

- max Variation in straightness is 0.3mm
- max Variation in thickness between the inner and outer surface is 0.5mm
- max Ovality for internal surface with the range of internal diameter tolerance (111 +/- 0.5 mm)
- tubes must be free of cracks
- should be acc: DIN 2391
- Mat. No: 1.7218 , DIN 17200

Standards	Steel Grades												
	Chemical Composition %												
	C:	Mn:	Si:	P:	S:	Cr:	Mo:	Ni:	V:	Ti:	Cu:	N:	W:
EN	25CrMo4 - 1.7218 - 25 CrMo 4 - 7218												
	0.22	0.60				0.9	0.15						
	-	-	<0.4	<0.025	<0.035	-	-	-	-	-	-	-	-
	0.29	0.90				1.2	0.30						

Tensile Strength	unit	Yield Strength	unit	Elongation after fracture at A5	Hardness HBW	Temper
SU= 90-110	kg/mm2	SY: 70	kg/mm2	12%		

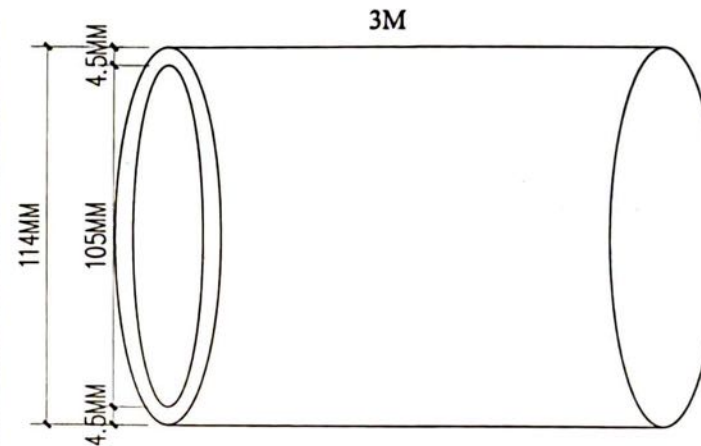
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Chemical composition % of steel 34CrMo4 (1.7220): EN 10083-3-2006						
C	Si	Mn	P	S	Cr	Mo
0.3 - 0.37	max 0.4	0.6 - 0.9	max 0.025	max 0.035	0.9 - 1.2	0.15 - 0.3

Mechanical properties of steel 34CrMo4 (1.7220)					
Nominal diameter (mm):	to 16	16 - 40	40 - 100	100 - 160	160 - 250
Rm - Tensile strength (MPa) (+QT)	1000-1200	900-1100	800-950	750-900	700-850
Nominal thickness (mm):	0.3 - 3				
Rm - Tensile strength (MPa) (+A)	600				
Nominal thickness (mm):	to 8	8 - 20	20 - 50	50 - 80	
Rm - Tensile strength (MPa) (+QT)	1000	900	800	750	

Nominal diameter(mm): or for flat products thickness: to 8; 8-20; 20-60; 60-100; 100-160;	to 16	16 - 40	40 - 100	100 - 160	160 - 330
Re - Upper yield strength or R _{p0.2} - 0.2% proof strength (MPa) (+QT)	800	650	550	450-500	410-450
Nominal thickness(mm):	0.3 - 3				
R _{p0.2} 0.2% proof strength (MPa) (+A)	460				

KV - Impact energy (J) longitud., (+QT)	+20° 35-45
KV - Impact energy (J) transverse, (+QT)	+20° 25-27

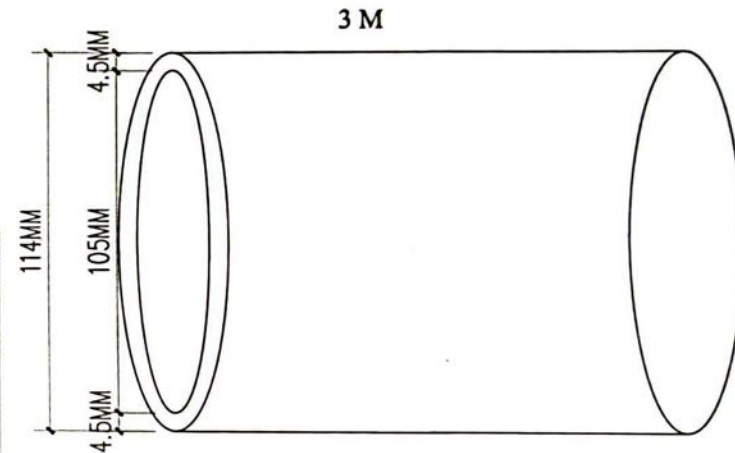


Seamless Tube Ø 114*105 mm 34 Cr Mo4 Mat 1.7220 Din 2391/GZF DIN 17200

Condition:
- Annealed (including de-scaling): GZF;

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Seamless Tube Ø 114*105 mm 34 Cr Mo4 Mat 1.7220 Din 2391/GZF DIN 17200



KV - Impact energy (J) longitud., (+QT)	+20° 35-45				
KV - Impact energy (J) transverse, (+QT)	+20° 25-27				
Nominal thickness (mm):	0.3 - 3				
A - Min. elongation Lo = 80 mm (%) (+A)	16				
A - Min. elongation at fracture (%) transverse, (+QT)	10-12				
Nominal thickness (mm):	to 16	16 - 40	40 - 100	100 - 160	160 - 250
A - Min. elongation Lo = 5,65 √ So (%) (+QT), round products	11	12	14	15	15
Nominal diameter (mm): or for flat products thickness: to 8; 8-20; 20-60; 60-100; 100-160;	to 16	16 - 40	40 - 100	100 - 160	160 - 250
Z - Reduction in cross section on fracture (%) (+QT)	45	50	55	55	60
Z - Reduction in cross section on fracture (%) (+AC)	60				
Brinell hardness (HBW): (+S)	255				
Brinell hardness (HBW): (+A)	223				
Vickers hardness (HV): (+A)	185				
Vickers hardness (HV): (+QT)	315 - 465				

Properties of steel 34CrMo4 (1.7220)

Weldability: Low weldability; this steel grade can be welded only with suitable precautions.
Hardenability: Steel grade with medium carbon content showing a poor hardenability; sensitive to notching and to quenching cracks.