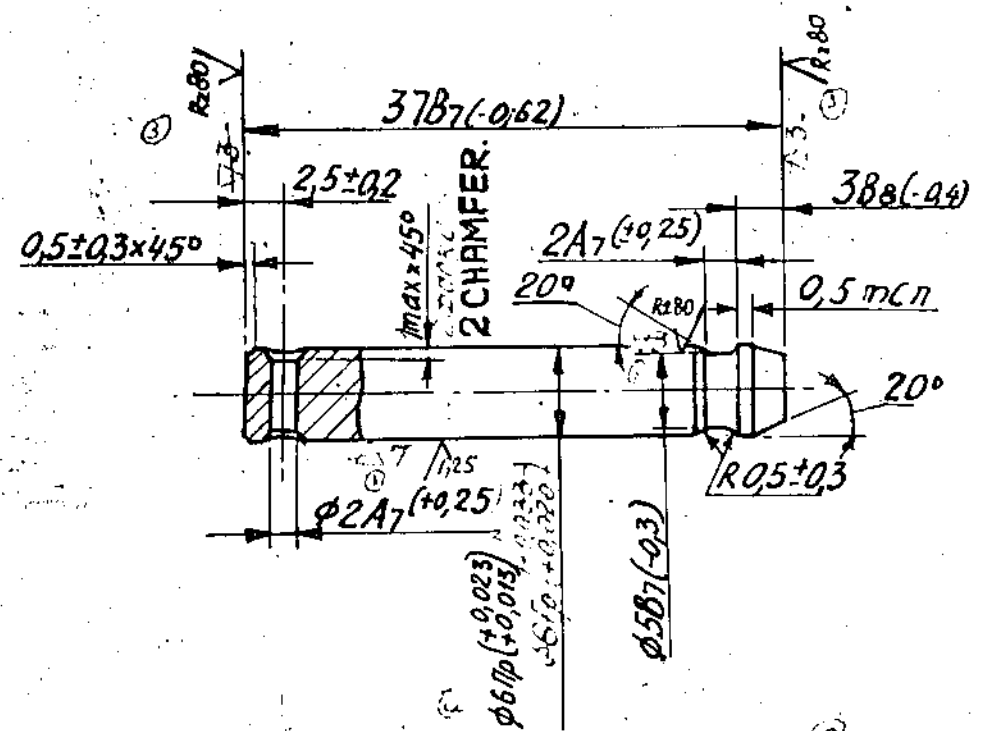


RAWING NUMBER
315-637-1

Rz 40 (✓)



1. Група контроля IV по ТТ-11
2. HRC 24-30
3. Покрытие хим. окс. прм.

- 1. INSPECTION GROUP IV, TT 11.
- 2. HRC 24-30. HRC 26..... 32
- 3. COATING : CHEMICAL OXIDIZING, OIL FINISHING.

DRAWING INDIANISED BASED ON ISSUE 3

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

EST WT (B) 0.007 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 OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSION IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	MATERIAL	STEEL 45	GOST 1050-74	USED ON	CB 315-662-3
				08-5-85	2:1			CONTROLLERATE OF INSPECTION(HEAVY VEHICLES) AVADI				
TITLE								LEVER PIN				
ALL THREADS TO CONFORM TO								D S CAT NUMBER		DRAWING NUMBER		
ISSUE								DATE		NATURE OF AMENDMENTS		
B 24.9.93 BK 86-441								A 7.12.87 AUTHY BK 82-394.				

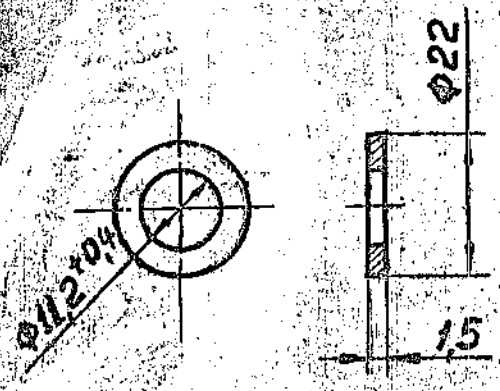
A 6
SIZE A3

8 7 6

315-637-1

315-639

2 A



1. Группа контроля У по ТУ Н 0
 2. Требования, предъявляемые к штамповке, по нормам 82050-16.
 3. Непопукость не более 0,2мм.
 4. Завалены и острые кромки не допускаются.
 5. Покрытие Ц.13-25. Хр по ИИИ-154.

1. REQUIREMENTS FOR STAMPING AS PER STANDARD 82050-16.
 2. NONFLUTNESS SHOULD NOT EXCEED 0.2MM.
 3. CHAMFERED EDGES AND SHARP EDGES ARE NOT ALLOWED.
 4. COATING: Zn 13-25 CHROMATIZING AS PER INSTRUCTIONS, ЦН-483-82

A-6

		EST. MASS	TO BE STAMPED OR MARKED WHERE INDICATED THUS *	
		0.003 Kg	LETTERS)	
A. 15 2 60 AUTHY EX 63-126		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL:- 10-BH-2-0-15 GOST 503-71	USED ON:- C6 315 663 21
DRN	SCALE - 1 : 1		CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm.		TITLE:- WASHER	
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.		D S CAT NUMBER	
APD	ALL THREADS CONFORM TO		DRAWING NUMBER	
DATE	03-5-86		315 639	

DRAWING NUMBER

315-639-1

EXPLANATORY NOTE:-

MATERIAL QUOTED : 10-BH-2-HO-15 GOST 503 - 71. STEEL STRIP

ALT. MATERIAL QUOTED : STEEL A 1.5 GOST 19904-74
II - BF - 08KП GOST 9045-80.

LOW CARBON STEEL, COLD ROLLED STRIPS.

- 10 = GRADE OF MATERIAL TO GOST 1050-74.
- BH = HIGHLY COLD WORKED.
- 2 = SURFACE QUALITY GROUP TO GOST 503 - 71.
- HO = UN-TRIMMED EDGES.
- 15 = THICKNESS IN mm.
- A = HIGH ACCURACY OF ROLLING TO GOST 19904-74.
- II = HIGH SURFACE FINISH TO GOST 9045-80.
- BF = EXTREMELY DEEP DRAWN.
- 08KП = GRADE OF MATERIAL TO GOST 9045-80.

a) CHEMICAL COMPOSITION % AS PER GOST 1050-74.

GRADE	C	Si	Mn	Cr	P	S	Cu	Ni
				M	A	X	I	M
10	0.07 - 0.14	0.17 - 0.37	0.35 - 0.65	0.15	0.035	0.040	0.25	0.25

b) MECHANICAL PROPERTIES.

GRADE	ULTIMATE TENSILE STRENGTH Kg f/m ² (Min)	YIELD POINT Kgf/mm ² (Min)	PERCENTAGE ELONGATION % (Min)	HARDNESS B H N (Max)
10	35	21	24	137

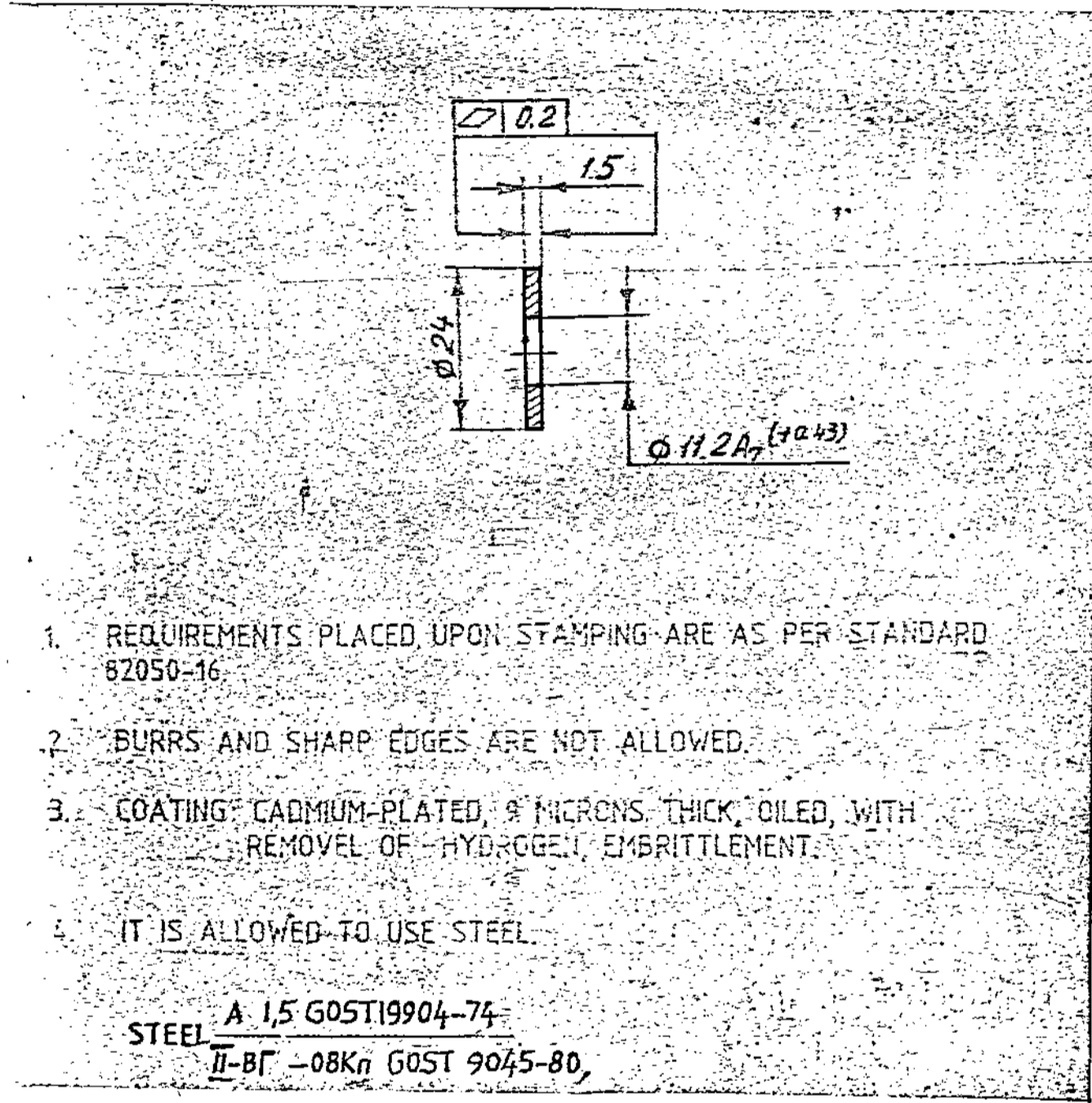
c) CHEMICAL COMPOSITION % AS PER GOST 9045 - 80

GRADE	C (Max)	Mn	S	P	Si	Cr	Ni	Cu	ARSENIC	NITROGEN
			M	A	X	I	M	U	M	
08KП	0.10	0.20 - 0.40	0.030	0.025	0.03	0.10	0.10	0.15	0.08	0.008

d) MECHANICAL PROPERTIES

GRADE	ULTIMATE TENSILE STRENGTH Kgf / mm ²	RELATIVE ELONGATION % (Min)
08KП	26 - 37	28

Ⓐ EQUIVALENT MATERIAL
Gr. 0 IS:513-1994

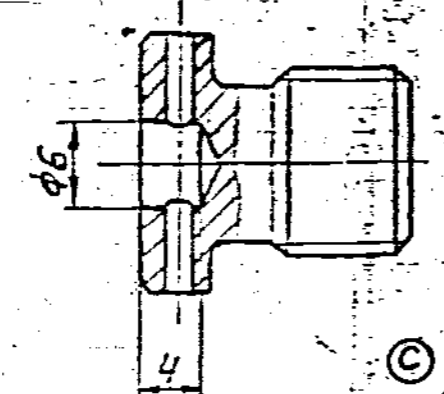
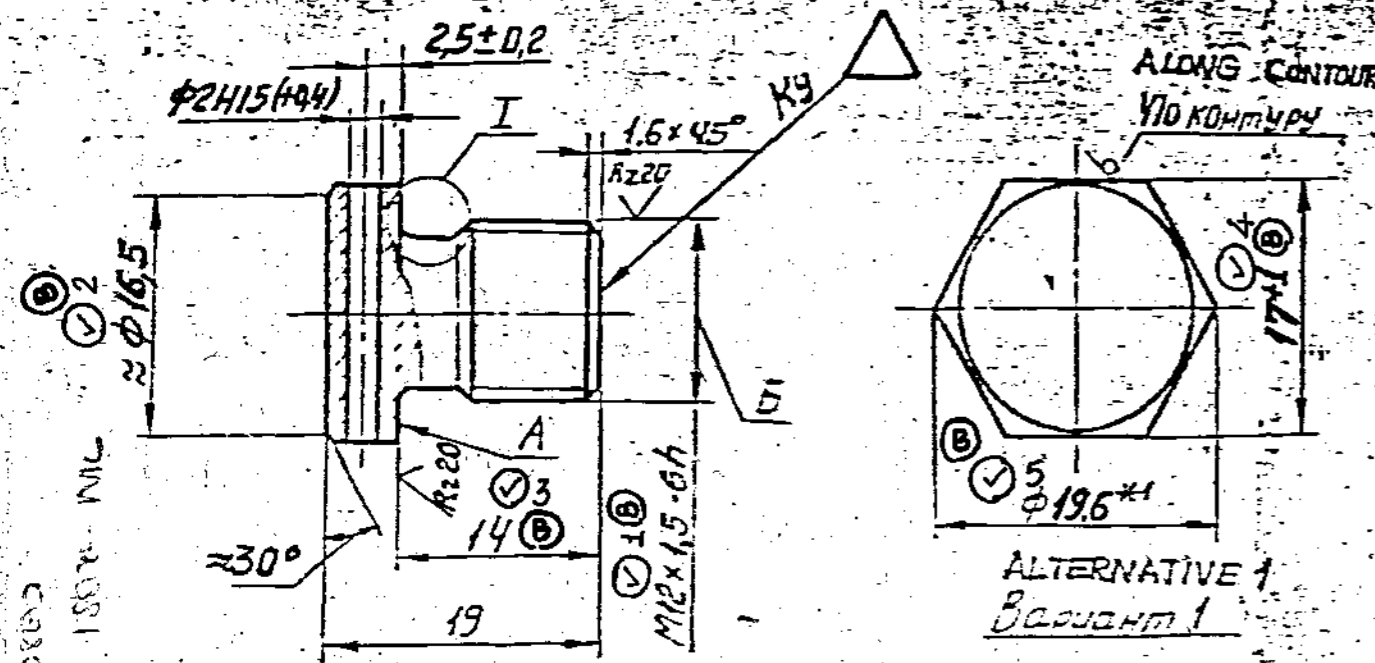


PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

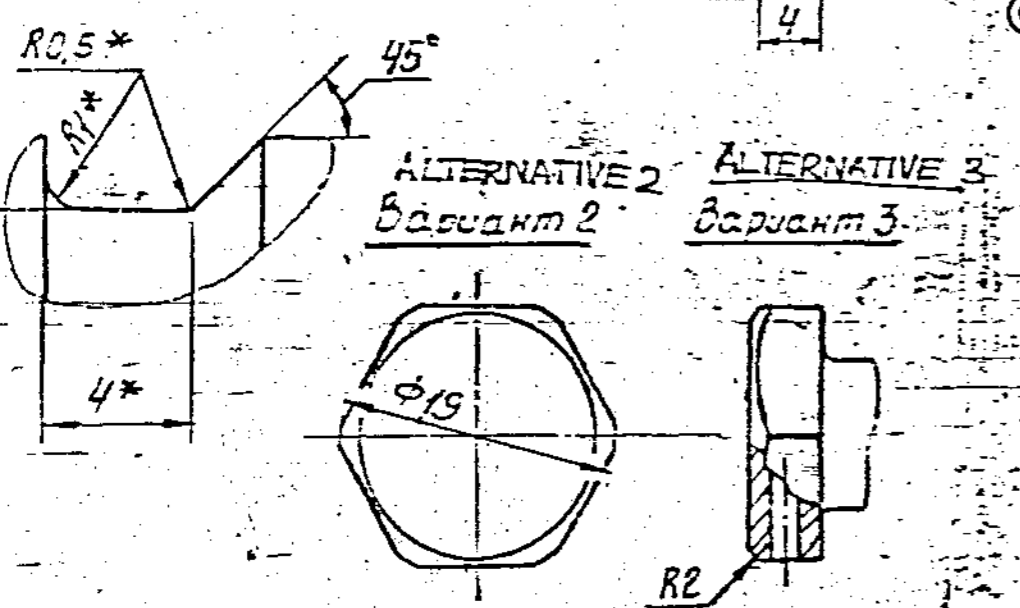
EST. WT. 0.004 Kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)

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

DRN	W. J. ...	MATERIAL :-	USED ON :-
CHD	...	STRIP 10-BH-2-HO15	CE 20-39-00-3
TEC	N. D. ...	GOST 503-71	CE 20-15-663-6
APPD	...		CE 315-663-21
DATE	24-6-86	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
SCALE	1:1	A V A O I	
DIMENSIONS IN mm		TITLE	
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 202-69			WASHER 11
ISSUE	A	D S CAT NUMBER	DRAWING NUMBER
DATE	1-7-10		315-639-1
NATURE OF AMENDMENTS	4 th ALT. COMM. Mtg. MINUTES POINT No 2 DATE 26-10-09		



M5:1
SCALE 5:1



1. ALTERNATE MATERIAL : STEEL 40 AND 50 OF GOST 1050-74.
2. UNSPECIFIED MAXIMUM DEVIATIONS OF DIMENSIONS :
FOR HOLES - AS PER H 14, FOR SHAFTS AS PER h 14, THE REMAINING ± IT 15
2
3. END PLAY ON SURFACE 'A' RELATIVE TO THE AXIS OF THREAD 'B' SHOULD NOT EXCEED 0.1 mm.
5. COATING : Cd 9 Cr. AS PER ULM-104 WITH HYDROGEN EMBRITHLEMENT REMOVED.
6. THREAD SHOULD BE FORMED BY ROLLING, IT MAY ALSO BE FORMED BY CUTTING.
7. BOLT HEAD MAY BE MADE BY UPSETTING.
8. MARKING MAY BE DONE ON A TAG FOR A BATCH OF COMPONENTS, WITH PACKING AND SEALING.
9. * DIMENSIONS TO BE ENSURED BY TOOL.
10. *1 DIMENSIONS FOR REFERENCE.
12. REPAIR SIZE DIMENSIONS ADDED BASED ON LETTER NO. 82847/OH/QAS/ED. DT. 27 MAR 95 AS PER TABLE -1.

ALTERNATE MATERIAL: STEEL 080 M40
(EN 8) TO BS: 970, Pt 1-1983 OR 45C8 TO IS: 1570
* * HEXAGON 17-5 GOST 8560-78 45 GOST 1051-73
PROT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

EST. MASS 0.02 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS # LETTERS I
C 19/09 3 rd ALTN. COMM. MINUTES POINT 8, DT 27-2-09	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACINNED CORNERS TO HAVE R* OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
B 20-5-96 REPAIR SIZES ADDED	
A 15-2-88 AUTHY. NO. BK. 81-406	
ISSUE (DATE) NATURE OF AMENDMENTS	MATERIAL: * * SEE ABOVE USED ON- CB 406-13-32 CB 406-17-21 CB 20-15-44-4
DRWD SCALE: 2:1	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI
CHEF DIMENSIONS IN mm	
TCD TOLERANCE ON DIMENS UNLESS OTHERWISE STATED	TITLE PLUG
APPD	D S CAT NUMBER
DATE 7-4-88 ALL THREADS TO CONFORM TO	DRAWING NUMBER 301-101

EXPLANATORY NOTE:-

MATERIAL QUOTED :- HEXAGONAL BAR 17-5 GOST 8560-78 45 GOST 1051-73.

ALTERNATE MATERIAL QUOTED:- 40 & 50 GOST 1050-74.

BRIGHT STEEL HEXAGONAL FROM GRADES 40, 45 & 50 STEEL WITH ACROSS FLATS 17mm OF ACCURACY CLASS-5.

CHEMICAL COMPOSITION:-

GRADE OF STEEL	CONTENT OF ELEMENTS %							
	C	Si	Mn	Cr	P	S	Cu	Ni
40	0.37-0.45	0.17-0.37	0.50-0.80	0.25	0.035	0.040	0.25	0.25
45	0.42-0.50	0.17-0.37	0.50-0.80	0.25	0.035	0.040	0.25	0.25
50	0.47-0.55	0.17-0.37	0.50-0.80	0.25	0.035	0.040	0.25	0.25

MECHANICAL PROPERTIES:-

GRADE OF STEEL	TENSILE STRENGTH	YIELD POINT	ELONGATION	REDUCTION	IMPACT
	Kgf/mm ²	Kgf/mm ²	%	IN AREA %	STRENGTH Kgf/cm ²
40	MINIMUM				
40	58	34	19	45	6
45	61	36	16	40	5
50	64	38	14	40	4

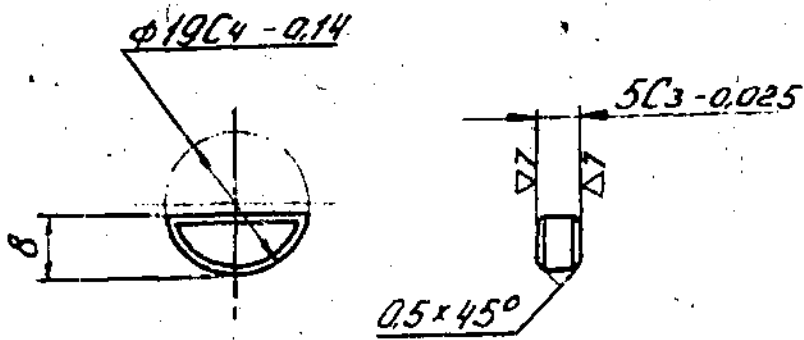
REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THIS TABLE -1

SL. No.	R	REMARKS
1	M14 X 1.5 - 6h	1. ALL OTHER CONDITIONS AS PER STD. DRG. 2. MARK REPAIR SIZE.
2	φ 18.5	
3	14 ± 0.1	
4	A/F 19 - 0.14	
5	A/C φ 21	

308-90

~~1. 308-90~~

(21)

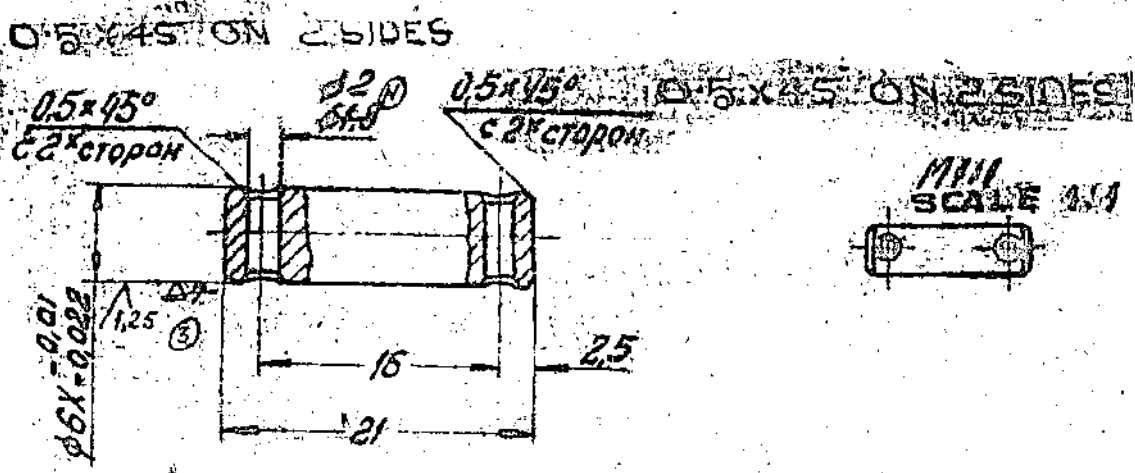


1. IV K
1. Группа контроля IV по ТТ-11
 2. Твердость HRC 26 - 33 @
 3. Размеры без допусков выполнять по 7 классу точности ОСТ 1010.
 4. Острые кромки затушить.
 5. Оксидировать Покрытие Хим. Окс. прм.
- 1) INSPECTION GROUP IV TT-II
 - 2) HARDNESS HRC 26 - 33
 - 3) DIMENSIONS WITH UNSPECIFIED TOLERANCES SHOULD BE MAINTAINED AS PER ACCURACY CLASS 7 OST 1010
 - 4) COATING :- CHEMICAL OXIDIZING, OIL FINISHING

1 1 75-616 *Лысый* EQUIVALENT MATERIAL STEEL 709M40
 (A) (EN19) BS:970/40Cr4Mo3 IS:1570

		EST. MASS 0.005 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS * LETTERS)	
A	13.8.10	4 th Alt. Comm. Meeting Minutes Point No.11 Dt:26-10-09	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL:- STEEL 65 X 543-71	USED ON:- CB 327-00-45
DRN	SCALE - 1 : 1		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CMO	DIMENSIONS IN mm.		TITLE:- WOODRUFF KEY	
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED		D S CAT NUMBER	
APPD	ALL THREADS CONFORM TO		DRAWING NUMBER 308 90	
DATE				

DRAWING INDICATED BY NUMBER OF ISSUES



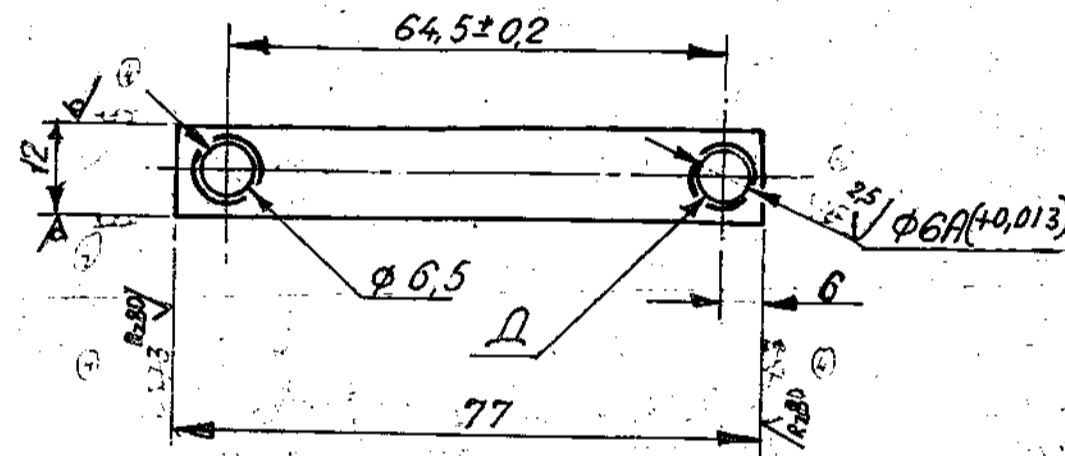
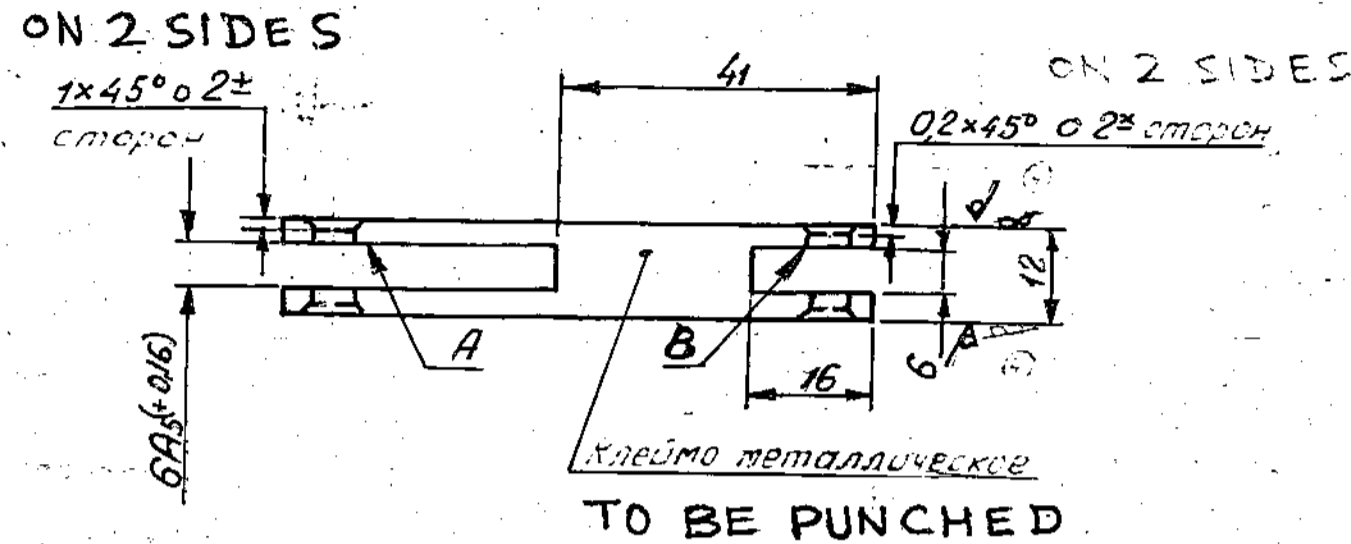
1. Группа контроля IV по ТТ-11
2. Твердость HRC 24-30. HRC 25-32
3. Размеры без допусков выполнять по 7 классу точности ГОСТ 1010.
4. Острые кромки затушить.
5. Покрытие хим. окс. прм.

