

Prepared By:

Rakesh Yadav

ARORA IRON & STEEL ROLLING MILLS (P) LTD.

DHANDARI KHURD, NEAR PHASE-VII, FOCAL POINT, LUDHIANA- 141 010.

E-mail: arora_iron_ldh@yahoo.com Website: www.arorairon.com



Approved By:



METALLURGICAL TEST REPORT

	omer	Addre:	ss:				Mate	rial		Billet	Route				Repor	rt No.		9295	7		
M/C FORCE / WILLIAM							1	ss Rout		EAF-LF	EAF-LRF-VD-CCM-AMLC-EMS-RM					Date			24-03-2018		
M/S -FORGE (INDIA) PVT . LTD #60 , SECTOR-5 , PARWANOO-H.P.								fication	ı	Standard					Invoid	e No.	11872				
															Weigh	nt (MT.)		15.805			
							Heat	No.		A06355					_	/Billet Si		200X200 MM			
							Grade			EN353					Reduction Ratio			11	10:1		
							Suppl	y Size		63 MM RCS					No's of Pcs				NA NA		
							Supply Condition Colour Code			AS HOT ROLLED WHITE+GREEN DOT				No's of Bundle			NA				
														Multip		NA NA					
									Т	EST F					Widiti	JIE .		INA		_	
						CHI	DAICA	I ANI													
	Eleme	nt	C%	Mn%	Si%	CITE COL				S (AST			T	811-	1998)						
Spec.		Min	0.200	0.500		5%	P%	Cr%	Ni%	0.080	0.51778	Al%	Cu%	Ti%	Sn%	В%	Ca%	Co%	CE%	Ci	
		Max				0.050	7-	0.750	CHURS 25							30				- 17:31	
	Achiev	TO THE PERSON					-			a management	- *	2	-	-	(+)	14.5	-	-	-		
	Acmey	eu	0.165	0.720	0.235	0.021	0.016	0.800	1.010	0.095	0.003	0.023	0.130		-	141					
						110	DEM	A D I : -		- 41-										_	
Die	tance	(mm)	4/16"			HAI	KUENA	ARILIT	Y TES	T (IS:3	848, 4	ASTM	A255	, SAE	J406)						
77	T		CONTRACTOR OF THE PARTY OF THE																	T	
Spec. (HRC)		Min	33					-													
	1	Max	37																		
ACD	ieved	(HKC)	34.0											-11							
							B 41				8				77						
			T	!! .	100		iviech	anical	Prop	erties	(IS 16)						
De			100000	nsile	27,000	eld	Elongation		Reduction			Impact Strength			D.I. Value			Surface Hardr			
Pu				trength Strength		STATE OF THE PARTY			Area		IZOD,	IZOD/Charpy V-notch/U-ne			notch ASTM A255		As Rolled				
Pior-		(Kg/mm²)		(Kg/mm ²)		(%)		(%)		(Joules)			(Inch) (mm)		(BHN)						
Spec.	Min		-				3		=			ACHECANTED.			Transmy.	(story		(DITI	V)		
	Max				_		9													-	
Achieved							121		NE -							192/197					
										- 4						-	- 2		132/	137	
			<u> </u>						etallo	graph	ic Pro	pertie	25								
		100				CLUSIO				Ш		Gr	ain Size	2		Depth of		M	licro Str	ucti	
	Parameters					EN10247 (Degree of Pu			ırity)			IS 4748 /			Decarburization			mero otracia			
Param	eters			4	Thin	3		Thick	L)	D.C	ASTM E112 (No.)		IS 6396/ASTM E107		400.00					
Param	eters	Туре	A			Thick	Thin		Thin	Thick	DS			(mm)							
Param		Series	Thin	Thick	inin										(2000)						
	N	Series In	Thin -	Thick -	I nin	1	>=:				-	7		- 1						22	
Spec.	N	Series In Iax	Thin -		- 1			+	•	-			*			1					
