First use	Format	Zone	Position	Designation	Nomenclature	Qty.	Remarks
					Documents		
Reference No.	*)			AK-630 Sb 117/50 SB	Assembly drawing		*)A2*3
					Assembly units		
	A4		1	AK-630 Sb 117-1	Tank	1	
	A4		2	AK-630 Sb 117-/50-1	Branch pipe	2	2 Pieces
							Permissible to
							Replace by pos.90
	A4		3	AK-630 Sb 117-2	Branch pipe	1	
	A4		4	AK-630 Sb 117-4	Pipe line	1	
	A4		5	AK-630 Sb 117-3	End cap	1	
Sign and Date	A4		6	AK-630 Sb 117-6	Liquid flow sensor	1	
	A4		8	AK-630 Sb 117-/50-4	Casing	1	
	A4		9	AK-630 Sb 117-7	Mesh	1	
	A4		10	AK-630 Sb 117-/50-1-01	Branch pipe		Use 1 Piece
Duplicate Inv. No							From pos.87 &
							Pos.40
							Replace 1 piece
							Pos.90 by
Alternate Inv no.							1 piece pos.2

Sign and Date						
						AK-630. Sb 117/50
	Amend.	Sheet	Doc. No.	Sign	Date	
	Developed by					**Cooling tank**
Orig. Inv. No.	Checked by					
	Head of Q.C.D					
	Approved by					

Type	Sheet	Sheets
A	1	6

Format	Zone	Position	Designation	Nomenclature	Qty.	Remarks
A4		90	AK-630 Sb 117-	Branch pipe	1	2 Pieces
						permissible
						to replace
						by pos.2 or
A4		11	AK-630 Sb 117-/50-100	Plate		Pos. 10
						Use 1 piece in
						place of
						pos.30
				Components		
A4		13	AK-630 117-2	Cover	1	
A3		14	AK-630 117-3	Cover	1	
A4		15	AK-630 117-4	Cover	2	
A4		16	AK-630 117-5	Screw	4	
A4		17	AK-630 117-6	Screw	20	
A4		18	AK-630 117-7	Screw	10	
A4		19	AK-630 117-8	Bush	1	
A4		20	AK-630 117-9	Gasket	1	
A4		21	AK-630 117-10	Gasket	1	
A4		22	AK-630 117-11	Gasket	2	
A4		23	AK-630 117-12	Gasket	3	
A3		24	AK-630 117-14	Plate	1	
A4		25	AK-630 117-15	Axle	1	
A4		26	AK-630 117-46	Body	1	
A4		28	AK-630 117/50-1	Gasket	2	
A4		29	AK-630 117/50-2	Indicator	1	

Sign and Date | Duplicate Inv. No | Alternate Inv no. | Sign and Date

Orig. Inv. No.						AK-630. Sb 117/50	Sheet
							2
	Amend.	Sheet	Doc. No.	Sign	Date		

Format	Zone	Position	Designation	Nomenclature	Qty.	Remarks
A1		30	AK-630 117/50-3	Plate		
A3		31	AK-630 117/50-4	Screw	4	
A4		32	AK-630 117/50-5	Half coupling	1	
A4		34	AK-630 117/50-31	Bush	4	
A4		35	AK-630 117/50-32	Wire armoured hose	1	
A4		36	AK-630 117/50-33	Bolt	1	
A4		37	AK-630 23	Finger	16	
A4		38	AK-630 108-3	Loop	4	
A4		39	AK-630 108-4	Strip	4	
A4		40	AK-630 117/50-34	Gasket	1	
				Standard articles		
		44		Bolt M12-8gx30.109.40X.029	8	*1
				GOST 7798-70		
		45		Bolt M10-8gx20.109.40X.029	4	*1
				GOST 7798-70		
		46		Bolt	10	*1
				2M12-8gx40.109.40X.029		
				GOST 7798-70		
		47		Bolt	4	*1
				2M8-8gx6.109.40X.029		
				GOST 7798-70	4	*1
		48		Bolt 3M12-8gx45.109.40X.029		
				GOST 7798-70		

Sign and Date | Duplicate Inv. No | Alternate Inv no. | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date	AK-630. Sb 117/50	Sheet 3

Format	Zone	Position	Designation	Nomenclature	Qty.	Remarks
		49		Bolt M8-8gx25.109.40X.029	16	
				GOST 7798-70		
		52		Nut M12-6G.10.40X.029	14	
				GOST 5919-73		
		53		Nut M16-6G.10.40X.029	4	
				GOST 5919-73		
		54		Nut M6-6G.10.40X.029	10	
				GOST 5927-70		
		55		Nut 2M8-6G.10.40X.029	24	
				GOST 5915-70		
		59		Washer A12.25.029	58	
				GOST 11371-78		
		61		Washer 6.01.08KP.029	10	
				GOST 13463-77		
		60		Washer A16.25.029	8	
				GOST 11371-78		
		62		Washer 8.01.08Kp.029	40	
				GOST 13463-77		
		63		Washer 12.01.08KP.029	8	
				GOST 13463-77		
		64		Washer 10.65G.029	4	
				GOST 6402-70		
		68		Cotter pin 3.2x32.029	14	
				GOST 397-79		
		69		Cotter pin 4x36.029	4	
				GOST 397-79		
		70		Cotter pin 6.3x36.029	4	
				GOST 397-79		

Sign and Date | Duplicate Inv. No | Alternate Inv no. | Sign and Date

Orig. Inv. No.						AK-630. Sb 117/50	Sheet
							4
	Amend.	Sheet	Doc. No.	Sign	Date		

Format	Zone	Position	Designation	Nomenclature	Qty.	Remarks
		72		Pin 5Pr22ax45.40X.		
				K38.5…45.5HRC.Chem.Phos.Oil.		
				OST 3-2234-93		
		77		Smooth Glass		1 piece, permissible
				TZ-220-22-3.5 MPa		To replace by
				GOST 1663-81		Pos.91
				Other articles		
		74		Cock KV – 15 TU		1 piece, permissible
				21-028-8995-011-90		To replace by
						Pos.89
		80		Pump VK-524 A-T2	1	
				GOST 10392-89		
		83		Hose VG(III)-10-31.5-47-T;	1	L=700 MM
				GOST 18698-79		
		86		Electric motor	1	
				DM 132 SV-40M5 380 V, 55		
				Kwatt JM 1081 TU		
				16-513.363-74		
		87		Manometer MKU model -1072	1	Refer n.3.3
				1.6Mpa M20x1.5		Ak-630.Ak-
				TU 25.05.1454-79		63m TU2
		88		Connector coupling	1	
				H48547 h 48.54714000-17		Export
						14000-17

Sign and Date | Duplicate Inv. No | Alternate Inv no. | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date	AK-630. Sb 117/50	Sheet 5

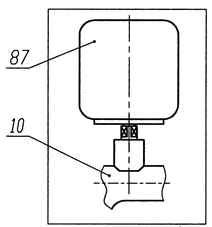
Format	Zone	Position	Designation	Nomenclature	Qty.	Remarks
		89		Cock KVP – 15 TU		1 piece, permissible
				21-028-8995-016-91		to replace by
						Pos.74
		91		Glass PK7 GOST 3514-94		1 piece, permissible
						To replace by
						Pos.77
			*1) Heat treatment of bolts pos. 44-49 31…40.5 HRC_E,			
			Nuts pos. 52,53,5531…40.5 HRC_E			
			*2) Heat treatment of nut pos. 54 65.5…70 HRA			

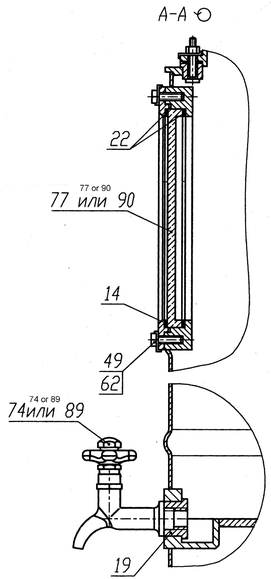
Sign and Date | Duplicate Inv. No | Alternate Inv no. | Sign and Date

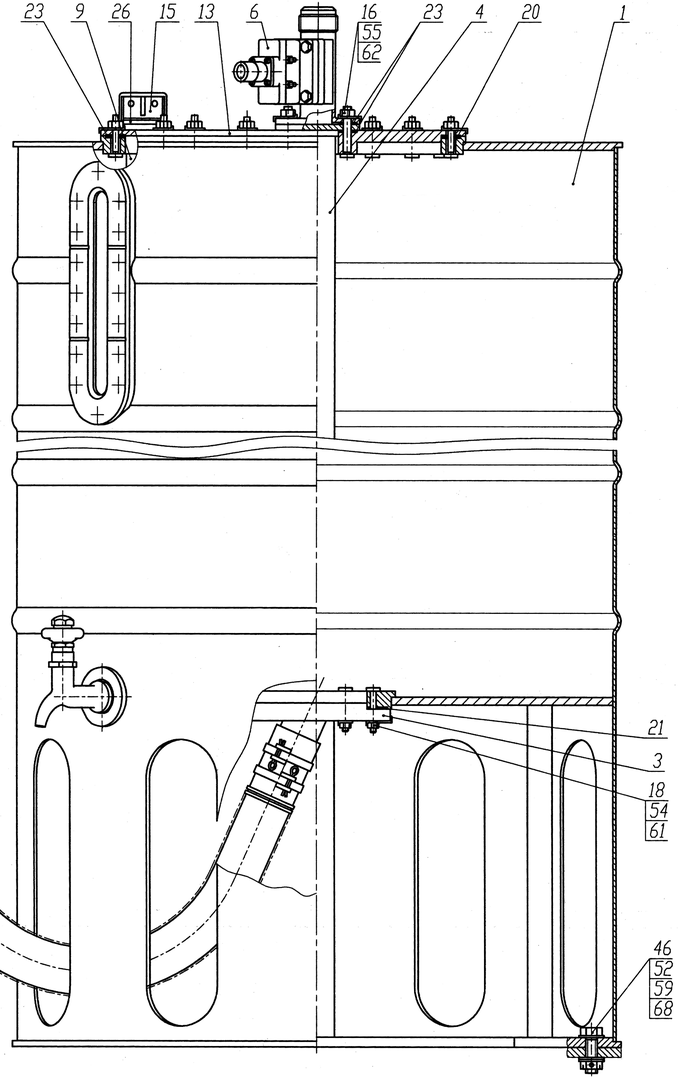
Orig. Inv. No.	Amend.	Sheet	Doc. No.	Sign	Date	AK-630. Sb 117/50	Sheet 6

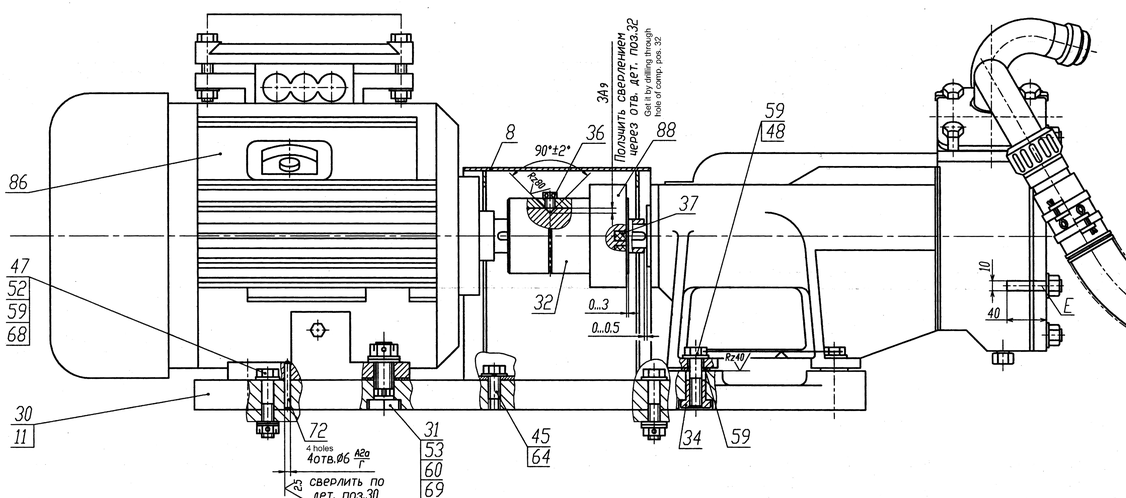
АК-630 SB 117/50 SB

Variant
Вариант









1. - Riveted plate of component pos. 24 should durably fix with projections in cover holes and freely rotate on axis.
2. Wipe all components before assembly with cloth no. 1 GOST 11680 65; blow inner strips with air.
3. Apply dry putty EP 0010 GOST 28379 89 on screws position 16, 17, 18.
4. Apply primer FL 03 Zh, yellowish green GOST 9109 81 on branch pipe pos. 3, cover pos. 14 and bolts pos. 49 and 44.
5. Test assembled cooling tank for strength and air tightness of joints with inner pressure 0.1 MPa (1 atm) for 15 minutes. Carry out testing with compressed air. Leakage of air in joints and swelling of tank walls during testing is not permissible. Check air tightness by soaking joints with soap solution, preliminarily stopping hole "T" with technological stop plug with rubber gasket which should be removed after checking for air tightness.
6. Secure water outlet cock pos. 74 with resin tape GOST 16183 70 impregnated with putty, at this flywheel of cock should be in upper position.
7. One end in tightened tape pos. 29 should have 2...2.5 turns around cotter pin pos. 70 and other end, bending around loop pos. 38, which should be bent in opposite direction by not less than 1 / 4 the circumference.
8. Split ends of all cotter pins after carrying out testing as per point 5.
9. Alignment of pump shaft axle and electric motor is ensured by displacing pump and electric motor and in case necessary, by placing and filing washer pos. 59 on pump.
10. Displacement of pump shaft axle and electric motor is ensured not more than 0.15 mm at length 100 mm is permissible.
11. Stop assembly pos. 6 with cover comp. AK 630 117 4, stop SB 117 / 50 1 with cover M 42x2 K OS 92 34 66, slip on poly ethylene strip following tying it on sleeve pos. 83 before placing in transportation box.
12. *Reference dimension.
13. Coat line E: enamel PF 115 red GOST 6465 76 2 layers IV, OM 2.
14. Lock bolt pos. 36 with wire 1 T 12Kh18N10T GOST 18143 72 as per OST 3 1315 79.
15. Stop assembly joint pos. 6 with cover M 24x1.5 K OS 92 34 66 before packing in transportation box. Cover enters in assembly pos. 6 (Sb. 117 6)
16. Pass sleeve pos. 83 to first upper hole of looking glass pos. 77.
17. Adjustment of face clearances between cover with operating wheel body by selecting thickness of gasket is permissible during improper production of pump.
18. Version of branch pipe pos. 10 (Refer "version") is manufactured on special order.
19. Cutting on length of bolts pos. 44 not more than by 3 mm is permissible.
20. Mark Ш, Ч, Н, На and stamp K as per AK 630, AK 630M TU I. На technological unit number of assembly.

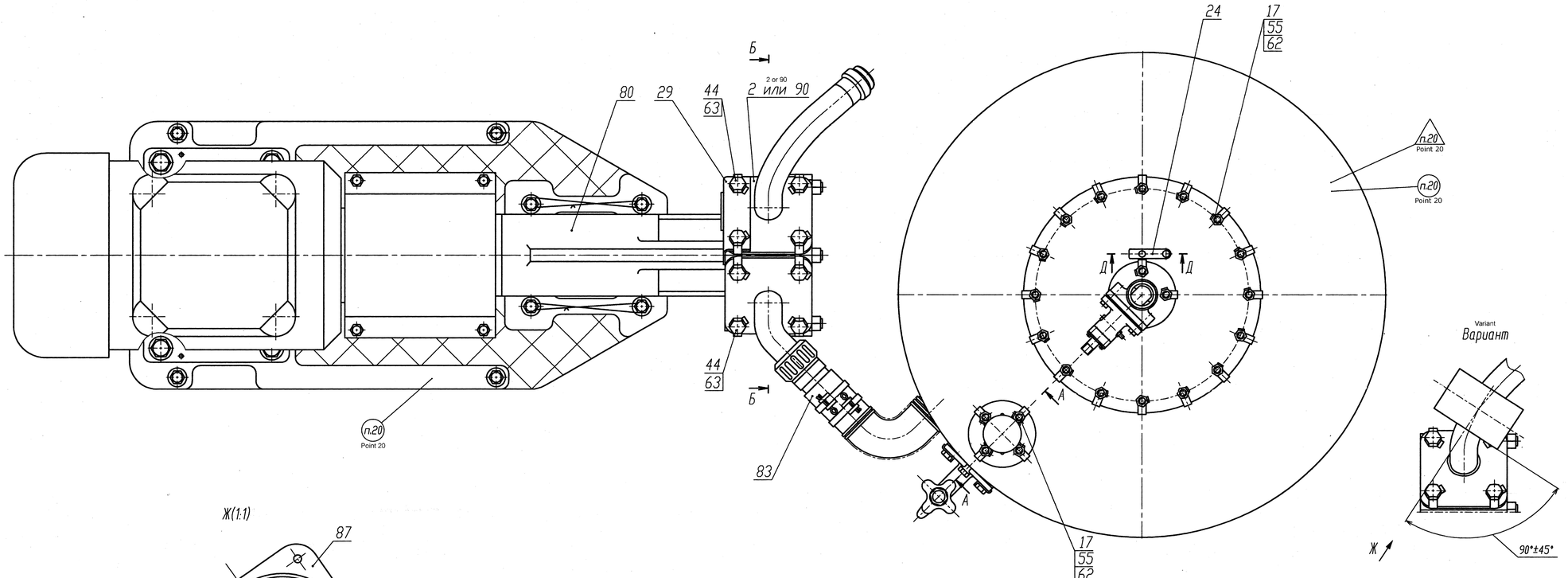
						AK-630 SB 117/50 SB
Amend	Sheet	Doc. No.	Sign	Date		
Developed by					Cooling tank Assembly drawing	Type: A; Weight: 163; Scale: 1:2
Checked by						
Technician						Sheet 1; Sheets 1
Head of bureau						
Head of QCD						
Approved by						

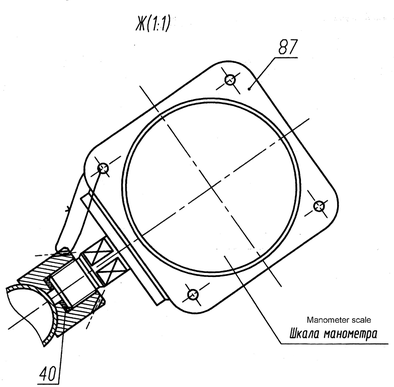
Format A2x3

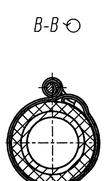
First remarks | Reference No. | Sign & Date | Duplicate Inv. No. | Alternate Inv. No. | Sign & Date | Inv. No.

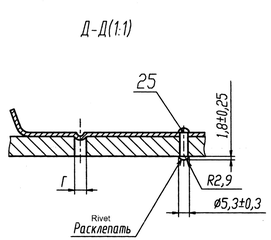
Bulk No. 3 Container No. 3

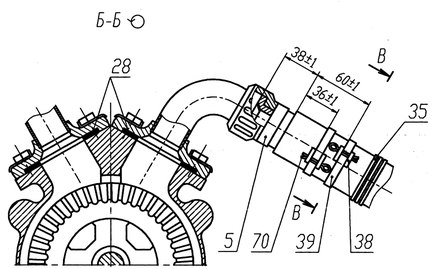
Bulk No. 3 Container No. 3











First remarks | Reference No. | Sign & Date | Duplicate Inv. No. | Alternate Inv. No. | Sign & Date | Inv. No.

						AK-630 SB 117/50 SB	Sheet
							2
Amend	Sheet	Doc. No.	Sign	Date			

First use | Reference No. | Sign and Date | Dupl. Inv. No. | Alternate Inv. | Orig. Inv. No.

Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
				Documents		
A1			AK-630 Sb 117-1 SB	Assembly drawing		
				Components		
A2		1	AK-630 117-19	Shell	1	
A4		2	AK-630 117-20	Disc	1	
A3		3	AK-630 117-21	Lower ring	1	
A3		4	AK-630 117-22	Upper ring	1	
A3		5	AK-630 117-23	Flange	1	
A4		6	AK-630 117-24	Flange	1	
A3		7	AK-630 117-25	Boss	1	
A4		8	AK-630 117-26	Flange	1	
A4		9	AK-630 117-27	Sleeve	1	
A4		10	AK-630 117-28	Elbow	5	