1. INSPECTION GROUP IV, T.T-11
2. HRC 24-30. HRC 25-32
3. DIMENSIONS WITH UNSPECIFIED TOLERANCES SHOULD BE OBTAINED AS PER ACCURACY CLASS OST 1010.
4. SHARP EDGES SHOULD BE BLUNTED.
5. COATING: CHEMICAL OXIDIZING, OIL FINISHING.

Ум. 630М.ВНВ. Ум. 630М.ВНВ. Подпись дата

		EST. MASS	TO BE STAMPED OR MARKED WHERE INDICATED THIS #
		0.004 Kg	LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE DATE	23-11-87	NATURE OF AMENDMENTS	
DRN		SCALE - 2 : 1	MATERIAL:- STEEL 45 GOST 1050-74
CHD		DIMENSIONS IN mm.	USED ON:- СБ 327-00-45
TCD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVADI
APPL		ALL THREADS CONFORM TO	TITLE:- PIN
DATE	11-5-87		D S CAT NUMBER
			DRAWING NUMBER 315-42

DRAWING NUMBER
315 44 1



- A TOTAL ON A LENGTH OF 70 MM.
- NON-SQUARENESS OF AXIS SURFACE OF A WITH THE WALLS OF SLOT A SHOULD NOT EXCEED 0.1 MM ON A LENGTH OF 12 MM.
 - SHARP EDGES ARE TO BE BLUNTED.
 - COATING: CHEMICAL OXIDIZING, OIL FINISHING.
 - ALTERNATE MATERIAL: STEEL, GRADES 40 AND 50 GOST 1050-74.

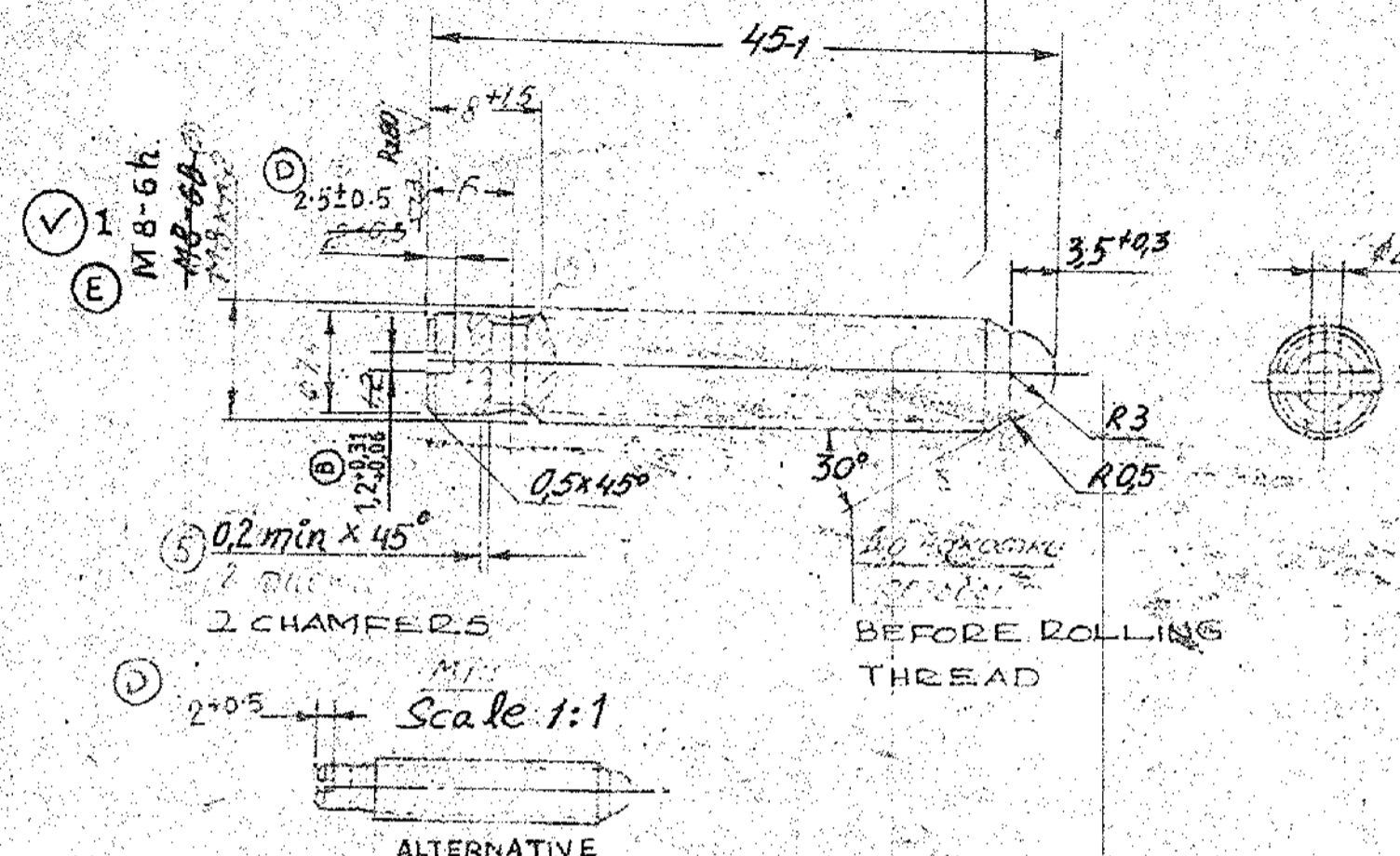
- Размеры без отклонения выполнять по 7 классу точности ГОСТ 1010.
 - Непараллельность стенок прореза А относительно стенок прореза В не более 0,15 мм на ширине 12 мм.
 - Смещение прорезов А и В от оси квадрата 12x12 не более 0,2 мм.
 - Непараллельность и смещение оси симметрии прореза А относительно оси симметрии прореза В в сумме не более 0,25 мм на длине 70 мм.
 - Неперпендикулярность оси поверхности Д к стенке прореза А не более 0,1 мм на длине 12 мм.
 - Острые кромки затупить.
 - Покрытие хим окс. прм.
 - Заменитель материала сталь марок 40 и 50 ГОСТ 1050-74.
- DIMENSIONS WITH UNSPECIFIED DEVIATIONS SHOULD BE OBTAINED AS PER ACCURACY CLASS 7 GOST 1010
 - NON-PARALLELISM OF WALLS OF SLOT A RELATIVE TO THE WALLS OF SLOT B SHOULD NOT EXCEED 0.15 MM ON A WIDTH OF 12 MM.
 - SHIFT OF SLOTS A AND B FROM THE AXIS OF SQUARE 12X12 SHOULD NOT EXCEED 0.2 MM.
 - NON-PARALLELISM AND SHIFT OF AXIS OF SYMMETRY OF SLOT 'A' RELATIVE TO THE AXIS OF SYMMETRY OF SLOT 'B' SHOULD NOT EXCEED 0.25 MM. AS

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

EST. MASS 0.053 Kg	TO BE STAMPED OR MARKED WHERE INDICATED (THIS # LETTERS)
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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	TCO	APPD	DATE	SCALE - 1:1	DIMENSIONS IN mm	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
										315 44 1
					MATERIAL:- SQUARE BAR 12-5 GOST 8559-75 45 GOST 1051-73		USED ON:- 05 315 606-5		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
					TITLE:-		HINGE LINK			
					ISSUE		DATE		NATURE OF AMENDMENTS	



1. Inspection group III, TT-11
2. Casehardening by cyaniding to a depth of 0.10 to 0.25 mm. HRC ≥ 48 ; to be checked with hardness-test file.
3. Dimensions with unspecified tolerances should be made as per accuracy class 7 OST 1010.
4. Technical requirements for thread as per standard 82021-00
5. During cutting the slot for screwdriver, radius $R \geq 25$ mm. from cutter is allowed.
6. There may be no coating on the internal surfaces. Coating Zn 3Cr should be as per instruction U.I. 483-87. Coating: Cd 9 chromating as per instructions U.I. 569-84 U.I. 104 with elimination of hydrogen embrittlement.
7. Dimensions are to be calibrated before coating.

- 1188/CA-1
25/07/09
RDS
1. Группа контроля III по TT-11
 2. Цианировать на глубину 0.10-0.25 мм. HRC ≥ 48 , проверить прибором с минимальным допуском
 3. Размеры без допусков выполнять по 7 классу точности OST 1010
 4. Технические требования на резьбу выполнять по нормам 82021-00.
 5. При прорезке паза под отвертку допускается оставление радиуса фрезы $R \geq 25$ мм.
 6. Цинковать и хромировать по U.I. 483-87. Толщина слоя покрытия 4.003 ± 0.006 мм. На внутренних поверхностях допускается отсутствие покрытия.
 7. Размеры контролировать до покрытия.
 8. Покрытие H 3 по U.I. 569-84 с исключением H 2 по U.I. 104 с исключением водородной хрупкости.

EXPLANATORY NOTE :-

8. MATERIAL QUOTED : STEEL 10 GOST 1050-74.
STEEL 10 = GRADE OF STEEL.
- a) CHEMICAL COMPOSITION :
CARBON = 0.07 - 0.14
SILICON = 0.17 - 0.37
MANGANESE = 0.35 - 0.65
CHROMIUM = 0.15 (max)
PHOSPHORUS = 0.035 (max)
SULPHUR = 0.040 (max)
COPPER = 0.25 (max)
NICKEL = 0.25 (max)
- b) MECHANICAL PROPERTIES :
TENSILE STRENGTH Kgf/mm² (min) = 34
YIELD POINT Kgf/mm² (min) = 21
% ELONGATION = 31 (min)
% REDUCTION IN AREA = 55 (min)

9. REPAIR SIZE DIMENSION ARE ADDED BASED ON LETTER NO: 328A7/0H/GAS/ED DT 21 MAR 95 WHERE INDICATED THUS \odot AS FOLLOWS.

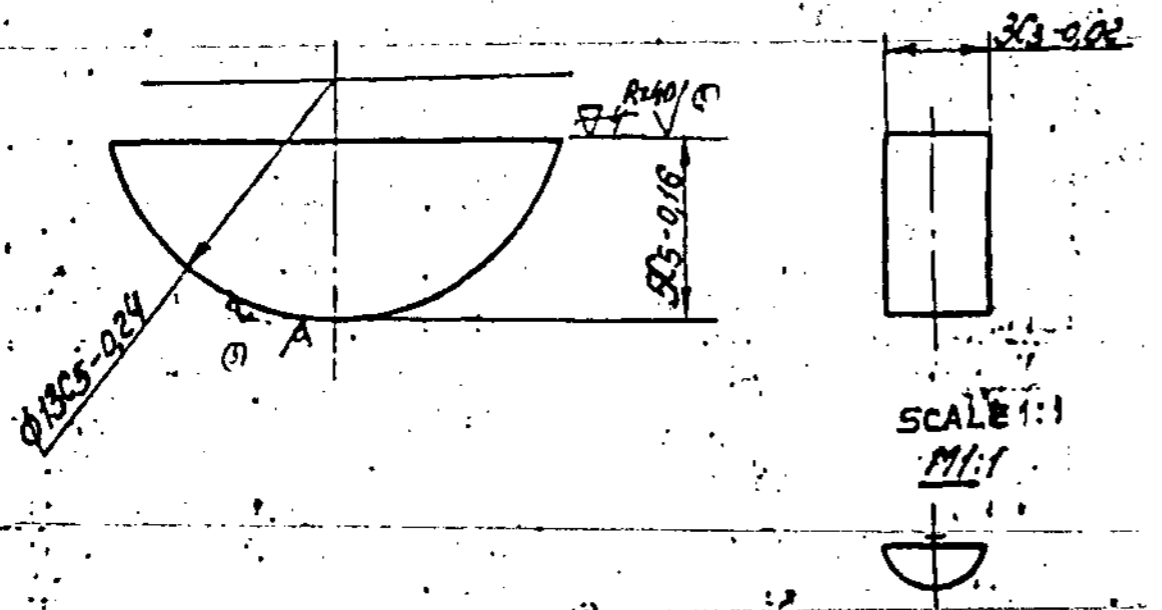
Sl.No	R	REMARKS
1	M 10x6 h	ALL OTHER CONDITIONS AS PER STD DRG. MARK REPAIR SIZE

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

EST. MASS 0.012 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.	ALL THREADS CONFORM TO
				09-5-86	2:1			
MATERIAL - STEEL 10 GOST 1050-74					USED ON - CB 315 663 21 CB 20-15-663-4			
CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI					TITLE - LIMITER SCREW			
D S CAT NUMBER					DRAWING NUMBER 315 49			
ISSUE	DATE	NATURE OF AMENDMENTS						
E	10-7-09	DO-CORRECTION						
D	26-9-93	AUTHY. BK 90-357						
C	15-2-88	AUTHY BK 85-141						
B	15-2-88	AUTHY. NO. BK 84-127						
	22-1-87							

DRAWING NUMBER
315-64



EXPLANATORY NOTE :-

MATERIAL QUOTED : 13-4 GOST 7417-75
45 GOST 1051-73

SIZED COLD DRAWN STEEL

13 = DIAMETER IN mm.

