PROJECT NAME : P-1

VE COMMERCIAL VEHICLES LIMITED. (UNIT:EICHER ENGINEERING COMPONENTS;DEWAS)UNIT:–II	CONTROL PLAN	PREV. OPN.	NEXT. OPN.	SURFACE FINISH :	DOC. NO. :
		70 - PRE HT INSPECTION	90 - TEETH CHAMFERING		APO4 : 160 : 20 REV-01 (DATE-05.10.17)

CONTROL PLAN NO : *2479 / 80*

KEY CONTACT PERSON :- S. KOMULWAD

CORE TEAM :- SK, LEVA, SRS, IDS, MM, KUNAL, MJ, VSG

REVISION: A1 B C D E F

EFF DATE	30.08.2016	EFF DATE	11.09.17	EFF DATE	
PROTOTYPE	✓	PRELAUNCH	✓	PRODN	
O.E.	✓	EXPORT			

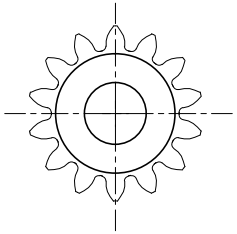
LOCATION → REST → CLAMP — N → SPL.CHAR. (CRITICAL DIMN.) (B) EECD ◇ CUSTOMER.

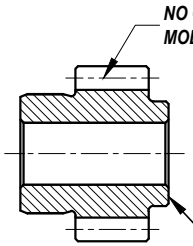
PART NO.	***ED 2479 (575189 / d)***		
PART NAME	***GEAR STARTER IDLE***	OPN. NO.	***80***
CUSTOMER	***ROYAL ENFIELD***		
OPERATION	***✱ HEAT - TREATMENT***		
CELL [OPTIONAL]	M./C. ***S.Q.F.***	M / C NO. [OPTIONAL]	

MATERIAL - : SAE 8620H A1
COMP. WT - : 0.08 Kg.

✱ HEAT-TREATMENT- :

✳ MARKING ;
PRE-WASHING ;
PRE-HEATING ;
CARBURISING ;
HARDENING ;
POST-WASHING ;
TEETH CHAMFERING
(REFER SEP.CONTROL PLAN);
SHOT BLASTING ;





A1 ✳

CHARGE NO. MARKING HERE
ENSURE STEEL HEAT CODE
& VENDOR CODE
ALREADY MARKED IN BLANK STAGE
OTHERWISE TO BE MARKED.

FIXTURE	FIX. NO.	TOOL	NO.

SURFACE HARDNESS	CORE HARDNESS	EFFECTIVE CASE DEPTH	MICROSTRUCTURE	
ALL AREA	AT RCD (MIDDLE OF TEETH)	AT PCD	CASE	CORE
80 ~ 84 HRA A1	330 ~ 480 HV1 A1	0.6 ~ 0.9 mm CUT OFF 513 HV1	FINE TEMPERED MARTENSITE + RA <10% AND FREE FROM CARBIDES GBO<20 micron	LOW CARBON MARTENSITE + BAINITE

GROUND SURFACE: HARDNESS @0.1 MM SHALL BE 650 HV1 MIN

A1 *MARKING LOACTION CHANGED AS PER BLANK DRAWING REV.-A1 DT-30.12.16 MATERIAL SCM 420 REMOVED SURFACE HARDNESS 80-84 HRA WAS 80-83 HRA, CORE HARDNESS 330-480 WAS 300-450 HV1 REVISED AS PER CUSTS LATEST DRG. REV.-d, BY-VSG, DT-13.12.17.*

SR. NO.	CHARACTERISTICS PRODUCT	CHARACTERISTICS PROCESS	SPL CHAR CLASS	PRODUCT SPECIFICATIONS	EVALUATION MEASUREMENT TECHNIQUE INSTRUMENT	NO.	SAMPLING SIZE	SAMPLING FREQ	RESP.	CONTROL METHOD	CORRECTIVE ACTION / REACTION PLAN
1.	***EFF. CASE DEPTH***		(B)	***REFER ABOVE TABLE***	*MICRO-HARDNESS TESTER*	---	*1 PC*	*PER CHARGE*	*~ INSPTR.*	*TESTING*	*CHECK FURNACE SETTING DATA & CONFIRM FOR CORRECTNESS*
2.	***SURFACE HARDNESS***		(B)		*HARDNESS TESTER*	---	*5 PC*	*PER CHARGE*	*~ INSPTR.*		
3.	*CORE HARDNESS*		(B)			---	*1 PC*	*PER CHARGE*	*~ INSPTR.*		
4.	*MICROSTRUCTURE*		(B)		*MICROSCOPE*	---	*1 PC*	*PER CHARGE*	*~ INSPTR.*		
						---	*1 PC*	*PER CHARGE*	*~ INSPTR.*		
5.	*SHOT BLAST*			*FREE FROM RUST & SCALE*	*VISUAL*	---	*100%*	*PER CHARGE*	*~ INSPTR.*		

FOR REFERENCE ONLY

DRN BY	*VIJAY S GIRI*	CHKD BY	*R.PATHAK*	APRD BY	*B.LEVA*	PAGE 01 / 02

UNSPECIFIED TOLERANCES AS PER IS : 2102 (PART-1) : 1993 MEDIUM CLASS. | *ALL DIMENSIONS ARE IN MILLIMETERS.* | *DO NOT SCALE, IF IN DOUBT, PLEASE ASK.* | *BREAK SHARP CORNERS.*