

BESTAR	Material No.	Grade	AISI	JIS
BE1274	1.1274	C100S	1095	SK95-CSP

Chemical Composition [%]

LOW ALLOY TOOL STEEL

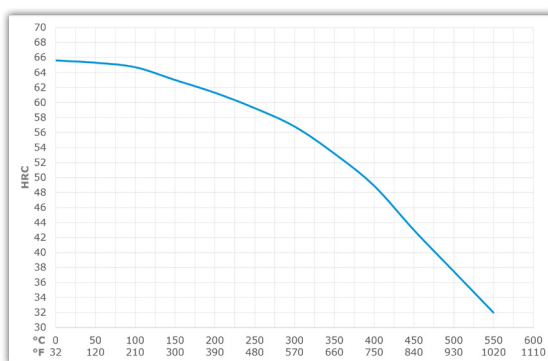
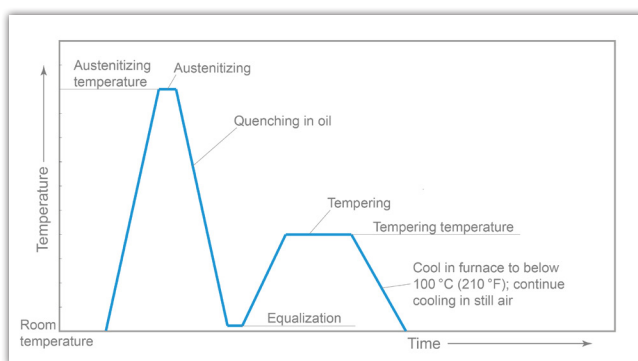
C	Si	Mn	Cr	Mo	V	Ni
0.95/1.05	0.15/0.35	0.30/0.60	≤0.40	≤0.10	-	≤0.40

Characteristics

Due to its high carbon content, BE1274 offers good wear resistance, making it a suitable choice for knife blades and other tools subjected to abrasive wear. BE1274 also possesses excellent toughness, meaning it retains some elasticity even under heavy loads before breaking. With a higher Carbon content, BE1274 can also reach higher HRC values into the upper 50's/low 60's if needed for edge retention, but it does give up elasticity at these higher Rockwell values. This also makes it a suitable material for band saws used in the wood, metal and food-processing industries. Additional applications include springs and other components.

Heat Treatment

Tempering Diagram



Hardening, Tempering, Annealing

ANNEALING

- 640-680°C / 1185-1255°F

STRESS RELIEVING

- Approx. 650°C / 1200°F

HARDENING

- Austenitizing temperature
800-830°C / 1470-1525°F
- Holding time after temperature
equalization: 1.5 x material thickness
- Quenching medium: oil

TEMPERING

- Slow heating to tempering temperature
immediately after hardening
- Time in furnace minimum 2 hours.
Our recommendation: 4-6 hours
- Cooling in the furnace until the tempera-
ture have fallen below 100°C / 210°F
- The desired hardness values are shown
on the tempering diagram

Delivery Options

HOT / COLD ROLLED STRIP

- Soft annealed
- Hardened and tempered

DISCS

- Soft annealed
- Hardened and tempered
- Ground surface

Applications

- Butcher band saws
- Wood band saws
- Industrial knives
- Bushcraft, outdoor and hunting knives
- Chef's knives

BESTAR does not assume any responsibility for the correctness of the information provided in this data sheet. The data sheet is intended only for informational purposes. All information, particularly chemical composition, is subject to change without prior notice. Applications mentioned are solely meant to be a reference. We do not certify the grade's suitability for any application. International and German standards may vary in their chemical analysis.

May 2025

