



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


CONTROL PLAN

PREV. OPN.	NEXT. OPN.	SURFACE FINISH	DOC. NO. : AP04 : 160 : 20 ISSUE-3 REV : 00 (01/11/06)
115 - STRAIGHTENING	125 - BURRFILING		
CLAMP — N →	SPL.CHAR. (CRITICAL DIMN.)	 EECD	 CUSTOMER'S
LOCATION →	REST →		REVISION

CONTROL PLAN NO : 1016/120

EFF. DATE 22.01.12 EFF. DATE 20.12.12 EFF. DATE 10.03.13

PROTO-TYPE  PRE-LAUNCH  PRODUCTION 

O.E.  EXPORT

PART NO. ED 1016 (LVU23493)

PART NAME SUN GEAR OPN. NO. 120

CUSTOMER JOHN DEERE

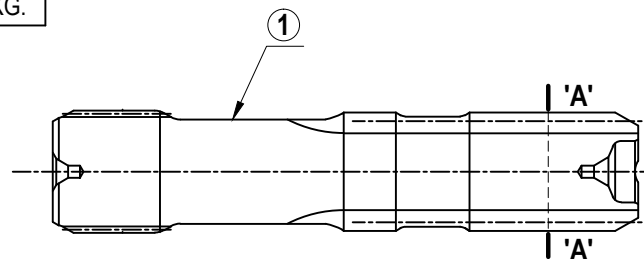
OPERATION AFTER H/T INSPECTION

CELL [OPTIONAL] M/C. INSP. DEPTT. M/C NO. [OPTIONAL]

FIXTURE FIX. NO. TOOL NO.

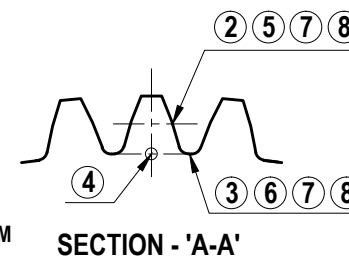
MATERIAL : 20 MnCr 5

COMP. WT. = 1.483 KG.




FOR REFERENCE ONLY

- NOTE : -
1. IF CASE DEPTH FOUND LOWER OR HIGHER LIMIT OF SPECIFICATION TWO PART CHECK.
 2. SAMPLE SHOULD BE CHECK BEST & WORST LOCATION FOR CASE DEPTH & MICROSTRUCTURE.
 3. IN CASE RA IS MORE THAN 25% CHECK HARDNESS (WITH 100 GM LOAD VICKER HARDNESS) AT 0.1mm. IN SHOULD BE 58 HRC. Min.



SECTION - 'A-A'

SR. NO.	CHARACTERISTIC		SPL CHAR CLASS	PRODUCT / PROCESS SPECIFICATIONS	MEASUREMENT TECHNIQUE		SAMPLING		CONTROL METHOD	CORRECTIVE ACTION / REACTION PLAN
	PRODUCT	PROCESS			INSTRUMENT	NO.	SIZE	FREQ.		
1.	SURFACE HARDNESS			58 - 64 HRC. 	ROCK WELL HARDNESS TESTER	---	1 PC.	PER CHARGE	SELF INSPECTION	SORT / REWORK ;
2.	CUT PART FOR CASE DEPTH ON PCD			1.1 ~ 1.3 mm. (AT515Hv)	AUTOMATIC VICKER HARDNESS TESTER	---	1 PC.	PER CHARGE	SELF INSPECTION	
3.	CUT PART FOR CASE DEPTH ON RCD			0.55 mm. Min (AT515Hv)	AUTOMATIC VICKER HARDNESS TESTER	---	1 PC.	PER CHARGE	SELF INSPECTION	
4.	CORE HARDNESS AT RCD			25 ~ 45 HRC.	ROCK WELL HARDNESS TESTER	---	1 PC.	PER CHARGE	SELF INSPECTION	
5.	MICROSTRUCTURE AT CASE			TM WITH 25% RA Max. (FREE FROM CARBIDES)	MICROSCOPE AT 500X	---	1 PC.	PER CHARGE	SELF INSPECTION	
6.	MICROSTRUCTURE AT CORE			LCM + BANITE	MICROSCOPE AT 500X	---	1 PC.	PER CHARGE	SELF INSPECTION	
7.	IGO & NMTP (Max. IN MICRON)			<_ 25 MICRON	MICROSCOPE 100X	---	1 PC.	PER CHARGE	SELF INSPECTION	
8.	ITP (Max. IN MICRON)			0% AT SURFACE 5% Max. AT ECD/2 AT PCD 5% Max. AT ECD/4 AT RCD	MICROSCOPE 100X	---	1 PC.	PER CHARGE	SELF INSPECTION	

DRN BY

M. PATEL

CHKD BY

R. PATHAK

APRD BY

B. LEVA

PAGE
01 / 01