Schematic family tree of the cold work tool steels
for hand and power tools

DEUTSCHE EDELSTAHLWERKE
Providing special steel solutions

Increasing toughness

2766 So — 35NiCrMo16-5
a. 650 | b. 840 | c. 51/55 | f. 58 | g. 260 | h(123) NHH

C	Cr	Mo	Ni	S
0.20 0.30	1.40 1.80	0.20 0.50	3.80 4.30	0.035

2766 — 35NiCrMo16-5
b. 840 | c. 51/55 | g. 260 | h(123) NHH

C	Cr	Mo	Ni	S
0.32 0.38	1.20 1.50	0.20 0.40	3.80 4.30	0.035

2243 So — 61SiCrV5
a. 660 | b. 880 | c. 56/61 | f. 62 | g. 220 | h(123) NNH

C	Cr	Si	V	S
0.57 0.65	1.15 1.55	1.00 1.30	0.07 0.12	0.025

2243 — 61SiCrV5
b. 660 | c. 880 | 56/61

C	Cr	Si	V	S
0.57 0.65	1.00 1.30	0.70 1.00	0.07 0.12	0.035

2381 So — 73MoV5-2, AISI S5
a. 680 | b. 980 | c. 60/62 | f. 65 | g. 225 | h(123) MHM

C	Si	Mo	V	S
0.50 0.65	1.75 2.25	0.20 1.35	0.15 0.35	0.025

2381 — 73MoV5-2
b. 980 | c. 60/62 | g. 225 | h(123) MHM

C	Si	Mo	V	S
0.70 0.77	1.00 1.30	0.45 0.65	0.15 0.25	0.025

2242 — 59CrV4
a. 680 | b. 880 | c. 57/60 | f. 62 | g. 220 | h(123) NHH

C	Cr	Mn	V	S
0.55 0.62	0.90 1.20	0.80 1.10	0.07 0.12	0.035

2249 — 45SiCrV6
a. 680 | b. 890 | c. 53/57 | f. 58 | g. 220 | h(123) NNH

C	Cr	Si	V	S
0.40 0.50	1.30 1.60	1.30 1.60	0.07 0.12	0.035

2083 — X40Cr14, AISI 420
a. 680 | b. 1050 | f. 56 | g. 230 | h(123) NNM | XXX

C	Si	Cr	Mn	S
0.36 0.42	1.00	12.50 14.50	1.00	0.030

2357 — 50CrMoV13-14, AISI S7
a. 600 | b. 970 | c. 50/57 | f. 56 | g. 248 | h(123) MMH | XXX

C	Cr	Mo	V	S
0.45 0.55	3.00 3.50	1.30 1.70	0.15 0.35	0.030

1520 — C70W
a. 650 | b. 810 | c. 54/61 | f. 64 | g. 180 | h(123) NHM

C	Si	Mn		S
0.65 0.74	0.10 0.30	0.10 0.35		0.030

2235 — 80CrV2
a. 680 | b. 830 | c. 57/62 | f. 63 | g. 225 | h(123) NNM

C	Cr	Mn	V	S
0.75 0.85	0.40 0.70	0.30 0.50	0.15 0.25	0.030

2210 — 115CrV2, AISI L2
a. 680 | b. 840 | c. 57/62 | f. 64 | g. 225 | h(123) MNM | XXX

C	Cr	Mn	V	S
1.10 1.25	0.50 0.80	0.20 0.40	0.07 0.12	0.030

2067 — 102CrV6
a. 650 | b. 860 | c. 57/61 | f. 64 | g. 225 | h(123) MNM

C	Cr	Mn	Si	S
0.95 1.10	1.35 1.65	0.25 0.45	0.15 0.35	0.030

2550 — 60WCrV8, ≈AISI S1
a. 650 | b. 900 | c. 55/58 | f. 60 | g. 225 | h(123) MNH | XXX

C	Si	Mn	W	S
0.55 0.65	0.90 1.20	0.15 0.45	1.70 2.20	0.030

2516 — 100WV4
a. 680 | b. 820 | c. 58/62 | f. 66 | g. 230 | h(123) MNM | XXX

C	Cr	W	V	S
1.15 1.25	0.15 0.25	0.90 1.10	0.07 0.12	0.035

2002 — 125Cr1
a. 680 | b. 800 | c. 58/64 | f. 65 | g. 200 | h(123) MNN

C	Si	Cr	Mn	S
1.20 1.30	0.15 0.35	0.40 0.60	0.25 0.40	0.025

2008 — 140Cr3
a. 680 | b. 820 | c. 60/66 | f. 68 | g. 220 | h(123) MNN

C	Si	Cr	Mn	S
1.35 1.50	0.15 0.30	0.40 0.70	0.25 0.40	0.035

a. Max. annealing temperature (°C)
b. Max. hardening temperature (°C)
c. Rec. service hardness min / max (HRC)
D. German material number
e. Abbreviated name

1.DDDD — eeeeeeeee, AISI designation
a. | b. | c. | f. | g. | h(123) | XXX

C	Si	Mo	V	S
min. max.				

f. Max. hardness (HRC)
g. Max. annealed hardness (HB)
h. Properties → 1- Strength, 2- Elasticity, 3- Machinabilty
XXX = Available from stock

H: High / good
M: Moderate
N: Low

rev. 02;022007

Increasing abrasion wear resistance

no responsibility is taken for the correctness of this information