Hot Work Tool Steel H13 (1.2344 / SKD61)

Designations: AISI H13 | 1.2344 | X40CrMoV5-1 | SKD61

Applicable standards: ASTM A681, EN ISO 4957

Product Description

Ochnology is a manufacturer and supplier of AISI H13 hot work tool steel, also sold as 1.2344, X40CrMoV5-1 and SKD61, in round bar, flat bar and forged blocks. Typical chemistry is 0.32–0.45% C, 4.75–5.5% Cr, 1.1–1.75% Mo and 0.8–1.2% V. It is supplied annealed (about 235 HB max) and is normally hardened to 44–52 HRC. H13 steel is used for aluminium die-casting dies, forging dies, extrusion tooling and hot stamping tools.

Chemical Composition (% by weight)

Element	H13 (ASTM A681)	1.2344 (EN ISO 4957)
Carbon (C)	0.32–0.45	0.35–0.42
Silicon (Si)	0.80–1.25	0.80–1.20
Manganese (Mn)	0.20–0.50	0.25–0.50
Chromium (Cr)	4.75–5.50	4.80–5.50
Molybdenum (Mo)	1.10–1.75	1.20–1.50
Vanadium (V)	0.80–1.20	0.85–1.15
Phosphorus (P)	≤ 0.030	≤ 0.030
Sulphur (S)	≤ 0.030	≤ 0.020

Mechanical and Physical Properties

Property	H13 (ASTM A681)	1.2344 (EN ISO 4957)
Hardness, annealed	≤ 235 HB	≤ 229 HB
Working hardness after heat treatment	44–52 HRC	44–52 HRC

Supply Details

Item	Detail
Density	7.80 g/cm^3
Forms	Round bar, flat bar, forged block
Delivery condition	Soft annealed; hardened and tempered on request
Certification	Mill test certificate (EN 10204 3.1) and third-party inspection available on request

Typical Applications

- Aluminium and zinc die-casting dies
- Hot forging dies and inserts
- Extrusion tooling and containers
- Hot stamping and hot shear tools

Ordering Information

To request a quotation, send the grade and standard, form, size or thickness, quantity, delivery condition, destination port and required certificates to info@ochnology.com or bd@ochnology.com. Typical values apply to the stated standards; actual values are certified on the mill test certificate for each lot.

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