4 = CLASS OF ACCURACY (-0.120)

45 = SIZED STEEL GRADE AS PER GOST 1051-73

a) CHEMICAL COMPOSITION : (AS PER GOST 1050-74.)

- CARBON = 0.42 - 0.50
- SILICON = 0.17 - 0.37
- MANGANESE = 0.50 - 0.80
- CHROMIUM = 0.25 (max)
- SULPHUR = 0.040 (max)
- PHOSPHORUS = 0.035 (max)
- COPPER = 0.25 (max)
- NICKEL = 0.25 (max)

b) MECHANICAL PROPERTIES :

- TENSILE STRENGTH Kgf/mm² = 61 (min)
- YIELD POINT Kgf/mm² = 36 (min)
- ELONGATION % = 16 (min)
- REDUCTION IN AREA % = 40 (min)

1. INSPECTION GROUP IV TT-11.
2. ~~HRC 26-30~~ HRC 26-32
3. COATING : COATING OXIDIZING OIL FINISHING.
4. SHARP EDGES ARE NOT ALLOWED.

KVD NO 78512 & 63484

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

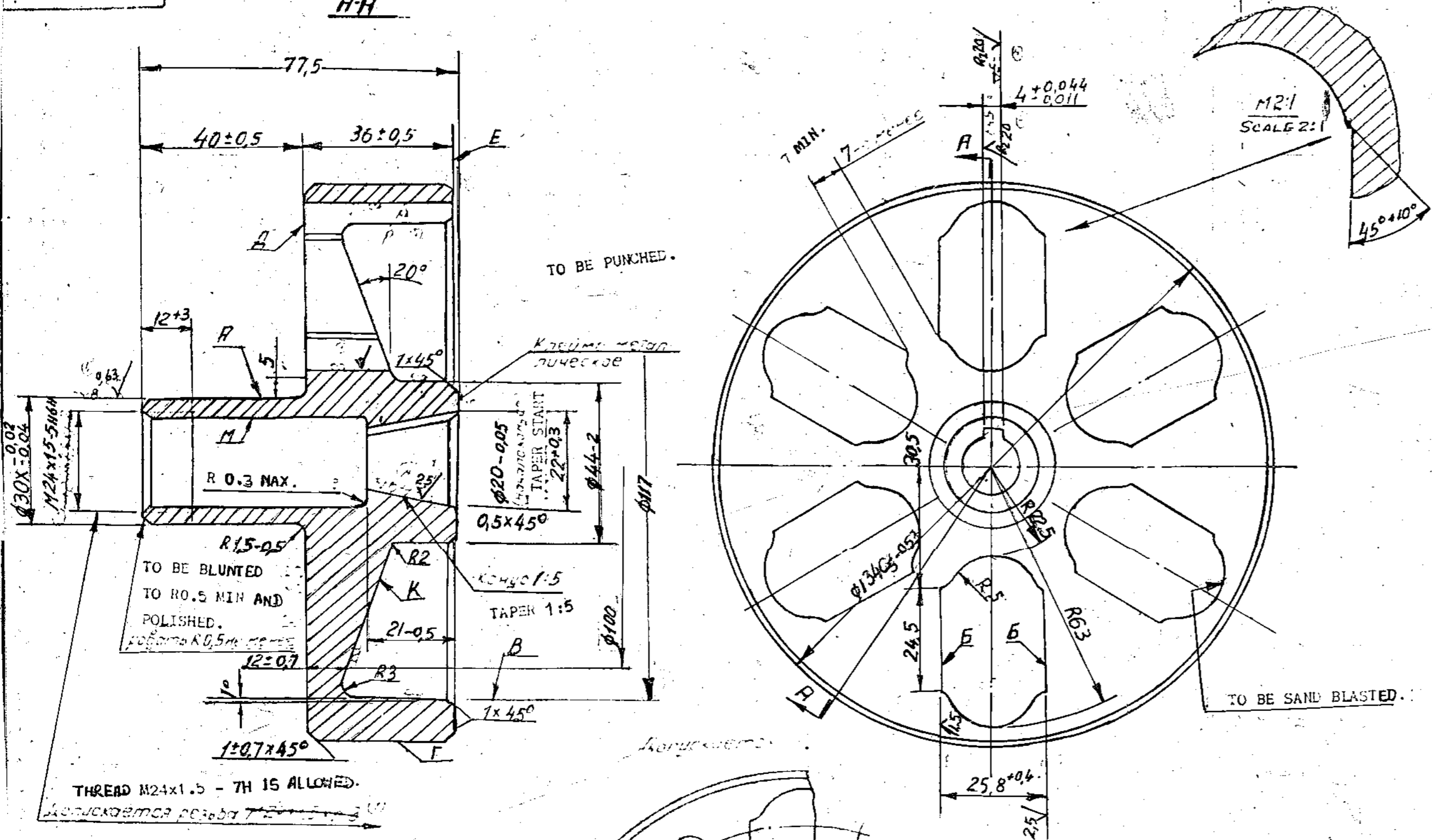
EST. WT. 0.001 Kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # 1 LETTERS)

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

DRN	CHD	TCD	APPD	DATE	SCALE:-	DIMENSIONS IN mm	TOLERANCE ON DIMNS	UNLESS OTHERWISE STATED IS:2102-69	ALL THREADS TO CONFORM TO	MATERIAL:- ROUND BAR 13-4 GOST 7417-75 45 GOST 1051-73	USED ON: C6 20-15-663-4 C6 315-663-21
				15/5-87	5:1					CONTROLLERATE OF QUALITY ASSURANCE(HEAVY VEHICLES) AVADI	
					TITLE		SEMI CIRCULAR KEY 3X5				
					D S CAT NUMBER		DRAWING NUMBER 315-64				
A		23-11-87		AUTHY BK-82-394.		ISSUE DATE		NATURE OF AMENDMENTS			

A-6
SIZE A3

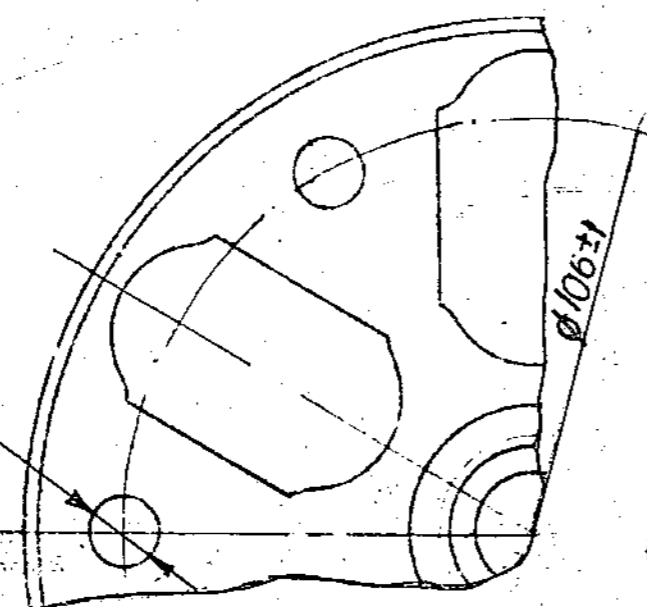
А-А



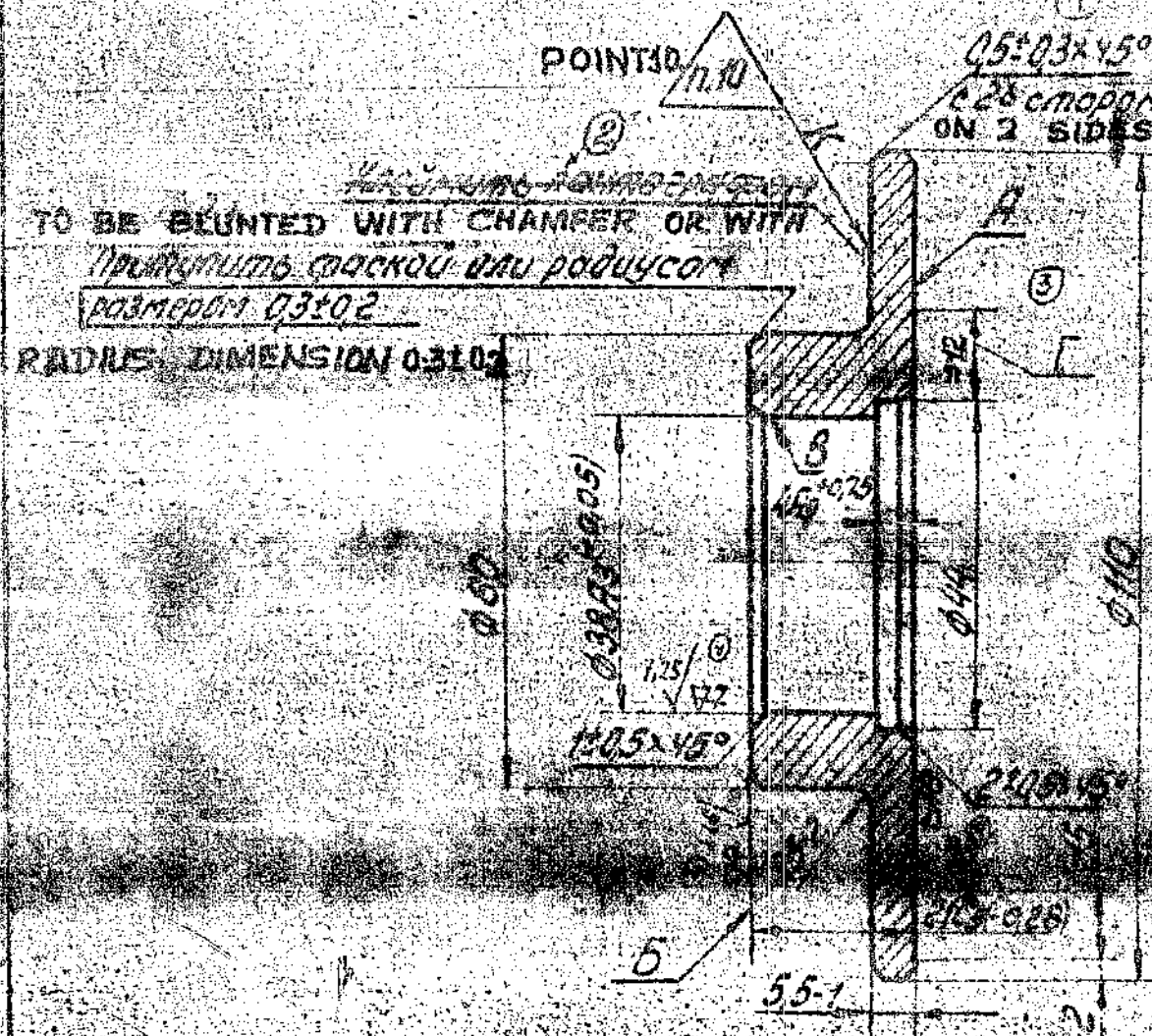
1. Inspection group III, IT - 11.
2. Surfaces A and B should be carburized to a depth of 0.6mm; max.
3. It is permitted to case-harden all over to a depth ≤ 1.2 mm, except surface M.
4. Hardness of surfaces not to be machined after heat-treatment should be HRC₃ ≥ 56.57 and of surface A, HRC ≥ 50 , HRC₃ ≥ 51 .
5. Dimensions with unspecified tolerances should be obtained as per A7, B7 OST 1010.
6. Technical requirements for thread as per standard 82021-00
7. Run-out of end portion of surface A relative to the taper should not exceed 0.1 mm.
8. Run out of surfaces B and Г relative to the taper should not exceed 0.7 mm.
9. Run-out of surface Д relative to the taper should not exceed 0.3 mm at dia. 130 mm.
10. Run-out of surface K relative to the taper should not exceed 0.7 mm at dia 100 mm.
11. Run-out of surface E relative to the taper should not exceed 0.3 mm. at dia. 130 mm.
12. Shift of key-way axis relative to the taper axis should not exceed 0.04 mm. (MMC)
13. Shift of axis of symmetry of slots Б from taper diametrical plane should not exceed 0.2 mm.
14. On surface Д grinding wheel mark is allowed at a distance of 5 mm, min; from the shank.
15. Finally finished component should be balanced. For this purpose it is allowed to remove excessive metal in any place at dia 117.
16. Un balance upto 6gr is allowed at R 67.5 mm.
17. Sharp edges should be blunted.
18. Coating:- Chemical oxidizing, oil finishing.

Позволено отливаться с 6 отверстиями диаметром 8 ± 0.5 мм, равномерно расположенными по окружности. Поверхности отверстий должны быть обработаны до Rz 320. Поверхности дисков должны быть обработаны до Rz 320.

PERMITTED ARE 6 CASTING HOLES, DIA 8 ± 0.5 ARE EQUI-SPACED ALONG THE CIRCUMFERENCE TO BE CAST ACCURATELY. DIRTY HOLE SURFACES SHOULD BE DRESSED TO Rz 320.



