

Stellapur PM 30

Ultra Clean Powder Metallurgy Steel

Chemical composition

C	Cr	Mo	W	V	Co
1,28	4,2	5,0	6,4	3,1	8,5

Standards:

Europe HS 6-5-3-8
W.Nr. (1.3207)

Delivery hardness

Max 280 HB



Scana forging mill

Characteristics

Stellapur PM 30 is a Co alloyed grade for high performance cutting tools and cold work tools. The grade combines high toughness with high wear resistance. The grindability is excellent and the grade is suitable for different kind of PVD coatings.

Typical applications:

Gear cutting tools Drills
End mills Cold work tools
Taps

Form supplied

Forging

Round 90 – 380 mm
Flat/square Max width 450 mm
 Min thickness 40 mm

Rolling

Peeled 10 – 72 mm
Flat black Width 20 -260 mm
 Thickness 5 – 55 mm

Profiles

On request

PM Block

400 x 500 x 2100 mm
400 x 500 x 1100 mm

Heat treatment

Soft annealing

Protective atmosphere 850 – 900°C followed by slow cooling at 10°C/h down to 700°C. After that, air cooling.

Stress-relieving

600 – 700°C for approximately 2 hours and slow cooling down to 500°C.

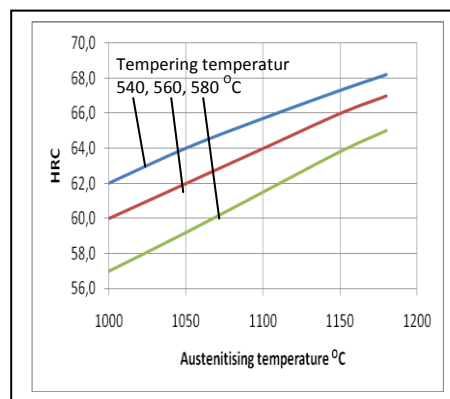
Hardening

Protective atmosphere with pre-heating in 2 steps at 400 – 500°C and 850 – 900°C and austenitizing at a temperature suitable for chosen hardness followed by rapid cooling down to 40 – 50°C

Tempering

560°C three times for at least 1 hour each time.

Cooling to room temperature (20-30°C) between tempering.



Austenitizing temperature

HRC	°C
58	960
59	980
60	1000
61	1020
62	1050
63	1075
64	1100
65	1130
66	1150
67	1180

Tempering
3 x at 560°C

