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

CONTROL PLAN

PREV. OPN.	NEXT. OPN.	SURFACE FINISH	DOC. NO. : APO4 : 100 : 20
115 - STRAIGHTENING	125 - BURRFILING		ISSUE-3 REV : 00 (01/11/08)

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

CONTROL PLAN NO : **1015 / 120**

EFF. DATE	21.01.12	EFF. DATE	20.12.12	EFF. DATE	10.03.13
PROTO-TYPE	✕	PRE-LAUNCH	✓	PRODUCTION	✓
O.E.	✓	EXPORT			

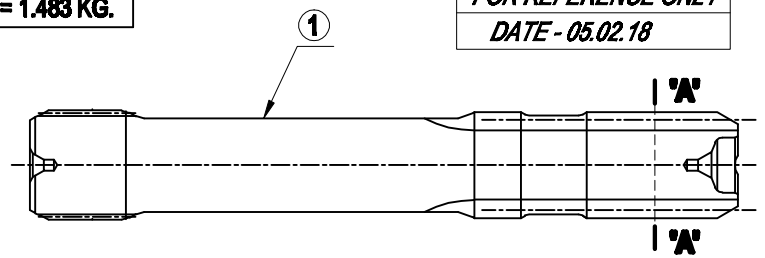
PART NO.	ED 1015 (LVU23492)		
PART NAME	SUN GEAR	OPN. NO.	120
CUSTOMER	JOHN DEERE		
OPERATION	AFTER H/T INSPECTION		

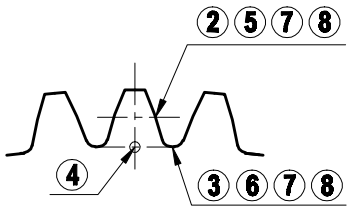
CELL [OPTIONAL]	M/C.	M/C NO. [OPTIONAL]
	INSP. DEPTT.	

FIXTURE	FIX. NO.	TOOL	NO.

MATERIAL - : 20 MnCr 5
COMP. WT. = 1.483 KG.

FOR REFERENCE ONLY
DATE - 05.02.18





SECTION - 'A-A'

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.

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 & NIMTP (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	

A CONTROL PLAN REVISED AS PER CUSTOMER'S UPDATED NEW DRG.(REV-E2) (DATE 03.05.13)
B CONTROL PLAN UPDATED : AS PER DCR 1128 (DATE 08.08.12) DISPAL

PAGE 01 / 01

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.