Quality	**42CrMo4**
According to Standard	**EN 10083-3:2006 (E)**
Number	**1.7225**

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

Comparable Standards

EN	W.N.	AISI
42CrMo4	1.7225	4140

Chemical Analysis

C %	Si % max	Mn %	P% max	S% max.	Cr %
0.38 to 0.45	0.40	0.60 to 0.90	0.025	0.035	0.90 to 1.20

Mo %	Ni %	V	B
0.15 to 0.30	–	–	–

Hot Work and Heat Treatment Temperatures

Quenching [c,d] °C	Quenching [e] agent	Tempering [f] °C	End Quench Test °C
820 to 800	Oil or Water	540 to 680	850 ± 5

Mechanical Properties at Room Temperature

	Mechanical Properties for the ruling section (see EN 10083-1:2006, Annex A) with a diameter)d) or for flat products thickness (f) of				
	R_e min. MPa [c]	R_m	A min. %	Z min. %	KV^b min. J
d ≤ 16 mm t ≤ 8 mm	900	1100 to 1300	10	40	–
16 mm < d ≤ 40 mm 8 mm < t ≤ 20 mm	750	1000 to 1200	11	45	35
40 mm < d ≤ 100 mm 20 mm < t ≤ 60 mm	650	900 to 1100	12	50	35
100 mm < d ≤ 160 mm 60 mm < t ≤ 100 mm	550	800 to 950	13	50	35
160 mm < d ≤ 250 mm 100 mm < t ≤ 160 mm	500	750 to 900	14	55	35

Steel Designation		Mechanical Pro						
		d ≤ 16 mm					16 m	
		t ≤ 8 mm					8 mr	
Name	Number	R	R	A	Z	KV[b]	R	R
		min.		min.	min.	min.	min.	
		MPa[c]		%	%	J	MPa[c]	

operties for the ruling section (see EN 10083-1:2006, Annex A) with a diameter)d) o								
m < d ≤ 40 mm			40 mm < d ≤ 100 mm					
n < t ≤ 20 mm			20 mm < t ≤ 60 mm					
A	Z	KV[b]	R	R	A	Z	KV[b]	R
min.	min.	min.	min.		min.	min.	min.	min.
%	%	J	MPa[c]		%	%	J	MP

r for flat products thickness (f) of								
100 mm < d ≤ 160 mm				160 mm < d ≤ 250 mm				
60 mm < t ≤ 100 mm				100 mm < t ≤ 160 mm				
R	A	Z	KV[b]	R	R	A	Z	KV[b]
	min.	min.	min.	min.		min.	min.	min.
Pa[c]	%	%	J	MPa[c]		%	%	J