

NAK 80 plastic mold steel stockholders and suppliers , OTAI SPECIAL STEEL china. We supply NAK 80 tool steel round bar, flat bar and plate.

Daido NAK 80 tool Steel is a high quality Hot work tool steel, It belong to the high quality high carbon alloy tool steel. Oil Quenched & Tempered Hardenss is 28-34 HRC. AISI NAK 80 steel Annealing delivery hardenss less than 250HB.

Related Specifications ASTM A685 DIN EN 17350 JIS G4404 GB/T 1299

Form of Supply

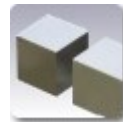
For Japanese Daido NAK 80 tool steel plastic mold steel, we can supply the round bar, steel flat bar, plate, steel sheet, hexagonal steel bar and steel square block. AISI NAK 80 steel Round bar can be sawn to your required lengths as one offs or multiple cut pieces. NAK 80 steel Rectangular pieces can be sawn from flat bar or plate to your specific sizes. Ground tool steel bar can be supplied, providing a quality precision finished bar to tight tolerances.



Round



sheet



Square



Plate

Chemical composition

C(%)	0.15	Si(%)	0.30	Mn(%)	1.5	Al(%)	1.00
Ni(%)	3.00	Cr(%)	0.30	Mo(%)	0.30	Cu(%)	1.00

Material equivalent of NAK 80 steel

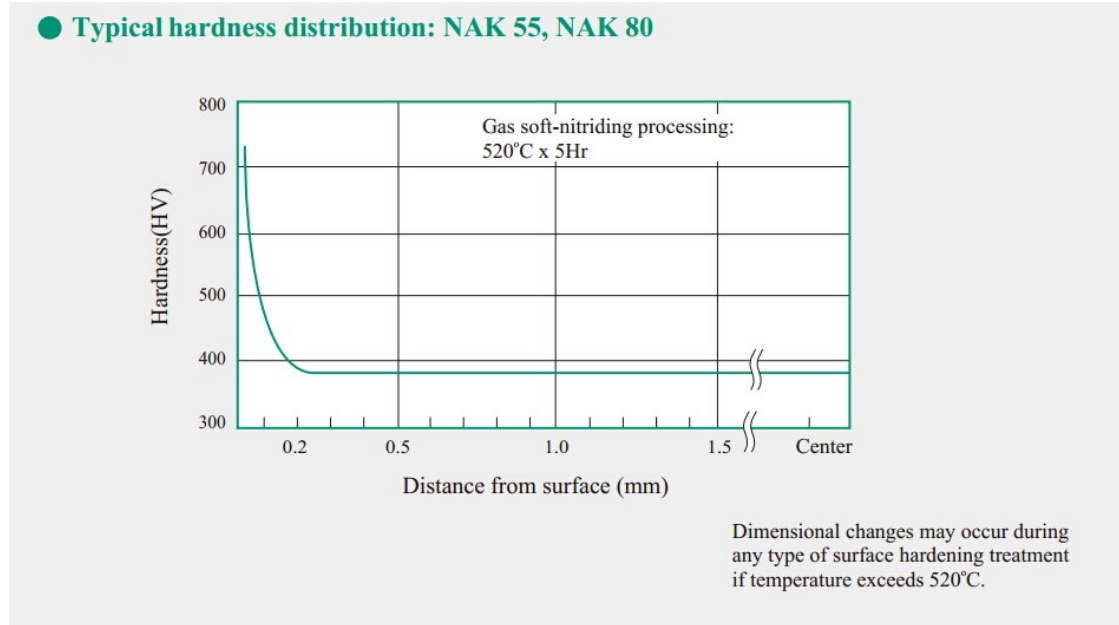
USA	Germany	China	Japan	France	England	Italy	Poland	Czechia	Austria	Sweden	Spain
AISI/UNS	DIN, WNr	GB	JIS DAIDO	AFNOR	BS	UNI	PN	CSN	ONORM	SS	UNE
P21 / T51621			NAK80								

NAK 80 steel Heat treatment Related

- **Forging Of NAK 80 steel-hot work alloy tool steel**
Heat to 900-1100 ° C(1652-2012°F), forged temperature not below 871°C (1600°F)
- **Annealing of NAK 80 Tool steel**

Slowly heated to 760~788 °C (1400~1450° F) and allow enough times, let the steel to be thoroughly heated, Then cool slowly at Maximum of 4°C (40° F) per hours. The NAK 80 tool steel will get MAX 235 HB (Brinell hardness) .

