

**CUSTOMER : SADHU FORGING LTD**

**PROCESS ROUTE**

**MBF-EAF-LRF-VD-CCM-RM**

TC NO. : 0001034  
INVOICE NO. : 172709906  
DELIVERY ORDER NO. : 81036403  
DATE : 24.10.2017  
TRUCK NO. : HR738488

**CUSTOMER SPECIFICATION NO.**

HEAT NO.

GRADE

SECTION IN (mm)

GRADE COLOUR CODE

BLT/BLM SIZE (mm)

SUPPLY CONDITION

LENGTH NO. OF (Mtrs) PIECES (MT) QTY

SF/BLUESTAMPING/SCM420H/001

/01.06.2002

06227

SCM420H

RND-40

RED+BLUE DOT+RED

160x160

AS ROLLED

5.500

15.054

**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	0.030	1.25	-	-	0.35	-	0.045	-	-	-	-	-	-	-	-	-	-	20	100	2.0
ACTUAL	0.21	0.87	0.0170	0.0120	0.2200	1.2100	-	0.2400	-	0.0210	-	-	-	-	-	-	-	-	-	-	14	82	1.19

**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	Full	Partial	Total	ASTM-E-381	MACRO ETCH RESULT	REDUCTION RATIO
A T A H B T B H C T C H D T D H	- E-112	( )											
SPEC-MIN	-	-	-	-	-	-	-	-	-	-	-	-	-
-MAX	1.50	-	1.50	-	-	-	-	-	-	-	-	-	-
ACTUAL	1.00	-	0.50	-	0.00	-	1.50	-	7/7.5	OK	-	-	-

REMARKS : 100% SPARK/SPECTRAL:OK.MICRO STRUCTURE:FERRITE + PEARLITE.

J5,J9MM=45,42 HRC

We certify that the material described above conforms to the specs.

For Sunflag Iron & Steel Co. Ltd.

*(Signature)*  
DGAN GUAR