

Stellapur PM 15

Ultra Clean Powder Metallurgy Steel

Chemical composition

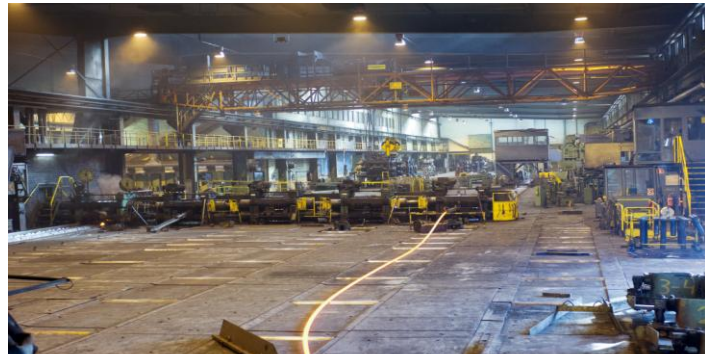
C	Cr	Mo	W	V	Co
1,60	4,0	-	12,0	5,0	5,0

Standards:

Europe HS 12-0-5-5
W.Nr. 1.3202
AISI T15

Delivery hardness

Max 280 HB



Scana rolling mill designed for round, flat and profile.

Characteristics

Stellapur PM 15 is a Co alloyed grade with high amount of W. The grade combines high toughness with high wear resistance and it's recommended for high performance cutting tools. The grindability is excellent and the grade is suitable for different kind of PVD

Typical applications:

Endmills
Broaches
Hobs
Shaper cutters
Cold Work tools

Form supplied

Forging

Round 90 – 380 mm
Flat/square Max width 450 mm
Max thickn. 5-40 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
500 x 600 x 1050 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.

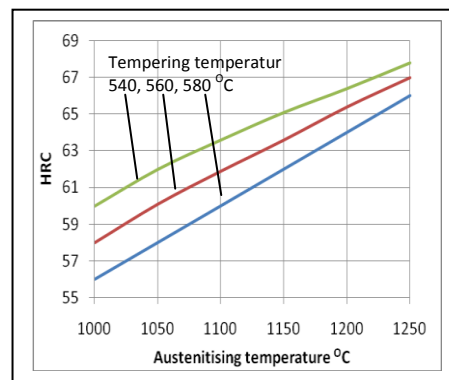
Hardening

Protective atmosphere with pre-heating in 2 steps at 400 – 500°C and 850 – 900°C and austenitising 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.

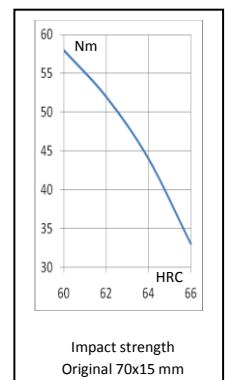
Cooling to room temperature (20-30°C) between temperings.



Austenitizing temperature

HRC	°C
58	1000
59	1030
60	1060
61	1090
62	1120
63	1150
64	1180
65	1210
66	1240

Tempering
3 x 560°C



Impact strength
Original 70x15 mm