Quality	**30MnB5**
According to Standard	**EN 10083 - 3 : 2006**
Number	**1.5531**

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

Comparable Standards	**German DIN**	**France AFNOR**	**Spain UNE**	**China GB**	**U.K. B.S.**	**Russia GOST**	**USA AISI - SAE**	**Japan JIS**
	23MnB4	30MB5						SWRCHB634

Chemical Analysis	**C% max**	**Si% max**	**Mn% max**	**P% max**	**S% max**	**Cr% max**	**Mo% max**
	0.27 - 0.33	0.40	1.15 - 1.45	0.025	0.035		

Hot Work and Heat Treatment Temperatures

Temperature °C

Hot - Forming	**Normalizing**	**Quenching**	**Tempering**	**Soft Annealing**	**Natural State**	**Full Annealing**	**End Quench Hardenability test**	**Stress-relieving +SR**
1150 - 900	860 - 900 air	860 - 900 polymer, water	450 - 650 air	600 - 680 air (HB 170 max)	(HB max - 190)	860 - 880 furnace (HB max 162)	880 water	50° under the temperature of tempering or 180 - 200

Mechanical Properties at Room Temperature

Mechanical properties for the ruling section (see EN 10083-1:2006, Annex A) with a diameter Steel designation (d) or for flat products thickness (t)

d ≤ 16mm					**16mm < d ≤ 40mm**					**40mm < d ≤ 100mm**		
t ≤ 8mm					**8mm < t≤20mm**					**20mm < t ≤ 60mm**		
Re Min.	**Rm**	**A min**	**Z min**	**KV[b] min.**	**Re Min.**	**Rm**	**A min**	**Z min**	**KV[b] min.**	**Re Min.**	**Rm**	**A min**
800	950 to 1150	13	50	-	650	800 to 950	13	50	60	-	-	-

40mm < d ≤ 100mm			**100mm < d ≤ 160mm**				**160mm < d ≤ 250mm**				
20mm < t ≤ 60mm			**60mm < t ≤ 100mm**				**100mm < t ≤ 160mm**				
Z min	**KV[b] min.**	**Re Min.**	**Rm**	**A min**	**Z min**	**KV[b] min.**	**Re Min.**	**Rm**	**A min**	**Z min**	**KV[b] min.**
-	-	-	-	-	-	-	-	-	-	-	-