Sign and Date

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

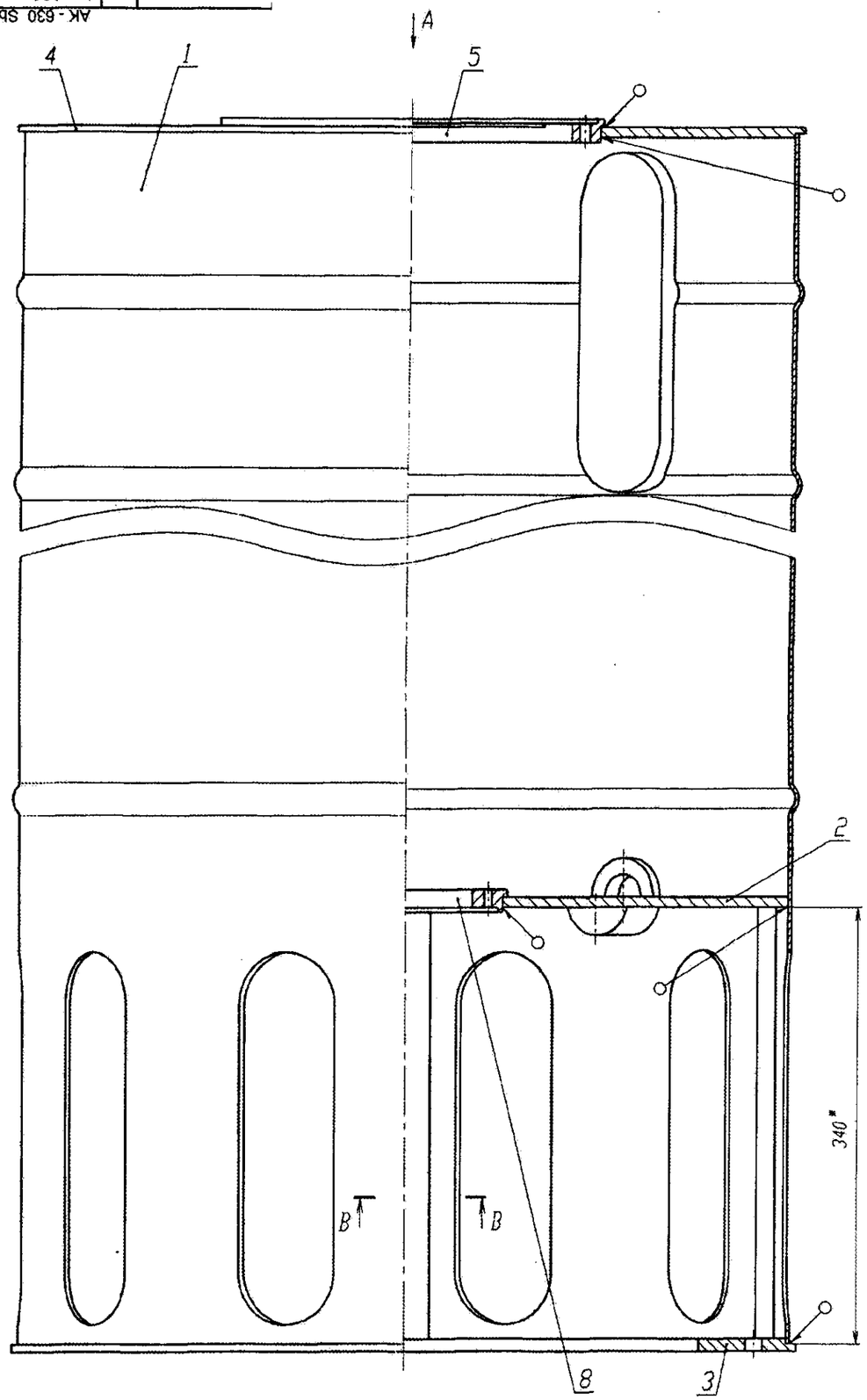
AK-630 Sb 117-1

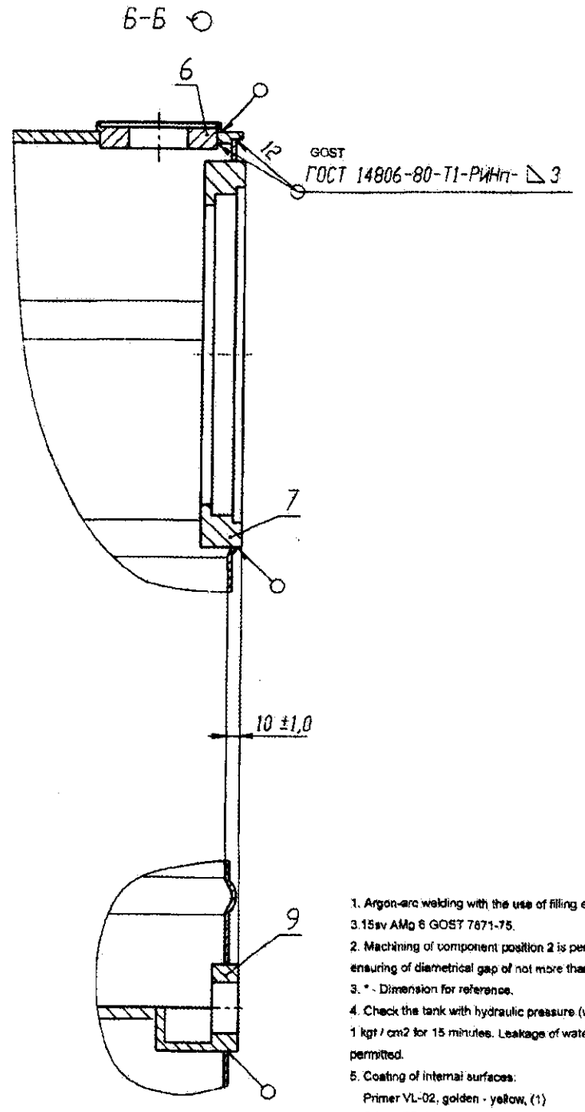
Tank

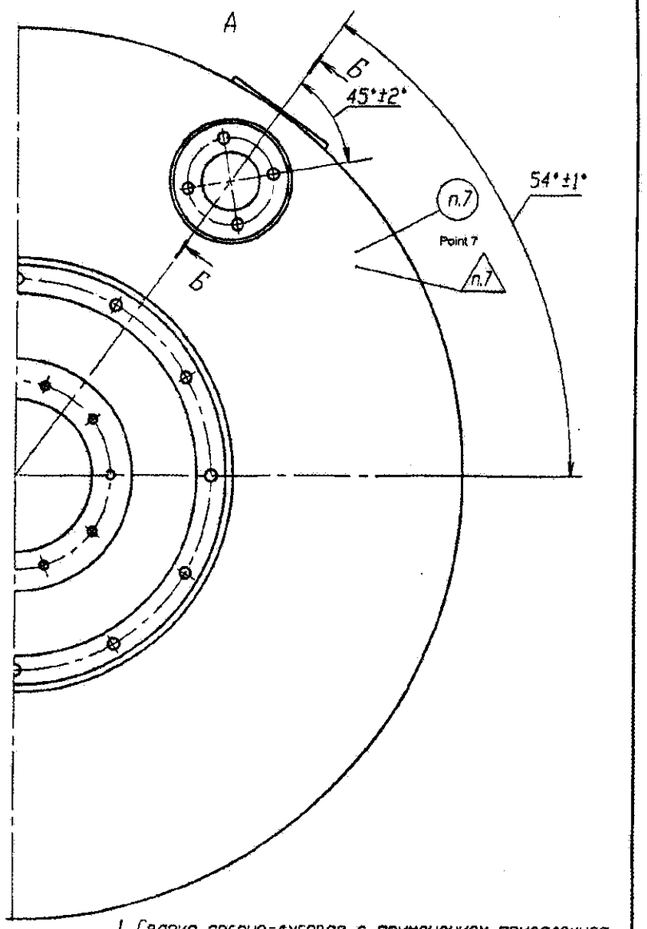
Type	Sheet	Sheets
A		1

АК-630 Сб117-1СБ

АК - 630 Sb 117-1 SB



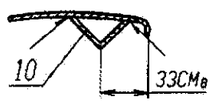




В-В

5 мест, равнорасположенных по окружности

5 places, evenly positioned along the circumference



1. Argon-arc welding with the use of filling electrode 3.15sv AMg 6 GOST 7871-75.
2. Machining of component position 2 is permitted with ensuring of diametrical gap of not more than 1.0 mm.
3. * - Dimension for reference.
4. Check the tank with hydraulic pressure (water) of 1 kgf / cm2 for 15 minutes. Leakage of water is not permitted.
5. Coating of internal surfaces:
   Primer VL-02, golden - yellow, (1)
   Primer EP-0010, red-brown, (1)
   Enamel EP - 773, green (4), IV, OM2.
   VL-02 GOST 12707-77
   EP-0010 GOST 28379-89
   EP-773 GOST 23143-83
   External surfaces, except seating (fitting) places:
   Primer VL-02, colour less, (1)
   Primer AK-070, yellow, (1)
   Enamel KhV-124, gray (4), IV, OM2.
   VL-02 GOST 12707-77
   AK-070 GOST 25718-83
   KhV-124 GOST 10144-89
6. During the detection of cracks on the welded joints, after the anodization for not more than two times, carry out the correction (straightening) by sawing out (cutting out) of cracks and argon arc welding with subsequent coating with primer AK-070 GOST 25718-83.
7. Mark Ч, Ш and stamp K as per AK-630, AK-630M TU I.

1. Сварка аргоно-дуговая с применением присадочной проволоки 3,15св АМг 6 ГОСТ 7871-75.
2. Допускается обработка детали поз. 2 с обеспечением диаметрального зазора не более 1,0 мм.
3. * Размер для справок.
4. Бак испытать гидравлическим давлением (водой) 1 кгс/см² в течение 15 мин. Просачивание воды не допускается.
5. Покрытие внутренних поверхностей:
   Грунтовка ВЛ-02, зеленовато-желтая, (1)
   Грунтовка ЭП-0010, красно-коричневая, (1)
   Эмаль ЭП-773, зеленая (4), IV, ОМ2.
   ВЛ-02 ГОСТ 12707-77
   ЭП-0010 ГОСТ 28379-89
   ЭП-773 ГОСТ 23143-83
   наружные поверхности, кроме посадочных мест:
   Грунтовка ВЛ-02, бесцветная (1)
   Грунтовка АК-070, желтая (1)
   Эмаль ХВ-124, серая (4), IV, ОМ2,
   ВЛ-02 ГОСТ 12707-77
   АК-070 ГОСТ 25718-83
   ХВ-124 ГОСТ 10144-89
6. При обнаружении трещин в сварных швах после анодирования не более двух допускается производить исправление путем выпиливания (вырубания) трещин и аргонно-дуговую подварку с последующим покрытием грунтовкой АК-070 ГОСТ 25718-83.
7. Маркировать Ч, Ш и клеймить К по АК-630, АК-630М ТУ I.

Bale 8 Container 3

АК - 630 Sb 117-1 SB

Изм.	Лист	N докум.	Подп.	Дата	АК-630 Сб117-1СБ			
Разраб.					Tank Бак	Type Лит.	Mass Масса	Scale Масштаб
Пров.						A	28,8	1:2
Т.контр.					Сборочный чертеж	Лист Sheet	Листов Total Sheets 1	
Н.контр.					Assembly Drawing			
Утв.								

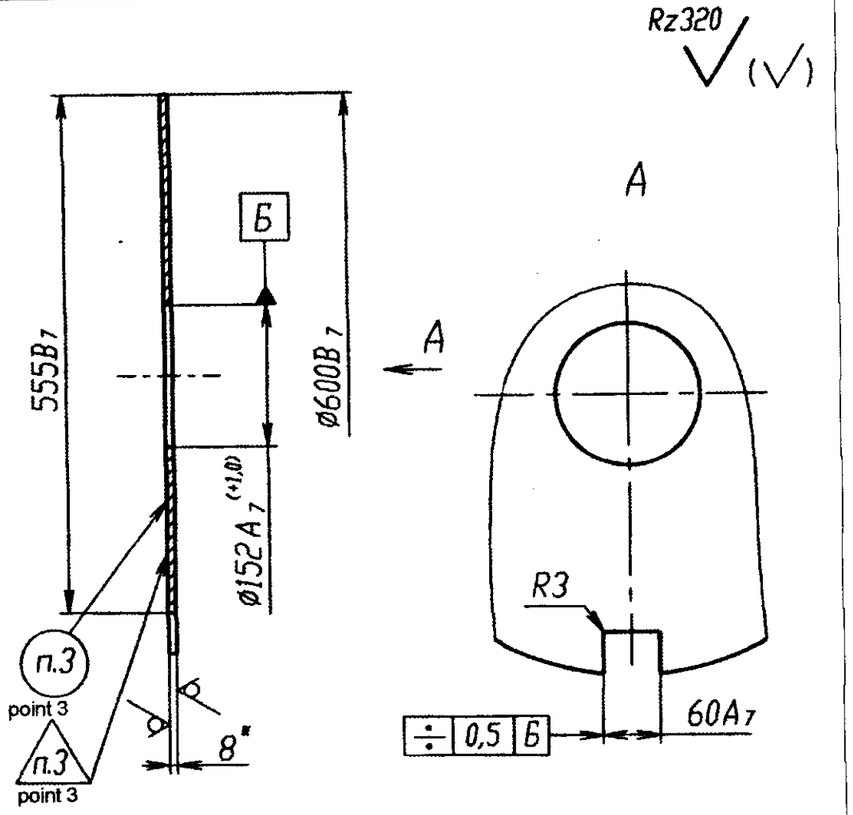
Инв.N подл. | Подп. и дата | Взам.инв.N | Инв.N дубл. | Подп. и дата

Перв. примен. | Справ.N

Формат А1

Blank No. 406

AK-630 117-20



1.* Reference dimension.
2. Blunt sharp edges ~0.6 mm.
3. Mark Ш, Ч and stamp К as per AK-630, AK-630M TU I.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117-20

Disc

Type	Weight	Scale
A	3.800	1:5

Sheet | Sheets 1

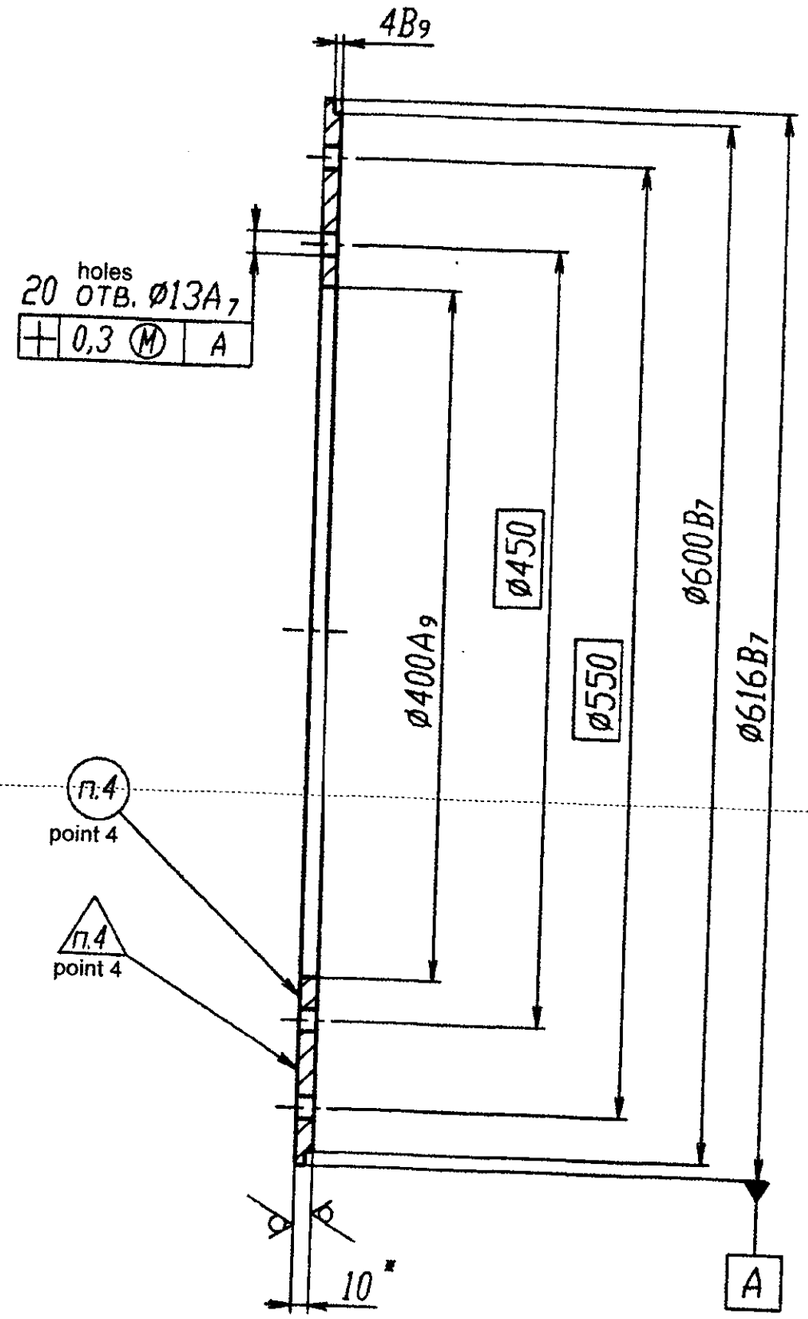
Sheet AMg6M-8
GOST 21631-76

Copied by

Format A4

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Inv. No
Alternate Inv. No.
Sign and Date
Approved OGMet
Orig. Inv. No.

AK-630 117-21



Rz320

1.* Reference dimension.
2. Inner angles R~0.4 mm.
3. Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630 M TU I.

Comments:

Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

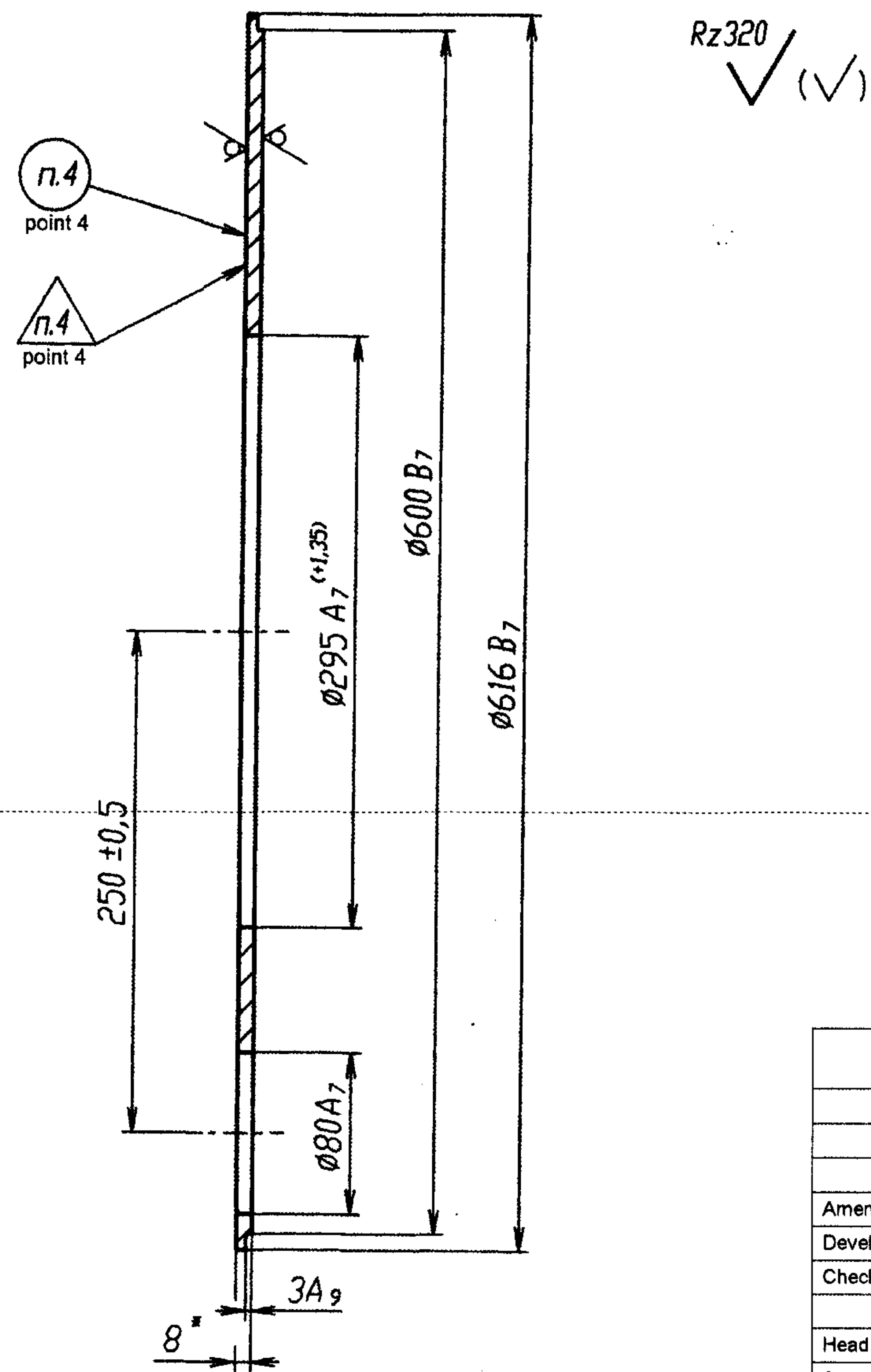
AK-630 117-21

Lower ring

Type	Weight	Scale
A	1.170	1:2.5
Sheet	Sheets 1	

Sheet AMg6 M-10
GOST 21631-76

AK-630 117-22

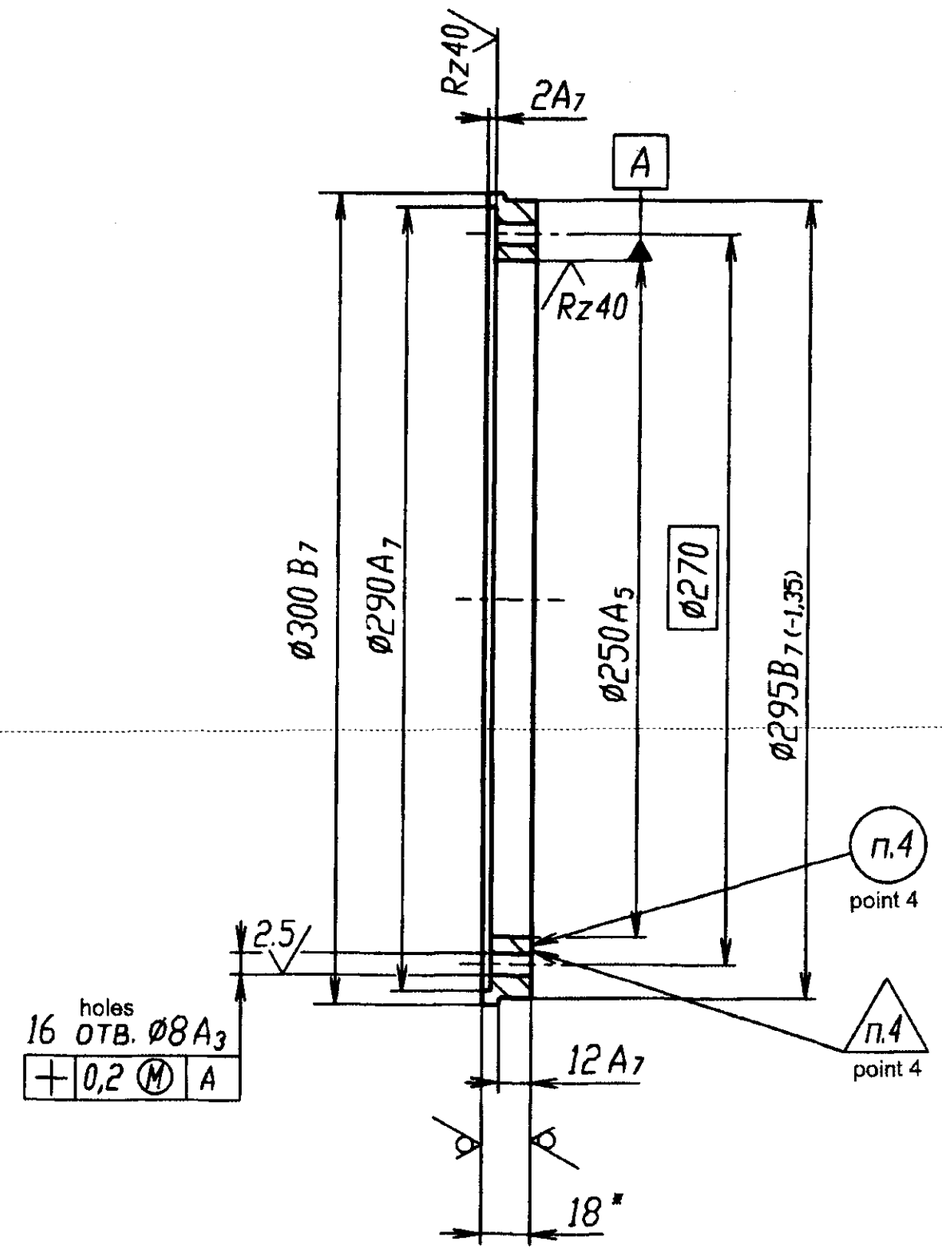


1.* Reference dimension.
2. Inner angles R~0.4 mm.
3. Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630 M TU I.

					AK-630 117-22			
Amend.	Sheet	Doc.No.	Sign	Date	Upper ring	Type	Weight	Scale
Developed by						A	2.850	1:2.5
Checked by						Sheet	Sheets 1	
Head of Q.C.D					Sheet AMg6 M-8 GOST 21631-76			
Approved by								

Comment:

AK-630 117-23



Rz80 (√)

1.* Reference dimension.
2. Inner angles R~0.4 mm.
3. Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630 M TU I.

Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

AK-630 117-23

Flange

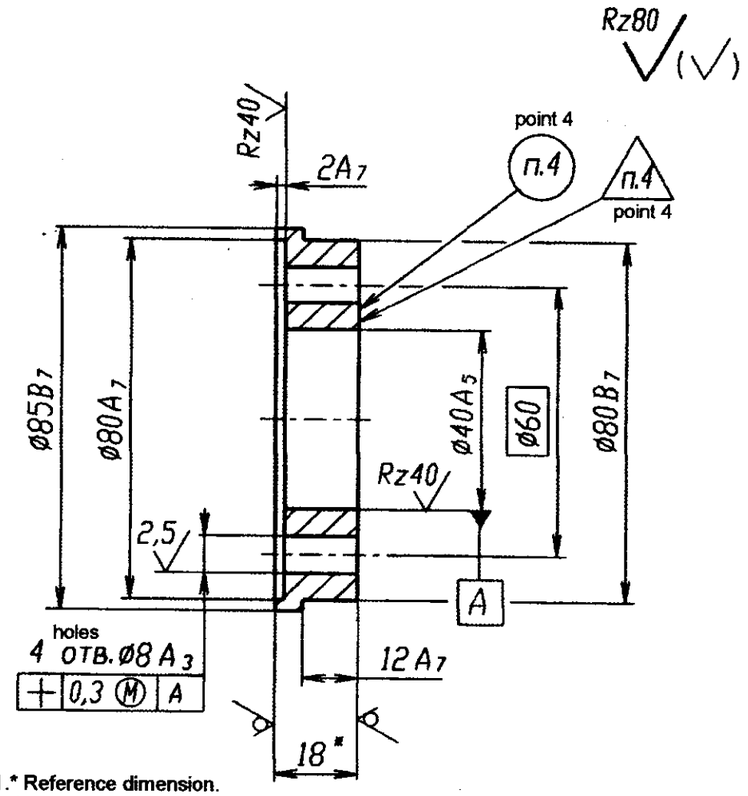
Type	Weight	Scale
A	0.800	1:2
Sheet	Sheets 1	

Plate AMg 6B-18
GOST 17232-99

Comment:

Blank No. 406

AK-630 117-24



1.* Reference dimension.
2. Inner angles R~0.4 mm.
3.Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630M TU I.

AK-630 117-24

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Flange

Plate AMg6 B-18
GOST 17232-99

Type	Weight	Scale
A	0.155	1:1

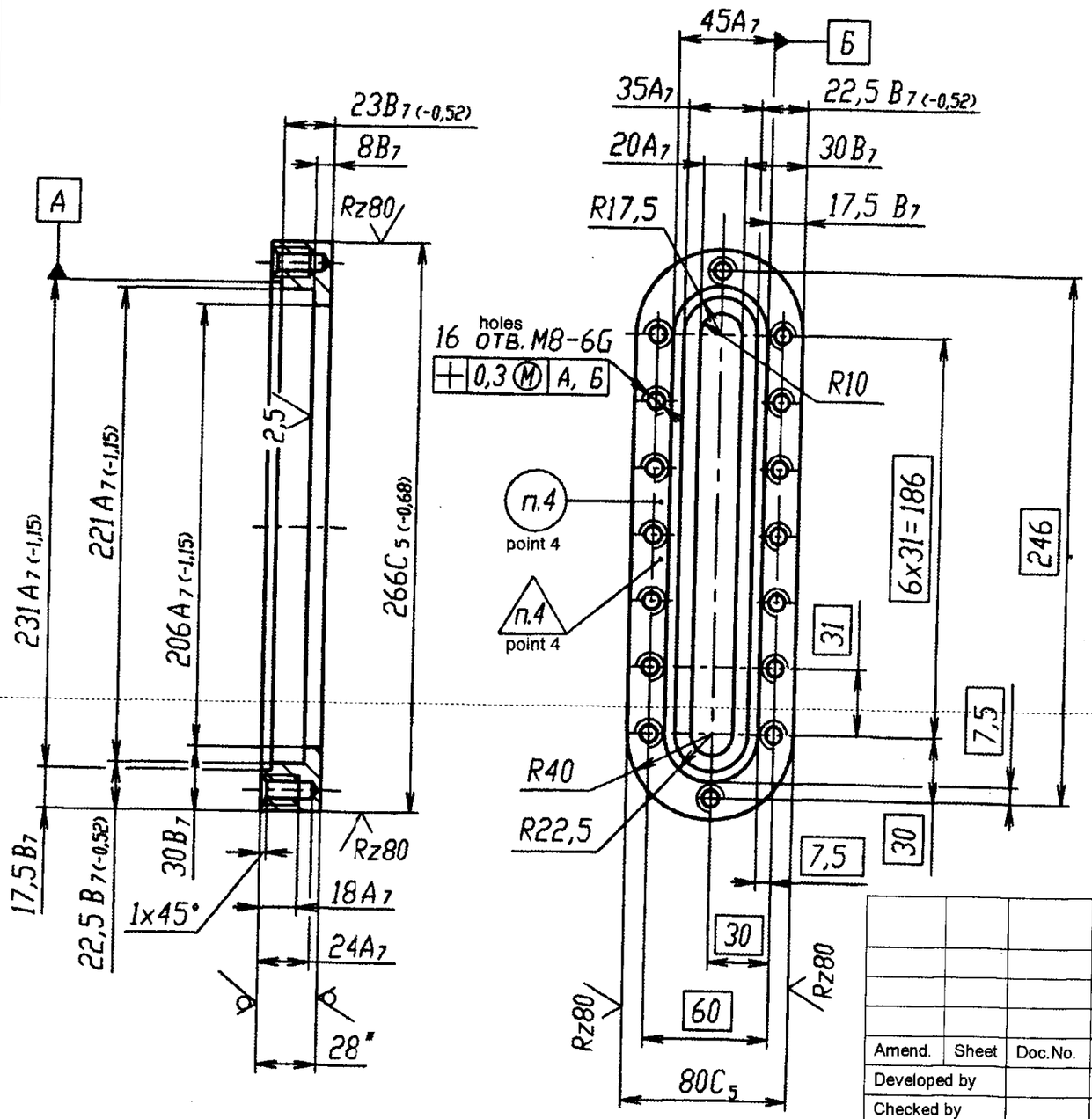
Sheet | Sheets 1

Approved KTONI | Approved by shop | First use
Reference No.
Sign and Date
Dupl. Inv. No.
Approved TOsb
Inv. No
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Copied by

Format A4

AK-630 117-25



Rz40 (√)

Comment:

1.* Reference dimension.
2. Inner angles R~0.4 mm.
3. Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630 M TU I.

Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

AK-630 117-25

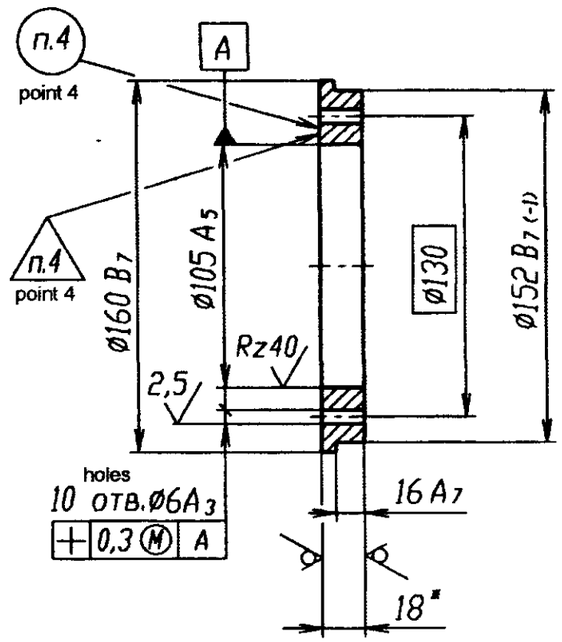
Boss

Type	Weight	Scale
A	0.910	1:2
Sheet	Sheets	1

Plate AMg6 B-28
GOST 17232-99

Blank No. 406

AK-630 117-26



1.* Reference dimension.
2. Inner angles R~0.4 mm.
3.Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp К as per AK-630, AK-630M TU I.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117-26

Flange

Type	Weight	Scale
A	0.405	1:2

Sheet | Sheets 1

Plate AMg6 B-18
GOST 17232-99

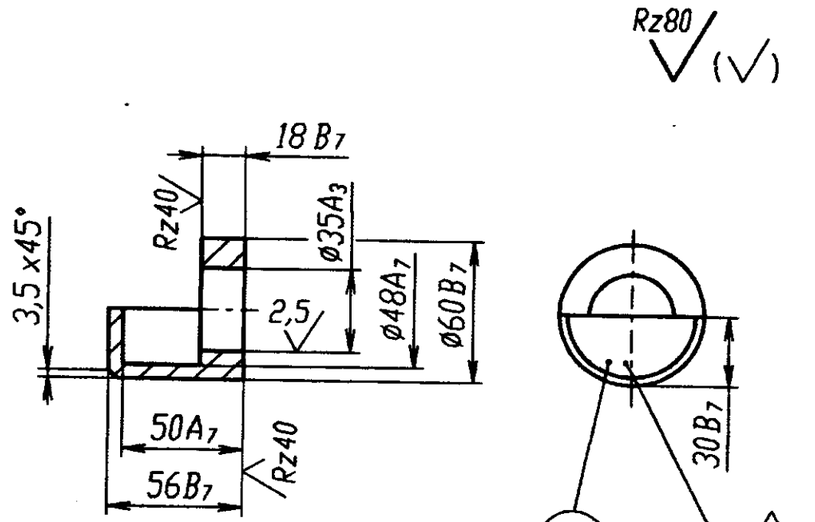
Approved KTONI | Approved by shop | First use | Reference No. | Sign and Date | Dupl. Inv. No. | Approved TOsb | Alternate Inv. No | Sign and Date | Approved OGMet | Orig. Inv. No.

Copied by

Format A4

Blank No. 406

AK-630 117-27



1. Inner angles R~0.4 mm.
2. Blunt sharp edges ~0.6 mm.
3. Mark Ш, Ч and stamp K as per AK-630, AK-630M TU I.

Approved KTONI | Approved by shop | First use
Reference No.
Sign and Date
Dupl. Inv. No.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117-27

Sleeve

Bar AMg6 KR65
GOST 21488-97

Type	Weight	Scale
A	0.140	1:2

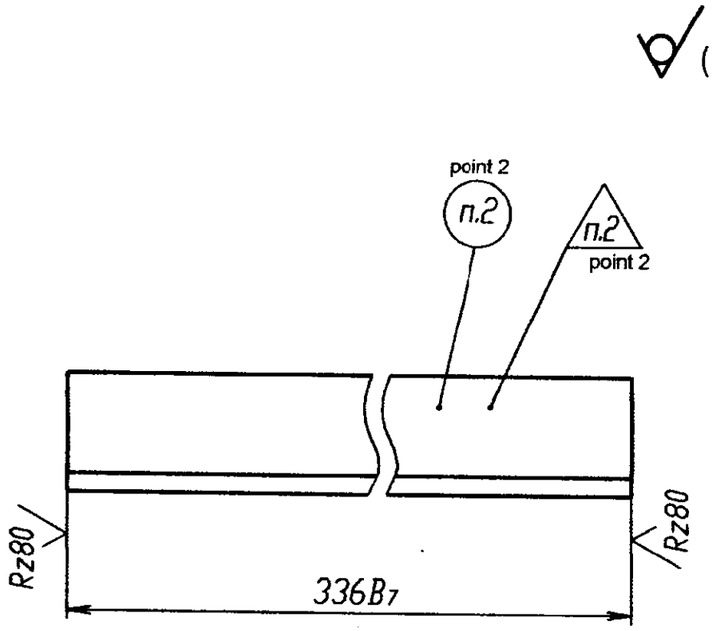
Sheet | Sheets 1

Copied by

Format A4

Blank No. 406

AK-630 117-28



1.Blunt sharp edges ~0.4 mm.
2. Mark Ш, Ч and stamp К as per AK-630, AK-630M TU I.

Approved KTONI | Approved by shop | First use
Approved TOsb | Reference No. | Dupl. Inv.
Approved OGMet | Alternate Inv. No | Sign and Date
Orig. Inv. No. | Sign and Date

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-28

Elbow

Type	Weight	Scale
A	0.155	1:1

Sheet | Sheets 1

Profile AMg6 410062 $\frac{GOST\ 8617}{GOST\ 13737-90}$

Format A4

Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
				Documents		
A1			AK-630 Sb 117/50-1 SB	Assembly drawing		
				Components		
A3		1	AK-630 117/50-10	Flange	1	
A3		2	AK-630 117/50-20	Pipe	1	
A4		3	AK-630 117/50-35	Connecting pipe	1	
			Variable details for implementation			
				AK-630 Sb 117/50-1		
				Components		
A4		4	AK-630 117/50-14	Sleeve	1	
				AK-630 Sb 117/50-1-01		
				Components		
A3		5	AK-630 117/50-10-01	Flange	1	
A3		6	AK-630 117/50-20-01	Pipe	1	
A4		7	AK-630 117/50-30-01	Connecting pipe	1	

First use | Reference No. | Sign and Date | Dupl. Inv. No. | Alternate Inv. No | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date

AK-630 Sb 117/50-1

Developed by	
Checked by	
Head of Q.C.D	
Approved by	

Tank

Type	Sheet	Sheets
A		1

АК-630Сб 117/50-1 СБ

АК-630Sb 117/50-1 SB

Fig. 1

Рис.1

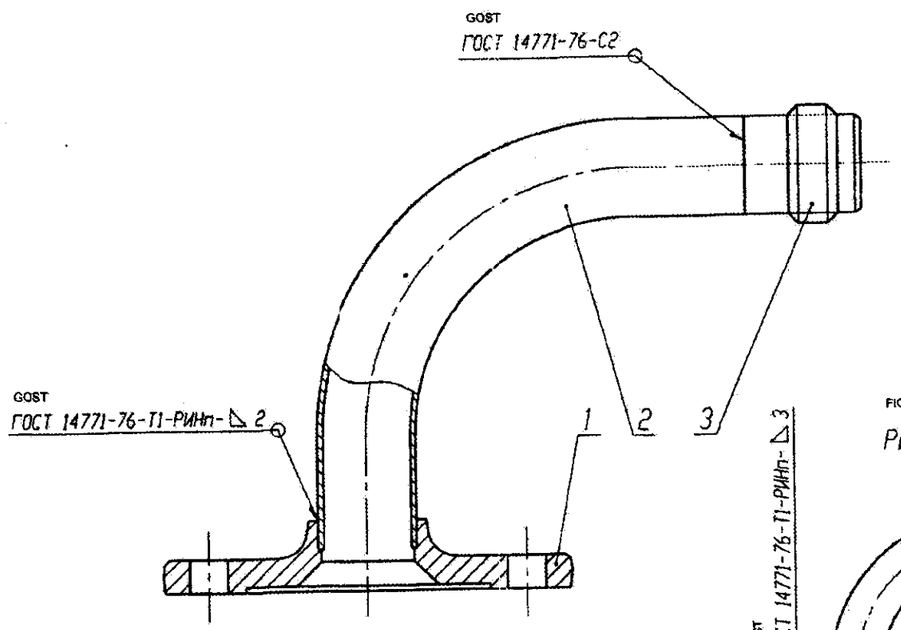


Fig. 2

Рис.2

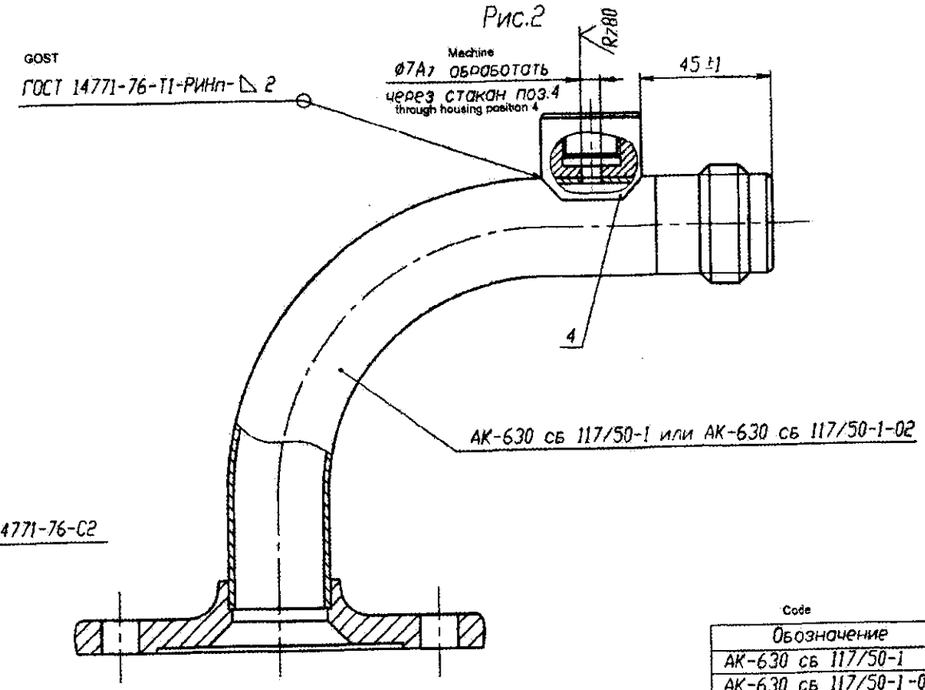
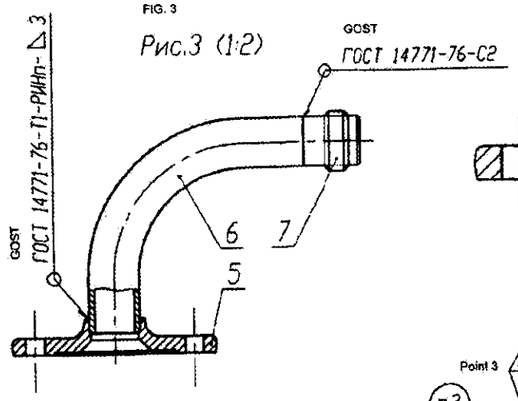
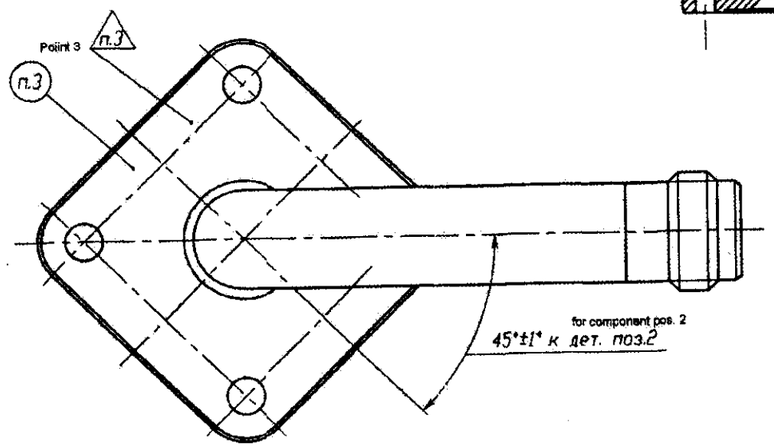


FIG. 3

Рис.3 (1:2)





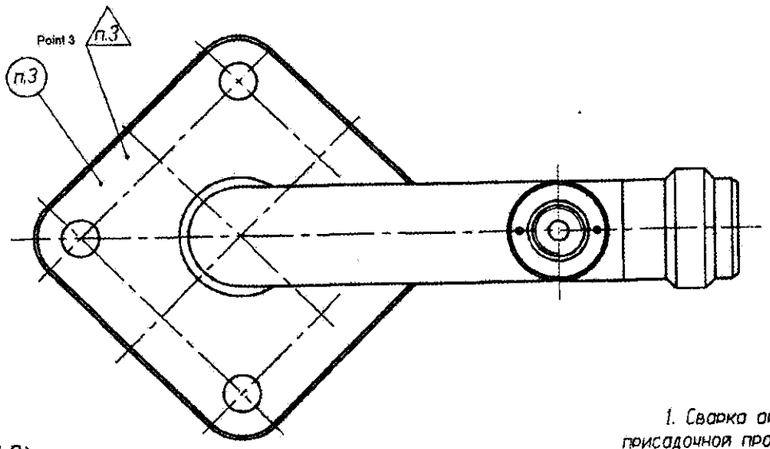
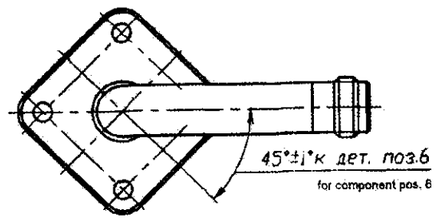


Fig. 3 Top View (1 : 2)

Рис.3 вид сверху (1:2)



Code	Fig	Mass, Kg
Обозначение	Рис.	Масса, кг
АК-630 сб 117/50-1	1	2,200
АК-630 сб 117/50-1-01	2	2,300
АК-630 сб 117/50-1-02	3	2,280

1. Argon - arc welding with the use of filler electrode 2.0 Sv-06Kh19N9T GOST 2246-70.
2. Coating:
Primer AK-070, yellow. (2).
Enamel KhV-124. grey, (4), IV. OM2.
AK-070 GOST 25718-83.
KhV-124 GOST 10144-89 -
external surfaces, except seating (fitting) places.
3. Mark Ч, Ш and stamp K as per AK-630, AK-630M TU 1

1. Сварка аргонно-дуговая с применением присадочной проволоки 2,0 Св-06Х19Н9Т ГОСТ 2246-70.
2. Покрытие:
Грунтовка АК-070, желтая, (2).
Эмаль ХВ-124, серая, (4), IV, ОМ2.
АК-070 ГОСТ 25718-83.
ХВ-124 ГОСТ 10144-89 -
наружные поверхности, кроме посадочных мест.
3. Маркировать Ч, Ш и клеймить К по АК-630, АК-630М ТУ 1.

AK - 630 Sb 117/50-1 SB

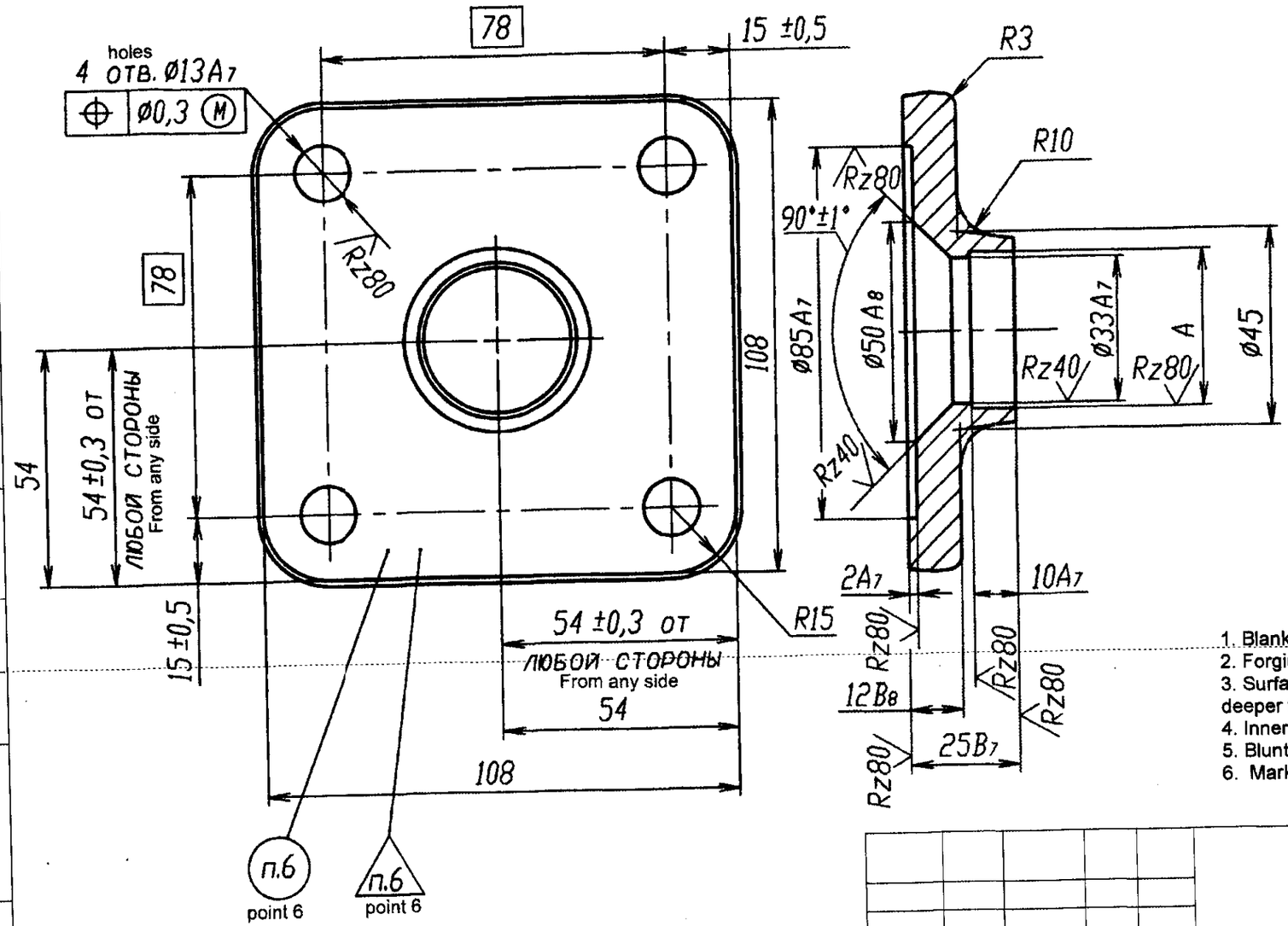
						АК-630 Сб 117/50-1 СБ			
						Branch Pipe	Лит.	Масса	Масштаб
Изм.	Лист	N докум.	Подп.	Дата		Патрубок	А	См. табл.	1:1
Разраб.						Сборочный чертеж	Лист	Листов 1	
Пров.						Assembly Drawing	Sheet	Total Sheets 1	
Т.контр.									
Н.контр.									
Утв.									

