

CUSTOMER : SADHU FORGING LTD

PROCESS ROUTE

TC NO. : 0008487 DATE : 30.12.2017

MBF-EAF-LRF-VD-CCM-RM

INVOICE NO. : 172715393 DATE : 30.12.2017
DELIVERY ORDER NO. : 81047039 TRUCK NO. : HR73A1010

CUSTOMER SPECIFICATION No.		HEAT No.	GRADE	SECTION IN (mm)	GRADE COLOUR CODE	BLT/BLM SIZE (mm)	SUPPLY CONDITION	LENGTH (Mtrs)	NO. OF PIECES	QTY
SF/BLUESTAMPING/SCM420H/001 /01.06.2002		06226	SCM420H	RND-56	RED+BLUE DOT+RED	160x160	AS ROLLED	5.200	18.390	

CHEMICAL COMPOSITION

%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Ni	%Mo	%V	%Al	%Pb	%Ti	%B	%Sn	%W	%As	%Ca	%Sb	%Co	%Nb	O2	N2	H2
SP-MIN	0.17	0.55	-	0.15	0.85	-	-	0.15	-	0.020	-	-	-	-	-	-	-	-	-	-	ppm	ppm	ppm
-MAX	0.23	0.90	0.030	0.35	1.25	-	-	0.35	-	0.045	-	-	-	-	-	-	-	-	-	-	20	100	2.0
ACTUAL	0.21	0.83	0.0130	0.0110	0.2200	1.2100	-	0.2400	-	0.0240	-	-	-	-	-	-	-	-	-	-	15	79	1.21

MECHANICAL PROPERTIES

JOMINY VALUE

PS/YS	UTS	%EL	%RA	IMPACT (IZOD/CHARPY)	HARDNESS (BHN)	DI VALUE	CE VALUE															
()	()			()																		
SPEC-MIN	-	-	-	-	-	-	-															
-MAX	-	-	-	-	-	-	-															
ACTUAL	-	-	-	-	-	-	-															

METALLURGICAL PROPERTIES

INCLUSION RATING (ASTM-E-45 / IS:4163)				GRAIN SIZE (ASTM)	SURFACE QUALITY	QUENCH HARDNESS	DA	db+dc	D	DECARBURIZATION (MM)	MACRO ETCH RESULTS	REDUCTION RATIO
AT	AH	BT	BH	CT	CH	DT	DH	-E-112				
SPEC-MIN	-	-	-	-	-	-	-	5	OK	-	-	-
-MAX	1.50	-	1.50	-	1.50	-	8		-	0.40	0.40	-
ACTUAL	1.00	-	0.50	-	0.00	-	1.50	7/7.5	OK	-	-	10.40

REMARKS : 100% SPARK/SPECTRAL:OK.MICRO STRUCTURE:FERRITE + PEARLITE.
J5,9 MM=44,41 HRC
We certify that the material described above conforms to the specs.
For Sunflag Iron & Steel Co. Ltd.

(Signature)
SUNFLAG STEEL