		EST. MASS 1.575 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS #
			LETTERS!
A 9-12-87 AUTHY BK 82-394		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL:- STEEL 20П-1 ГОСТ 977-75	USED ON:- CB 327-00-45
DRN	SCALE - 1 : 1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHO	DIMENSIONS IN mm.	TITLE: GOVERNOR SLOTTED DISC	
TCO	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	D S CAT NUMBER	
APPO	DATE 11/5/87	DRAWING NUMBER 315-611-2A	
		ALL THREADS CONFORM TO	



1. Inspection group III, TT-11.
2. To be carburized. Depth of case-hardened layer on surfaces A and B should be 0.8 mm; min, on the rest of the surfaces ≤ 1.6 mm. Hardness HRC ≥ 56 ; on surface B \geq HRC 48. HRC ≥ 57 HRC ≥ 41
3. Dimensions with unspecified deviations should be obtained as per accuracy class 7 OST 1010.
4. Run-out of surface 'A' relative to surface 'B' should not exceed 0.1 mm. at dia. 100 mm.
5. Run-out of face B relative to surface 'B' should not exceed 0.05 mm. at dia. 55 mm.
6. Face 'A' is to be checked with tool makers straight-edge., clearance of not more than 0.2 mm is allowed at dia. 10mm
7. Sharp edges are not allowed.
8. Non-straightness of surface 'A' should not exceed 0.007 mm. To be checked on working strip 15 mm wide in 4 places along the circumference.
9. Coating:- Chemical, oxidizing, except surface A.
10. To be marked by electric-etching.
11. Surface roughness 0.63 is allowed on section.

(A6)

** CB20-15-664-1

		EST. MASS	TO BE STAMPED OR MARKED WHERE INDICATED THUS *
		0.520 Kg	LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS	
A	23.11.87	AUTHY BK 62-394	
DRN	SCALE - 1:1		MATERIAL - STEEL 20 x GOST 4543-71
CHD	DIMENSIONS IN mm.		USED ON:- ** CB 315-644-2
TCO	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APD	ALL THREADS CONFORM TO		TITLE:- STOP DISC
DATE	09-5-88		D S CAT NUMBER
			DRAWING NUMBER 315-613-3



DRAWING DIMENSIONED BASED ON ISSUE NIL.



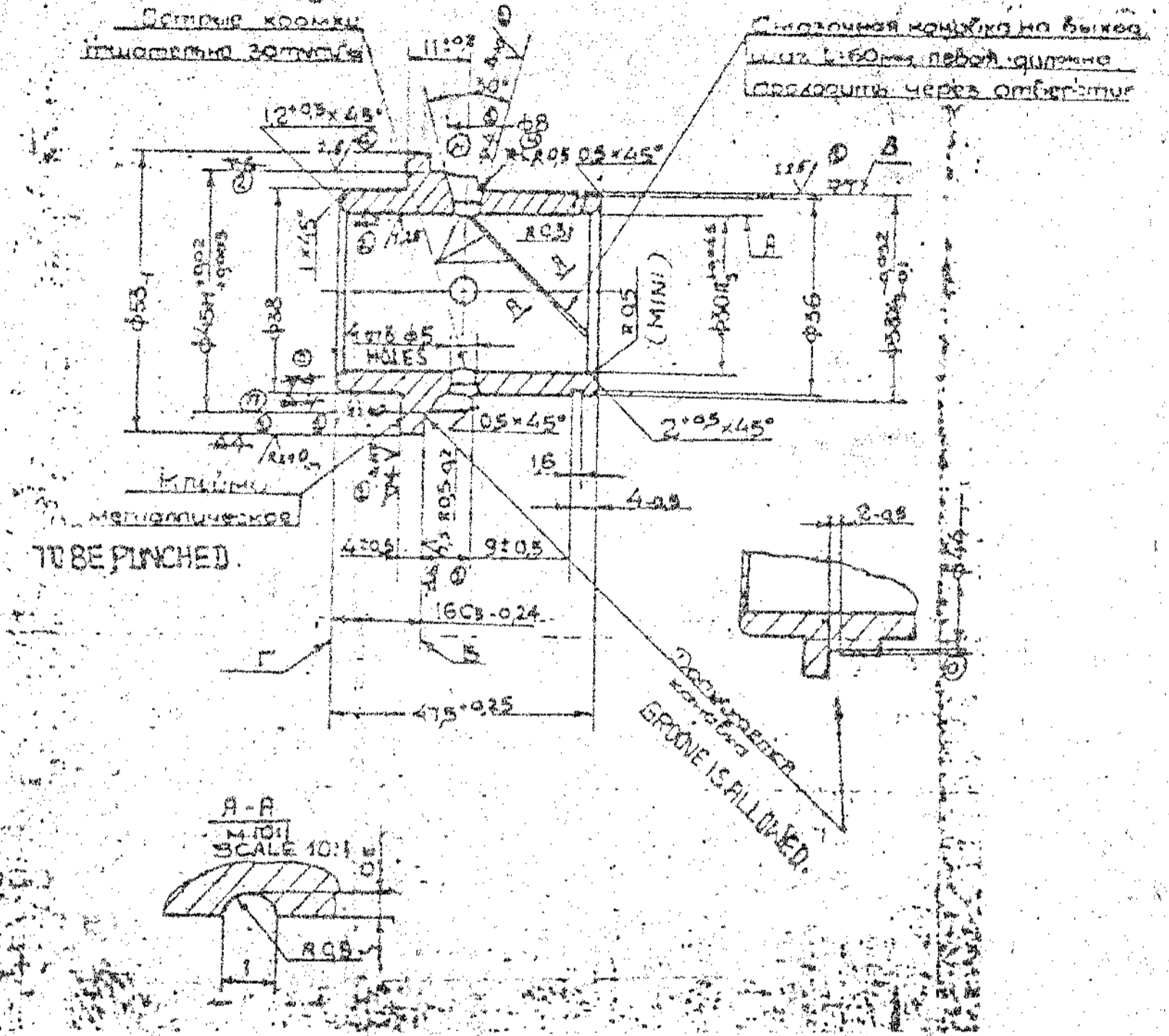
Ф25 ± 0.005

Допускается использование шариков
 5-й степени точности класса ГОСТ 3722-60.
 BALLS, ACCURACY DEGREE II ACCURACY
 CLASS II, GOST 3722-60 MAY BE USED.

		EST. MASS 0.065 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS #
			LETTERS)
A	7.12.87 AUTHY BK 83-297	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN		SCALE - 1 : 1	MATERIAL GOST 3722-60 & USED ON:- 25.6 П ETY 500-65 (A) CB 327 00 65
CHD		DIMENSIONS IN mm.	CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVADI
TEDS		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	TITLE:- BALL
APPO		ALL THREADS CONFORM TO	D S CAT NUMBER
DATE	11.5.86		DRAWING NUMBER 315 614

SHARP EDGES SHOULD BE THOROUGHLY BLUNTED.

THROUGH LUBRICATING GROOVE L.H. PITCH $t = 60MM$, PASSING THROUGH THE HOLE.



1. Dimensions with unspecified tolerances should be obtained as per accuracy class 7 05T1010.
2. Run-out of surface B relative to the axis of surface A should not exceed 0.03 mm at dia 50 mm.
3. Run-out of face B relative to the axis of surface A should not exceed 0.05 mm.
4. Non squareness of face Γ with the axis of surface A should not exceed 0.1 mm at dia 35 mm.
5. Sharp edges should be blunted.
6. Alternate material: Bronze grade БРОС 10-10, TY 23-108-49-75.

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

EST. WT. 0.210 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.	

EXPLANATORY NOTE:

Material quoted: Bronze bar БРАЖ 9.4 GOST 1628-78.
 Alternate material Quoted: Bronze grade БРОС 10-10, TY 23-108-49-75.
 БРАЖ 9.4 : grade of bronze = БРА Ж 9.4 As per standard SEV 377-76.
 Extruded round bar grade = СВА19 Fe4
 chemical composition: (as per GOST 18175-78)

Aluminium = 8.0 - 10.0
 Iron = 2.0 - 4.0
 Copper = Rest
 Parts of impurities (by weight) maximum.
 Tin = 0.1 ; Lead = 0.01 ; Manganese = 0.5 ; Phosphorus = 0.01 ;
 Silicon = 0.1 ; Zinc = 1.0 ; Total = 1.7

By mutual agreement between manufactures and customer content of impurities of arsenic and antimony may be standardized. Nickel up to 0.5% (part by weight) without considering it in total impurities.

Properties: High mechanical properties excellent anti-friction properties; corrosion-resistant.

Mechanical properties: (as per GOST 1628-78)

Ultimate tensile strength kgf/mm^2 = 55 (min)
 Relative elongation % = 15 (min)
 Brinell hardness HB = 110-180.

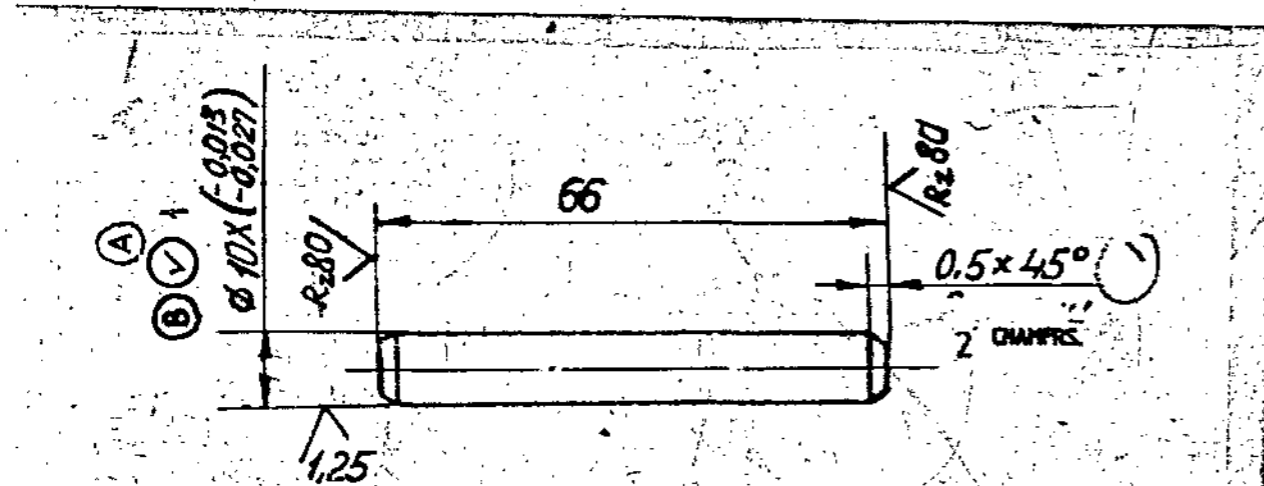
110 / 167 108 / 100

DRN	DRN	MATERIAL - BRONZE BAR	USED ON :-
CD	CD	БРАЖ 9.4 GOST 1628-78	СБ 315-644-2
APPD	APPD	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
DATE	DATE	AVADI	
SCALE :- 1:1	SCALE :- 1:1	TITLE	
DIMENSIONS IN mm	DIMENSIONS IN mm	BUSH	
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 2102-69	TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 2102-69	D S CAT NUMBER	
ISSUE	DATE	DRAWING NUMBER	
MATURE OF AMENDMENTS		315-616-4	

DRAWING NUMBER
315-618A

EXPLANATORY NOTE :

Rz40 ✓ ✓



6. MATERIAL QUOTED : 45X GOST 4543-71.

ALTERNATE MATERIAL QUOTED : 38XC GOST 4543-71.

CHEMICAL COMPOSITION :

GRADE OF STEEL	C O N T E N T O F E L E M E N T S %							
	C	Si	Mn	Cr	P	S	Cu	Ni
	M A X I M U M							
45X	0.41-0.49	0.17-0.37	0.50-0.80	0.80-1.10	0.035	0.035	0.30	0.30
38XC	0.34-0.42	1.00-1.40	0.30-0.60	1.30-1.60	0.035	0.035	0.30	0.30

1. INSPECTION GROUP III AS PER TECHNICAL REQUIREMENTS IT-11.

- 2. HRC ~~44 TO 52~~ HRC₃ 45 53
- 3. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS PER B7
- 4. COATING: CHEMICALLY OXIDIZED, OILED.
- 5. ALTERNATE MATERIAL IS 38XC GOST 4543-71.

MECHANICAL PROPERTIES :

GRADE OF STEEL	YIELD POINT Kg/mm ² (min)	ULTIMATE TENSILE STRENGTH Kg/mm ² (min)	RELATIVE ELONGATION % (min)	RELATIVE REDUCTION ALONG CROSS SECTION % (min)	IMPACT STRENGTH Kgfm/cm (min)
45X	85	105	9	45	5
38XC	75	95	12	50	7

7. REPAIR SIZE DIMENSIONS ARE ADDED BASED ON LETTER NO: 82847/04/

QAS/ED DT: 27 MAR '95 AS FOLLOWS:

REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THUS ✓

Sl. No	R	REMARKS
1	Ø10.2 ^{-0.013/-0.027}	ALL OTHER CONDITION AS PER STD DRG. MARK REPAIR SIZE

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

EST. WT. 0.04 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 OUT SIDE INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DRM *S. Ramdas*
 CHD *R. Ramdas*
 TCD *Navan Pillay*
 APPD *[Signature]*
 DATE 25-04-87
 SCALE: - 1 : 1
 MATERIAL:- STEEL 45X GOST 4543-71
 USED ON: CB 327.00 45 CB 20-27-00-4

CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVAD!