Формат А1

Перв. примен.
Справ. №
Подп. и дата
Инв. № подл.
Взам. инв. №
Подп. и дата

Bale 8 Container 3

AK-630 117/50-10



Designation

Обозначение	A
AK-630 117/50-10	Ø35,5A5
AK-630 117/50-10-01	Ø38,5A5

1. Blank- forging, accuracy class T5 as per GOST 7505-89.
2. Forging gradient not more than 7°.
3. Surface defects on un machined surfaces should not be deeper than 0.5 mm.
4. Inner angles R~0.4 mm.
5. Blunt sharp edges ~0.6 mm.
6. Mark Ш, Ч and stamp K as per AK-630, AK-630 M TU I.

Comment:

Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

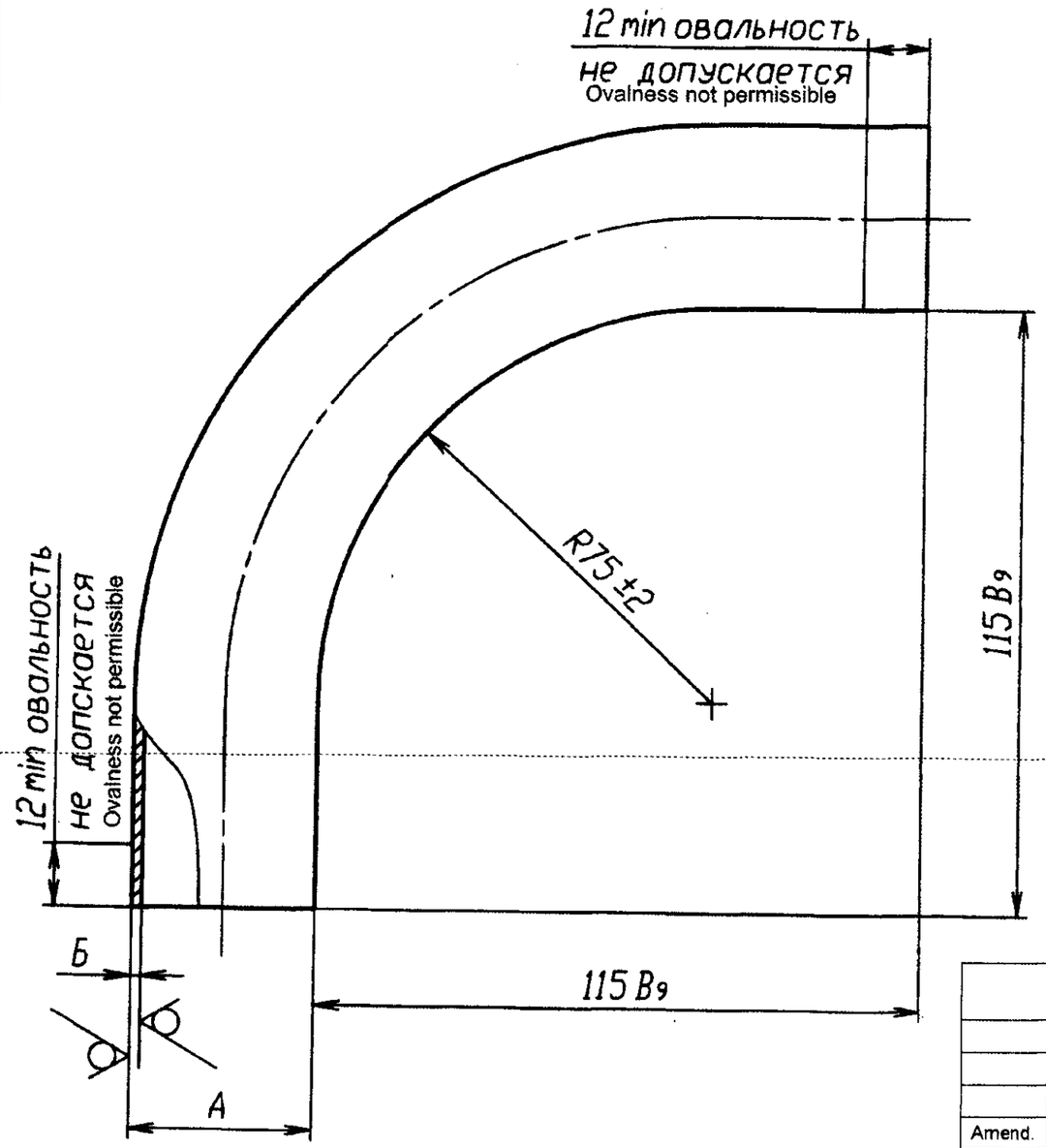
AK-630 117/50-10

Flange

Type	Weight	Scale
A	1.6	1:1
Sheet	Sheets 1	

Steel 12Cr18Ni9Ti
GOST 5632-72

AK-630 117/50-20



Rz80 (√)

Designation	А	Б	Material	Weight, kg
AK-630 117/50-20	Ø35*[1]	2*[1]	Pipe 35x2-12Cr18Ni10Ti GOST 9941-81	0.15
AK-630 117/50-20 -01	Ø38*[1]	3*[1]	Pipe 38x3-12Cr18Ni10Ti GOST 9941-81	0.225

1.* [1] Reference dimensions.
2. Oval ness at place of bent not more than 4 mm. Corrugation as per test specimen.
3. Mark Ш, Ч and stamp K on tag.

Comment:

Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

AK-630 117/50-20

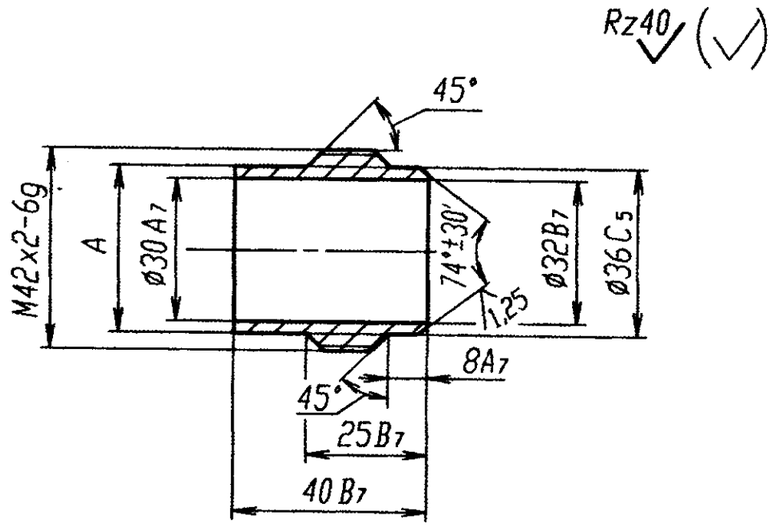
Tube

*)

Type	Weight	Scale
A		1:1
Sheet	Sheets 1	

Blank No. 406

AK-630 117/50-35



Designation	A
AK-630 117/50-35	Ø35C5
AK-630 117/50-35 -01	Ø38C5

1. Substitute material- steel 12Cr18Ni9Ti GOST 5632-72.
2. Blunt sharp edges ~0.6 mm.
3. Mark Ш, Ч and stamp K on tag.

AK-630 117/50-35

Amend.	Sheet	Doc. No.	Sign	Date		Type	Weight	Scale
Developed by					**Connecting pipe**	A	0.035	1:1
Checked by						Sheet		Sheets 1
Head of Q.C.D								
Design bureau chief					Steel 12Cr18Ni10Ti GOST 5632-72			
Head of Q.C.D								
Approved by								

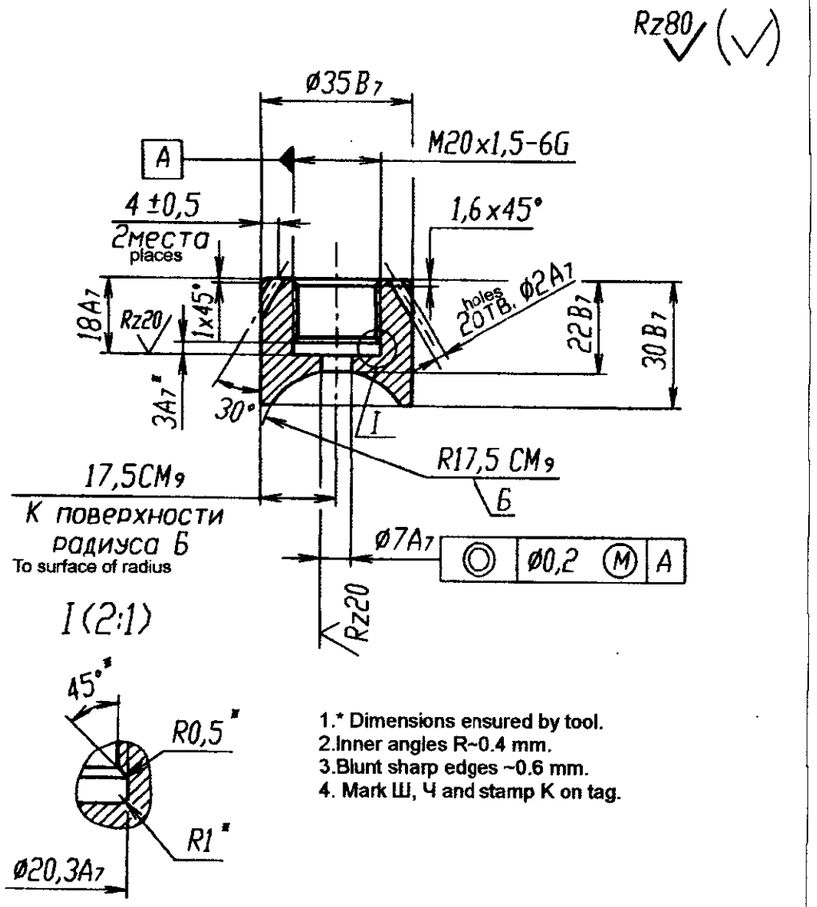
Copied by

Format A4

Approved KTONI | Approved by shop | First use | Reference No. | Sign and Date | Dupl. Inv. No. | Approved TOstb | Alternate Inv. No | Sign and Date | Approved OGMet | Orig. Inv. No.

Blank No. 406

AK-630 117/50-14



1.* Dimensions ensured by tool.
2.Inner angles R~0.4 mm.
3.Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp K on tag.

AK-630 117/50-14

Amend.	Sheet	Doc. No.	Sign	Date		Type	Weight	Scale
Developed by					**Sleeve**	A	0.15	1:1
Checked by						Sheet	Sheets 1	
Head of Q.C.D								
Design bureau chief					Steel 12Cr18Ni9Ti GOST 5632-72			
Head of Q.C.D								
Approved by								

Approved OGMet | Orig. Inv. No. | Sign and Date | Alternate Inv. No | Approved TOsb | Dupl. Inv. No. | Sign and Date | Approved KTONI | Reference No. | Approved by shop | First use

Copied by

Format A4

Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
				Documents		
A4			AK-630 Sb 117-4 SB	Assembly drawing		
				Components		
A4		1	AK-630 117-42	Pipe	1	
A4		2	AK-630 117-34	Flange	1	

First use

Reference No.

Sign and Date

Dupl. Inv. No.

Alternate Inv. No

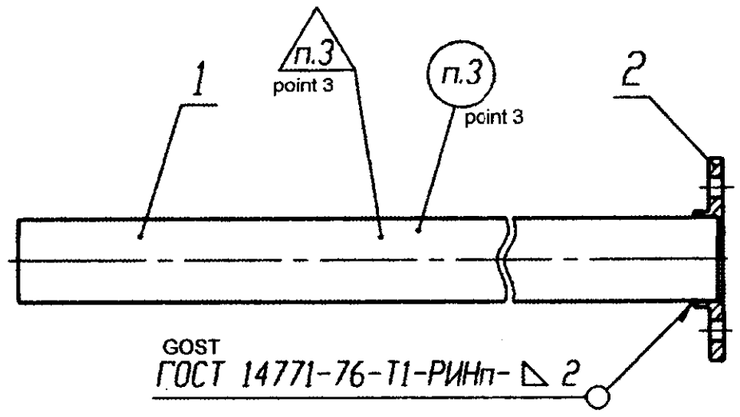
Sign and Date

Orig. Inv. No.

					AK-630 Sb 117-4
Amend.	Sheet	Doc. No.	Sign	Date	
Developed by					Pipeline
Checked by					
Head of Q.C.D					
Approved by					

Type	Sheet	Sheets
A		1

AK-630 Sb117-4 SB



1. Argon-arc welding by using filler wire 2.0 sv-06Cr19Ni9Ti GOST 2246-70.
2. Coating: Primer EP-0010, red-brown (2); Enamel EP-773, green (4)
   IV, OM2 for outer surfaces, except fitting places.
   EP-0010 GOST 28379-89
   EP-773 GOST 23143-83.
3. Mark Ш, Ч and stamp K as per AK-630, AK-630M TU I.

AK-630 Sb117-4 SB

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Pipeline
Assembly drawing

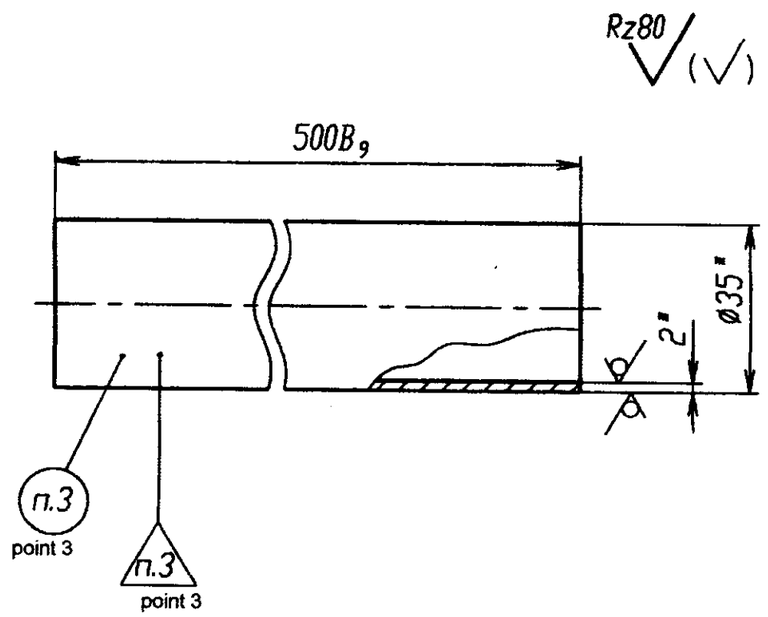
Type	Weight	Scale
A	1.070	1:2

Sheet | Sheets 1

Copied by | Format A4

Approved KTONI | Approved by shop | First use | Reference No. | Sign and Date
Approved TOsb | Dupl. Inv. No. | Alternate Inv. No | Sign and Date
Approved OGMet | Orig. Inv. No.

AK-630 117-42



1.*Reference dimensions.
2.Blunt sharp edges ~0.6 mm.
3. Mark Ш, Ч and stamp К as per АК-630, АК-630М TU I.

Approved TOsb | Approved by shop | Approved KTONI | Approved OGMet

First use | Reference No. | Sign and Date | Dupl. Inv. No. | Alternate Inv. No | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-42

Pipe

Type	Weight	Scale
A	0.790	1:1

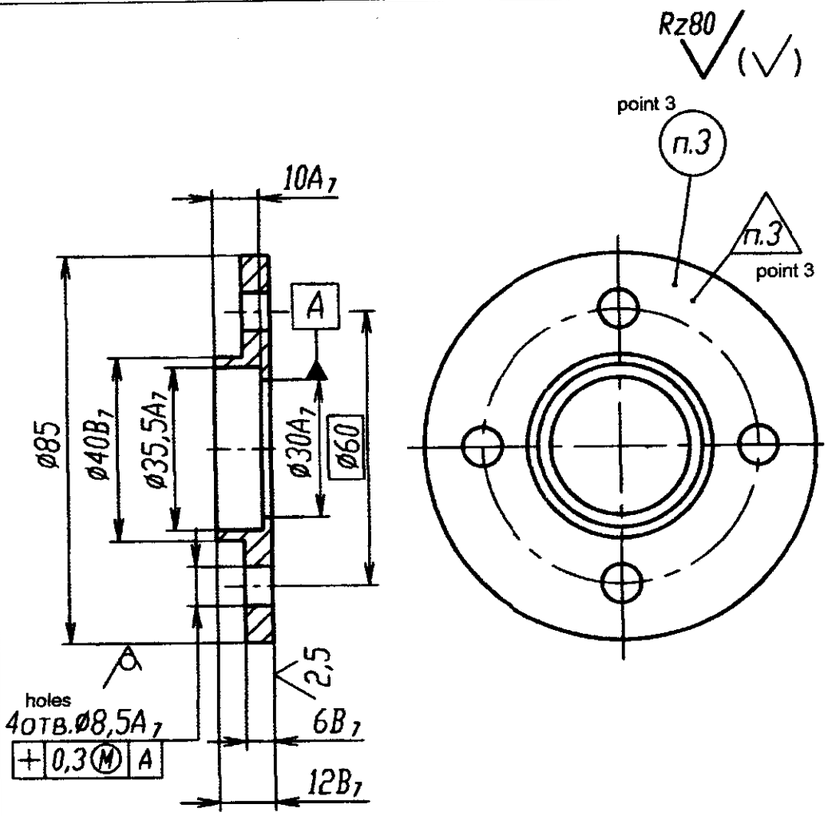
Sheet | Sheets 1

Pipe 35x2-12Cr18Ni10Ti
GOST 9941-81

Format A4

Blank No. 406

AK-630 117-34



1. Inner angles R~0.4 mm.
2. Blunt sharp edges ~0.6 mm.
3. Mark Ш, Ч and stamp K as per AK-630, AK-630M TU I.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117-34

Flange

Type	Weight	Scale
A	0.240	1:1

Sheet | Sheets 1

Wheel $\frac{85 - V\ GOST\ 2590 - 88}{12Cr18Ni9Ti - B - T\ GOST\ 5949 - 75}$

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Copied by

Format A4

Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
				Documents		
A1			AK-630 Sb 117-6 SB	Assembly drawing		
				Assembly units		
A4		1	AK-630 Sb 117-10	Diaphragm	1	
A4		2	AK-630 Sb 117-11	Indicator	1	
				Components		
A2		5	AK-630 117-51	Base	1	
*)		6	AK-630 117-52	Body	1	*)A4x3
A2		7	AK-630 117-53	Adaptor	1	
A3		8	AK-630 117-54	Spring	2	
A4		9	AK-630 117-55	Pin	1	
A4		11	AK-630 117-57	Screw	2	
A4		12	AK-630 117-58	Screw	4	
A4		14	AK-630 117-60	Gasket	1	
				Standard articles		
		18		Bolt 3M6-8gx30.109.40Kh.029	4	*)
				GOST 7805-70		
		22		Nut M4-6G.10.40Kh.026	2	*)
				GOST 5918-73		

First use | Reference No. | Sign and Date | Dupl. Inv. No. | Alternate Inv. No | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date

AK-630 Sb 117-6

Developed by		
Checked by		
Head of Q.C.D		
Approved by		

Liquid flow sensor

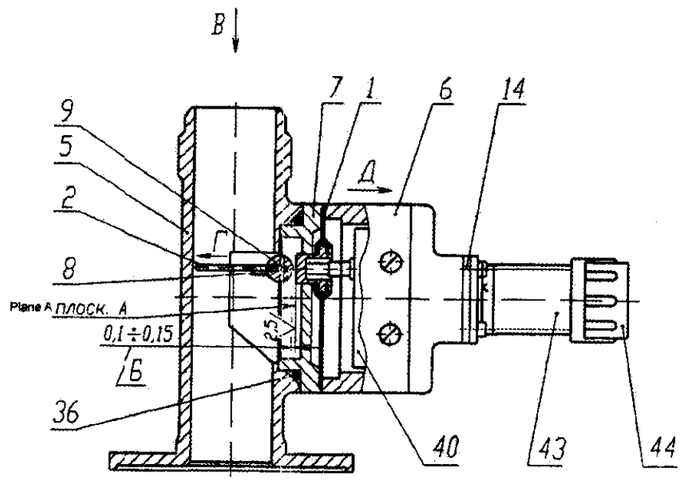
Type	Sheet	Sheets
A	1	2

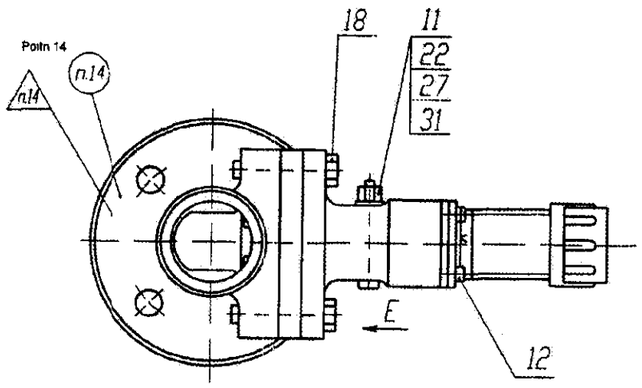
Format	Zone	Position	Designation	Nomenclature	Qty.	Remarks
		27		Washer A4.25.029	2	
				GOST 11371-78		
		31		Cotter pin 1.2x12.029	2	
				GOST 397-79		
		36		Ring 050-056-36-2-2	1	
				GOST 9833-73/18829-73		
				Other articles		
		40		Micro switch A801-A	1	
				763-65 TU		
		43		Plug 2RTT20B2Sh4	1	
				GYeO.364.120 TU		
		44		Cover M24x1.5-K	1	
				OS92-34-66		
			*) Heat treatment of bolts pos.18 and nuts pos.22- 65.5-70 HRA			

Sign and Date | Dupl. Inv. No. | Alternate Inv. No | Sign and date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date	AK-630 Sb 117-6	Sheet 2

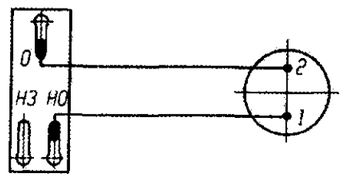
Format A4

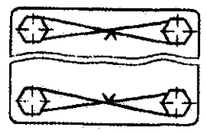




Electric mounting (wiring) diagram

Схема электромонтажная





1. Before assembly, wash the components of sensor in white-spirit GOST 3134-78, rub carefully and blow the internal cavities with air.
2. The cap of diaphragm position 1 should move freely, smoothly, without jamming into the adaptor position 7.
3. Flag position 2 should be turned freely, smoothly, without jamming towards the axis position 9.
4. Chipping (ribs) on rubbing surfaces of components are not permitted.
5. While turning the flag at an angle of 45 60 degrees from the initial position, the microswitch position 40 should operate. Ensure the gap "Б" due to the fitting of plane "A" of the cap of diaphragm. Check at initial position of flag, which is squeezed towards "Г" and in microswitch position, squeezed towards "Д" with out base position
5. Released flags rod of microswitch cap of diaphragm should sharply and firmly return to initial position.
6. Check the assembled sensor by the hydraulic pressure (water) of 1 kgf / cm2 for 15 minutes. Direction of water supply is towards B. Leakage of water in to the cavity of microswitch is not permitted
7. Check the sensor by passing the water at the rate of 3 lit / sec, microswitch should operate, and at the rate of less than 0.5 lit / sec, it should return to initial position.
8. Put the screws position 12 in the primer FL-03K, brown GOST 9109-81 and bind with wire1-T-12Kh18N10T GOST 18143 - 72.
9. Technical requirements for electric mounting (wiring) - as per OST4.GO.010.016.
10. Solder with solder Prv KR2.0 POS-61 GOST 21931-76 with the use of
rectified technical ethyl spirit GOST 18300-87 flux LTI-120 OST4.GO.033.200.
11. Check for electrical strength with 500 V (amp l.) ac having frequency of 50 Hz for 1 minute between contacts and each contact and the body.
12. Insulation resistance between contacts and between each contact and body should be not less than 20 M ohm under normal climatic conditions. Value of dc voltage during measurement - 500 V.
13. Coating: Primer AK-070, yellow (2)
Enamel KhV-124, gray (4), IV, OM2.
External surfaces except threads and seating (fitment) place,
AK-070 GOST 25718-83
KhV-124 GOST 10144-89
14. Mark ч, ш, H_A and stamp K as per AK-630, AK-630M TU I.

