

## Gen Con Syllabus

**Time:** 8 hours

**Maximum Class Size:** 12

**Prerequisites:** None

### Course Description

Working safely and efficiently is the primary focus of the Gen Con eight-hour course. Laborers need to use a wide variety of tools designed for different types of work. To work both safely and efficiently, it is important to learn how to use and maintain each type of tool correctly. In this course, the participant will learn about hand tools, portable cut off saws, and tools that are powered by gas engines. Two-cycle and four-cycle engines will be introduced (their parts, safety equipment, and precautions that need to be taken when using them). OSHA Silica Standard will be presented and discussed. The participant will have the opportunity to operate a variety of these gas-powered tools.

### Goals/Objectives/Student Learning Outcomes:

- List 5-7 hand tools commonly used by Laborers
- List 3-5 power tools commonly used by Laborers
- Select Personal Protective Equipment (PPE) for 1-3 tasks commonly performed by Laborers
- Complete a “How to Read a Tape” exercise with a score of 75% or above
- List items for a pre-operation inspection on a ramming compactor
- Operate a ramming compactor using all required PPE
- Describe the OSHA Silica standard 29 CFR 1926.1153 and explain how it applies to construction tasks
- Tie a string-line between two steel stakes
- Identify the steps to priming a portable trash pump
- Using a chart, select the proper amount of two-cycle oil for at least two given fuel/oil ratios
- List items for a pre-operation inspection of a portable cut-off saw
- Perform basic cutting techniques using a portable cut-off saw
- Remove and replace the blade on a portable cut-off saw
- Properly pressurize a can sprayer
- Properly relieve pressure from a can sprayer
- Pass an Exit Exam with a score of 80% or above

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### Standards

- OSHA 29 CFR 1926.21 Safety training and education
- OSHA 29 CFR 1926.28 Personal Protective Equipment
- OSHA 29 CFR 1926.55 Gases, vapors, fumes, dusts and mists
- OSHA 29 CFR 1926.152 Flammable liquids
- OSHA 29 CFR 1926.302 Power-operated hand tools
- OSHA 29 CFR 1926.1153 Respirable crystalline silica

### Classroom Rules and Procedures

- All classes begin at 6:30 am and end at 3:00 pm
- Upon entering classroom, all participants must sign in and be seated by 6:30 am
- Class will consist of a combination of lecture, video, demonstration, coached group exercises, individual exercises and assessment.
- Students are required to report to class ready to work and maintain the provided PPE

### Textbooks/Readings/Materials

- Gen Con Handouts (HO):
  - Participant Guide
  - Measuring Tape (practice)
  - Measuring Tape (Exam)
- Gen Con Instructional Tools (IT):
  - Prepared/Unprepared photos
  - Ruler Flash Cards
  - Small Engine Exercise
  - Trash Pump Exercise
  - OSHA Silica in Construction Fact Sheet

### Tools/Equipment/Other Materials

- 1 Jumping Jack
- 1 gal. Motor Oil
- 3 Pairs of toe guards
- 1 Flat shovel
- 1 Pump
- 1 Suction hose
- 1 Discharge hose
- 2 55 gal. Trash Cans

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- 1 5 gallon bucket
- 1 Portable cut-off saw
- 2 Abrasive blades
- 2 Hardhats with face shield
- 2 Pair of leather leg protectors
- 2 Can sprayer
- 3 8 lb. Sledge hammer
- 2 Roll of string line
- 6 Steel stakes
- 1 T-handle wrench (for blade change-out)
- 1 Water hose (Facility may already have one)
- 1 Nozzle
- 1 plastic or PVC pipe

### Personal Protective Equipment

- 12 pairs of gloves
- 12 pairs of safety glasses
- 2 hardhats with face shields or separate face shields
- 20 pairs of earplugs
- 2 Boxes of paper respirators/particle masks

### Course Requirements

To receive credit for the course, participants must:

- Be present for full eight hours
- Participate in all classroom exercises
- Pass a written exam
- Pass a hands-on exam

### Course Policies

- Participants must be on-time and ready to work.
- Participants must return from breaks on-time.
- Participants must participate in each exercise and assignment

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- Participants who are on “light duty” are not allowed to take this course due to the physically demanding requirements.

### **Assessment and Grading**

Participants will be assessed on the following:

- All written exams must be passed with a score of 80% or above.
- All hands-on exercises are graded on performance and participation. They are pass/fail and must be passed with a score of 80% or above.

### **Safety**

Failure to maintain and use PPE may result in dismissal from the course.