DIMENSIONS IN mm - TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS: 2102-69

TITLE VARIABLE SPEED GOVERNOR LEVER AXLE

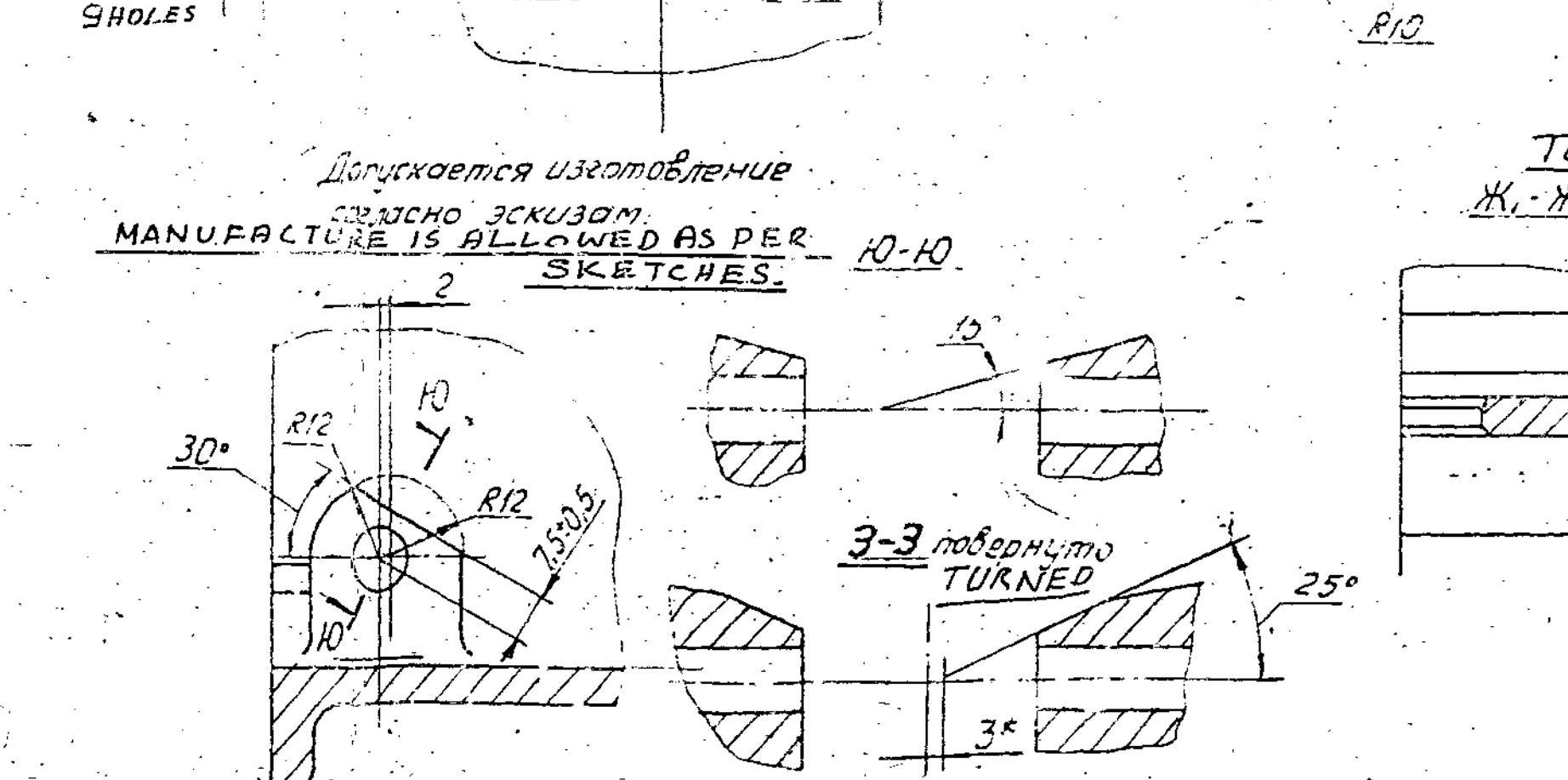
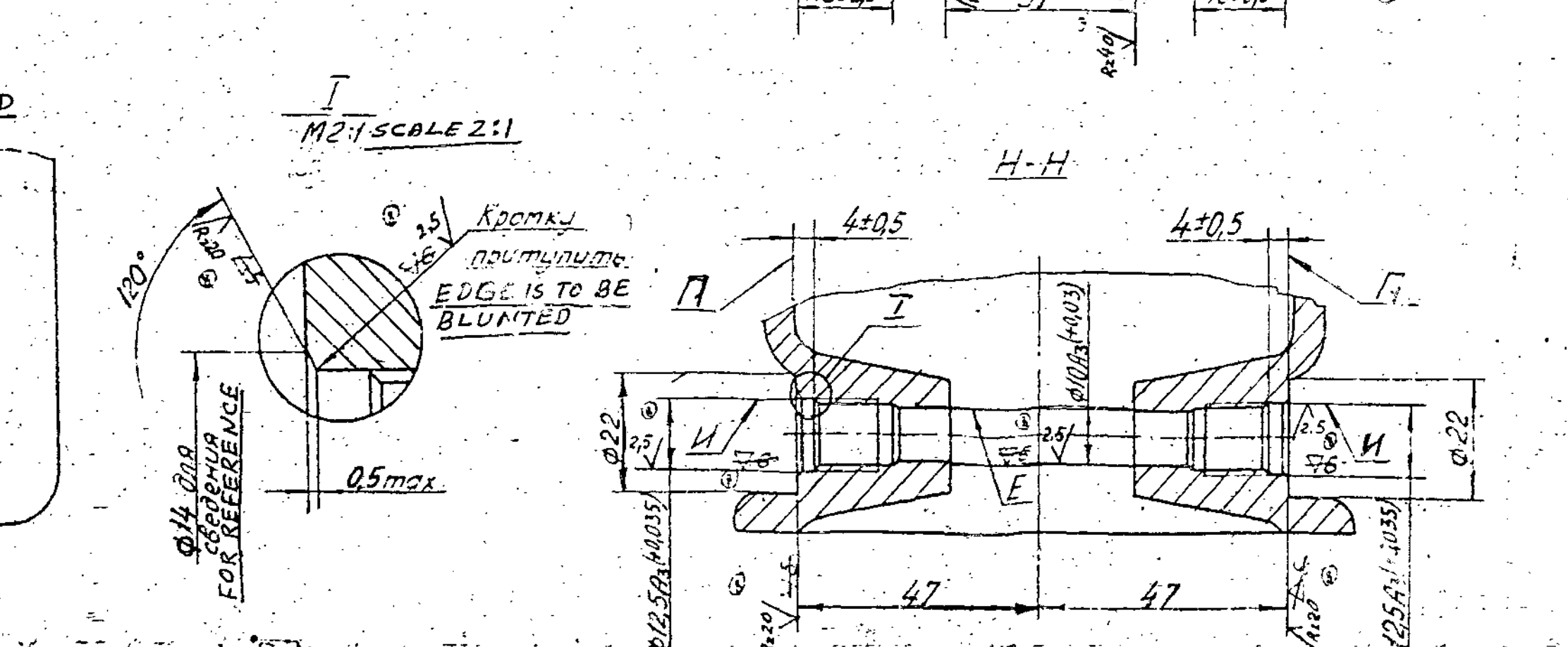
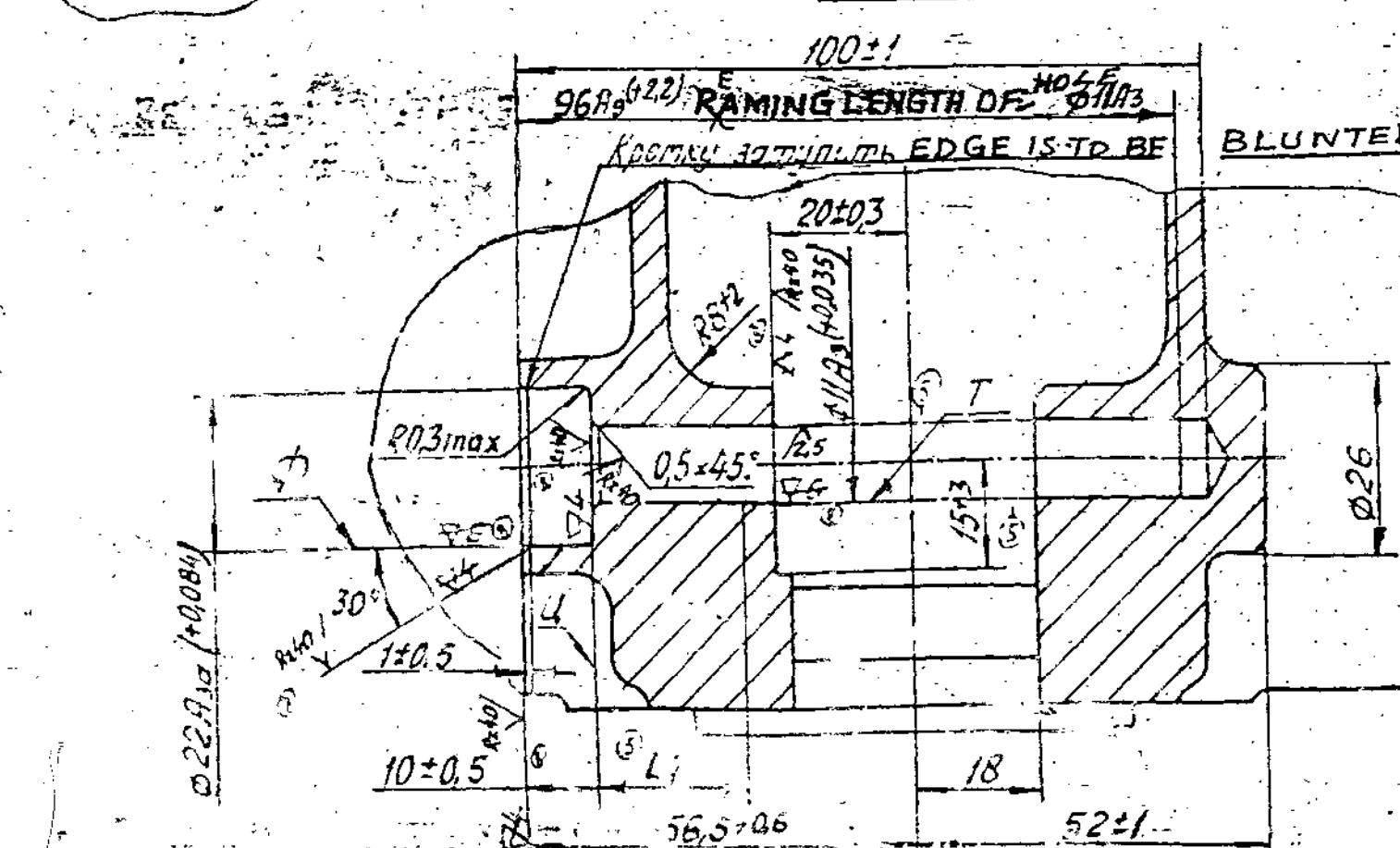
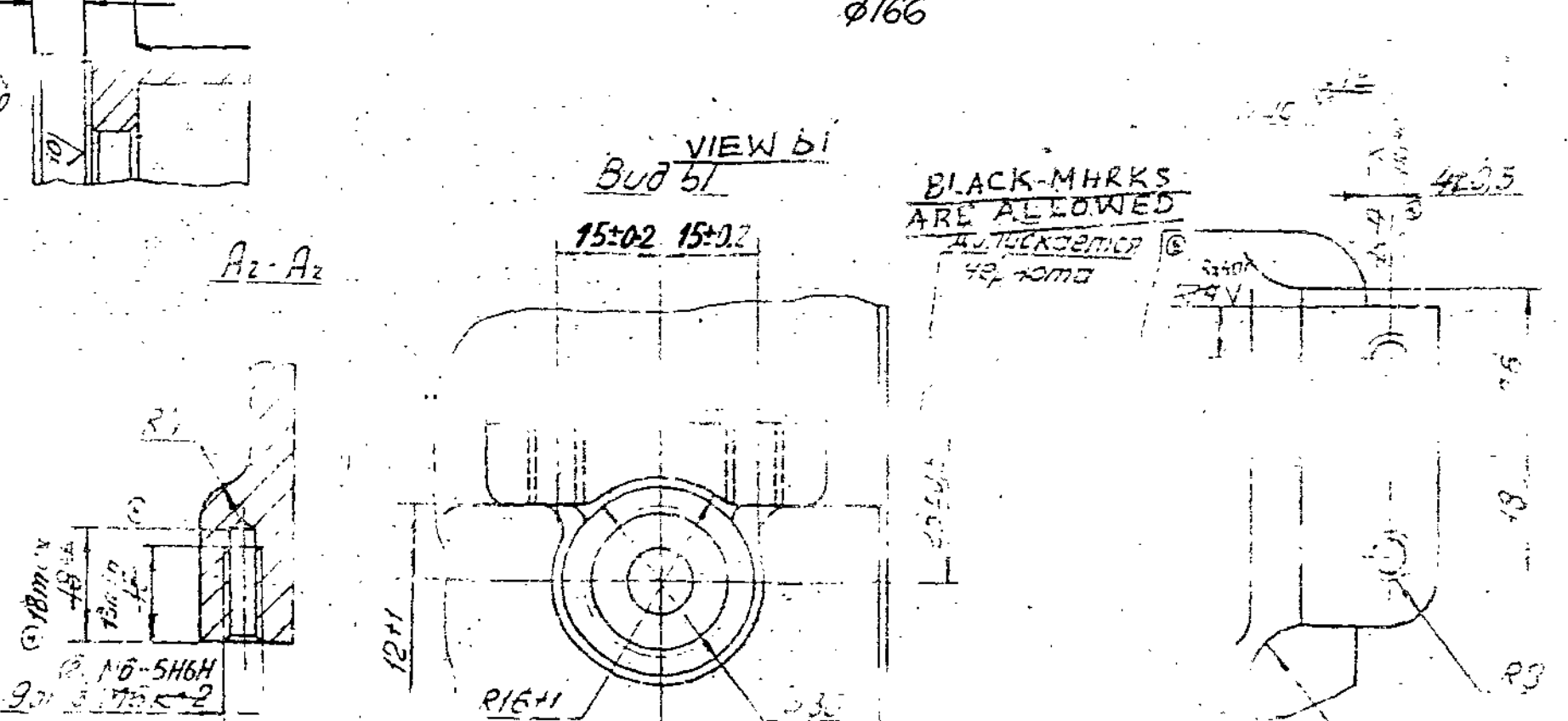
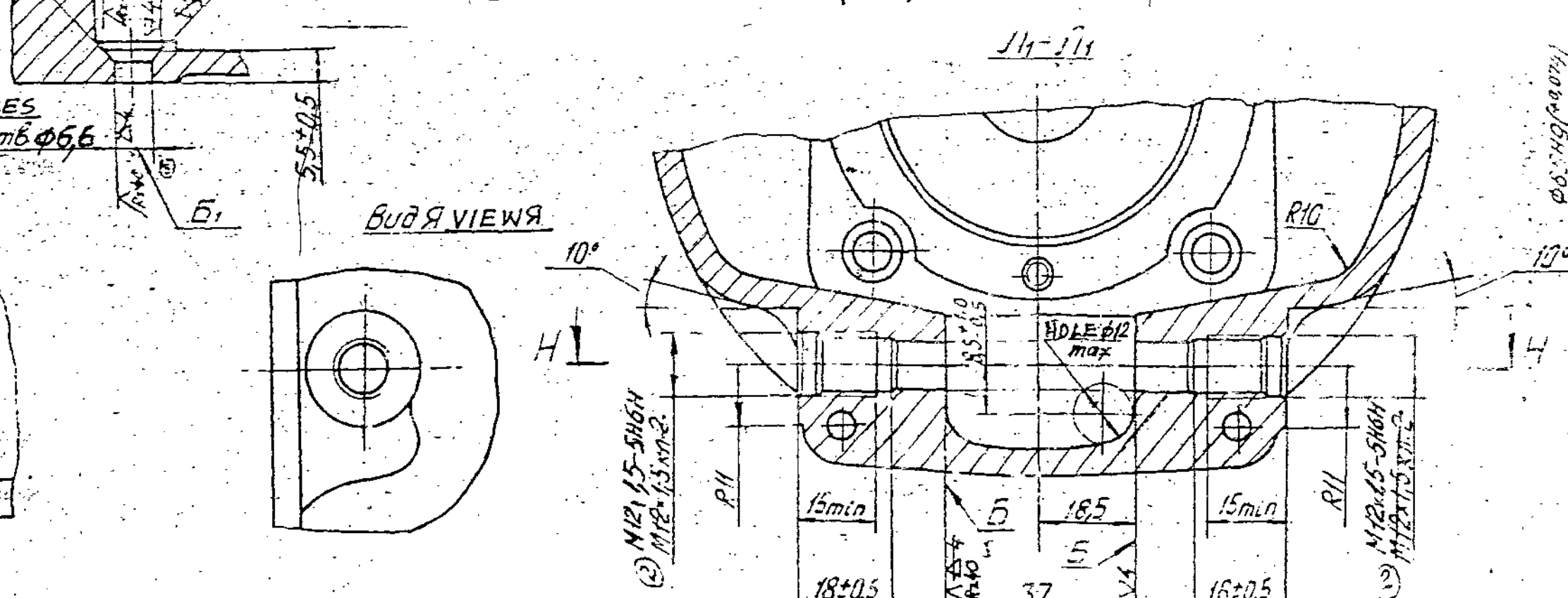
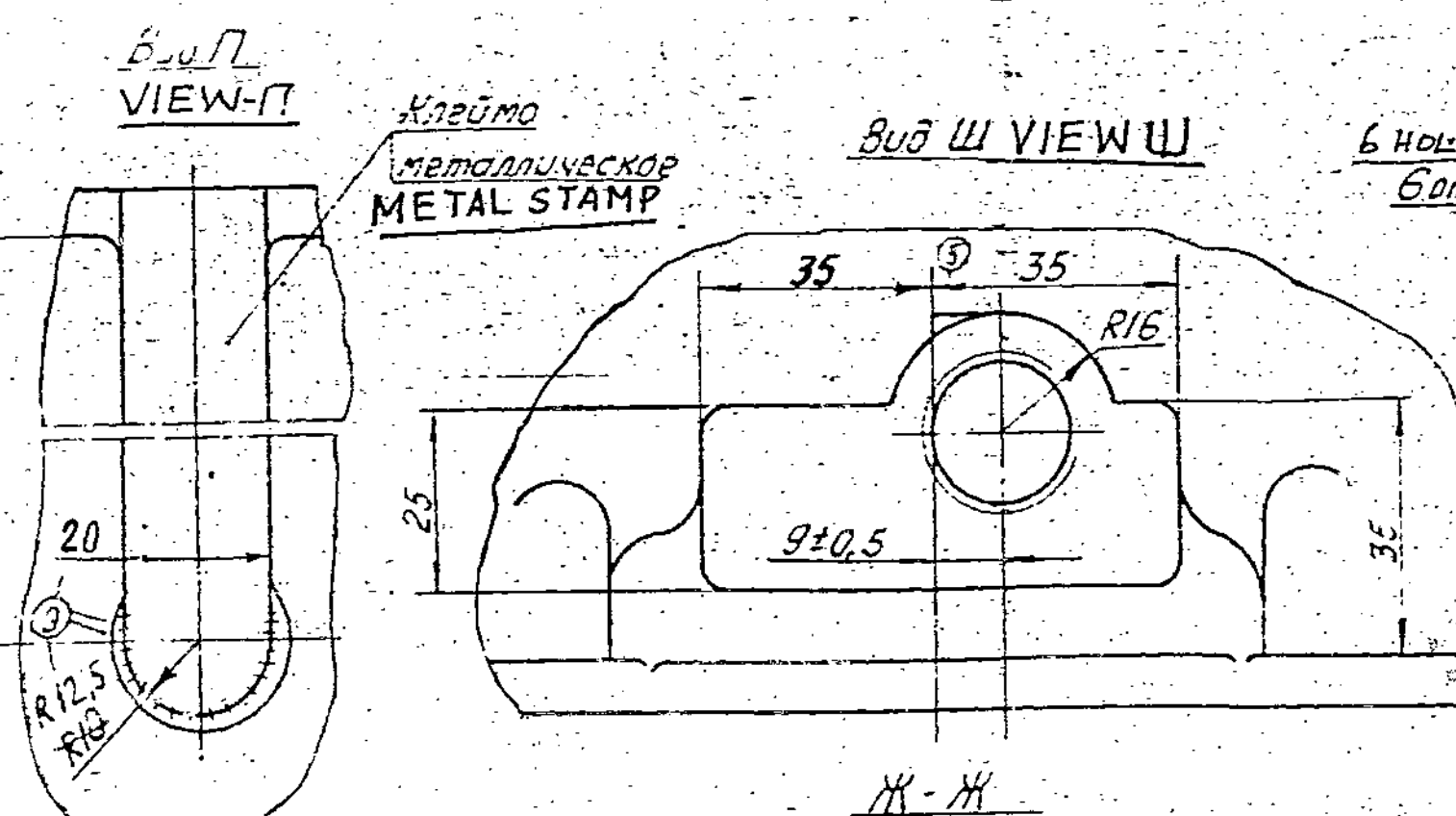
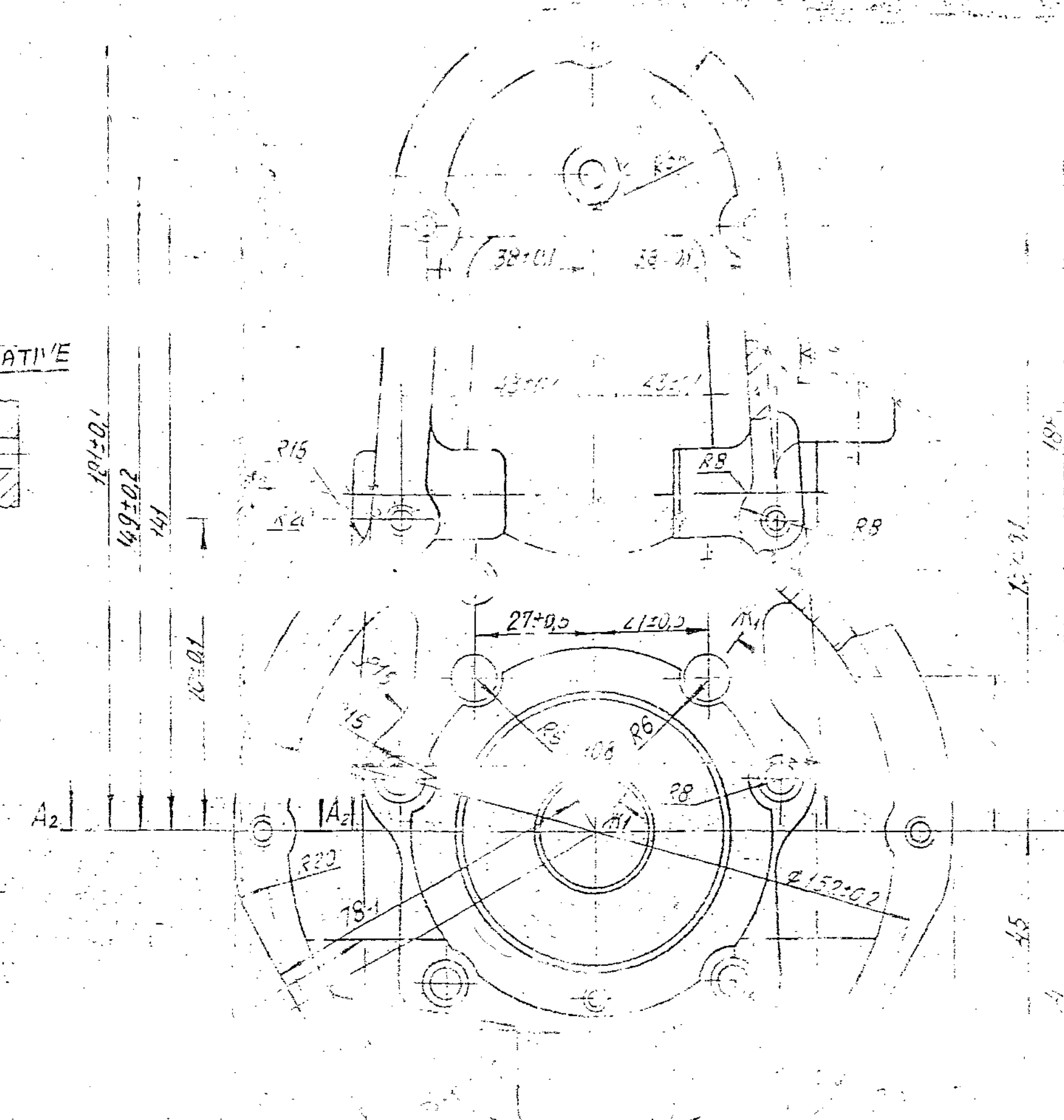
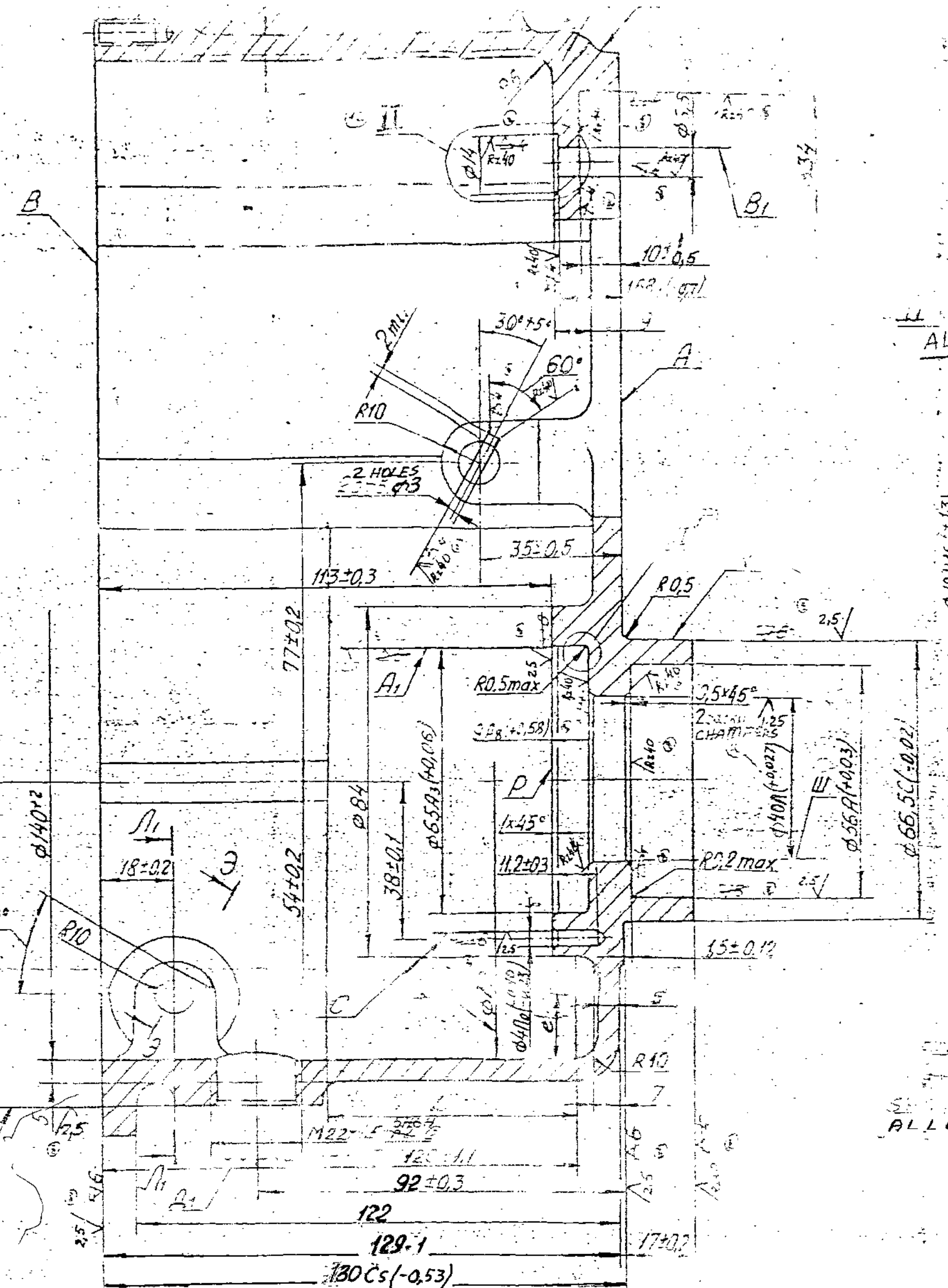
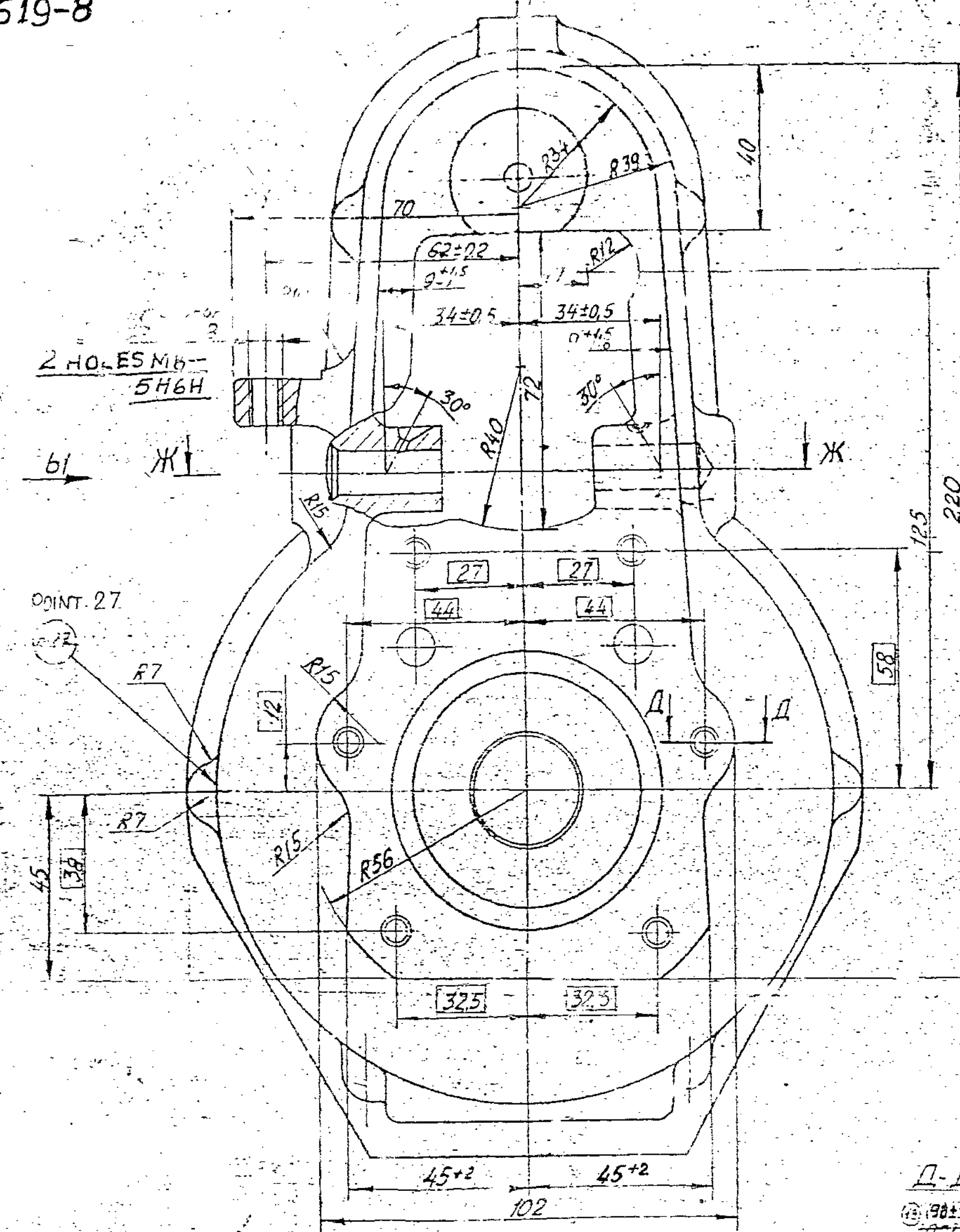
D S CAT NUMBER DRAWING NUMBER 315-618A

