

CUSTOMER	:DHAR AUTOMOTIVES PVT.LTD. PITHAMPUR,DIST-DHAR
SPECIFICATION	:
REV No / REF NO	:
HEAT NO	:MB07750
GRADE	:EN353
SECTION(MM)	:75 RCS
REDUCTION RATIO	:11.1
INPUT SIZE (MM)	:250 X 250
PROCESS ROUTE	:BF/EDF/LRF/VD/CCM/SEN/M'EMS/AMLC

INVOICE NO	:	11868	QA/RM/F10
TRUCK NO	:	MH18AN/9299	
DATE	:	22/05/2018	
NO OF PCS / BNDL	:	29 PCS/04 BNDS	
QUANTITY (MT)	:	7.060	
COLOUR CODE	:	RED+YELLOW	
SUPPLY CONDITION	:	AS ROLLED	
MULTIPLE LENGTH	:	XL=5-6 MTR	

## CHEMICAL COMPOSITION % (Ladle/Product)

	%C	%Mn	%P	%S	%Si	%Cr	%Ni	%Mo	%Pb	%Cu	%Sn	%V	%Ti	%B	%Al	%Ca
CUST. MIN	--	0.500	--	--	--	0.750	1.000	0.080	--	--	--	--	--	--	0.020	--
SPEC. MAX	0.200	1.000	0.050	0.050	0.350	1.250	1.500	0.150	--	--	--	--	--	--	0.040	--
ACTUAL	0.170	0.930	0.014	0.025	0.200	1.120	1.020	0.110	--	0.011	0.003	0.004	0.0020	0.0004	0.026	0.001

## 2. MECHANICAL PROPERTIES

YS	:	--	
UTS	:	--	--
ELONGATIONS(5.65Sq.rt.A) %	:	--	
REDUCTION AREA %	:	--	
IMPACT VALUE	:	--	
HARDNESS(BHN/HRB/HRC)	:	--	180/200 BHN

### 3. METALLURGICAL PROPERTIES

MICRO STRUCTURE	:	P+F	PEARLITE+FERRITE
GRAIN SIZE (ASTM E112/IS:4748)	:	5/8	6.5/7.5
TOTAL DECARB (MM) SAEJ419	:	--	--
INCL RATINGS (ASTM E-45/IS:4163)	:		

## SPECIFIC REQUIREMENT

THIN ; THICK; THIN ; THICK; THIN ; THICK; THIN ; THICK;							
A-2.0/-		B-2.0/-		C-2.0/-		D-2.0/-	
1.5	0.0	0.5	0.0	0.0	0.0	1.5	0.0

MACRO ETCH TEST (ASTM E - 381)	:	C2R2S2 MAX.	BETTER THAN C2R2S2.
4. D. I. VALUE (J406)	:	--	
DOMINY REQUIREMENT	:	6/16"=36/40 HRC	
HARDENABILITY IS:3848/A255-02	:		

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5. GAS LEVEL (PPM) SPECIFIED MAX	:	O2: 20.0	N2: 70-100	H2: 2.0
GAS LEVEL (PPM) ACHIEVED	:	O2: 16.1	N2: 62.0	H2: 1.9

5. REMARKS : 100% SPARK/SPECTRAL/MOBILE SPECTRO TEST :OK  
 STEP DOWN TEST :OK  
 UPSET TEST :NA  
 100% BAR MPI & UST :OK

*H. L. H.*  
AUTHORISED SIGNATORY