1. Перед сборкой детали датчика промыть уайт-спиритом ГОСТ 3134-78, тщательно протереть, внутренние полости продуть воздухом.
2. Колпачок диафрагмы поз. 1 должен легко, плавно, без заеданий перемещаться в переходнике поз. 7.
3. Флажок поз. 2 должен легко, плавно, без заедания вращаться на оси поз. 9.
4. Задиры на трущихся поверхностях деталей не допускаются.
5. При повороте флажка на угол 45°...60° от исходного положения должен срабатывать микровыключатель поз. 40. Зазор "Б" обеспечить за счет пригонки плоскости "А" колпачка диафрагмы. Проверять в исходном положении флажка, отжатого по стрелке "Г" и при микровыключателе, отжатом по стрелке "Д" без основания поз. 5. Отпущенные флажок, шток микровыключателя, колпачок диафрагмы должны четко, надежно возвращаться в исходное положение.
6. Собранный датчик проверить гидравлическим давлением (водой) 1кгс/см² в течение 15 минут. Направление подачи воды по стрелке В. Просачивание воды в полость микровыключателя не допускается.
7. Датчик испытать на срабатывание пропусканием воды при расходе 3 л/сек микровыключатель должен срабатывать, а при расходе менее 0,5 л/сек возвращаться в исходное положение.
8. Винты поз. 12 ставить на грунтовке ФЛ-03К, коричневой ГОСТ 9109-81 и обвязать проволокой 1-Т-12Х18Н10Т ГОСТ 18143-72.
9. Технические требования к электромонтажу по ОСТ4.ГО.010.016.
10. Паять припоем Прв КР2,0 ПОС-61 ГОСТ 21931-76 с применением:
спирт этиловый технический ректификованный ГОСТ 18300-87
флюс ЛТИ-120 ОСТ4 ГО.033.200
11. Проверять на электрическую прочность напряжением 500В (ампл.) переменного тока частотой 50 гц в течение 1 минуты между контактами и каждым контактом и корпусом.
12. Сопротивление изоляции между контактами и каждым контактом и корпусом должно быть не менее 20 мОм при нормальных климатических условиях. Величина напряжения постоянного тока при измерении - 500 В.
13. Покрытие: Грунтовка АК-070, желтая (2)
Эмаль ХВ-124, серая (4), IV, ОМ2,
наружные поверхности кроме резьб и посадочного места.
АК-070 ГОСТ 25718-83
ХВ-124 ГОСТ 10144-89
14. Маркировать Ч, Ш, H_A и клеймить К по АК-630, АК-630М ТУ 1.
H_A - технологический агрегатный номер сборки.

Bale 8 Container 3

АК-630 Sb 117-6SB

Изм./Лист	N докум.	Подп.	Дата	АК-630 Сб117-6СБ		
Разраб.				Fluid Flow Sensor Датчик потока жидкости Сборочный чертеж Assembly Drawing	Лит.	Масса	Масштаб
Пров.					А	1,440	1:1
Т.контр.					Лист	Листов 1	
Н.контр.					Sheet	Total Sheets 1	
Утв.							

Формат А1

Перв. примен.
Справ.N
Подп. и дата
Инв.N дубл.
Взам.инв.N
Подп. и дата
Инв.N подл.

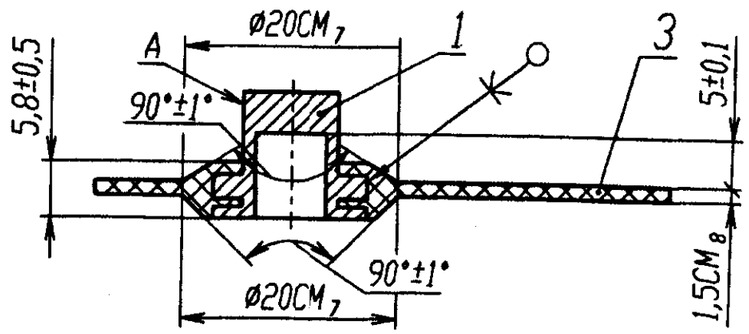
First use | Reference No.

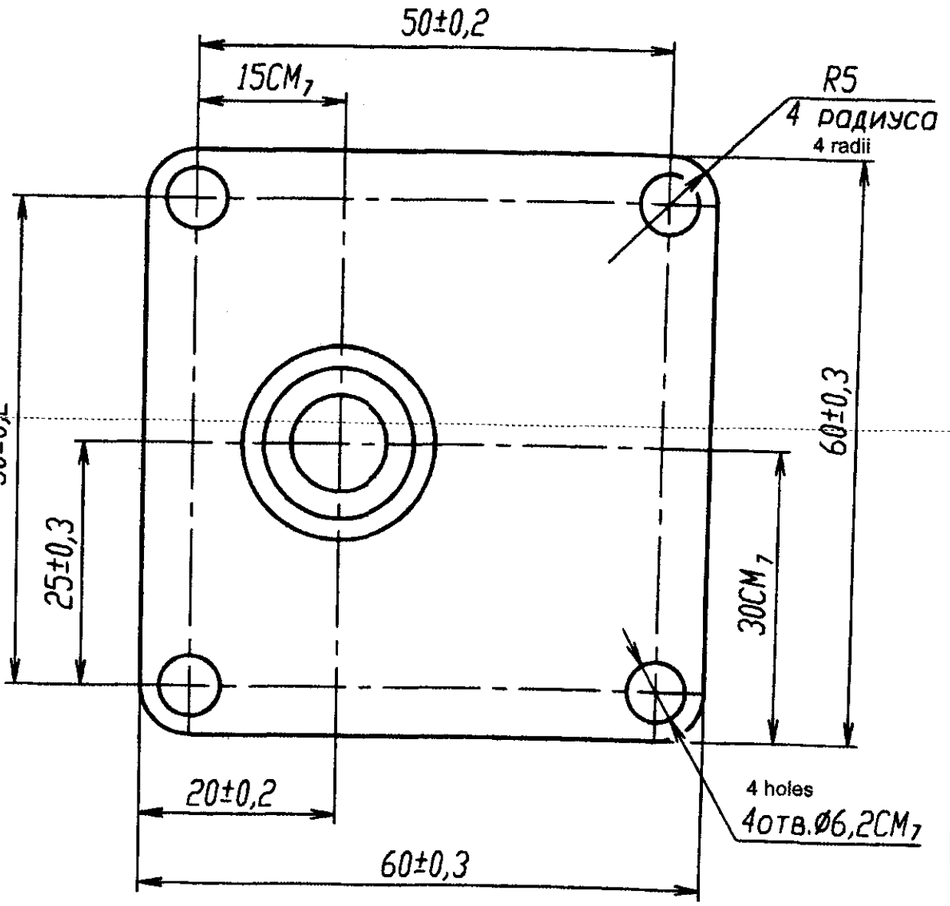
Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
				Documents		
A3			AK-630 Sb 117-10 SB	Assembly drawing		
				Components		
A4		1	AK-630 117-64	Cap	1	
				Materials		
		3		Rubber stock NO-68-1	0.02	kg.
				NTA TU 38 0051166-98		

Sign and Date | Dupl. Inv. No. | Alternate Inv. No | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date	AK-630 Sb 117-10		
Developed by						Type	Sheet	Sheets
Checked by					Diaphragm	A		1
Head of Q.C.D								
Approved by								

AK-630 Sb 117-10 Sb





1. It is permissible to make from rubber stock NO-68-1 NTA TU 38.005.1166-98.
2. Carry out sand blast cleaning of cap pos.1 except external surface A , before vulcanization.
3. Rubber surface should be smooth, without burrs, cavities, cracks, bubbles and foreign inclusions.
4. Fin should be removed. Polishing of metal is permissible during removal of fin.
5. Adhesive "Leikonat" TU 6-14-95-85. Also permissible adhesive "Leikonat" TU 2473-002-367 333 10-98.
6. Dimensions ensured by tool.
7. Surface finish of formation surfaces of press mould $^{0.32}\sqrt{}$.
8. Peeling of rubber off metal is not permissible.
9. Inner angles R~0.5 mm.
10. Mark Ш, Ч and stamp К on tag.

Comment:

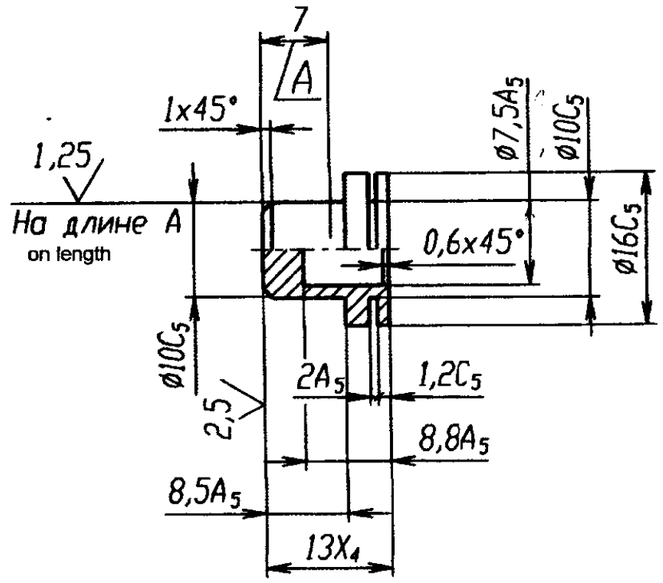
					AK-630 Sb 117-10 Sb
Amend.	Sheet	Doc.No.	Sign	Date	
Developed by					Diaphragm Assembly drawing
Checked by					
Head of Q.C.D					
Approved by					

Type	Weight	Scale
A	0.026	2:1
Sheet	Sheets 1	

Blank No. 406

AK-630 117-64

Rz40 (√)



1. Inner angles R~0.4 mm.
2. Blunt sharp edges ~0.4 mm.
3. Mark Ш, Ч and stamp К on tag.

AK-630 117-64

Amend.	Sheet	Doc. No.	Sign	Date		Type	Weight	Scale
Developed by					Cap	A	0.006	2:1
Checked by						Sheet		Sheets 1
Head of Q.C.D								
Design bureau chief					Steel 12Cr18Ni9Ti GOST 5632-72			
Head of Q.C.D								
Approved by								

Copied by

Format A4

Approved by shop | Reference No. | First use
Approved KTONI | Sign and Date | Dupl. Inv. No.
Approved TOsb | Alternate Inv. No
Approved OGMet | Sign and Date | Orig. Inv. No.

First use	Reference No.	Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
						Documents		
		A3			AK-630 Sb117-11 SB	Assembly drawing	1	
						Components		
		A4		1	AK-630 117-67	Pin	1	
		A4		2	AK-630 117-68	Support	1	

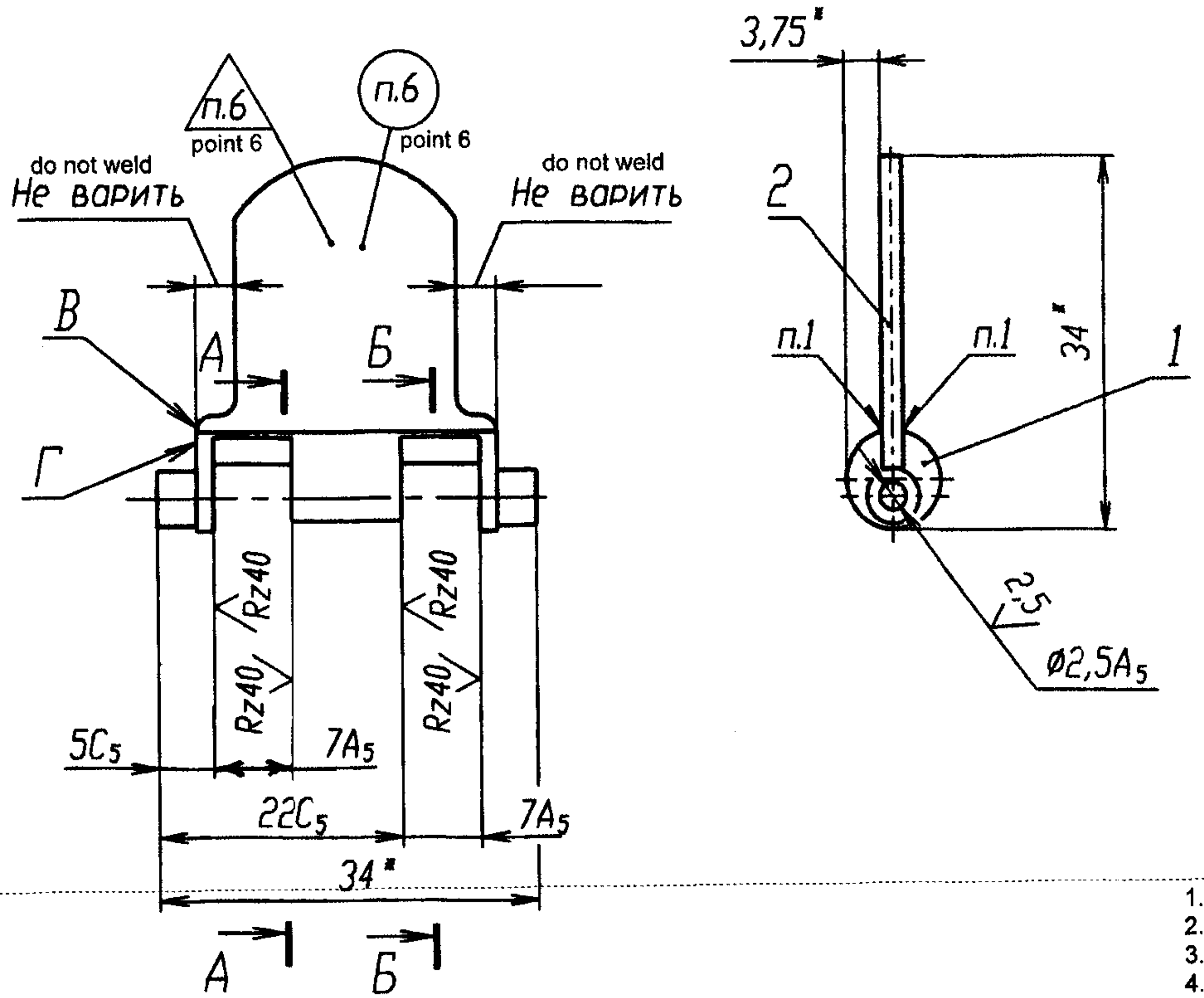
Sign and Date	Dupl. Inv. No.	Alternate Inv. No	Sign and Date	Orig. Inv. No.

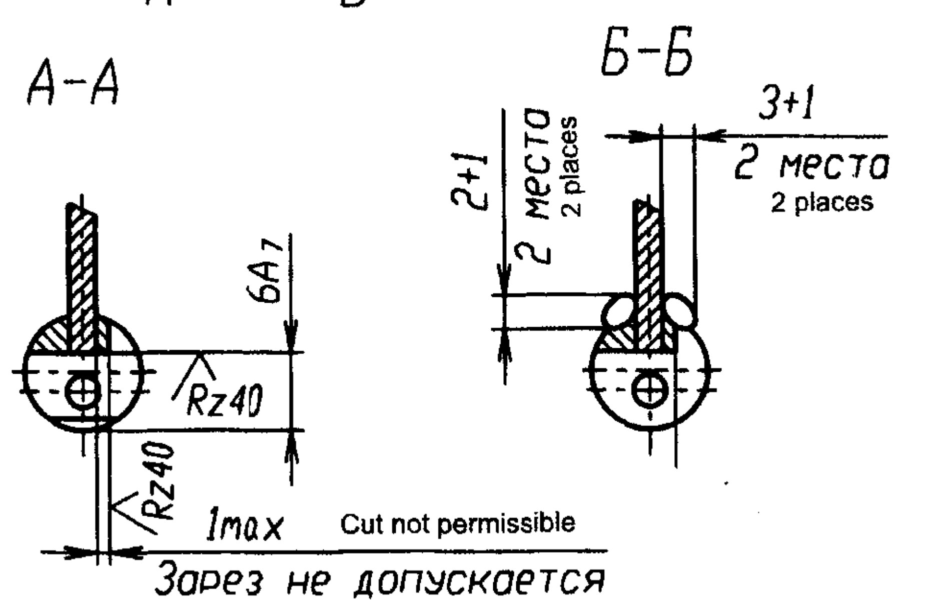
Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

AK-630 Sb 117-11

Indicator

Type	Sheet	Sheets
A		1



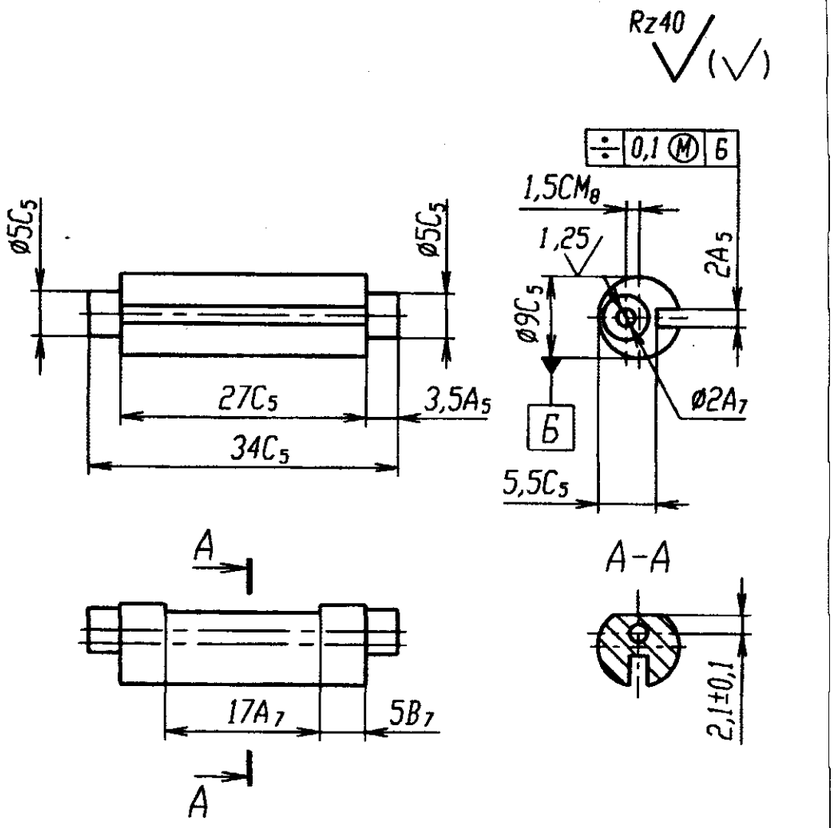


1. Argon arc welding by using filler wire 2.0 sv-06Kh19N9T GOST 2246-70.
2. Misalignment of surfaces B and Г not more than 0.2 mm.
3.* Reference dimensions.
4. Inner angles R~0.4 mm.
5. Blunt sharp edges ~0.6 mm.
6. Mark Ч, Ш and stamp K as per AK-630, AK-630M TU I.

					AK-630 Sb 117-11 SB		
Amend.	Sheet	Doc.No.	Sign	Date			
Developed by					Indicator Assembly drawing	Type: A	Weight: 0.025 · Scale: 2:1
Checked by						Sheet	Sheets 1
Head of Q.C.D							
Approved by							

Blank No. 406

AK-630 117-67



1.Inner angles R~0.4 mm.
2.Blunt sharp edges ~0.6 mm.
3.Mark Ш, Ч and stamp К on tag.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-67

Pin

Type	Weight	Scale
A	0.010	2:1

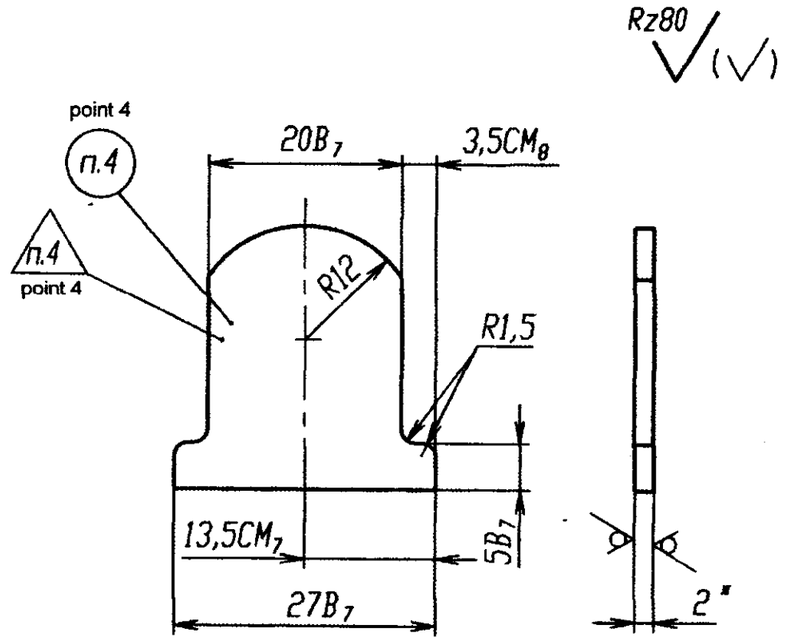
Sheet | Sheets 1

Steel 12Cr18Ni9Ti
GOST 5632-72

Format A4

Approved by shop | Reference No. | First use
Approved KTONI | Sign and Date
Approved TOsb | Dupl. Inv. No. | Alternate Inv. No
Approved OGMet | Orig. Inv. No. | Sign and Date

АК-630 117-68



1.Dimensions ensured by tool.
2.* Reference dimension.
3. Blunt sharp edges ~0.6 mm.
4. Mark Ш, Ч and stamp К as per АК-630, АК-630М ТУ I.

