Quality	**13CrMo4-5**
According to Standard	**EN 10273 : 2000**
Number	**1.7335**

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

Comparable Standards	**EN**	**W.N.**
	13CrMo4-5	1.7335

Chemical Analysis	**C %**	**Si % max**	**Mn %**	**P% max**
	0.08 - 0.18	0.35	0.40 - 1.00	0.03

Cr %	**Cu max.**	**Mo %**	**Ni %**
0.70 - 1.15[4])	0.3	0.40 - 0.60	-

S% max	**Al_{tot}**
0.025	1)

Hot Work and Heat Treatment Temperatures

Normalizing	**Temperature Range For Quenching**	
	Austenitizing	**Tempering[2])**
--	890 to 950	630 to 730

Mechanical Properties at Room Temperature

Usual delivery conditon	**Diameter or thickness mm**		**Yield Strength R**
+N	**over**	**up to**	**N/mm2 min.**
+NT	16	16	300
+NT or +QA or +QL	60	100	275
+QL	100	150	255

Tensile Strength	**Elongation after fracture ($L_o = 5{,}65\sqrt{S_o}$)**	**Minimum impact energy value**		
N/mm2	**A (longitudinal) % min.**	**KV (longitudinal)**		
		J at temperatures in °C		
450 to 600	20			
440 to 590	19	-	-	40
430 to 580				

1) The Al content of the cast shall be determined and given in the inspection document.
4) ●● If resistance to pressurized hydrogen is of importance,
a minimum percentage by mass of Cr of 0,80% should be agreed at the time of enquiry and order.