. Perform washing.
- 22. Select, inspect and use stepladders.
- 23. Select, inspect and use straight and extension ladders.
- 24. Erect, inspect and disassemble tubular buck scaffolding.
- 25. Perform all prestart checks for engine-driven generators.
- 26. Set up and operate engine-driven welding machines.
- 27. Operate engine-driven generators.
- 28. Perform all prestart checks for portable air compressors.
- 29. Operate portable air compressors.
- 30. Identify portable pumps to use for specific applications.