

MATERIAL DATA SHEET · STRUCTURAL & PLATE STEEL

ASTM A516 Grade 60 — Chemical Composition & Mechanical Properties

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ASTM A516 Grade 60 is a structural & plate steel grade for pressure-vessel plate (UNS K02100, EN / W.Nr ≈ P265GH). It is also known as A516-60. This sheet summarises its chemical composition limits, minimum mechanical properties, heat treatment and typical service. Teshi Group supplies this grade as a stockist and supplier.

At a glance

Material family	Structural & plate steel
Product form	Pressure-vessel plate
UNS	K02100
EN / W.Nr	≈ P265GH
Also known as	A516-60

Mechanical properties

Tensile strength, min	415 MPa
Yield strength (0.2 % offset), min	220 MPa
Elongation, min	21 %
Tensile strength, max	550 MPa
Hardness	Not specified

Chemical composition (weight %)

C 0.21 max (≤12.5 mm) to 0.27 max (>200 mm)	Mn 0.60–0.90 (≤12.5 mm), 0.85–1.20 (thicker)	P 0.025 max	S 0.025 max	Si 0.15–0.40
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Single values are maximums unless shown as a range or "min".

Heat treatment

As rolled or normalised (normalised above 40 mm)

Typical service

Pressure vessels and tanks needing good notch toughness

International equivalents (nearest)

USA — ASTM / ASME	ASTM A516 Grade 60 · ASME SA-516 Grade 60
USA — UNS	K02100
Europe — EN designation	P265GH (EN 10028-2)
Europe — W.Nr	1.0425
Japan — JIS	SGV410 (JIS G3118)
China — GB / NB	Q245R (GB/T 713.2)
China — old GB designation	20R
India — IS	IS 2002 Gr.1
UK — BS (withdrawn)	BS 1501-161-430

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