

STEEL STRUCTURES DAMAGE ANALYSIS

DAM12

Properly analysing collision damaged vehicles so that the structural integrity is restored is critical to the repair process. This requires understanding the aspects of vehicle design and how collision energy can travel throughout a structure. Being able to thoroughly identify structural damage and industry accepted repair practices can help ensure that your customer's vehicle is restored to its condition prior to the collision, resulting in a complete and safe repair.

Course Content

Module 1—Vehicle Structures

This course opens with a description of how a vehicle is designed and how it collapses under collision forces, which is a critical step in identifying structural damage during the analysis process. Students will also learn about different vehicle body types and their characteristics, which supports the importance of building an accurate repair plan that will not compromise the integrity of the vehicle from its original design. The student will gain an understanding of the different types of vehicle damage and how they are created, the various types of vehicle damage conditions and how to use visual indicators to identify the type of damage. This module concludes with information on how to take quick measurements to verify structural problems and understand three dimensional computerised measuring results.

Module 2—Structural Damage Analysis

The second module of the course introduces students to specific criteria needed for determining if a structural part should be repaired or replaced, whether heat can be used or if a part can be partially replaced. The course continues with a detailed look at which parts make up the front, rear and side structures and provides damage analysis considerations for each of these sections. The role of stationary glass is examined with

emphasis on how glass adds to the integrity of the vehicle structure. Damage analysis procedures and repair considerations for stationary glass, in addition to analysis of full-frame structures and repair or replace considerations are discussed.

Recommendations

This class covers a range of parts and materials common on many of today's vehicles. It is recommended that students have an understanding of vehicle construction and damage analysis procedures. Other courses that may be helpful include:

- Advanced Material Damage Analysis (DAM08)
- Structural Steel Technologies and Repair (SPS07)
- Best Practices for High Strength Steel Repairs (SPS09)

Registration

To register for Steel Structures Damage Analysis (DAM12) 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:



ESTIMATOR



ASSESSOR

After completing this course, you will be able to:

- Identify the different types of vehicle designs
- Explain how unitised structures are designed to collapse
- Understand how different impact angles transfer collision energy and create different types of damage
- Comprehend how to make point-to-point measurements and computerised three dimensional measuring results
- Identify general repair considerations for vehicle structures, including front, side and rear
- Identify structural parts and common techniques for analysing damage