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Inv. No
Alternate Inv. No
Sign and Date
Approved OGMet
Inv. No.
Orig. Inv. No.

АК-630 117-68

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Flap

Type	Weight	Scale
A	0.005	2:1

Sheet | Sheets 1

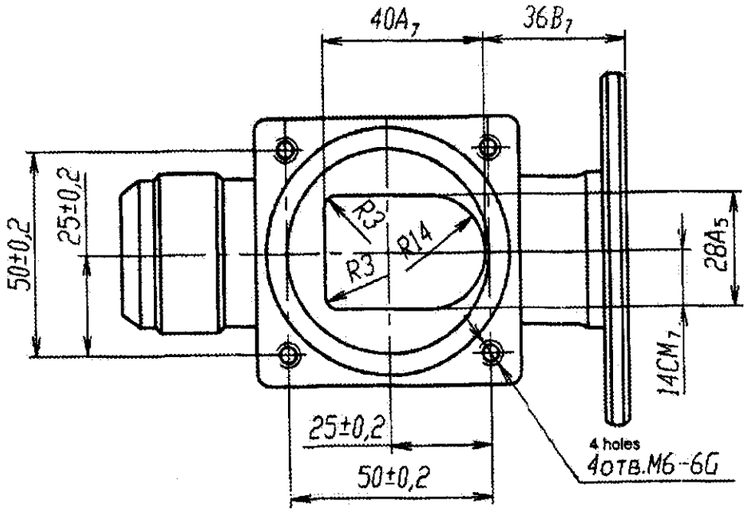
Sheet $\frac{BT-0-PN-2GOST\,19904-90}{12Cr18Ni10Ti-M3aGOST\,5582-75}$

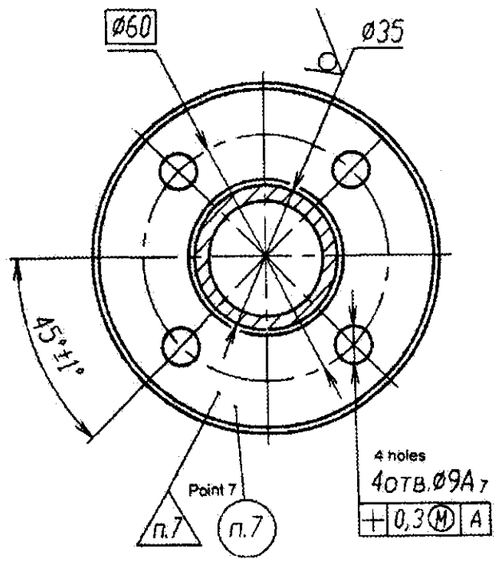
Copied by

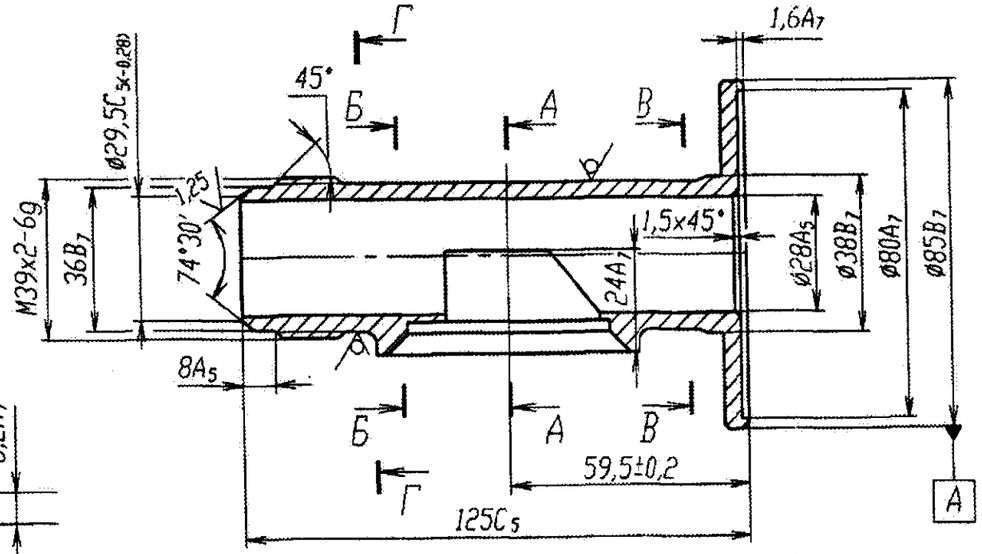
Format A4

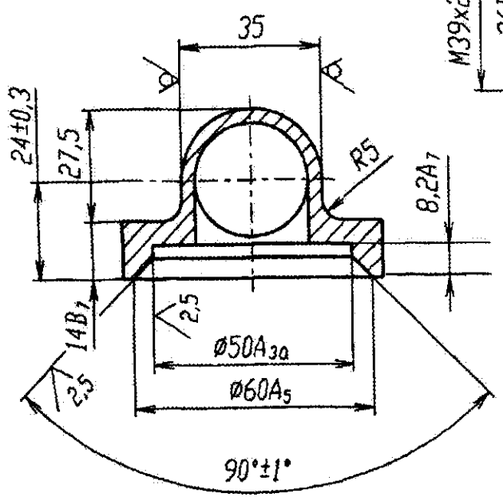
АК-630 117-51

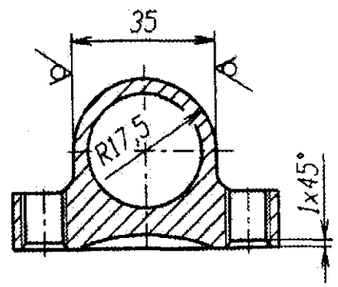
Rz40

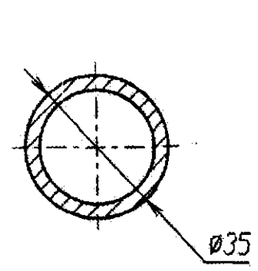


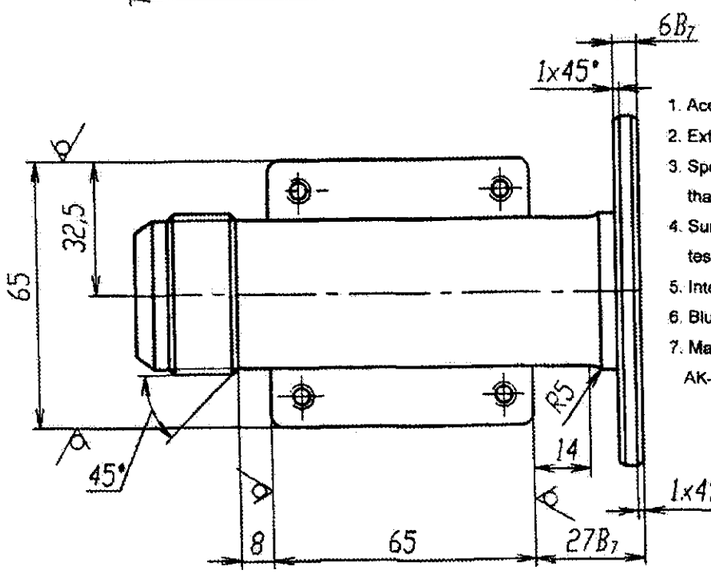












1. Accuracy of cast 8-0-0-7 GOST 26645-85.
2. External drafts as per GOST 3212-92
3. Specified cast radiuses are not more than 3 mm.
4. Surface finish of cast surface is as per test specimen.
5. Internal angles R ~ 0.4 mm.
6. Blunt the sharp edges ~ 0.6 mm.
7. Mark Ш, Ч, П and stamp K as per AK-630, AK - 630M TU I.

1. Точность отливки 8-0-0-7 ГОСТ 26645-85.
2. Формовочные уклоны по ГОСТ 3212-92 в сторону увеличения размеров.
3. Неуказанные литейные радиусы не более 3 мм.
4. Шероховатость литейной поверхности по контрольному образцу.
5. Внутренние углы R~ 0,4 мм.
6. Острые ребра притупить ~ 0,6 мм.
7. Маркировать Ш, Ч, П и клеймить К по АК-630, АК-630М ТУ I.

Изм.	Лист	N докум.	Подп.	Дата
Разраб.				
Пров.				
Т.контр.				
Нач.бюро				
Н.контр.				
Утв.				

АК-630 117-51

Base

Основание

II OST3-4365-79

Cast Отливка II ОСТ3-4365-79 12Х18Н9ТЛ ГОСТ 977-88

12Kh18N9TL GOST 977-88

Lit. Лит.	Wt. Масса	Scale Масштаб
A	0,360	1:1

Лист sheet | Листов 1 sheets 1

Формат А2

Bale 8 container 2

Перв. примен.

Справ. N

Подп. и дата

Инв. N дубл.

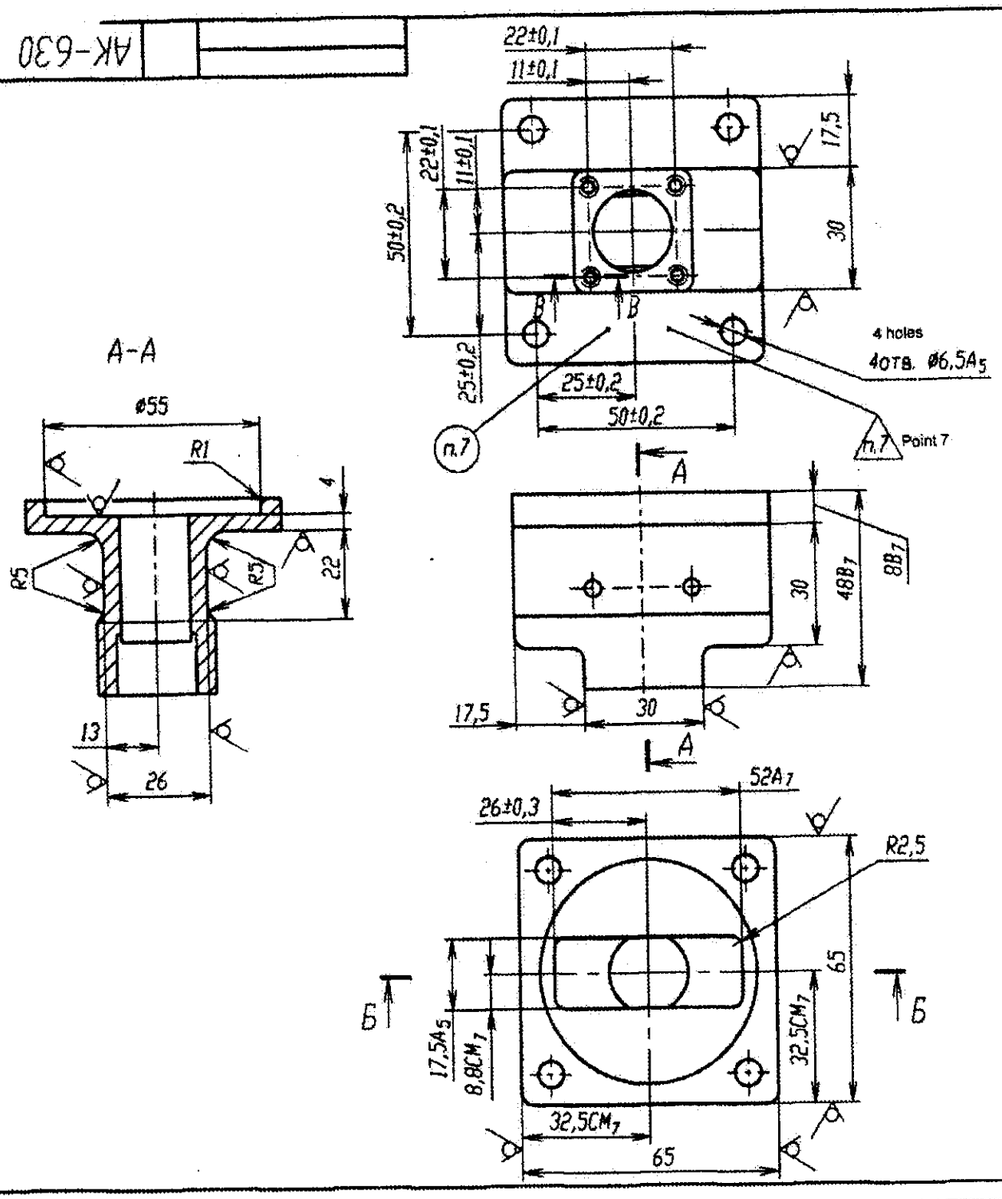
Взам. инв. N

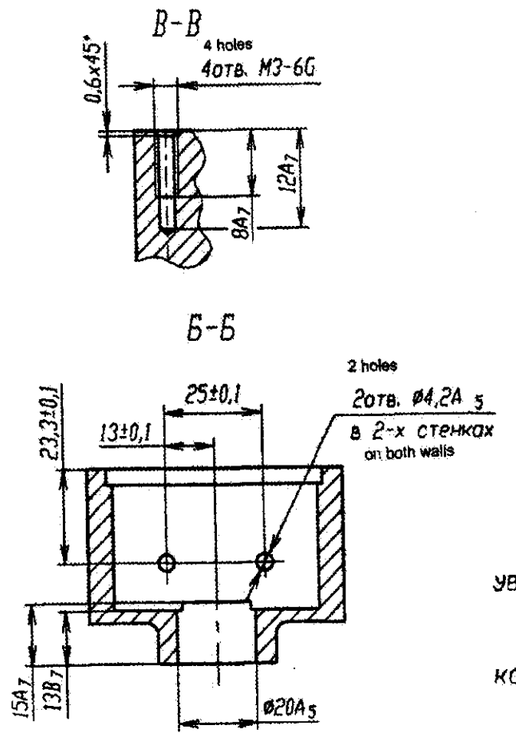
Подп. и дата

Инв. N подл.

АК-630 117-52

Rz40 (√)





1. Accuracy of cast 8-0-0-7 GOST 26645-85.
2. External drafts as per GOST 3212-92 .
3. Specified cast radiuses are not more than 3 mm.
4. Surface finish of cast surface is as per test specimen.
5. Internal angles R ~ 0.4 mm.
6. Blunt the sharp edges ~ 0.6 mm.
7. Mark Ш, Ч, П and stamp K as per AK-630. AK - 630M TU I.

1. Точность отливки 8-0-0-7 ГОСТ 26645-85.
2. Формовочные уклоны по ГОСТ 3212-92 в сторону увеличения размеров.
3. Неуказанные литейные радиусы не более 3 мм.
4. Шероховатость литейной поверхности по контрольному образцу.
5. Внутренние углы R~ 0,4 мм.
6. Острые ребра притупить ~ 0,6 мм.
7. Маркировать Ш, Ч, П и клеймить К по АК-630, АК-630М ТУ I.

Изм.	Лист	N докум.	Подп.	Дата	АК-630 117-52		
Разраб.					Body Корпус	Лит.	Масса	Масштаб
Пров.						A	0,390	1:1
Т.контр.					Cast II OST3-4365-79	Лист	Листов 1
Нач.бюро					Отливка II ОСТ3-4365-79 12Х18Н9ТЛ ГОСТ 977-88	Sheet	Sheets 1
Н.контр.							
Утв.							

Lit Wt. Scale

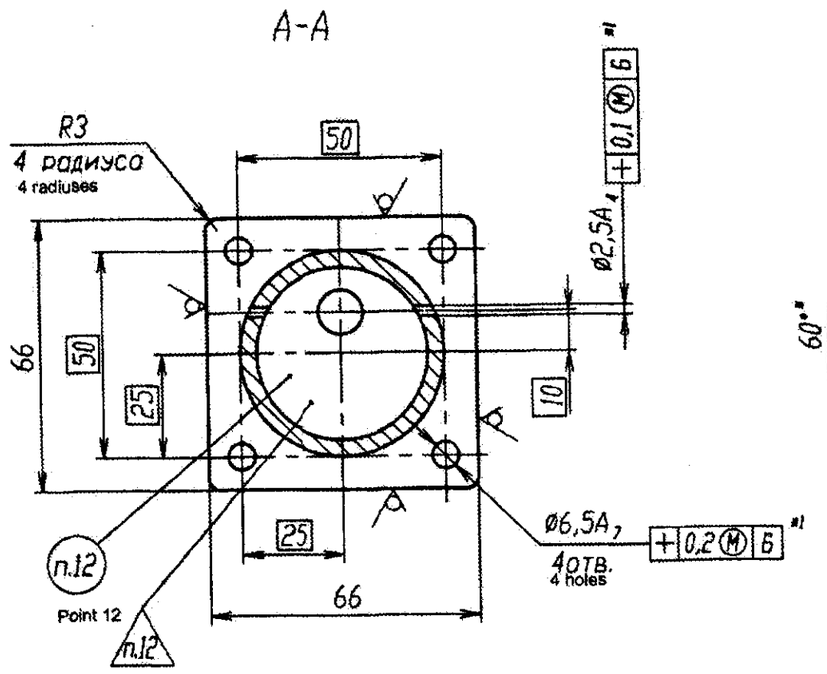
12 Kh18N9TL GOST 977-88 Формат А4х3

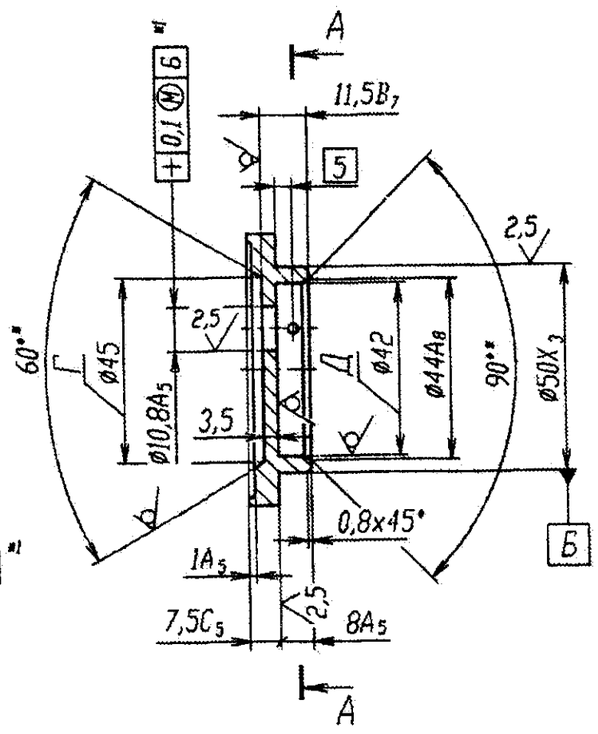
Bale 8 container 2

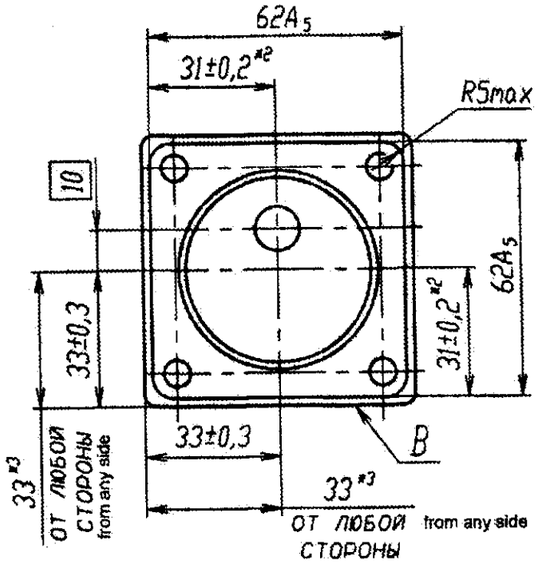
Перв. примен.
Справ.N
Подп. и дата
Взам.инв.N
Инв.N дубл.
Подп. и дата
Инв.N подл.

АК-630 117-53

Rz40 (√)







1. Accuracy of cast 8-0-0-7 GOST 26645-85.
2. External drafts as per GOST 3212-92.
3. Surface finish of cast surface is as per test specimen.
4. Displacement of the plane of joint (connector) for not more than 0.3 mm is permitted.
5. Traces of push rod ± 0.5 mm are permitted.
6. * - Dimension is ensured by the tool.
7. *1 - Deviation is specified in respect of surface Б and plane В.
8. *2 - Dimension is specified in respect of surface Б and plane В.
9. *3 - Dimension is specified for surfaces Г and Д.
10. Internal angles R ~ 0.4 mm.
11. Blunt the sharp edges ~ 0.6 mm.
12. Mark Ш, Ч, П and stamp К as per АК-630, АК - 630М ТУ 1.

1. Точность отливки 8-0-0-7 ГОСТ 26645-85.
2. Формовочные уклоны по ГОСТ 3212-92 в сторону увеличения размеров.
3. Шероховатость литейной поверхности по контрольному образцу.
4. Допускается смещение плоскости разъема не более 0,3 мм.
5. Допускаются следы от толкателя ±0,5 мм.
6. * Размер обеспечивается инструментом.
7. #1 Отклонение задано относительно поверхности Б и плоскости В.
8. #2 Размер задан относительно поверхности Б и плоскости В.
9. #3 Размер задан к поверхностям Г и Д.
10. Внутренние углы R~ 0,4 мм.
11. Острые ребро притупить ~ 0,6 мм.
12. Маркировать Ш, Ч, П и клеймить К по АК-630, АК-630М ТУ 1.

Bale 8 container 2

Изм.	Лист	N докум.	Подп.	Дата
Разраб.				
Пров.				
Т.контр.				
Нач.бюро				
Н.контр.				
Утв.				