Spec.	N	Series In Iax	Thin -	18	- 4	0.0						6.5	to 7	7.0	11	7.5		Pearlit	e+Ferri	to 4 F	
Spec.	N	Series In Iax	Thin -		- 1			-		-		6.5	to 7	7.0		18.		Pearli	te+Ferri	te+E	
Spec.	N	Series In Iax	Thin -		- 1	0.0	0.0	0.0	1.0	0.0					Tost			Pearli	te÷Ferri	ite+E	
Spec.	N	Series In Iax	Thin - : 1.5		- 0.5	0.0 Physi	0.0	0.0 opert	1.0 ies, N	on Des	structi	ve Te	st & C	ther				Pearli			
Spec. A	M N chieve	Series In Iax	Thin - : 1.5	0.5	- 0.5	0.0 Physi	0.0	0.0 opert	ies, Ne	on Des	structi	ve Te	st & C	Other	Ultri	asonic T	10/21/21	Pearli	Upsett	ing	
Spec. A	M N chieve	Series In Iax	Thin	0.5	- 0.5	0.0 Physi	0.0 cal Pr	0.0 opert	ies, Ne	on Des	structi	ve Te Magne	st & C etic Par spectin	Other	Ultri	asonic T	10/21/21	Pearli	Upsett Test	ing	
Spec. A	N N chieve	Series In Iax	Thin	0.5	- 0.5	0.0 Physi	0.0 cal Pr	0.0 opert	ies, Ne	on Des	structi	ve Te Magne	st & C	Other	Ultri	4388 / IS	10/21/21	Pearli	Upsett	ing	
Spec. A	N N chieve	Series Ain Hax Id	Thin - : 1.5 ternal Sc ASTM	0.5	0.5	O.O Physi	cal Pr Pr Down Test S 4075	opert	ies, No	0.0 on Des	structi	ve Te Magne	st & C etic Par spectin	Other	Ultri	4388 / IS	10/21/21	Pearli	Upsett Test	ing	
Spec. A	N N chieve	Series Ain Hax Id	Thin - : 1.5 ternal Sc ASTM	0.5 oundnes	0.5	O.O Physi	0.0 cal Pr	opert	ies, No	on Des	structi	ve Te Magne	st & C etic Par spectin	Other	Ultri	4388 / IS	10/21/21	Pearlit	Upsett Test	ing	
Spec. A	N N chieve	Series Ain Hax Id	ternal So ASTM	0.5 oundness E381	0.5	Physi Ste	cal Prep Down Test 5 4075	operting	ies, No	on Des	structi	ve Te Magne	st & C etic Par spectin	Other	Ultri ASTM A	A388 / IS - OK	2417		Upsett Test	ing	
Spec. A	eters c. ved	Series Ain Hax Id	ternal Sc ASTM	0.5 oundness E381	0.5	Physi Ste	cal Pr Pr Down Test S 4075	operting	ies, No	0.0 on Des	structi	ve Te Magne	st & C etic Par spectin	Other	Ultri ASTM A	A388 / IS - OK	10/21/21		Upsett Test	ing	
Spec. A	eters c. ved	Series Ain Hax Id	ternal Sc ASTM Dimens Tolera	0.5 0.5 oundness E381 C2,R2,S sional ance	0.5	Physi Ste	cal Prep Down Test 5 4075	operting	ies, No	on Des	structi	ve Te Magne	st & C etic Par spectin	Other	Oltro	A388 / IS - OK	is Repo		Upsett Test	ing	
Spec. A	eters c. ved	Series Ain Hax Id	ternal Se ASTM Dimens Tolera	0.5 oundness E381 C2,R2,S sional ance	0.5	Physi Ste	cal Prep Down Test 5 4075	operting	ies, No	on Des	structi	ve Te Magne In IS	st & C etic Par spectin	Other	Gas A	OK	is Repo	ort	Upsett Test IS 111	ing t 69	
Spec. A	N N N N N N N N N N N N N N N N N N N	Series Jin Jax Jin	ternal Se ASTM Dimens Tolera	0.5 oundness E381 C2,R2,S sional ance	0.5	O.O Physi Ste	cal Prep Down Test 5 4075	operting	ies, No	on Des	structi	ve Te Magne In IS	st & C etic Par spectin 10138	Other	Gas A	OK Analysist metho	is Repo	ort	Upsett Test	ing t 69	

Checked By: