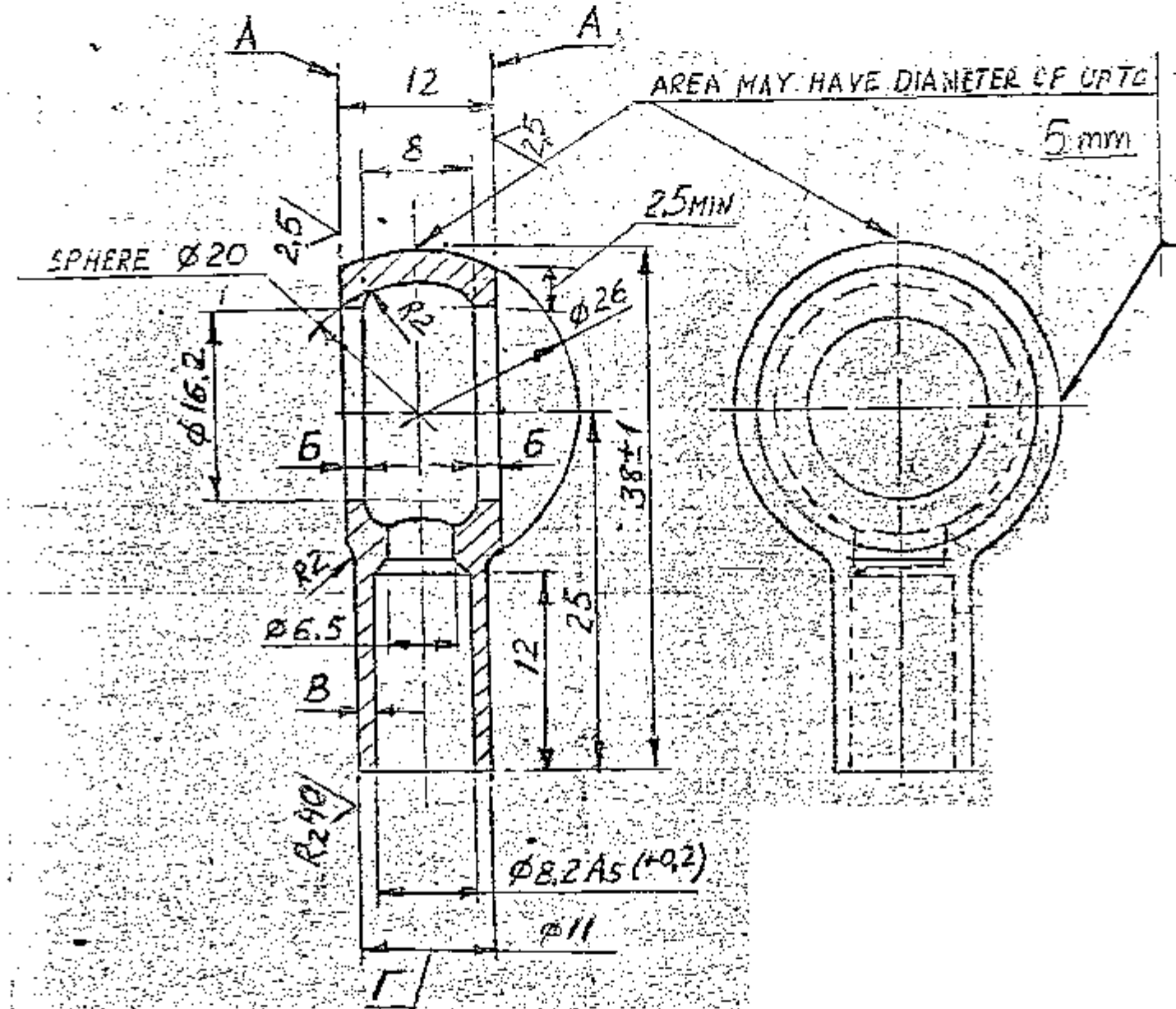


DRAWING NUMBER

322-17

R280 (✓)

ROUGH (✓) CYLINDRICAL SURFACE FROM BOTH SIDES
4mm max, IN WIDTH IS PERMITTED.



- ALTERNATE MATERIAL IS STEEL 30, 40 GOST 1050-74.
- UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS FOLLOWS :
FOR HOLES - AS PER A7
FOR SHAFTS - AS PER B7
FOR OTHERS - AS PER CM7
- WALL THICKNESS DIFFERENCE B SHOULD NOT EXCEED 0.2mm.
- TOLERANCE ON PARALLELISM OF PLANES A SHOULD BE 0.05mm.
- TOTAL TOLERANCE ON ALIGNMENT AND INTERSECTION OF AXIS OF SURFACE I WITH RESPECT TO AXIS OF PLANES A SHOULD BE R 0.3mm OVER THE LENGTH OF CYLINDRICAL PORTION.
- THICKNESS OF WALL B MAY BE ATLEAST 1.5mm.
- USED FOR PARTS, DELIVERED AS SPARE-PARTS IS COATING: ZINC PLATED 6 MICRONS THICK, OILED, WITH REMOVAL OF HYDROGEN EMBRITTLEMENT.
- USED FOR TROPICAL VERSION IS COATING: CADMIUM-PLATED 9 MICRONS THICK, OILED, WITH REMOVAL OF HYDROGEN EMBRITTLEMENT.
- INTERNAL SURFACE MAY HAVE NO COATING.
- MARK AND STAMP FINAL ACCEPTANCE ON THE TAG (PART 540-551) FOR BATCH OF PARTS AND SEAL.

EXPLANATORY NOTE :-

- MATERIAL QUOTED : 35 GOST 1050-74.
Alt Matl Quoted : 30 & 40 GOST 1050-74.
30, 35 & 40 = GRADES OF STEEL.
a) CHEMICAL COMPOSITION :-

GRADE OF STEEL	CONTENT OF ELEMENTS %							
	C	Si	Mn	Cr	P	S	Cu	Ni
30	0.27 - 0.35	0.17- 0.37	0.50- 0.80	0.25	0.035	0.040	0.25	0.25
MAXIMUM								
35	0.32- 0.40	0.17- 0.37	0.50- 0.80	0.25	0.035	0.040	0.25	0.25
40	0.37- 0.45	0.17- 0.37	0.50- 0.80	0.25	0.035	0.040	0.25	0.25

b) MECHANICAL PROPERTIES :-

GRADE OF STEEL	TENSILE STRENGTH Kgf/mm ² (min)	YIELD POINT Kgf/mm ² (min)	ELONGATION % (min)	REDUCTION IN AREA % (min)	IMPACT STRENGTH Kgf.m/cm ² (min)
30	50	30	21	50	8
35	54	32	20	45	7
40	58	34	19	45	6

KVD No: 60732

**
CB 322-01-4 TO CB 322-12-4
CB 322-07-4
CB 20-22-01-4
CB 20-22-03-4
CB 20-22-05-5

Ⓐ ALTERNATE MATERIAL: STEEL O80 M40(ENB)
TO BS: 970 PL 1-1983 OR 35 CA TO IS: 1570

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST. WT. 0.027 Kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)

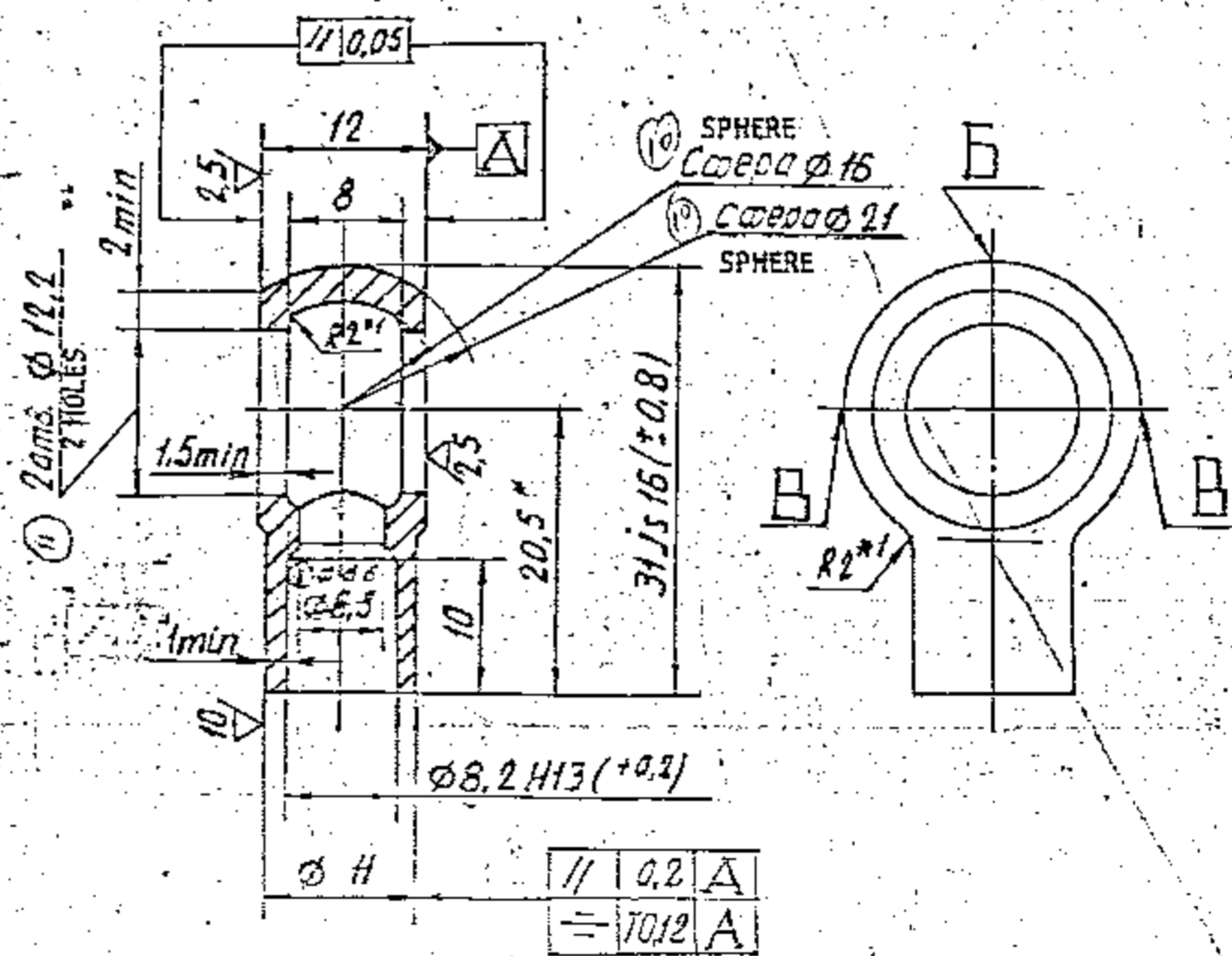
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSIONS IN mm.	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 2102-69	MATERIAL :- 35 GOST 1050-74	USED ON :- ** SEE ABOVE
				22-12-89	2:1			CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) A V A D I	
								TITLE SWIVEL - ELBOW	
								D S CAT NUMBER	DRAWING NUMBER 322-17
ISSUE	DATE	NATURE OF AMENDMENTS							
	11-7-09	3rd ALTERATION COMM. MINUTES POINT 6. DATE 27-2-09							



DRAWING NUMBER
322-18

20/ (✓)



1. Неуказанные предельные отклонения размеров отверстий по H14, валов по h7, остальных - ± IT14

2. На поверхностях B допускается чернота шириной 4 мм, не более.

3. В месте Б допускается площадь 0.5 мм, не более.

4. Покрытие ЦБ хр по ИЦД-154 с удалением водородной хрупкости для деталей аттравляемых в зап. части и для комплектования объектов по ИВ-40.

5. Покрытие КД9 хр по ИЦД-102 с удалением водородной хрупкости для деталей в тропическом исполнении. Допускается отсутствие покрытия на внутренних поверхностях.

6. Заменитель материала сталь марок 10, 20 ГОСТ 1050-74.

7. Клеимать на бирке для партии деталей с опломбированием окончательно праченки.

8* Размеры для справок.

9* Размеры обеспечить инструментом.

- 1) UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS OF HOLES AS PER H14, SHAFTS AS PER H7, OTHER DIMENSIONS - ± IT14
- 2) BLOCK SPOTS NOT EXCEEDING 4mm WIDE ARE ALLOWED ON SURFACES B
- 3) AREA 0.5mm MAXIMUM IS ALLOWED ON PLACE Б
- 4) COATING : Zn 6, CHROMATIZING AS PER ИЦД-154 WITH ELIMINATION OF HYDROGEN EMBRITTLEMENT FOR COMPONENT TO BE DISPATCHED AS SPARES AND FOR COMPONENTS MAKING A COMPLETE SET OF ARTICLES AS PER ИВ-40

- 5) COATING : КД9, CHROMATIZING AS PER ИЦД-102 WITH ELIMINATION OF HYDROGEN EMBRITTLEMENT FOR COMPONENTS HAVING TROPICALIZED CONSTRUCTION INTERNAL SURFACES MAY HAVE NO COATING
- 6) ALTERNATE MATERIAL : STEEL GRADES 10, 20 ГОСТ 1050-74
- 7) FINAL ACCEPTANCE STAMP SHOULD BE MARKED ON A TAG FOR A BATCH OF COMPONENT AND SHOULD BE SEALED
- 8) * DIMENSION FOR REFERENCE
- 9) *1 DIMENSIONS TO BE ENSURED WITH TOOL

ⓑ ALTERNATE MATERIAL: STEEL 080 M40 (EN8) TO BS:970 PL-1-1983 OR 05 C4 TO IS:1570

CB 322-01-4	CB 322-07-4
CB 322-02-4	CB 322-08-4
CB 322-03-4	CB 322-09-4 CB 20-35-12
CB 322-05-4	CB 322-10-4 CB 3335-00-30CB
CB 322-06-4	CB 322-11-4 CB 322-12-4

PILOT SAMPLE SHOULD BE APPROVED BY A R S P BEFORE BULK PRODUCTION.

EST. WT. 0.018 Kg. TO BE STAMPED OR MARKED WHERE INDICATED THIS = (LETTERS)

ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

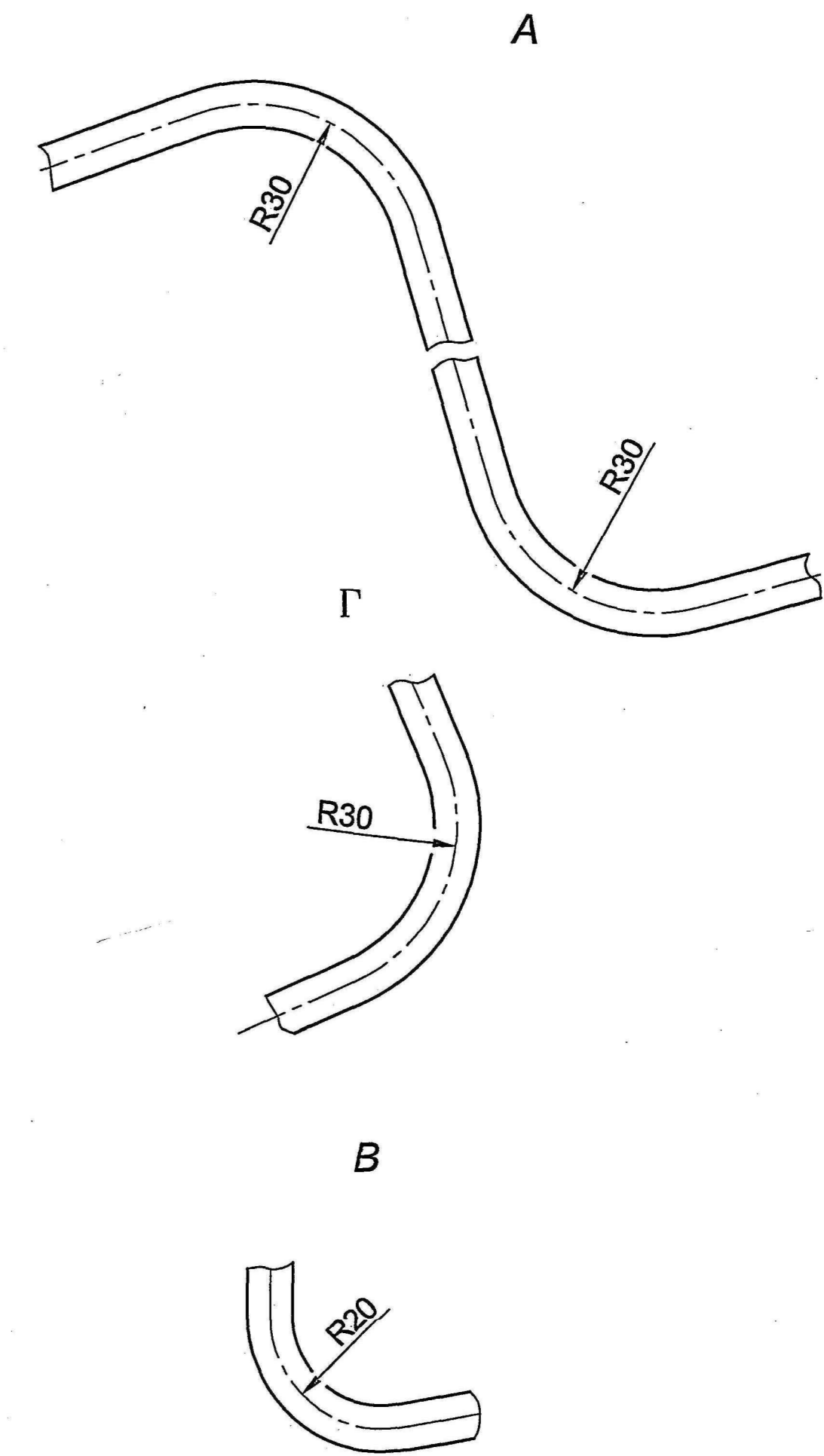
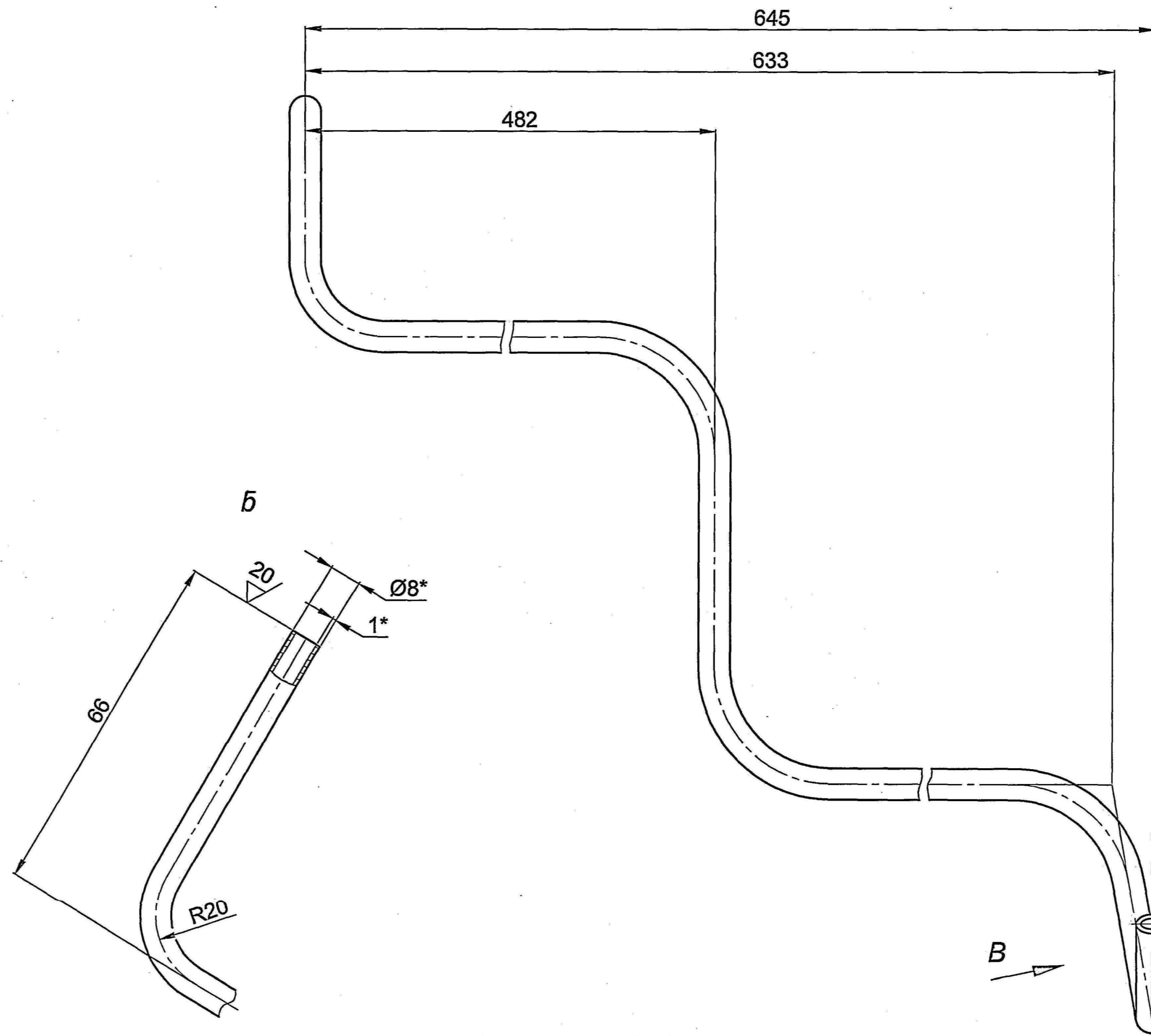
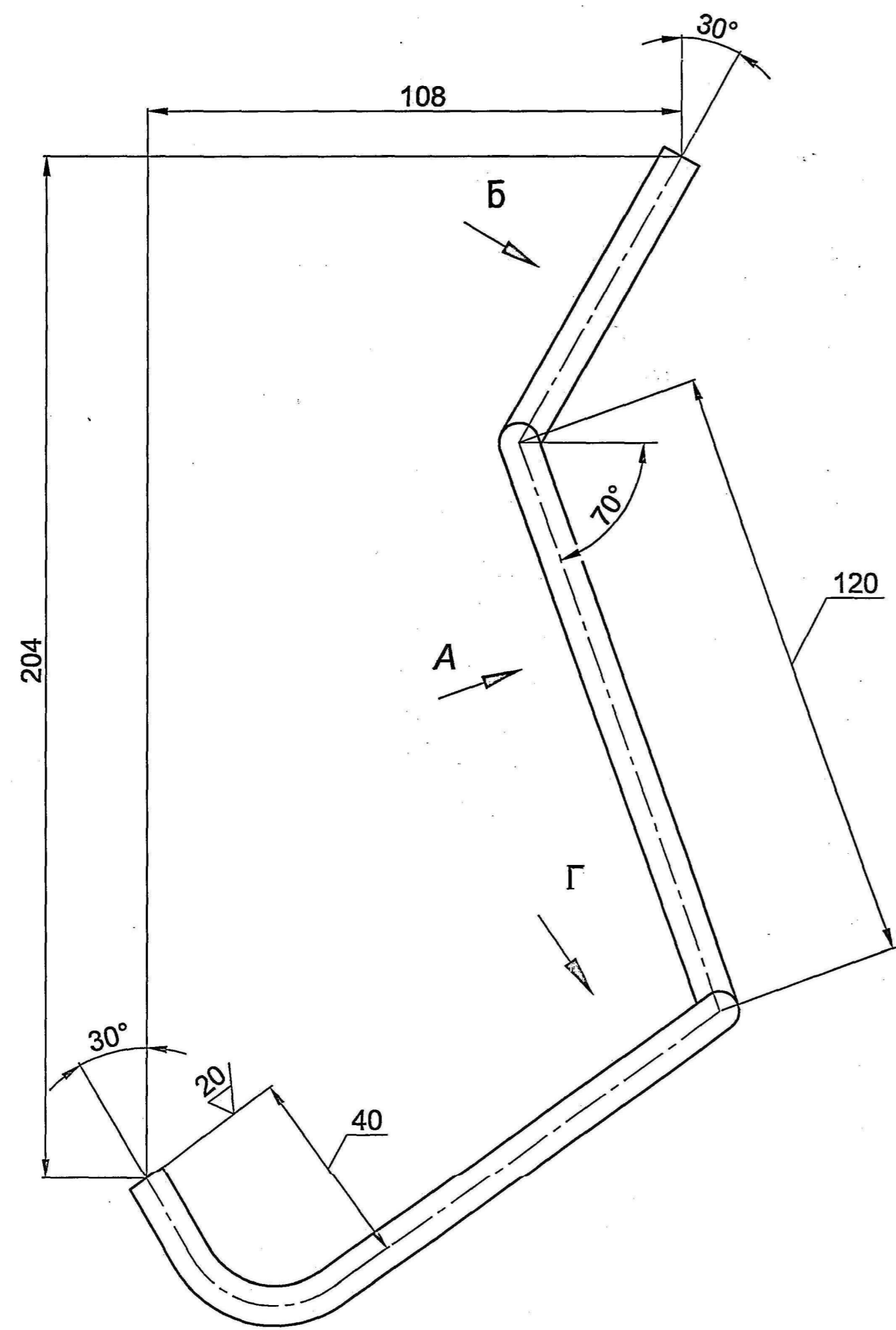
WORK	DATE	MATERIAL	USED ON
DATE	DATE	STEEL 35, GOST 1050-74	SEE ABOVE **
DATE	DATE	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VENTLES) AVADI	
SCALE - 2:1	DIMENSIONS IN mm		
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 2102-69		TITLE SWIVEL ELBOW	
3rd ALTERATION COMM. MINUTES B 11-7-09 POINT 6, DATE 27-2-09	S CAT NUMBER		
A 11-2-97 AUTHY NOTN. No. BK 86-41	DRAWING NUMBER 322-18		
ISSUE	DATE	NATURE OF AMENDMENTS	

DRG. INDIVANISED BASED ON RUSSIAN ORIGINAL ISSUE NO. 0 (BK 03-265)



DRAWING NUMBER
322-24-9

✓(✓)



1. Unfolded length of pipe should be $L \approx 925 \text{ mm}$.
2. Tolerance of ovality for pipe in bending areas should be 0.8mm (semi difference of diameters).
3. Bending-tool marks are allowed.
4. * Dimensions are given for reference.

DRAWING INDIANISED BASED ON RUSSIAN ORIGINAL ISSUE - 1

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST. WT. (Kg) 0.155 TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)

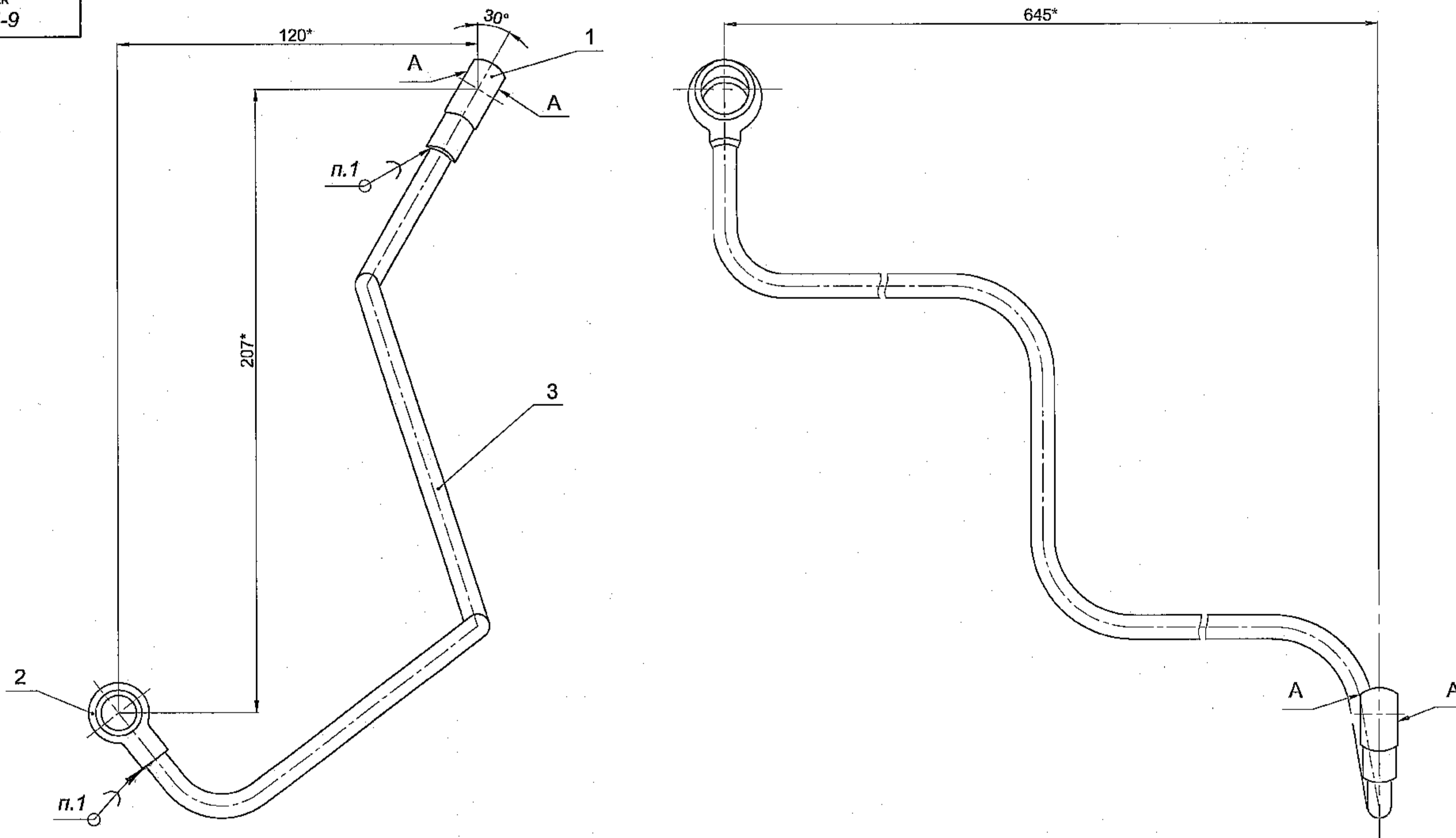
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	APPD	DATE	SCALE	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS: 2102-69	ALL THREADS TO CONFORM TO	DRN	MATERIAL	USED ON
			1:1					PIPE 8x20A TY 14-3-480-76	LS 322-04-9
							CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI		
							TITLE: 4 th LH CYLINDER PIPE		
							D S CAT NUMBER		DRAWING NUMBER
									322-24-9
ISSUE	DATE	NATURE OF AMENDMENTS							

F4
173
158
SIZE A1

DRAWING INDIANISED BASED ON RUSSIAN ORIGINAL ISSUE - 4

DRAWING NUMBER
Cb.322-04-9



1. Wire Л63 Gost 12920-67.
2. Varnish coating ГФ - 95 as per ИЛ-628-86.
3. On surface "A" sag and overflow of varnish are not allowed, but dressing them with subsequent coating with enamel ИЛ-5123-Red-Sinamen Gost 7462-73 is permitted.
4. Check the pipe as per dummy in the assembly unit *cb.322-14-9*.
5. Before coating carryout the test for air tightness with air in water under pressure $(0.4 \pm 0.1) \text{ MPa}$ $((4 \pm 1) \text{ Kgf/cm}^2)$. Air - leakage is not allowed.

6. After coating carry out the test for airtightness with diesel fuel under pressure $(9.5 \pm 0.5) \text{ MPa}$ $((95 \pm 5) \text{ Kgf/cm}^2)$ for a period of minimum 2 minutes. Leakage of fuel is not permitted. Check selectively minimum 10 % of pipes.
7. * Dimensions are given for reference.

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST. WT.(Kg) 0.200	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
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ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	CHD	APPD.	DATE	SCALE	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102 - 69	ALL THREADS TO CONFORM TO
			06/20/07	1:1			
				MATERIAL :-		USED ON :-	
						Cb 322-14-9	
				CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI		TITLE :-	
						4A 4th LEFT HAND CYLINDER TUBE ASSY	
				D S CAT NUMBER		DRAWING NUMBER	
						Cb.322-04-9	
4A	13.08.08	D.O.CORRECTION					
ISSUE	DATE	NATURE OF AMENDMENTS					

F-4
152
253
SIZE A2