АК-630 117-53
Lit Wt. Scale

Adapter
Переходник
II OST3-4365-79

Лит.	Масса	Масштаб
А	0,190	1:1

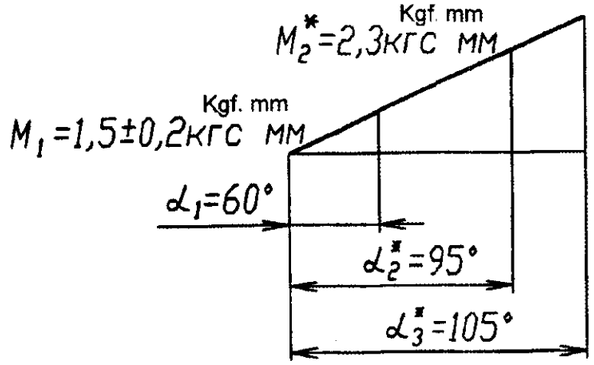
Лист sheet | Листов 1 sheets 1

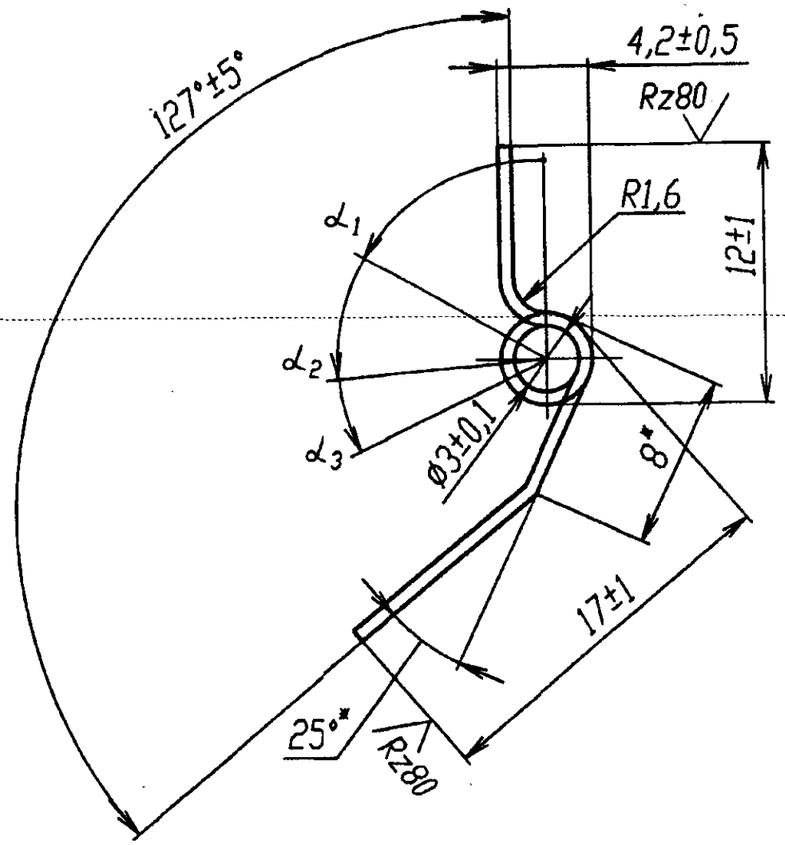
Cast Отливка II ОСТ3-4365-79 12Х18Н9ТЛ ГОСТ 977-88
12 Kh18N9TL GOST 977-88

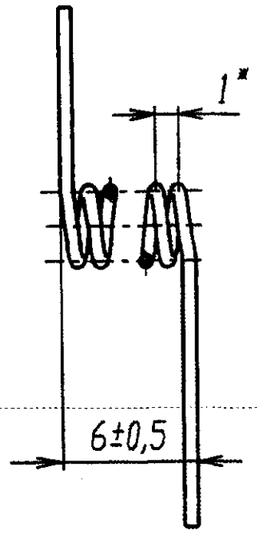
Формат А2

Перв. примен.
Справ.N
Подп. и дата
Инв.N подл.
Взам.инв.N
Инв.N дубл.
Подп. и дата

AK-630 117-54







1. Group II
2. E* = 17600 kgf/mm^2; G_2* = 144 kgf/mm^2.
3. Unrolled length L* = 95 mm.
4. Coiling direction- right.
5. n = 5.4.
6. Heat treatment- tempering 450-470^{0}C.
7. Pre deformation time (at α_Z) –12 hours.
8. D_S = 2.5 C_5.
9. Coating.
10.* Dimensions as parameters for reference.
11. Mark Ш, Ч and stamp К, И on tag.
12. Other technical requirements as per OST3-2561-91.

Comment:

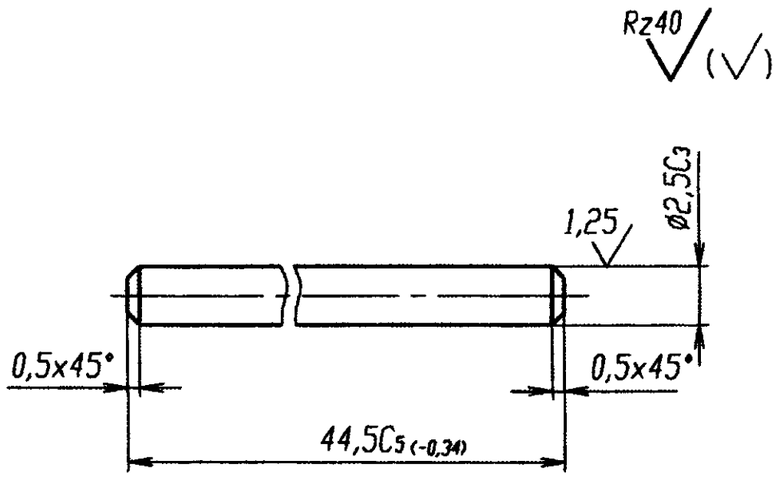
Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

AK-630 117-54

Spring	Type	Weight	Scale
	A	0.002	4:1
	Sheet	Sheets 1	
Wire V-0.61 TU3-1002-77			

Blank No. 406

AK-630 117-55



1. Blunt sharp edges ~0.2 mm.
2. Mark Ш, Ч and stamp К on tag.

Approved by shop | First use | Reference No.
Approved KTONI | Sign and Date
Approved TOsb | Dupl. Inv. No. | Alternate Inv. No.
Approved OGMet | Sign and Date | Orig. Inv. No.

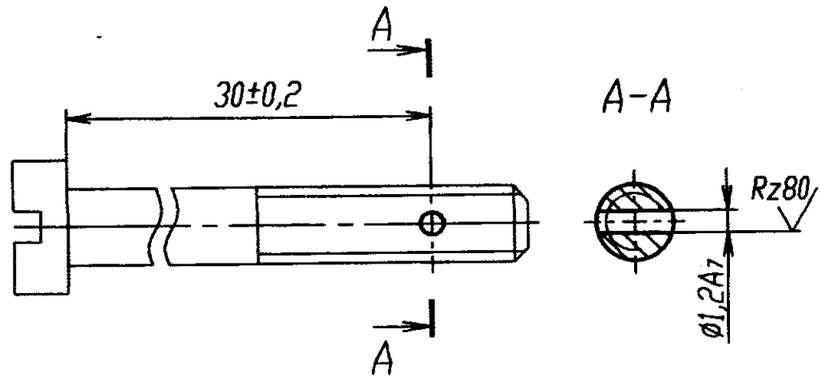
AK-630 117-55

Amend.	Sheet	Doc. No.	Sign	Date		Type	Weight	Scale
Developed by					**Pin**	A	0.003	5:1
Checked by						Sheet		Sheets 1
Head of Q.C.D								
Design bureau chief					Steel 12Cr18Ni10Ti GOST 5632-72			
Head of Q.C.D								
Approved by								

Copied by | Format A4

Blank No. 406

AK-630 117-57



1. 65.5..70 HRA , Check on specimen.
2. Blunt sharp edges ~0.2 mm.
3. Coating Cd6.phos.Oil.
4. Mark Ш, Ч and stamp К, И on tag.

Approved KTONi | Approved by shop | First use | Reference No. | Sign and Date | Dupl. Inv. No. | Approved TOsb | Alternate Inv. No | Sign and Date | Approved OGMet | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-57

Screw

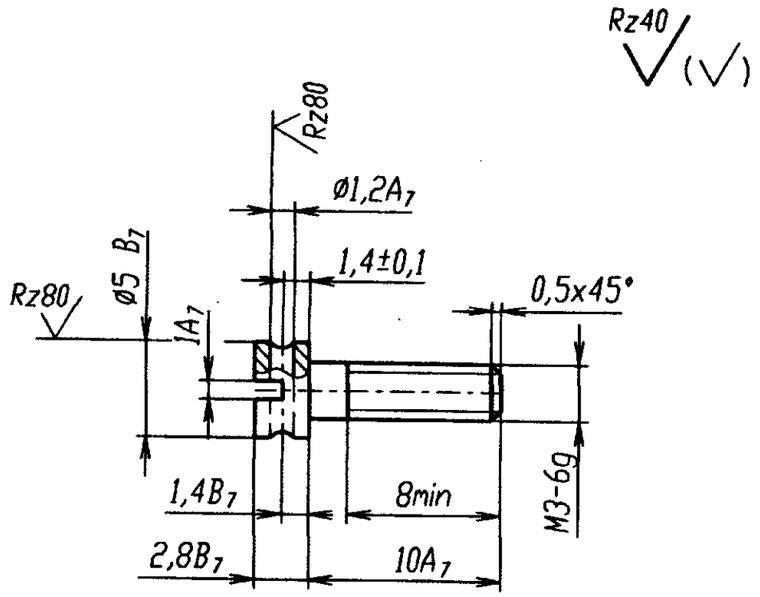
Type	Weight	Scale
A	0.005	4:1

Sheet | Sheets 1

Blank-screw
M4-6gx35.10.9.40Kh.026
GOST 1491-80

Format A4

AK-630 117-58



1.34..39.5 HRC_E , Check on specimen.
2.Inner angles R~0.2 mm.
3. Blunt sharp edges ~0.2 mm.
4. Coating Cd6.phos.Oil.
5. Mark Ш, Ч and stamp К, И on tag.

Approved by shop | Reference No. | First use
Approved KTONI | Sign and Date
Approved TOsb | Dupl. Inv. No. | Alternate Inv. No
Approved OGMet | Orig. Inv. No. | Sign and Date

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-58

Screw

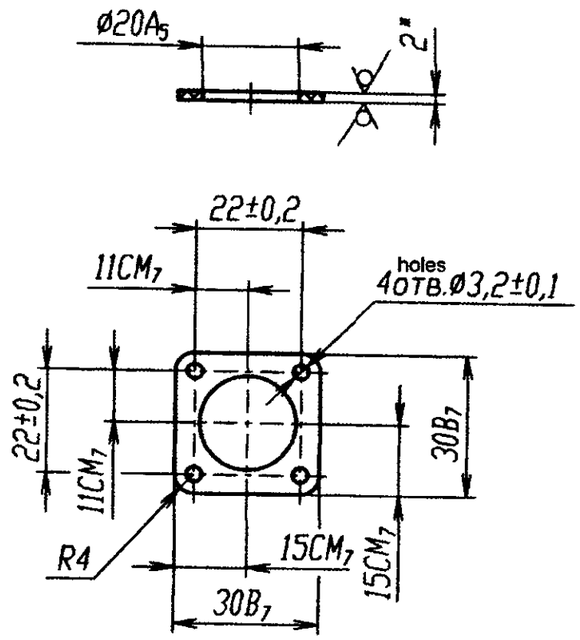
Type	Weight	Scale
A	0.002	4:1

Sheet | Sheets 1

Wheel $\frac{6-5GOST\ 7417-75}{40Kh-T-V\ GOST\ 1051-73}$

Format A4

AK-630 117-60



1.* Reference dimension.
2. Dimensions ensured by tool.
3. Mark Ш, Ч and stamp К on tag.

Approved KTONI | First use | Approved by shop | Reference No. | Sign and Date | Dupl. Inv. No. | Approved TOsb | Alternate Inv. No | Sign and Date | Approved OGMet | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-60

Gasket

Type	Weight	Scale
A	0.002	1:1

Sheet | Sheets 1

Plate 1N-I MBS-M_1-2
GOST 7338-90

Format A4

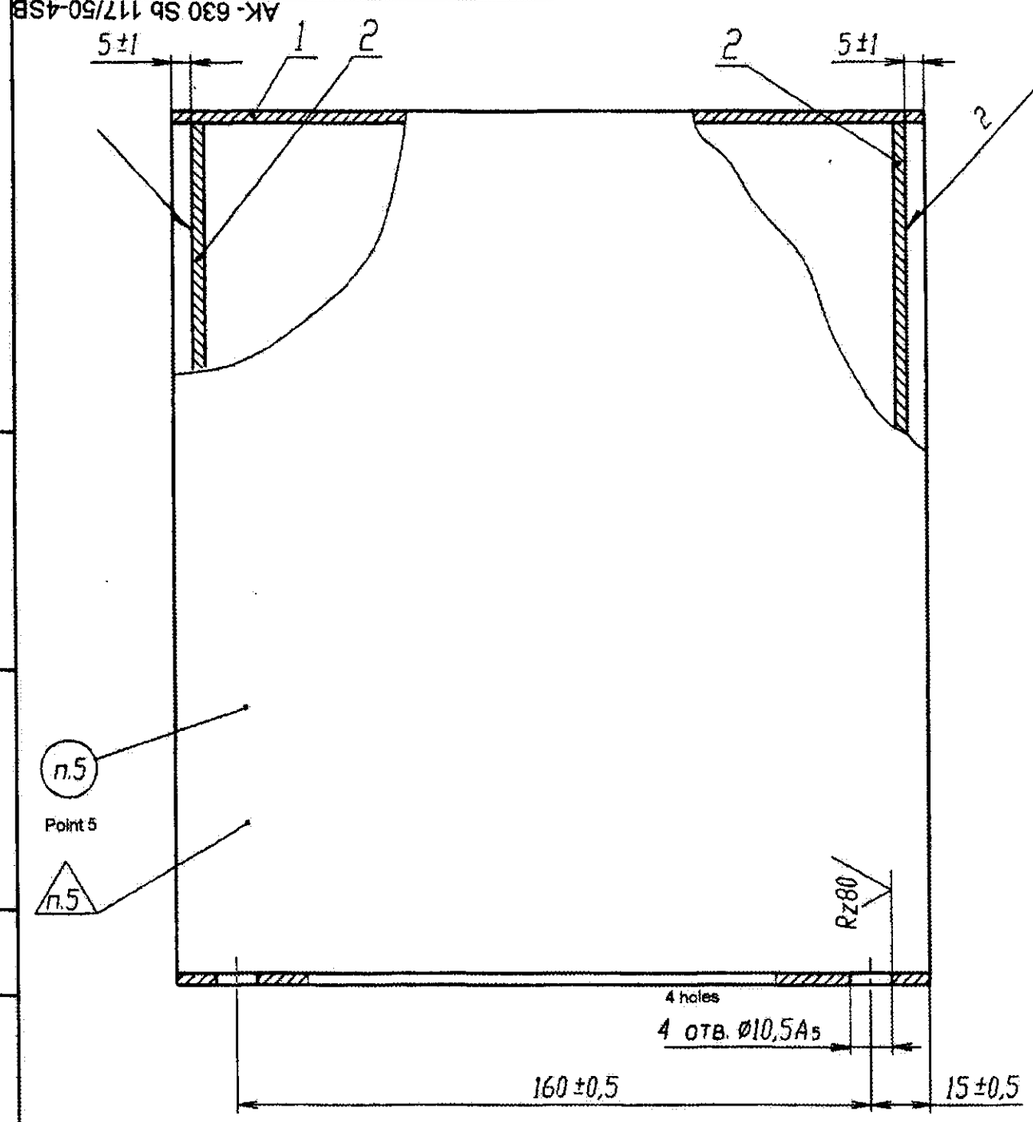
First use / Reference No.	Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
					Documents		
	A2			AK-630 Sb 117/50-4 SB	Assembly drawing		
					Components		
	A2		1	AK-630 117/50-24	Casing	1	
	A3		2	AK-630 117/50-25	Ribs	2	

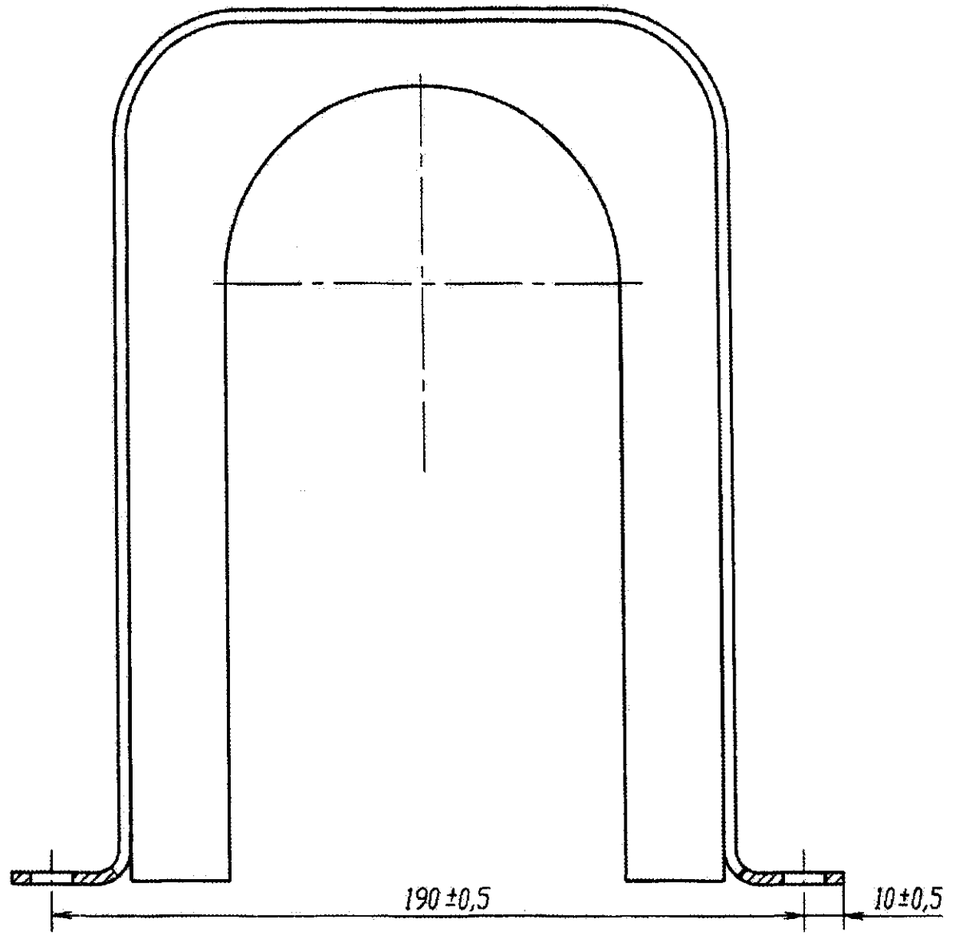
Sign and Date / Dupl. Inv. No. / Alternate Inv. No / Sign and Date / Orig. inv. No.

Amend.	Sheet	Doc. No.	Sign	Date	AK-630 Sb 117/50-4		
Developed by						Type	Sheet / Sheets
Checked by					Casing	A	1
Head of Q.C.D							
Approved by							

АК-630 Сб 117/50-4СБ

AK- 630 Sb 117/50-4SB





1. Argon-arc welding with the use of filler rod 3.15 Sv-AMg6 GOST 7871-75.
2. Blunt the sharp edges ~ 0.6 mm.
3. Coating: Anodic Oxide Chrome
   Primer AK-070, yellow. (2). Enamel Kh V-124, gray (4). IV. OM2.
   AK -070 GOST 25718-83. Kh V-124 GOST 10144-89.
4. During the detection of cracks on welded joints, after the anodization for not more than two times, t is permitted to carry out the straightening (correction) by cutting out (chipping out) of cracks and argon-arc welding with subsequent coating of primer AK-070 GOST 25718-83.
5. Mark Ч, Ш and stamp К as per AK-630, AK-630M TU I.

4. При обнаружении трещин в сварных швах после анодирования не более двух допускается производить исправление путем выпиливания (вырубания) трещин и аргоно-дуговую подварку с последующим покрытием грунтом АК-070 ГОСТ 25718-83.

5. Маркировать Ч, Ш и клеймить К по АК-630, АК-630М ТУ I.

1. Сварка аргонно-дуговая с применением присадочной проволоки 3,15 Св-АМг6 ГОСТ 7871-75.
2. Острые ребро притупить ~0,6мм.
3. Покрытие Ан. Окс. хр.
Грунтовка АК-070, желтая, (2).
Эмаль ХВ-124, серая, (4), IV, ОМ2.
АК-070 ГОСТ 25718-83.
ХВ-124 ГОСТ 10144-89.

AK- 630 Sb 117/50 - 4SB

Изм.	Лист	N докум.	Подп.	Дата
Разраб.				
Пров.				
Т.контр.				
Н.контр.				
Утв.				

АК-630 Сб 117/50-4СБ

Casing Кожух

Сборочный чертеж

Assembly Drawing

Type Лит.	Mass Масса	Scale Масштаб
A	0,660	1:1

Лист Sheet	Листов 1 Total Sheets 1

Формат А2

Перв. примен.

Справ.N

Подп. и дата

Инв.N дубл.

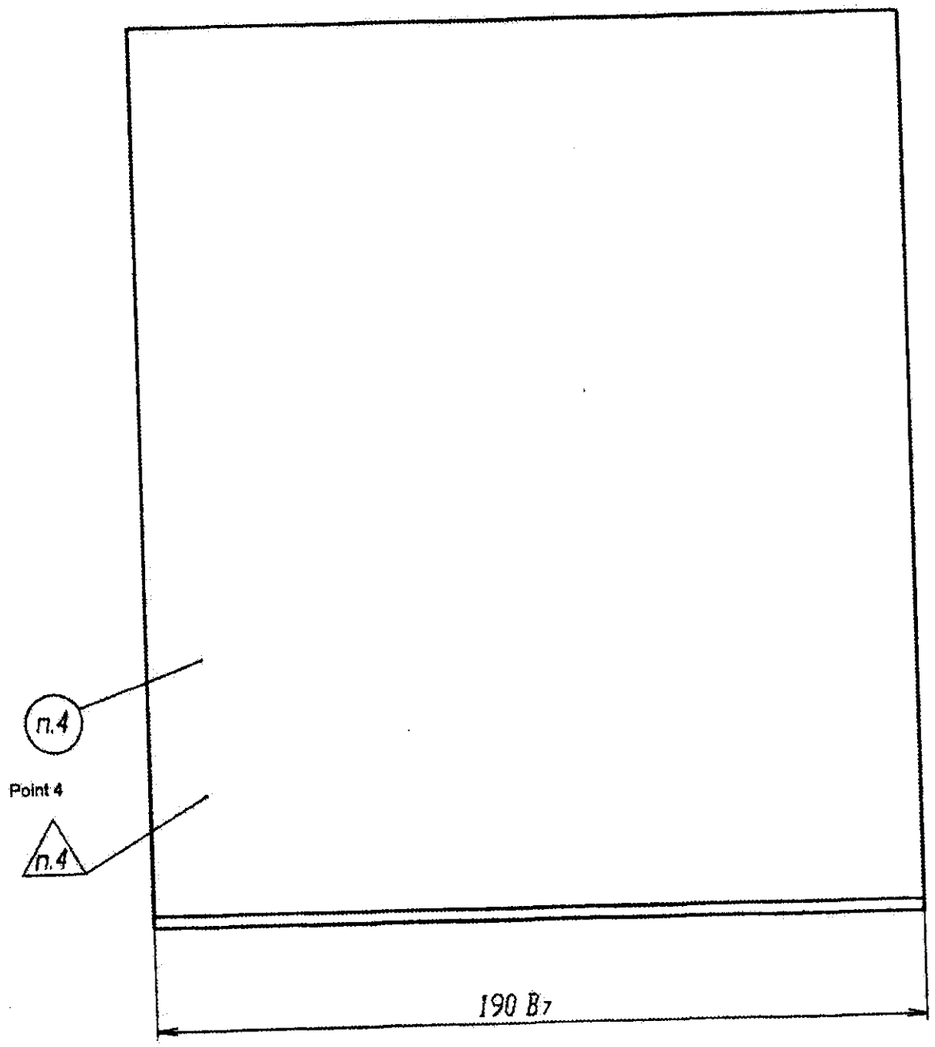
Взам.инв.N

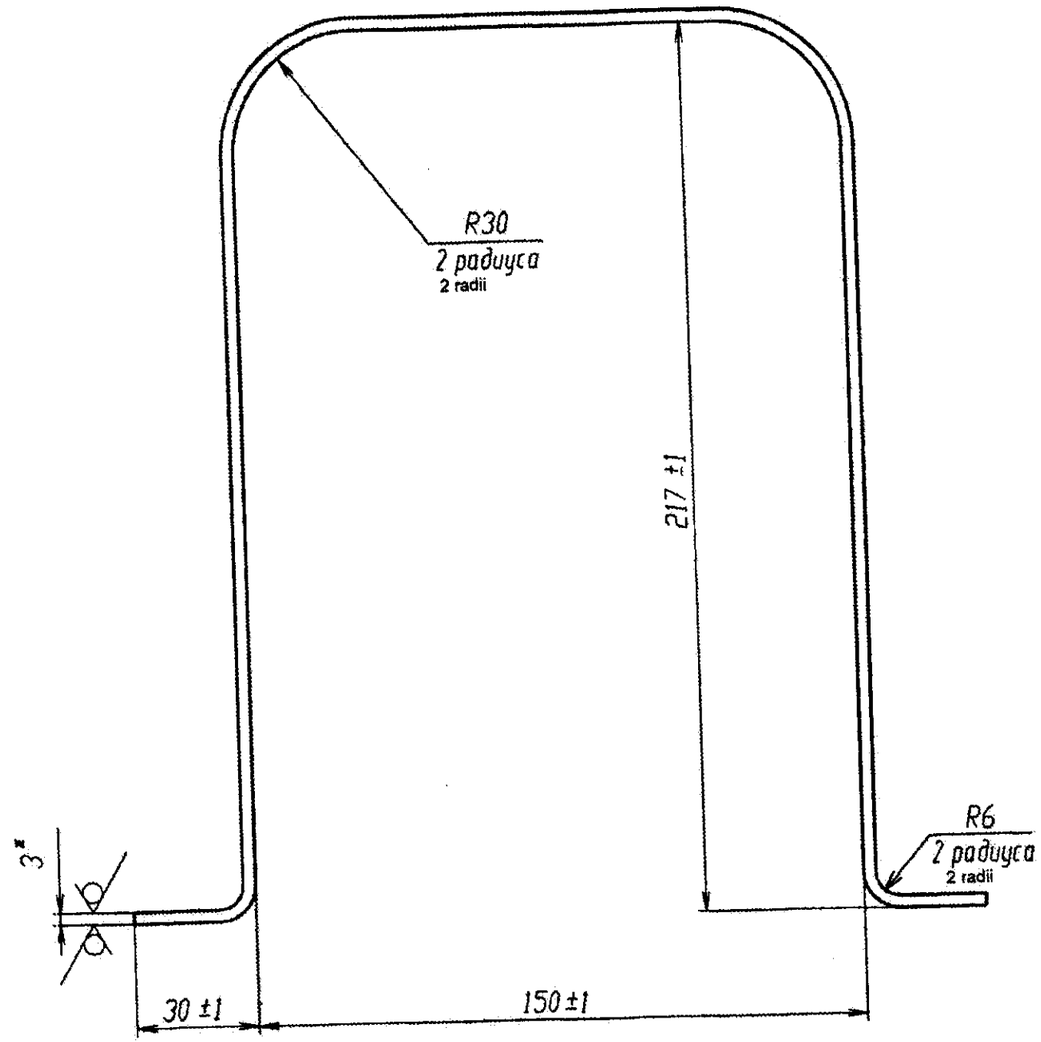
Подп. и дата

Инв.N подл.

