# Welding – Electric Rod

#### SAFETY AWARENESS KEPT SIMPLE

#### Safety Talk Delivery Pack

#### This Safety Talk contains:

- 6 Page Talk Text
- 6 OHP Presentation Slide Pack
- 12 A5 talk Handout Sheets
- Assessment and Assessment Answers Sheet
- Employee Attendance Register
- A "How to Present Safety Talks Guide"

Using the talks (Extract "How to Present Safety Talks"):

Plan which topic you want to discuss with your team.

**Read** through the script before you hold the meeting to familiarise yourself with the material.

**Start** the talk with a comment that makes the topic relevant to the team. For example, if you have seen a number of people using ladders incorrectly, use this as your opening comment.

**Follow the script** but don't read straight from the page. The script is only a prompt and it will sound better if you use your own words.

**Ask the questions** as they appear in the script. It is important you do this because they are a lead in to the next section of your talk.

**Give the team enough time to answe**r the questions. Safety talks can be boring for the team if you are the only one talking.

**Hand out** the information sheets as they appear in the script. Don't hand out all the information sheets at the start of the talk otherwise there is a temptation for the team to read ahead and not listen to the points you are making.

Collect the information sheets at the end of the talk so they can be used again.

To obtain your Safety Talk Delivery Pack go to: www.smartsafe.com.au

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# Welding - Electric Rod

## INTRODUCTION

There are a number of hazards associated with welding, which include:

- toxic gases;
- toxic fumes;
- radiation;
- · heat; and
- · electricity.

Serious injuries and fatalities can occur as a result of inattention to hazards and unsafe work practices.

#### **LEARNING OUTCOMES**

At the end of this talk you will know:

- welding hazards;
- · Personal Protective Equipment;
- · checking welding equipment; and
- using welding equipment.

## **WELDING HAZARDS**

All welding processes require heat and sometimes other substances to produce the weld. Because high heat is used to make the weld a number of by-products result from the process including gases, fumes and radiation which can be serious health hazards.

Exposure to toxic gases during welding can result in:

- · inflammation of the lungs;
- · swelling and accumulation of fluid in the lungs;
- emphysema;
- · chronic bronchitis; and
- asphyxiation.

The types of gases and fumes present in the welding plume depends on the type of material that is being welded and the flux rods used.



"What are some of the gases and fumes you can be exposed to when welding?"



Hand out sheet 1 - Welding gases, fumes and radiation

Document Number: ST029

Revision 2013 1.0

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# Sample OHP Presentation Slide

# Sheet 1 - Welding Gases, Fumes and Radiation





#### Toxic gases

- Ozone
- · Nitrogen Oxides
- Phosgene

#### **Toxic fumes**

- · Cadmium Oxide
- · Chromic acid
- Copper fumes
- · Nickel fumes
- Vanadium fumes
- Zinc Oxide

#### **Radiation**

- Infra-red
- Ultra-violet

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#### Sample A5 Handouts

## **Sheet 4 – Welding Equipment Checks**



- Burns or cracks in the insulation
- Loose screws
- Damaged or dirty connection points
- · Loose cable connection
- Burned or split insulation



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# **Sheet 4 – Welding Equipment Checks**



- Burns or cracks in the insulation
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