RAUNAQ STEELS TRADING PRIVATE LIMITED

Rockhard 400 – Technical Datasheet

1. Chemical & Mechanical Properties

Property	Value	
Carbon (C)	≤ 0.20%	
Manganese (Mn)	≤ 1.60%	
Sulphur (S)	≤ 0.010%	
Phosphorus (P)	≤ 0.025%	
Silicon (Si)	≤ 0.70%	
Chromium (Cr)	≤ 1.50%	
Molybdenum (Mo)	≤ 0.50%	
Boron (B)	≤ 0.005%	
Yield Strength (YS)	≥ 1000 MPa	
Tensile Strength (TS)	1250 – 1400 MPa	
Elongation (%)	≥ 10	
Hardness (HB)	360 – 440	
Impact Test	30J min at -40°C	

2. Equivalent / Alternative Grades

Standard	Grade	C (%)	Mn (%)	P (%)	S (%)	Si (%)	Cr (%)	Mo (%)	B (%)	YS (MPa)	TS (MPa)	Elongation (%)	Hardness (HB)	Impact (J at °C)
EN 10029 / EN 10051	Hardox 400	≤0.20	≤1.60	≤0.025	≤0.010	≤0.70	≤1.50	≤0.50	≤0.005	≥1000	1250 - 1400	≥10	360-440	30J at -40°C
ASTM A6 / ASTM A514	AR400	≤0.20	≤1.60	≤0.025	≤0.010	≤0.70	≤1.50	≤0.50	≤0.005	≥1000	1300 - 1400	≥10	360-440	30J at -40°C
JIS G3106	SM400	≤0.20	≤1.60	≤0.030	≤0.010	≤0.70	≤1.50	≤0.50	≤0.005	≥1000	1250 - 1400	≥10	360-440	30J at -40°C
ISO 3580	AR400	≤0.22	≤1.60	≤0.030	≤0.010	≤0.70	≤1.50	≤0.50	≤0.005	≥1000	1300 - 1400	≥10	360-440	30J at -40°C
DIN 17102	Hardox 400	≤0.20	≤1.60	≤0.025	≤0.010	≤0.70	≤1.50	≤0.50	≤0.005	≥1000	1250 - 1400	≥10	360-440	30J at -40°C

3. Common Applications

- Excavator buckets

- Bulldozer blades

- Crushing equipment

- Dump truck liners

- Mining equipment wear parts

4. Standard Conformance

Proprietary abrasion-resistant steel grade designed for high hardness and wear resistance.

Used widely in heavy-duty mining and earth-moving machinery parts.

5. Disclaimer

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