



Below mentioned program overview gives an impression of the possibilities of GNS. Given the enormous diversity in dimensions there is only mention made of available qualities. The products are available in DIN and ASME / ANSI qualities and in many cases with certificates according to EN 10204, additional PMI tests etc.

Are you curious about the possibilities? Do not hesitate to contact us. We are always willing to help and would like to think along with you about your material needs. Our options will surprise you.

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### 1 Delivery program spring steel in bar and/or sheet and slit strip

#### 1.1 Spring steel; former and current descriptions

Material number	Description according EN 10132-4	Description according DIN 17222 (expired)	Description according AISI
1.0535	-	C55	1055
1.0601	-	C60	1060
1.0603	-	C67	1070
1.0605	-	C75	1074
1.0913	50Mn7	50 Mn 7	-
1.1203	-	Ck55	1055
1.1204	C55S	-	1055
1.1211	C60S	-	1060
1.1217	C90S	-	-
1.1221	-	Ck60	1060
1.1231	C67S	Ck67	1070
1.1248	C75S	Ck75	1075
1.1269	C85S	Ck85	1086
1.1274	C100S	Ck101	1095
1.2003	75Cr1	75 Cr 1	-
1.2235	-	80 CrV 2	-
1.2067	102Cr6	100 Cr 6	52100
1.4021	X20Cr13	X 20 Cr 13	420
1.4031Mo	X39Cr13	X 39 Cr 13	420
1.4034	X46Cr13	X 46 Cr 13	420
1.4037	X65Cr13	X 65 Cr 13	-
1.4301	X5CrNi18-10	X5 CrNi 18-10	304
1.4310	X10CrNi18-8	X10 CrNi 18-8	301
1.4767	CrAl20-5	Cr Al 20-5	-
1.4821	X15CrNiSi25-4	X15 CrNiSi 25-4	-
1.4828	X15CrNiSi20-12	X15 CrNiSi 20-12	309
1.5022	48Si7	48 Si 7	-
1.5023	38Si7	38 Si 7	-
1.5024	46Si7	46 Si 7	9250
1.5025	51Si7	51 Si 7	9255
1.5026	55Si7 / 56Si7	55 Si 7 / 56 Si 7	9255
1.5027	60Si7	60 Si 7	9260H
1.5028	65Si7	65 Si 7	9260H
1.5634	75Ni8	-	-
1.7103	67SiCr5	60 SiCr 5	9254
1.7108	60SiCr7	60 SiCr 7	9260
1.7701	51CrMoV4	51 CrMoV 4	-
1.8159	51CrV4	50 CrV 4	6150

#### Available versions:

+U	=	Untreated
+A	=	Soft annealed
+LC	=	Annealed and lightly rolled
+AC	=	Annealed for the formation of spherical carbides
+CR	=	Cold rolled
+QT	=	Quenched and tempered



## 2 Delivery program spring steel sheet and slit strip

### 2.1 Hardened, bright polished spring steel <sup>1</sup>

Material thickness <sup>2</sup>	Width <sup>2</sup>	Quality <sup>3</sup>	Tensile strength in N/mm <sup>4</sup>	Quality acc.	Tolerances acc <sup>5</sup>
0,10 - 3,00 mm	until 300 mm	C55S (C55 and Ck55)	980 – 1275	EN 10083 (former DIN 17200) EN 10132-4 (former DIN 17222)	EN 10140 (former DIN 1544)
0,10 - 1,50 mm		C67S (C67 and Ck67)	1320 - 1525		
0,15 - 4,00 mm		C85S (Ck85), C75S, (C75 and Ck75)	1320 - 1800		
0,03 - 2,00 mm		C100S (Ck101)	1650 - 2250		

### 2.2 Not hardened, hardenable spring steel <sup>1</sup>

Material thickness <sup>2</sup>	Width <sup>2</sup>	Quality <sup>3</sup>	Tensile strength in N/mm <sup>4</sup>	Quality acc.	Tolerances acc <sup>5</sup>
0,05 - 4,00 mm	until 300 mm	C45 and Ck45	Depending om thickness between 490 en 800	EN 10083 (former DIN 17200) EN 10132-4 (former DIN 17222)	EN 10140 (former DIN 1544)
		C60S (C60 and Ck60)			
		C75S (C75 and Ck75 until Ck101)			

### 2.3 Stainless and heat resistant steel spring steel <sup>1</sup>

Material thickness <sup>2</sup>	Width <sup>2</sup>	Quality <sup>3</sup>	Tensile strength in N/mm <sup>4</sup>	Quality acc.	Tolerances acc <sup>5</sup>
0,03 - 3,00 mm	until 300 mm	AISI 301 (1.4310)	1000 - 2100	EN 10088 (former DIN 17224/ 17440/17441)	EN 10258 (former DIN 59381)
		AISI 304 (1.4301)	Soft		
0,1 – 0,5 mm	until 300 mm	AISI 316 (1.4401)	0,1-0,3 mm: Soft, 0,1-0,5 mm: Hard		
1,0 – 3,0 mm	until 300 mm	AISI 420 (1.4021 1.4031Mo, 1.4034)	Hard		
0.03 - 0,20 mm	until 300 mm	1.4767	0,03 0,05 0,10 and 0,20 mm: Soft		
0.15 - 0,30 mm	until 300 mm	1.4828	Soft		

<sup>1</sup> Version with cutting or rounded edges.

<sup>2</sup> Larger thicknesses and widths on request.

<sup>3</sup> Missing grades on request.

<sup>4</sup> Your preferred strength to be agreed in advance.

<sup>5</sup> Different tolerances discussable.