Quality	X37CrMoV5-1
According to standards	EN ISO 4957 : 2002
Number	1.2343

ALOK INGOTS
steel re engineered
AN ISO 9001:2008 CERTIFIED COMPANY

Chemical composition

C% max	Si%	Mn%	P% max	S% max	Cr% max
0.33-0.41	0.80-1.20	0.25-0.50	0.030	0.020	4.80-5.50

Mo% max	Ni% max	V% max
1.10-1.50	-	0.30-0.50

Temperature ▲°C

Hot-forming	Quenching	Tempering	Stress-relieving	Soft annealing
1050-900	heating up to 800, pause, then 1000-1040 oil, polymer, s.b. (HRC ~ 54)	immediately after quenching minimum 2 cycles	50° Under the temperature of tempering	800-810 furnace cooling max 25° /h to 600, then air (HB max 229)

Mechanical properties

Tempering table after quenching at 1020°C in oil. Values on test ⌀ 20 mm

HB	543	525	518	512	512	518
HRC	54	53	52.5	52	52	52.5
R N/mm2	2010	1950	1915	1880	1880	1880
Tempering at °C	50	100	150	200	250	300
Kv +20 °C J	16	16	16	18	20	20
Thermal Expansion	10^{-6}. K^{-i}		12.2	12.5	12.9	13
Modulus of elasticity long.	GP a	215		183	176	165
Modulus of elasticity tang.	GP a	82		70	68	63
R Hardened and tempered	N/mm2	1600	1400	1300	1100	800
Rp 0.2	N/mm2	1450	1200	1100	900	600
R Hardened and tempered	N/mm2	1200	1120	1000	850	580
Rp 0.2	N/mm2	1060	900	800	650	420
Specific heat capacity	J/(kg.K)	460			550	590
Thermal conductivity	W/(m.K)	25			28.5	29.3
Density	kg/dm3	7.8			7.64	7.60
Specific electric resistivity	ohm.mm2/m	0.52			0.86	0.96
Electrical conductivity	Siemens.m/mm2	1.92			1.16	1.04
°C		20	300	400	500	600