

## **Welding & Metallurgy—Skills & Practices (STRCTR-551)**

**Length** 80 hours (10 days)

### **Objective**

The objective of this course is to teach students to use the basic welding skills required for their engineering duties and to satisfy requirements for the Officer in Charge of the Engineering Watch (OICEW).

### **This Course is USCG Approved and STCW Compliant. The course certificate will state:**

“Any applicant who has successfully completed our Welding & Metallurgy – Skills and Practices (STRCTR-551) course will satisfy the training requirements of the STCW Code 2010, Table A-III/1, within the Function: Maintenance and Repair at the Operational Level, under the Competence: Appropriate use of hand tools, machine tools and measuring instruments for fabrication and repair on board. AND the specific TASKs listed from the National Assessment Guidelines of NVIC 17-14 OICEW: 8.1.B and 8.1.C Applicants who have successfully completed this course need not present completed “Control Sheets” for these assessments in applications for STCW certification.”

### **Scope**

This course provides students with a thorough knowledge and understanding of marine engineering at the operational level, specifically in the use of appropriate techniques for fabrication and repair operations such as welding, cutting, soldering, and brazing. This course provides theory and lab practice of the basic welding and metallurgy processes including Oxy-Acetylene Equipment (OAE), Shielding Metal Arc Welding (SMAW), and Flux Core Welding (FCW).

### **Entry standards**

Student minimum prerequisites are:

- In possession of a valid Merchant Mariner Credential (MMC)
- Proficient in the English language
- At least 18 years of age.

### **Please be prepared for class with the following:**

Please note that you must adhere to the following requirements of this course:

Apparel:

- Wear long pants
- Wear close-toed work boots with socks

STAR Center will supply the following:

- Welding helmet
- Apron
- Sleeves
- Goggles
- Safety Glasses
- Chipping hammer
- Striker
- Wire brush
- Course materials

### **Teaching Facilities**

STAR Center, Dania Beach, Florida

McFatter Technical Institute, Davie, FL