- **Hardening of NAK 80 tool steel**

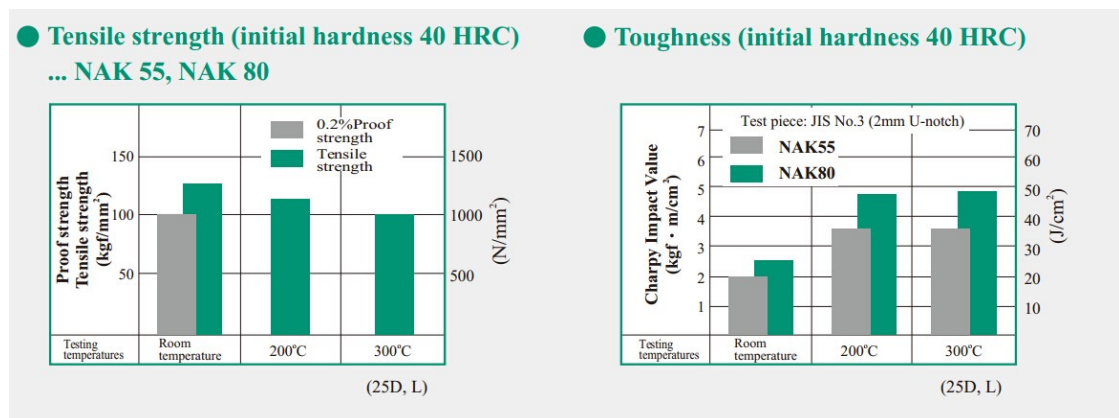


- **Tempering of NAK 80 tool steel**

Tempering of NAK 80 steels is performed at 482~593°C (900~1100°F), Soak well at the selected temperature and soak for at least one hour per 25mm of total thickness. Get Rockwell C hardness of 28-37 HRC.

Mechanical Properties

The mechanical properties of NAK 80 tool steels plastic mold steel are outlined in the following table.

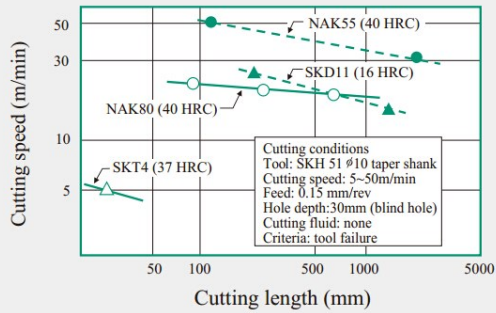


Mirror Finished Properties Of NAK80 plastic mold steel

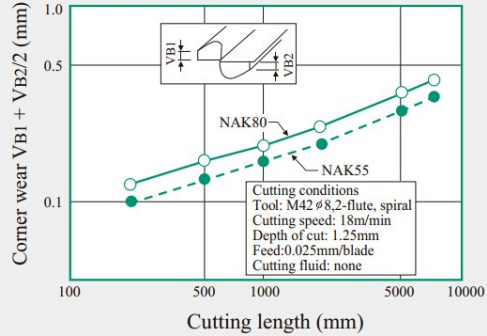
[Machinability]

- Though both are easily machined, the properties of NAK 80 are slightly inferior to those of NAK 55.

● Typical drill tool life

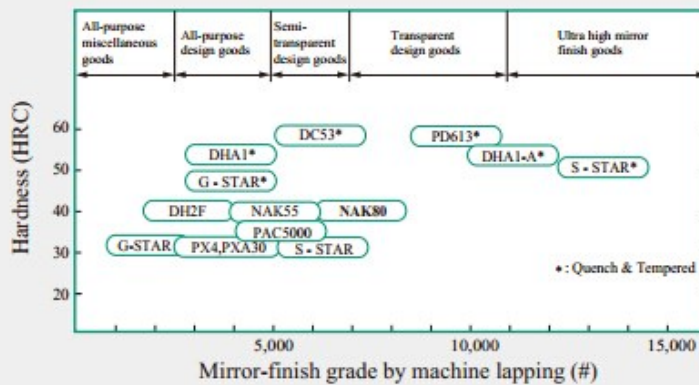


● Typical tool wear by end mill



- It provides good mirror finished surface and full brightness.

● Mirror finished grade (concept diagram)



(Normal polishing procedures)

Turning }
 Milling } → Grinding (~#220 → #320 → #400)

-Emery paper polishing (#320 → #400 → #600 → #800 → #1000 → #1200 → #1500) →

Diamond paste finishing (#1200 → #1800 → #3000 → #8000 → #14000)

With NAK 55, surface might be roughed to aventurine finish surface when the method of polishing of #5000 or finer polishing is attempted.

Applications of NAK 80 Tool Steel-Tungsten Hot-Work Steel

NAK 80 Plastic mould steels Commonly used in mirror polishing mold, dust proof, filter plate of the television, cosmetics boxes, precision wrinkles processing mould, office automation equipment, auto parts electro discharge machining mould. Transparent or for finish product, such as family, cars, cameras, computers and other articles on the transparent products mold.

NAK 80 tool steel Regular size and Tolerance

hot rolled NAK 80 steel bar: ϕ 5mm-200mm

Forging NAK 80 steel bar: Ø140mm-3000mm

Hot rolled NAK 80 steel plate: Thickness 10mm-200mm x width 100-2300mm

Forged NAK 80 material steel plate: Thickness 150-1500mm x Width 100 x 3000mm

Others NAK 80 have not specified size, pls [contact](#) our experienced sales team.

[Processing](#)

JIS NAK 80 tool steel round bar and flat sections can be cut to your required sizes. NAK 80 tool steel ground bar can also be supplied, providing a high quality tool steel precision ground tool steel bar to your required tolerances. JIS NAK 80 steel is also available as Ground Flat Stock / Gauge Plate, in standard and nonstandard sizes.

Contact our experienced sales team to help you with your NAK 80 tool steel questions
And enquiry by [Email](#) or Telephone. The questions will be reply in 24 hours.

OTAI SPECIAL STEEL CO., LTD

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