



Cold Working Tool Steel

TG 01
(DIN-1.2510)



Steel Properties : Good edge-holding ability, high hardenability, close tolerance on heat treatment.

Applications : Blanking and stamping dies for cutting sheet metals up to 6 mm thickness, threading tools, drills, broaches, measuring tools, plastic moulds, shear blades.

Similar steel grade :

CHINA	BRAZIL	AUSTRIA	GERMANY	SLOVANIA	JAPAN			CHEZ. REP
TG	VILLARES	BOHLER	DEW	RAVNE	HITACHI	NIPPON	SANYO	POLDI
01	VND	K460	1.2510	OW4	SGT	KS3	QKS3	STABIL K

Chemical Composition: (%)

C	Mn	Cr	V	W
0.90-1.05	1.00-1.20	0.50-0.79	0.50-0.70	0.40-0.60

Production process:

Round Bar :

EAF → LF → VD → ESR → FORGED (5 TONS HAMMER) →

[Forged Annealed Turned	: Φ 81.0-610mm]	→ ANNEALED CONDITION
]	Hot Rolled & Annealed Peeled	: Φ 14.5-80.0mm]	
]	Cold Drawn / Centreless Ground	: Φ 2.0-14.4mm]	

Flat Bar :

EAF → LF → VD → ESR → FORGED → HOT ROLLED (850) → ANNEALED CONDITION

Hardness : ≤ Hb230

UT STANDARD :
SEP 1921, (DEC.84)E/e

REDUCTION RATIO :
As 1:4 or 1:5

DELIVERY STATUS :
In Annealed Condition.

SIZE : Round

Cold Drawn/Centreless Ground Bar	Hot Rolled Annealed & Peeled Bar	Forged + Annealed + Turned Bar
Φ 2.0 - 14.4mm	Φ 14.5 - 80.0mm	Φ 81.0 - 610.0mm

SIZE : Hot Rolled Flat Bars / Sand Blasted & Machined Straight

Thickness	Width
14mm - 100mm	200mm - 710mm

SIZE : Sheets

Thickness	Width	Length
0.5mm to 12mm	810mm	2500mm

HEAT TREATMENT CONDITION :

Soft annealing °C	Hardening from °C	Cooling	in	Hardness and quenching HRC
740-770	780-820	Furance	Oil or hot bath 180-220 °C	64

Tempering °C	100°C	200°C	300°C	400°C
HRC	64	62	57	53