HIGH CHROMIUM COLD WORK TOOL STEEL

SKD11 / D2 1.2379 / X153CrMoV12

High chromium cold work tool steel

12 % Cr	58–62 HRC	Ø1200 mm	ESR
High chromium	Hardened and tempered	Max forged bar	On request

GRADE AND STANDARDS

Item	Detail
Designations	SKD11 / D2 / 1.2379 / X153CrMoV12 / BD2 / XW-41
Standards	JIS G4404; ASTM A681; DIN EN ISO 4957
Delivery condition	Annealed max 255 HB
Melt route	EAF + vacuum degassing; ESR for large blocks and mirror dies
Typical use	Blanking and piercing dies, punches, slitting rolls, thread rolls, wear plates
Certificate	EN 10204 3.1 with chemistry, hardness and carbide distribution

CHEMICAL COMPOSITION (% BY MASS)

C	Si	Mn	Cr	Mo	V
1.40–1.60	0.10–0.60	0.20–0.60	11.0–13.0	0.70–1.20	0.20–0.50

MECHANICAL PROPERTIES

Condition	Hardness	Wear resistance	Toughness
Annealed	≤255 HB	—	High
Hardened, temper 180 C	60–62 HRC	Highest	Low
Hardened, temper 250 C	58–60 HRC	High	Moderate
Hardened, temper 500 C	54–56 HRC	Moderate	Best

SUPPLY RANGE

Form	Size range	Condition
Forged round bar	Ø80–1200 mm	Annealed / Q+T
Forged flat bar	Thickness 100–600 mm × width 300–2000 mm	Annealed
Rolled round bar	Ø10–200 mm	Annealed / as rolled
Hot rolled plate	Thickness 1–100 mm × width 60–1600 mm	Annealed

INSPECTION AND CERTIFICATION

- EN 10204 3.1 with chemistry, hardness and annealed structure
- Carbide distribution / banding rating on request
- Ultrasonic inspection to SEP 1921 for blocks above 200 mm
- Decarburisation depth on annealed bar
- ESR route marked on the certificate where supplied

ORDERING INFORMATION

- Grade and standard
- Form and size - thickness x width x length, or diameter and cut length
- Quantity in pieces or kilograms
- Delivery condition and hardness window
- Certificate and inspection requirements

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EN 10204 3.1 mill certificate with every shipment
Chemistry · mechanical properties · test results · heat number

Hardness map and ultrasonic inspection on request.
Values are typical for the grade; the certificate of the actual heat governs.