VE COMMERCIAL VEHICLES LIMITED.
(UNIT:EICHER ENGINEERING COMPONENTS;DEWAS)UNIT:–II

CONTROL PLAN

PREV. OPN.	NEXT. OPN.	SURFACE FINISH :	DOC. NO. :
60 – PRE HT INSPECTION	80 – TEETH CHAMFERING		AP04 : 160 : 20

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

CONTROL PLAN NO : 24122 / 070

EFF DATE	06.09.17	EFF DATE		EFF DATE	
PROTOTYPE	✓	PRELAUNCH		PRODN	
O.E.	✓	EXPORT			

PART NO.	ED 24122 (1570287)
PART NAME	GEAR, PRIMARY DRIVEN
OPN. NO.	070
CUSTOMER	ROYAL ENFIELD
OPERATION	* HEAT - TREATMENT

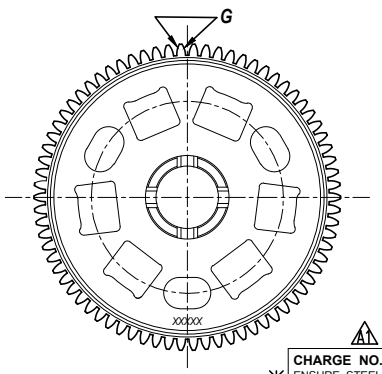
CELL [OPTIONAL]	M./C.	M / C NO. [OPTIONAL]
	S.Q.F.	

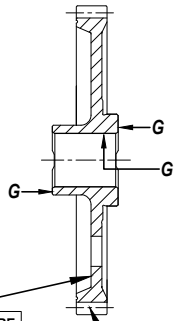
FIXTURE	FIX. NO.	TOOL	NO.

MATERIAL - : 16MnCr5
COMP. WT - : 1.0 Kg.

*** HEAT-TREATMENT- :**

MARKING ;
PRE-WASHING ;
PRE-HEATING ;
CARBURISING ;
HARDENING ;
POST-WASHING ;
TEETH CHAMFERING ;
SHOT BLASTING ;





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

NO OF TEETH :- 74
MODULE :- 2.0

SURFACE HARDNESS	CORE HARDNESS	* EFFECTIVE CASE DEPTH		MICROSTRUCTURE	
ALL AREA	AT RCD (MIDDLE OF TEETH)	UNGROUND AREA	AT PCD AFTER GEAR GRINDING	CASE	CORE
80 ~ 83 HRA	300 ~ 450 HV1	0.6 ~ 0.9 mm CUT OFF 513 HV1	0.5 ~ 0.8 mm CUT OFF 513 HV1	FINE TEMPERED MARTENSITE + RA <10% AND FREE FROM CARBIDES GBO<20 micron	LOW CARBON MARTENSITE + BAINITE

NOTE:- 1) GROUND SURFACE : HARDNESS @ 0.1mm SHALL BE 650 HV MIN.

* PLEASE NOTE, GEAR TEETH WOULD BE FURTHER GROUND.

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

FOR REFERENCE ONLY

⚠1 MARKING LOCATION CHANGED (MISTAKE CORRECTION) BY-VSG, DT-02.05.18

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.