

STEEL UNITISED STRUCTURES TECHNOLOGY AND REPAIR

SPS07

Developed specifically to address the issues of the new High Strength and Ultra High strength steels, this course is a must for anyone involved in collision repair on post 2000 vehicles. Incorrect processes can compromise the strength of these new steels. Understanding unibody design technologies and construction as well as advanced high strength steel considerations will help the technician with structural steel part repair or replace considerations.

Course Content

Module 1—Steel Strength and Unitised Structures Repair

This module explains the new types of steels used in unitised vehicle structures. The student will learn about the mechanical properties of some of the new AHSS and how typical repair processes can affect the steel strength.

Module 2—New Construction Processes

In this module, the student will learn objectives for identifying new construction processes used in steel unitised structures such as tailor welding and multiple layer construction. The student will also examine how new construction processes have altered traditional repair procedures.

Recommendations

This course covers a range of AHSS used in today's modern vehicles. It is recommended that students have an understanding of vehicle construction and damage analysis procedures. Other courses that may be helpful include:

- Adhesive Bonding (ADH01)
- Steel Unibody Front and Rear Rails, Floors and Front Structure (SPS01)
- Steel Unibody, A,B,C,D Pillars and Rocker Panels (SPS02)
- Steel GMA (MIG) Welding (WCS01)
- Squeeze-Type Resistance Spot Welding (WCS04)

Course Highlights

Points: 1

Estimated Duration: 4 Hours

Format: Classroom & Virtual Classroom

Meets the I-CAR ProLevel 1 training requirements for the following roles:



STRUCTURAL TECHNICIAN



NON-STRUCTURAL TECHNICIAN



ESTIMATOR



ASSESSOR

After completing this course, you will be able to:

- Describe basic metallurgy and its impact on the collision repair industry
- Explain how the use of new materials used in vehicles relates to collision repair dynamics
- Understand why vehicle makers are moving toward AHSS
- Identify the repair considerations for AHSS and new vehicle construction processes

