SQUEEZE-TYPE RESISTANCE SPOT WELDING

WCS04

With an increases number of vehicles being manufactured with high strength and ultra high strength steel, spot welding is an effective solution for minimising the heat affect zone. The process of spot welding for attaching body panels and components has many other benefits as well, among them are decreased damage to corrosion protection and replication of production weld appearance.

Course Content

Module 1—Squeeze-Type Resistance Spot Welding (STRSW) Process

This module describes the history of collision repair welding processes and defines the squeeze-type resistance spot welding (STRSW) process. The student will learn about the considerations for using STRSW and identify the stages of a resistance spot weld.

Module 2— STRSW Equipment and Settings

In the second module, the student will learn about STRSW power sources and inverter-type equipment. This module covers the types of STRSW arm sets, electrode tips, electrode tip maintenance and machine settings.

Module 3—Making Resistance Spot Welds

The module provides information on how to prepare a panel for spot welding and provides information for panel fit-up and alignment of the electrode tips. It provides information on how to determine the correct pitch and edge distance for STRSW welds and how to visually inspect and destructively test STRSW welds.

Module 4—Weld Bonding

The final module provides an overview of the weld bonding process and how to prepare mating flanges for weld bonding. The student will learn how to make and inspect weld bonding test samples. Also included are vehicle maker recommendations for STRSW and how to choose STRSW equipment.

Registration

To register for Squeeze-Type Resistance Spot Welding (WCS04) click here or visit www.i-car.com.au

Course Highlights

Points: 1

Estimated Duration: 4 Hours

Format: Classroom & Virtual Classroom

Meets the I-CAR training requirements for the following roles:

- STRUCTURAL TECHNICIAN
- NON-STRUCTURAL TECHNICIAN

After completing this course, you will be able to:

- Understand the squeeze-type resistance spot welding and STRSW process
- Describe the STRSW power sources
- Identify the types of arm sets and electrode tips and understand the importance of aligning and dressing electrode tips
- Identify the machine settings for resistance spot welding.
- Understand the flange preparation and fit-up
- Visually inspect and destructively test spot welds.
- Describe the welding process
- Understand how to choose the appropriate STRSW machine for your needs