

MATERIAL TECHNICAL DATASHEET

HA350 High-Strength Structural Steel (AS/NZS 1594)

1. MATERIAL OVERVIEW

HA350 is a high-strength hot-rolled structural steel manufactured to AS/NZS 1594. With a guaranteed minimum yield strength of 350 MPa, it offers superior load-bearing capacity and excellent impact toughness, making it the premier choice for heavy civil infrastructure, crane booms, and demanding transport fabrication where weight reduction and high strength are critical.

2. KEY ENGINEERING SPECIFICATIONS

- Primary Standard:** AS/NZS 1594:2002
- Tolerance Standard:** AS/NZS 1365:1996
- Guaranteed Yield Strength:** ≥ 350 MPa
- Flatness Designation:** Class A and B

3. DIMENSIONAL CAPABILITIES MATRIX

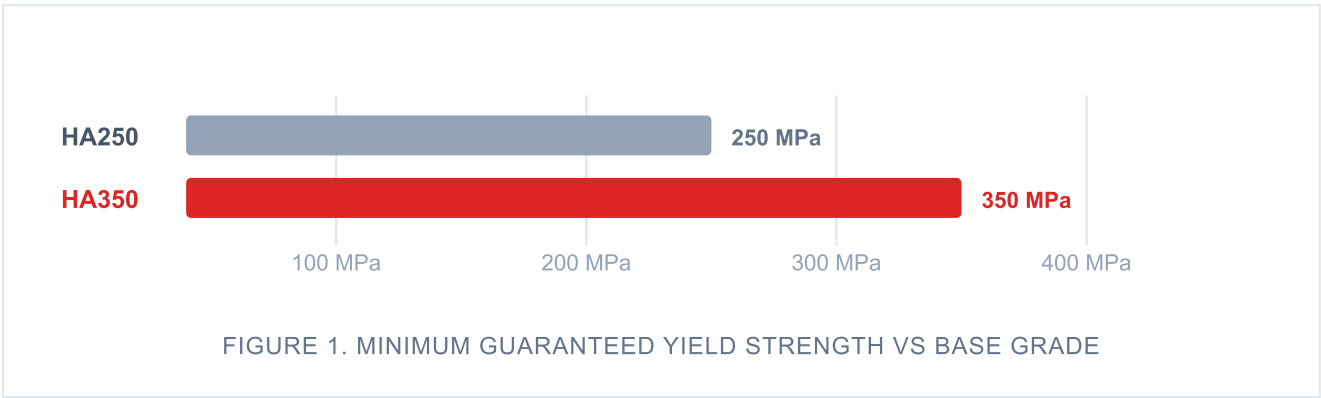
PARAMETER	AVAILABLE RANGE / OPTIONS
Thickness	1.2 mm – 25.0 mm
Standard Widths	50 mm – 1865 mm (Common Stock: 1000 mm, 1220 mm, 1500 mm, 1800 mm)
Length	500 mm – 22,000 mm
Surface & Temper	Hot-Rolled (Skin passed processing available for thickness under 8mm)
Delivery Conditions	Dry, Pickled & Oiled (P&O) Untrimmed (Mill Edge) or Trimmed (Slit Edge)
Supply Forms	Coil, Heavy Plate, Sheet, Laser & Plasma Cut Profiles

4. CHEMICAL COMPOSITION (MAXIMUM WEIGHT %)

CARBON (C)	MANGANESE (MN)	SILICON (SI)	PHOSPHORUS (P)	SULFUR (S)
≤ 0.25	≤ 1.60	≤ 0.35	≤ 0.040	≤ 0.030

5. MECHANICAL & PHYSICAL PROPERTIES

YIELD STRENGTH (R _E)	TENSILE STRENGTH (R _M)	ELONGATION (A)	TYPICAL DENSITY
≥ 350 MPa	≥ 430 MPa	≥ 20%	7.85 g/cm ³



6. QUALITY & COMPLIANCE TRACEABILITY

- **Mill Test Reports (MTR):** Fully compliant with EN 10204 3.1 certification.
- **Heat Traceability:** Direct mill-level melt allocation ensuring unbroken tracking from raw billet to finished heavy plate format.
- **Third-Party Inspection:** Available via DNV, SGS, or TUV upon request (EN 10204 3.2).

ENGINEERING DESK NOTICE: HIGH-TENSILE LASER PROCESSING

High-strength grades like HA350 inherently retain greater internal stresses after hot rolling. Our processing lines utilize specialized heavy-duty leveling cassettes to ensure the material remains perfectly flat after thermal cutting. Please specify exact tolerance requirements and end-use applications when submitting an RFQ.