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 A B C

CONTROL PLAN NO : 24102 / 070

EFF DATE	18.08.17	EFF DATE		EFF DATE	
PROTOTYPE	✓	PRELAUNCH		PRODN	
O.E.	✓	EXPORT			

PART NO. **ED 24102 (1570289)**

PART NAME **GEAR, PRIMARY DRIVE** OPN. NO. **070**

CUSTOMER **ROYAL ENFIELD**

OPERATION **✱ HEAT - TREATMENT**

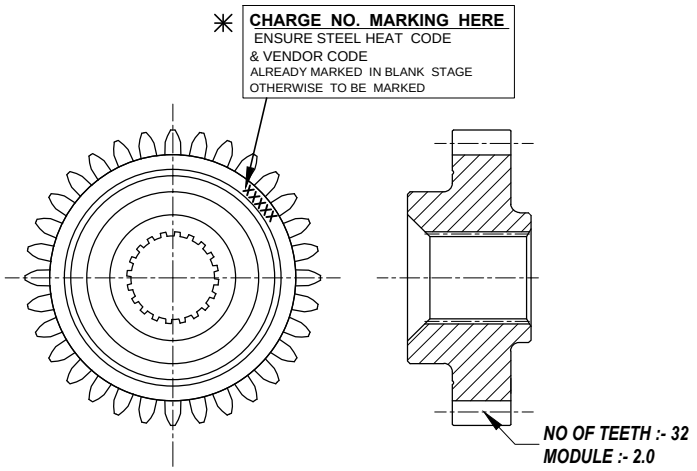
CELL [OPTIONAL]	M./C.	M / C NO. [OPTIONAL]
	S.Q.F.	

FIXTURE	FIX. NO.	TOOL	NO.

MATERIAL - : 16MnCr5
COMP. WT - : 0.44 Kg.

✱ HEAT-TREATMENT- :

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



HEAT TREATMENT SPECIFICATION

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

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			
3.	CORE HARDNESS					---	1 PC			
4.	MICROSTRUCTURE		Ⓑ		MICROSCOPE	---	1 PC			
						---	1 PC			
5.	SHOT BLAST			FREE FROM RUST & SCALE	VISUAL	---	100%			

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.