

MODULE OVERVIEW

This module covers the safety procedures and considerations for operating hydroblasting equipment for cleaning and surface preparation. Confined space entry and scaffold safety are also covered. The basics of setting up and operating hydroblasting equipment are explained.

PREREQUISITES

Prior to training with this module, it is recommended that the trainee shall have successfully completed *Core Curriculum*.

OBJECTIVES

Upon completion of this module, the trainee will be able to do the following:

1. Know the proper safety procedures for hydroblasting.
2. Explain the requirements for job-site setup for hydroblasting.
3. Perform the basic hookup for cleaning with a hydroblaster.
4. Perform job-site maintenance on dump valves and lances.
5. Identify types of hydroblasting equipment.

PERFORMANCE TASKS

Under the supervision of the instructor, the trainee should be able to do the following:

1. Explain the proper safety procedures for hydroblasting.
2. Describe the requirements for job-site setup for hydroblasting including assembly of all hoses, valves, lances, and equipment.
3. Demonstrate the correct and effective use of flex lances, line moles, and shotguns.
4. Demonstrate the proper care of equipment and job site.
5. Identify types of hydroblasting equipment.

MATERIALS AND EQUIPMENT LIST

Overhead projector and screen	Detection meters
Transparencies	Personal protective equipment (PPE)
Blank acetate sheets	Set of armor
Transparency pens	Waterproof clothing
Whiteboard/chalkboard	Ear protection
Markers/chalk	Face protection
Pencils and scratch paper	Standard PPE for working in a confined space
Hydroblasting equipment	Waterproof physician's card
Objects for hydroblasting demonstration	Decibel meter
Dummy with a waterproof suit	Company safety policy on confined space entry
Dummy with body armor	Literature on manlifts
Wood	Manlift operator's manual
Painted wood	Line mole
Concrete	Typical pumps
Metal	Typical foot pedal dump valve
Company's safety manual or other safety materials on hydroblasting	High-pressure hose

Several types of lances
 Moleing frame
 Jetting heads
 Surface cleaners
 Various types of nozzles
 Pre-task assessment form

Pictures of typical job sites
 Safety video(s) (optional)
 TV with VCR/DVD player (optional)
 Copies of Quick Quizzes*
 Module Examinations**
 Performance Profile Sheets**

* Located in the back of this module.

**Located in the Test Booklet.

SAFETY CONSIDERATIONS

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module requires trainees to perform hydroblasting. Ensure that all trainees are briefed on safety procedures including how to properly inspect the equipment and job site before operations, how to operate the dump valve and other safety devices, and don the appropriate personal protective equipment.

ADDITIONAL RESOURCES

This module is intended to present thorough resources for task training. The following reference work is suggested for both instructors and motivated trainees interested in further study. This is optional material for continued education rather than for task training.

Troubleshooting and Repairing Pumps, Latest Edition. Contren® Learning Series. New York, NY: Prentice Hall.

TEACHING TIME FOR THIS MODULE

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 20 hours are suggested to cover *Hydroblasting Technician*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

Topic	Planned Time
Sessions I and II. Hydroblasting Safety	
A. Introduction	_____
B. Industrial and Legal Cautions	_____
C. Confined Spaces	_____
D. Motorized Equipment and Scaffolding	_____
E. Laboratory – Trainees practice explaining proper safety procedures for hydroblasting. This laboratory corresponds to Performance Task 1.	_____
Session III. Equipment	
A. Hydroblasting Applications	_____
B. Hydroblasting Equipment	_____
C. Laboratory – Trainees practice identifying types of hydroblasting equipment. This laboratory corresponds to Performance Task 5.	_____

Session IV. Setting Up

- A. Personnel _____
- B. Setup _____
- C. Laboratory – Trainees practice describing the requirements for job-site setup for hydroblasting. This laboratory corresponds to Performance Task 2. _____

Sessions V through VII. Operating Hydroblasting Equipment

- A. Shotgunning _____
- B. Pipe _____
- C. Tanks _____
- D. Cleanup _____
- E. Laboratory – Trainees practice using flex lances, line moles, and shotguns. This laboratory corresponds to Performance Task 3. _____
- F. Variances _____
- G. Laboratory – Trainees practice demonstrating the proper care of equipment and job site. This laboratory corresponds to Performance Task 4. _____

Session VIII. Review, Module Examination, and Performance Testing

- A. Review _____
- B. Module Examination _____
 - 1. Trainees must score 70 percent or higher to receive recognition from NCCER.
 - 2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.
- C. Performance Testing _____
 - 1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
 - 2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.

