DESCRIPTION

IS 319 Gr III A ductile alloy with good machinability as well as bending and cold heading properties. Suitable for bicycle spoke nipples.

CHEMICAL COMPOSITION

THE LEWIS	Elements			Min (%)			Max (%)		
67717	Cu		, us life in	62.00	62,	5	63.00	pille.	43,
C ₂	Pb	THE HILL		0.50		JIE JIE	1.50		
S METHER	Fe	bit yan		M. Hill		11 June	0.20		
. JHDIB	Total Others			HING - N			0.50		
40	Zn	S. HELL		62.,	Rem	nainder	Hilligo II. Harring		

MECHANICAL PROPERTIES ACCORDING TO IS 319 GR III (AS PER TEMPER HB)

Range (Inch)	From	То	UTS Min (Mpa)	PS Min (Mpa)	Elongation Min (%)	Hardness Min	Hardness Max
ALL'S STREET STREET	6.00	12.00	355.00	aliethi - athi	8.00	- 0,	-ETAL
Dound (Dio)	12.00	25.00	345.00	- 420	12.00	- 167	THE T
Round (Dia)	9 25.00	50.00	305.00	-	22.00	William Control	60/2
	50.00	75.00	285.00	s - di	27.00	42,-	=
S EMEN THING	6.00	12.00	355.00	-11/1/2	8.00		Elli.
Hoy (A/F)	12.00	25.00	345.00	650	12.00	E. Mill	THE PARTY - UNITED
Hex (A/F)	25.00	50.00	305.00	- 6.	22.00		-
	50.00	75.00	285.00	- 16/100	27.00	Sp	-
, HE IN HINDS	6.00	12.00	355.00	-IIIIE	8.00		THE - HE
Courses (A /E)	12.00	25.00	345.00	bpg	12.00	CIRIT- IN	- 97/1/1
Square (A/F)	25.00	50.00	305.00	- 6-	22.00	ite in - objin	-
	50.00	75.00	285.00	.E.M	27.00	-	- /10

PHYSICAL PROPERTIES

Density	8.46 g/cm3
Melting Point	910°C
Specific heat cap at 20°C	0.377 (kj/kgK)
Electrical conductivity	14.7 (MS/m)
Mod of elasticity	105 (GPa)
Coef of therm exp at 20°C	20.4 (10 ⁻⁶ /K)
Thermal Conductivity	116W/m.K

FABRICATION PROPERTIES

Suitability
80%
poor
Fair
Excellent
Good

TYPICAL USES

> Precision Components Machining with Riveting operation.