ISSUE DATE NATURE OF AMENDMENTS
 B 20-5-95 REPAIR SIZES ADDED
 A 20-6-87 AUTHY. B.K 82-394

DRG. INDIANISED BASED ON ISSUE-3

A-6
SIZE A3

RECEIVED FILE BK 19 85-482 SUR 19-8 ISSUE-D

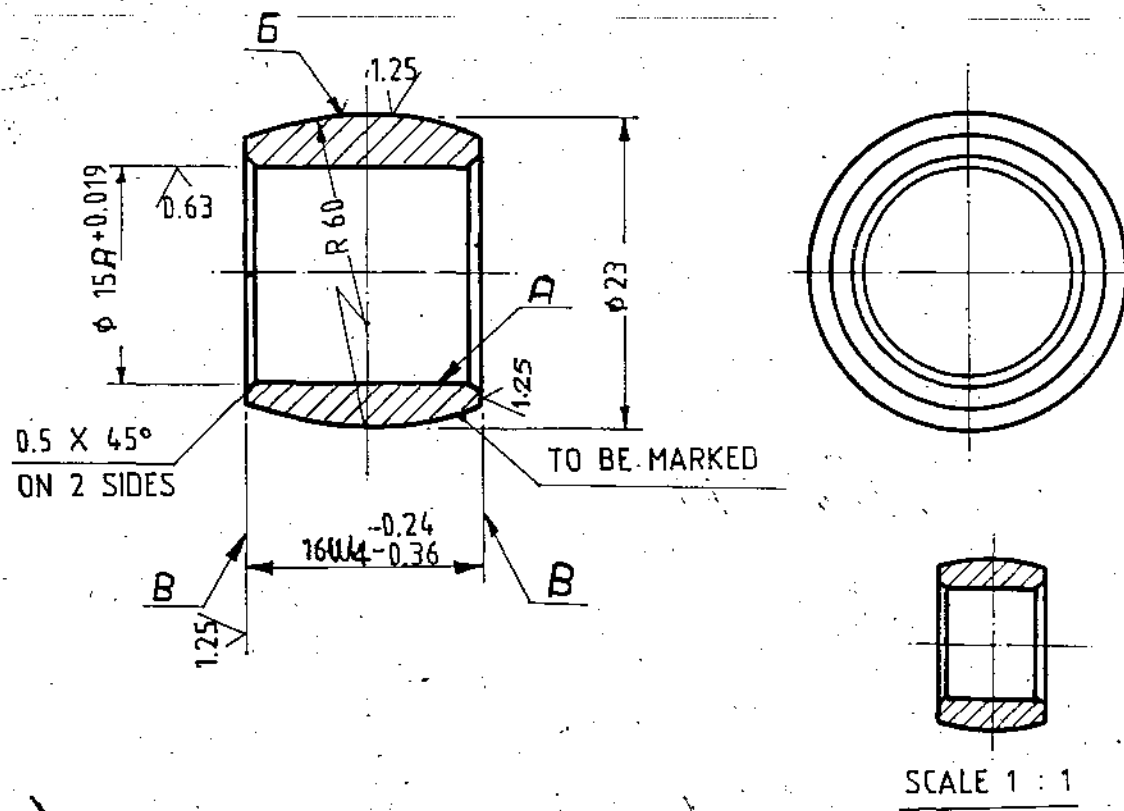


1. Resulting from the...
2. Manufacture...
3. ...
4. Cases...
5. ...
6. Technical requirements...
7. Straightness...
8. ...
9. ...
10. ...
11. ...
12. Shift of ...
13. ...
14. ...
15. ...
16. ...
17. Surfaces A, K and R 0.5mm are to be machined in assembly.
18. Holes C is to be maintained only for articles R-20.
19. ...
20. ...
21. ...
22. ...
23. ...
24. ...
25. ...
26. ...
27. ...
28. Shoulder of 2mm deep up to 1mm is allowed on end face F1.
29. Dimension 10 given for construction of metal stamp.
30. Dimensions A1 and A2 are to be checked by tool with a length of 15±0.5mm and on the ring 2±0.5mm.
31. ...
32. ...

DRN	END	APPD	DATE	SCALE	DIMENSIONS IN mm	TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 0.10-0.25	ALL THREADS TO CONFORM TO
2-23-83	10-2-84	1:1					
PLOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE P.L.K PRODUCTION.				MATERIAL: A49 GOST.2609-75			
CLASS TO BE STAMPED OR MARKED WHERE INDICATED THUS II LETTERS)				CONTROLERATE OF QUALITY ASSURANCE			
SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R 0.10-0.25 EQUIVALENT CHAMFERS ARE PERMISSIBLE.				TITLE GOVERNOR BODY			
ISSUE DATE				DRAWING NUMBER 315-619-8			

DRAWING NUMBER
315-622-2

✓(✓)



1. INSPECTION GROUP III, TT-11.
2. DIMENSIONS WITH UNSPECIFIED TOLERANCES SHOULD BE OBTAINED AS PER A7 OR B7 QST 1010.
HRC₃61..... 64
3. ~~HRC = 60-63~~
4. RUN-OUT OF SURFACES "B" RELATIVE TO SURFACE "A" SHOULD NOT EXCEED AT DIA. 18mm.
5. RUN-OUT OF SURFACE "B" RELATIVE TO SURFACE "A" SHOULD NOT EXCEED 0.05mm.
6. SHIFT OF SPHERE CENTRE FROM THE AXIS OF SYMMETRY OF SURFACES "B" SHOULD NOT EXCEED 0.3mm.
7. SHARP EDGES SHOULD BE BLUNTED.
8. COATING :-CHEMICAL OXIDIZING, OIL FINISHING.

EXPLANATORY NOTE :

(B) MATERIAL QUOTED: STEEL U_X15 GOST 801-78.
BALL BEARING STEEL WITH CHROMIUM (X) CONTENT 15% BY WEIGHT.

a) CHEMICAL COMPOSITION :

CARBON	= 0.95 - 1.05	COPPER	= 0.25 (max)
SILICON	= 0.17 - 0.37	NICKEL & COPPER	= 0.50 (max)
MANGANESE	= 0.20 - 0.40		
CHROMIUM	= 1.30 - 1.65		
SULPHUR	= 0.02 (max)		
PHOSPHORUS	= 0.02 (max)		
NICKEL	= 0.30 (max)		

* ROUND BLANK 25.5-Γ-4 GOST 14955-77
U_X 15-0-XB GOST 801-78

(C) EQUIVALENT MATERIAL
STEEL 535A 99 (EN31) TO BS: 970/103
CR 2 TO IS 4399-72

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

EST WT 0.0267 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 OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DRN	CHD	TCD	APPD	DATE	MATERIAL	USED ON
				08-5-86	SEE ABOVE * U_X 15 GOST 801-78	CG 315-662-3
SCALE 2 : 1					CONTROLLERATE OF INSPECTION(HEAVY VEHICLES) AVADI	
DIMENSION IN mm					TITLE	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED					ROLLER	
ALL THREADS TO CONFORM TO					DRAWING NUMBER	
ISSUE DATE NATURE OF AMENDMENTS					315-622-2	

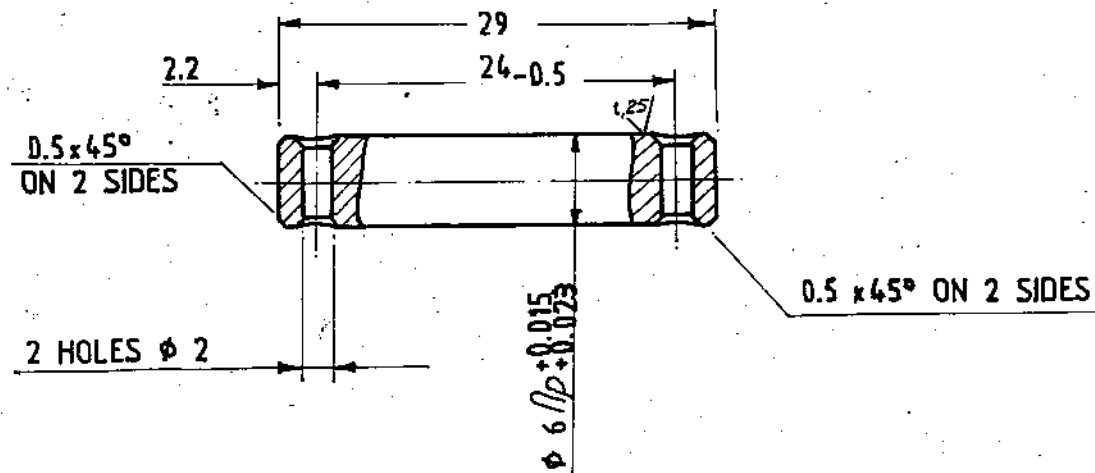
DRAWING INDIANISED BASED ON ISSUE 3

KVD NO 78288

(A 6)

SIZE A3

DRAWING NUMBER
315-632-1



1. INSPECTION GROUP III, TT-11.
2. TO BE CARBURIZED TO A DEPTH OF 0.4 TO 0.7mm ON FINISHED ARTICLE. HARDNESS HRA \geq 78.
3. DIMENSIONS WITH UNSPECIFIED TOLERANCES SHOULD BE OBTAINED AS PER ACCURACY CLASS 7 OST 1010.
4. IN HOLES ϕ 2 CARBURIZED LAYER IS NOT ALLOWED.
5. COATING : CHEMICAL OXIDIZING, OIL FINISHING.

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

EST WT 0.006 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 OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

			DRN		MATERIAL: STEEL 12XH3A	USED ON
			CHD	<i>Primo</i>	TY 14-1 381-72	CB 315-661-1
			TCD	<i>Skumar</i>		
			APPD	<i>B. S. S.</i>	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES)	
			DATE	08-5-'82	AVADI	
			SCALE 2 : 1			TITLE
			DIMENSION IN mm			SPRING PIN
			TOLERANCE ON DIMNS UNLESS OTHERWISE STATED			
			ALL THREADS TO CONFORM TO		D SCAT NUMBER	DRAWING NUMBER
						315-632-1
8	7	6	ISSUE	DATE	NATURE OF AMENDMENTS	