

Plastic Mould

TGP 80 (NAK 80)



Smelting method : EAF+LF+VD+ESR

Main characteristics : High mirroring performance, even hardness, excellent discharging processing performance and texture processing performance. Molds can be used upon processing and no heat treatment is required.

Major applications : • Mirror plastic molds: Transparent plastic molds: optical instrument parts, compact disks, medical devices, etc. • Molds underlining discharging processing surface quality.

Chemical constituent (%):

C	Si	Mn	Cu	Mo	Ni	Ai	P	S
0.15	≤0.45	1.55	1.0	0.35	3.1	0.95	≤0.025	≤0.003

Physical Property :

Room temperature density (Kg/m^3)	Specific heat of room temperature (J/Kg.K)	200°C thermal conductivity (W/m•K	Elastic mouldus (N/mm^2)	Linear expansivity (x10^{-6}K)	
				20 ~ 200°C	20 ~ 400°C
7.8	460	22	218,000	12.3	13.2

Ultrasonic flaw detection: Flaw detection standard: as per GB/T 6402-2008 Class 4 flaw detection standard or as per customer requirements.

Purity :

Class A		Class B		Class C		Class D	
Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse
0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.0

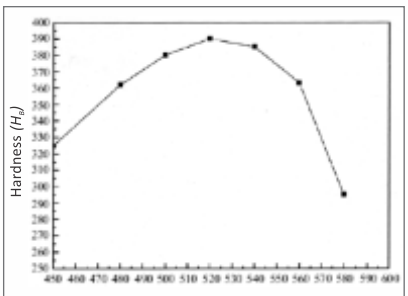
Delivery state : (1) Delivery under pre-hardening state, delivery hardness 38~42HRC.

Supply specification

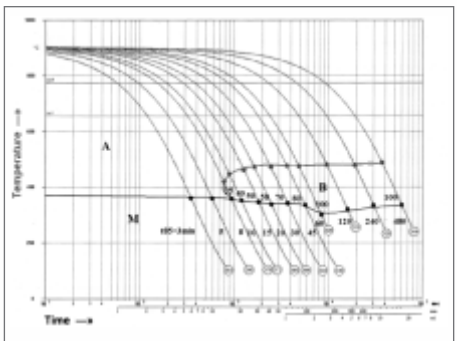
Flat Steel	Module
16~120mmx200~810mm	120~400mmx300~800mm

Thermal treatment

Softening annealing	Quenching	Tempering
Heating to 760°C for heat insulation and cooling to 600°C at 40°C/h	Delivery under pre-hardening state, no heat treatment, temperature of nitridation treatment 520°C	



Tempering temperature and hardness relation curve



CCT curve