



AUSTRALIAN STEEL INSTITUTE

## KNOWLEDGE SERIES MODULE 5: STRUCTURAL STEEL TYPES

### ASI KNOWLEDGE SERIES

- KNOWLEDGE SERIES MODULE 1  
Introduction to the Knowledge Series
- KNOWLEDGE SERIES MODULE 2  
Steel and Steel Making
- KNOWLEDGE SERIES MODULE 3  
The Metallurgy of Steel
- KNOWLEDGE SERIES MODULE 4  
The Engineering Properties of Steel
- KNOWLEDGE SERIES MODULE 5  
Structural Steel Types
- KNOWLEDGE SERIES MODULE 6  
The Steel Supply Chain
- KNOWLEDGE SERIES MODULE 7  
Steel Quality and Compliance
- KNOWLEDGE SERIES MODULE 8a  
Steel Structures – An Introduction
- KNOWLEDGE SERIES MODULE 8b  
Steel Structures – Beyond the Basics

### COURSE OUTLINE

#### Lesson 1: Steel product groupings

- Steel product groups based on output form:
  - Long products
  - Flat products
- Steel product shaping
- Long product manufacture
- Flat product manufacture

#### Lesson 2: Long product types

- Hot-rolled structural steel
- Structural steel hollow sections
- Merchant bar
- Reinforcing bar
- Rod and wire
- Rail products

#### Lesson 3: Flat product types

- Plate
- Hot-rolled coil steel
- Cold-rolled coil steel
- Weathering steel
- Flat bar
- Welded beams and columns
- Metallic coated flat steel products

- Pre-painted flat steel products
- High strength steel products

#### Lesson 4: Standards requirements - manufacturing

- Manufacturing process
- Chemical composition
- Manufacturing tolerances
- Freedom from defects

#### Lesson 5 – Standards requirements – Designation, identification and documentation

- Designation
- Identification
- Scope of documentation
- Information to appear

#### Lesson 6 – Standards requirements – Engineering properties

- Relevant engineering properties
- Manufacturer data
- Basis for assessing engineering properties
- Steel grades

ACCESS HERE : [HTTPS://LEARN.STEEL.ORG.AU/KNOWLEDGE-SERIES/](https://learn.steel.org.au/knowledge-series/)