АК-630 117/50-24

Rz80 (✓)





1. * - Dimension for reference.
2. Expanded length L = 612 mm.
3. Blunt the sharp edges R~0.4 mm.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630M TU I.

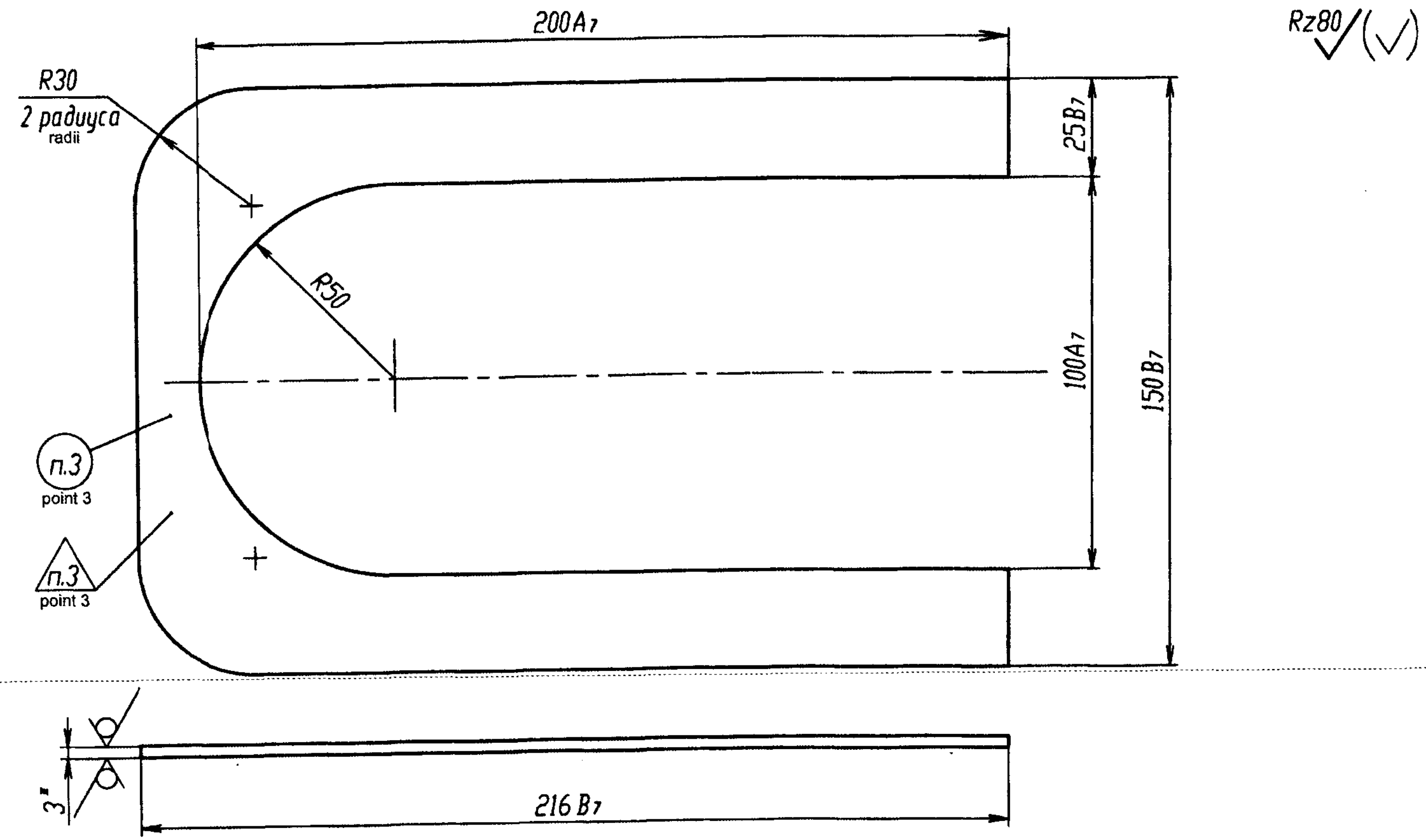
1.* Размер для справок.
2. Развернутая длина L = 612мм.
3. Острые ребра притупить R ≈ 0,4 мм.
4. Маркировать Ш, Ч и клеймить К по АК-630, АК-630М ТУ I.

Изм.	Лист	N докум.	Подп.	Дата	АК-630	117/50-24
Разраб.					Casing / Кожух	Лит. A; Масса 0,650; Масштаб 1:1
Пров.						Лист; Листов 1
Т.контр.					Sheet AMg6 BM-3 GOST 21631-76 / Лист АМг6 ВМ-3 ГОСТ 21631-76	sheet; sheets 1
Н.контр.						
Утв.						

Bale 8 container 2

Инв.N подл. | Подп. и дата | Взам.инв.N | Инв.N дубл. | Подп. и дата | Справ.N

АК-630 117/50-25



1. * Reference dimension
2. Blunt sharp edges ~0.4 mm.
3. Mark Ш, Ч and stamp K as per AK-630, AK-630 M TU I.

Amend.	Sheet	Doc.No.	Sign	Date	AK-630 117/50-25
Developed by					Rib
Checked by					Type / Weight / Scale: 1:1
					Sheet / Sheets 1
Head of Q.C.D					Sheet AMg6 BM-3 GOST 21631-76
Approved by					

Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
				<u>Documents</u>		
A4			AK-630 Sb 117-7 SB	Assembly drawing		
				<u>Components</u>		
A4		1	AK-630 117-61	Cylinder	1	
A4		2	AK-630 117-62	Bottom	1	
A4		3	AK-630 117-63	Bush	1	

First use

Reference No.

Sign and Date

Dupl. Inv. No.

Alternate Inv. No

Sign and Date

Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

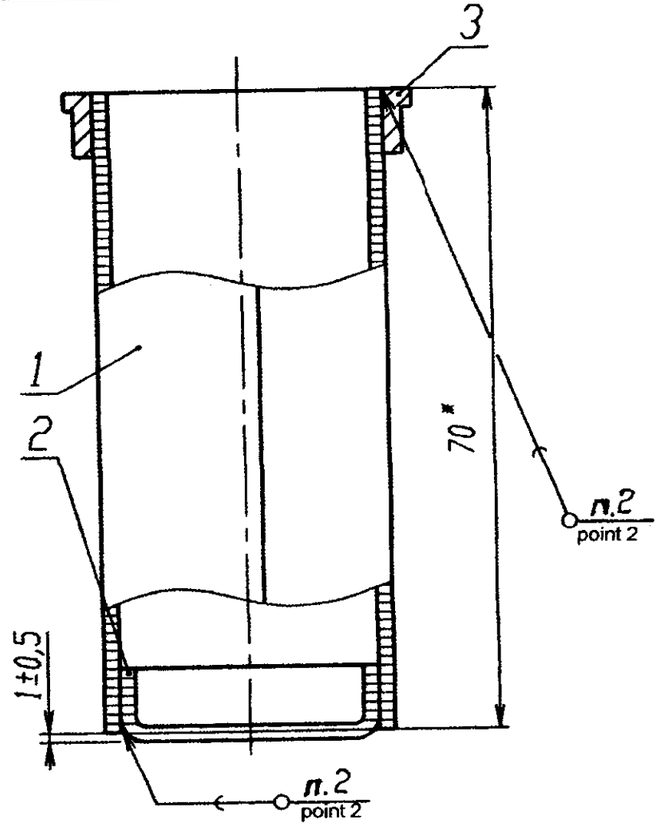
AK-630 Sb 117-7

Mesh

Type	Sheet	Sheets
A		1

Blank No. 406

AK-630 Sb117-7 SB



1.* Reference dimension.
2. Solder with Prv KR 2.0 POS 61. GOST 21931-76.
3. Mark Ш, Ч and stamp К on tag.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 Sb117-7 SB

Mesh
Assembly drawing

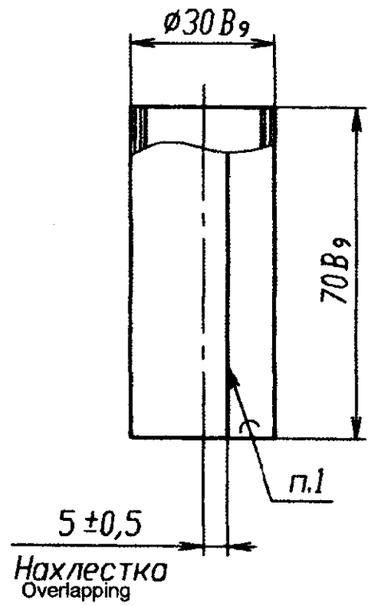
Type	Weight	Scale
A	0.025	2:1

Sheet | Sheets 1

Format A4

Approved KTONI
Approved OGMet
Approved TOsb
Approved by shop
First use
Reference No.
Alternate Inv. No
Dupl. Inv. No.
Orig. Inv. No.
Sign and Date

АК-630 117-61



1. Solder with Prv KR 2.0 POS61 GOST 21931-76.
2. Dimensions ensured by tool.
3. Mark Ш, Ч and stamp К on tag.

Approved by shop | Reference No. | First use

Approved KTONI | Sign and Date

Approved TOsb | Dupl. Inv. No. | Alternate Inv. No | Sign and Date

Approved OGMet | Orig. inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

АК-630 117-61

Cylinder

Type	Weight	Scale
A	0.110	1:1

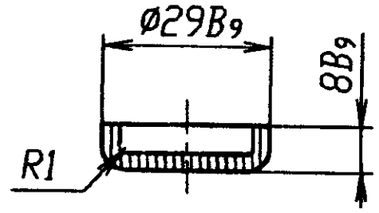
Sheet | Sheets 1

Mesh No.1, 6 GOST 6613-86

Copied by

Format A4

AK-630 117-62



1. Dimensions ensured by tool.
2. Mark Ш, Ч and stamp К on tag.

Approved by shop | First use
Reference No.
Approved KTONI | Sign and Date
Dupl. Inv. No.
Approved TOsb | Alternate Inv. No
Sign and Date
Approved OGMet | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-62

Bottom

Mesh No.1, 6 GOST 6613-86

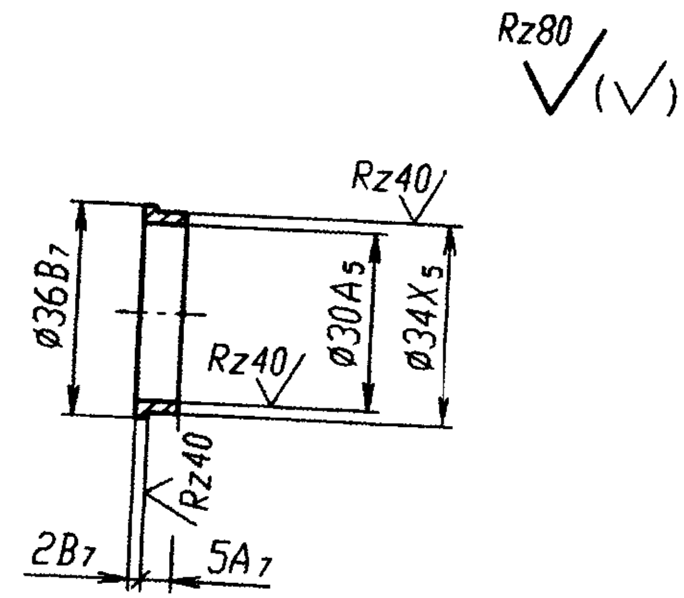
Type	Weight	Scale
A	0.004	1:1

Sheet | Sheets 1

Format A4

Blank No. 406

AK-630 117-63



1. Blunt sharp edges ~0.4 mm.
2. Mark Ш, Ч and stamp K on tag.

First use | Reference No. | Approved by shop | Approved KTONI | Sign and Date | Dupl. Inv. No. | Approved TOsb | Alternate Inv. No | Sign and Date | Orig. Inv. No. | Approved OGMet

AK-630 117-63

Amend.	Sheet	Doc. No.	Sign	Date				
Developed by					Bush	Type	Weight	Scale
Checked by						A	0.008	1:1
Head of Q.C.D						Sheet	Sheets 1	
Design bureau chief								
Head of Q.C.D					Steel 12Cr18Ni9Ti GOST 5632-72			
Approved by								

Copied by

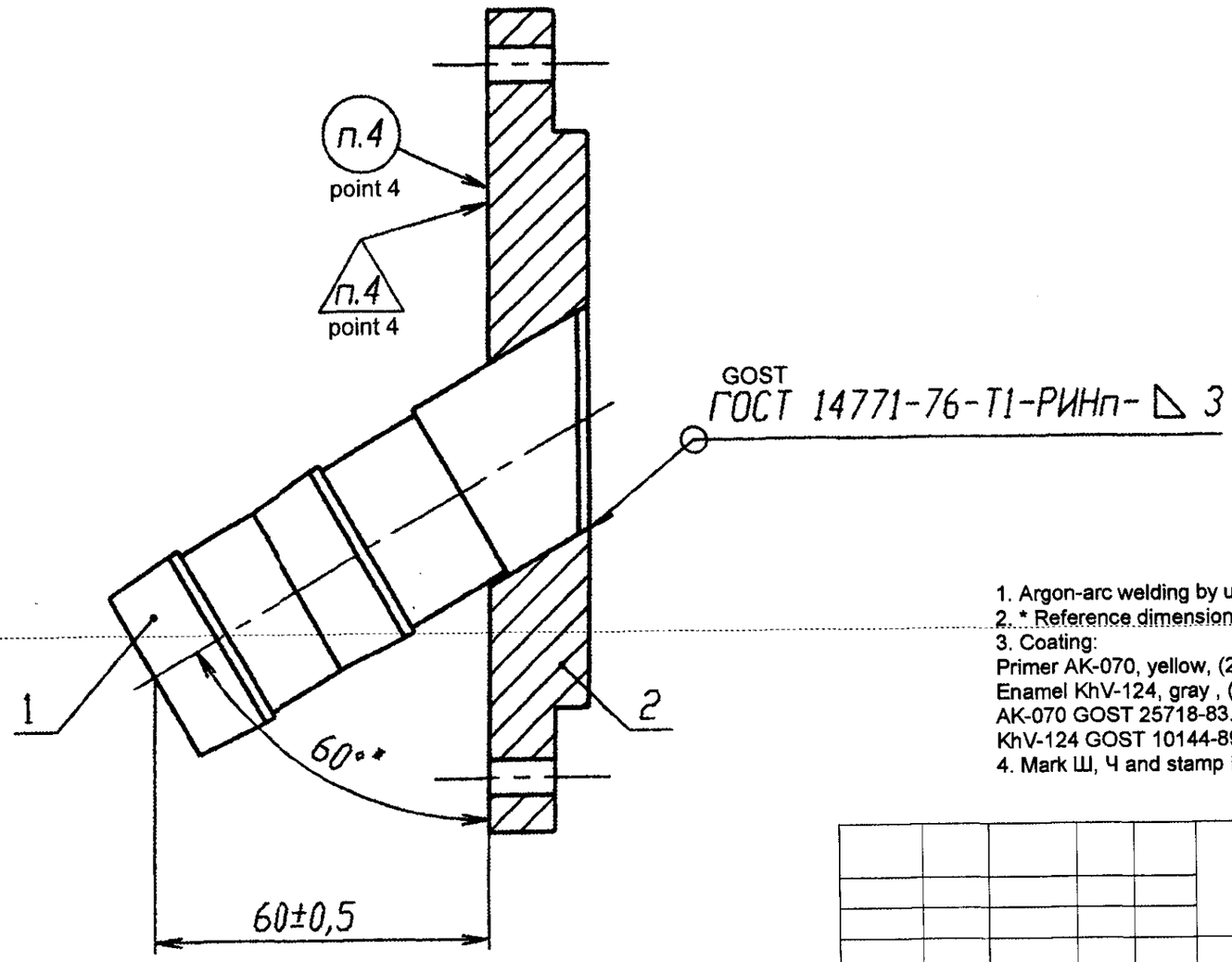
Format A4

Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
				<u>Documents</u>		
A3			AK-630 Sb 117/50-2 SB	Assembly drawing		
				<u>Components</u>		
A3		1	AK-630 117/50-16	Pipe	1	
A4		2	AK-630 117/50-17	Flange	1	

First use | Reference No. | Sign and Date | Dupl. Inv. No. | Alternate Inv. No | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date	AK-630 Sb 117/50-2		
Developed by					Branch pipe	Type	Sheet	Sheets
Checked by						A		1
Head of Q.C.D								
Approved by								

AK-630 Sb 117/50-2 SB



1. Argon-arc welding by using filler wire 2.0 Sv-06Cr19Ni9T GOST 2246-70.
2. * Reference dimension.
3. Coating:
Primer AK-070, yellow, (2).
Enamel KhV-124, gray , (4), IV, OM2.
AK-070 GOST 25718-83.
KhV-124 GOST 10144-89- external surfaces, except fitting places.
4. Mark Ш, Ч and stamp К as per AK-630, AK-630 M TU I.

Comment:

Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

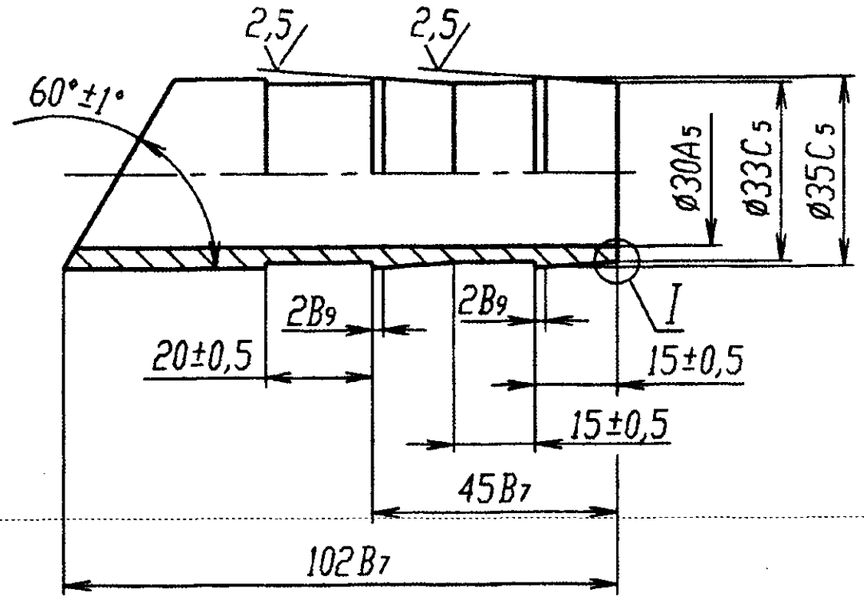
AK-630 Sb 117/50-2 SB

Branch pipe
Assembly drawing

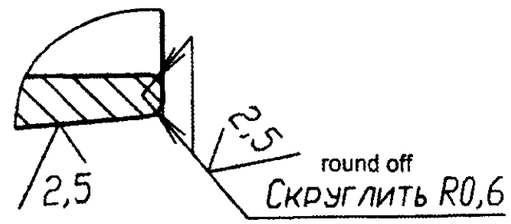
Type	Weight	Scale
A	2.020	1:1
Sheet	Sheets 1	

АК-630 117/50-16

Rz80 (√)



I (5:1)



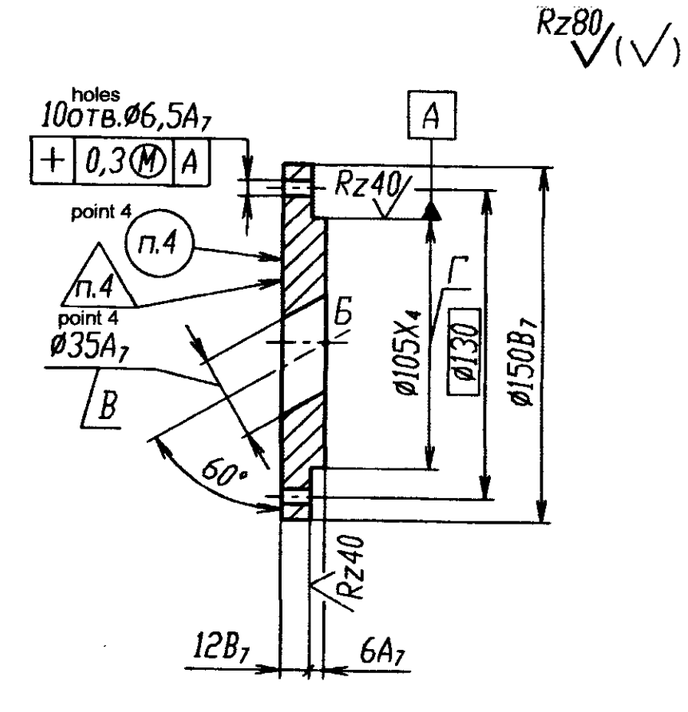
1. Inner angles R~0.4 mm.
2. Blunt sharp edges ~0.4 mm.
3. Mark Ш, Ч and stamp К on tag.

					АК-630 117/50-16
Amend.	Sheet	Doc.No.	Sign	Date	Tube
Developed by					Type: A; Weight: 0.120; Scale: 1:1
Checked by					Sheet; Sheets 1
Head of Q.C.D					Pipe 38x6-12Cr18Ni10Ti GOST 9941-81
Approved by					

Comment:

Blank No. 406

AK-630 117/50-17



1. Displacement of point Б of hole B with regard to diameter Г is not more than ± 0.2 mm.
2. Inner angles R~0.4 mm.
3. Blunt sharp edges R~0.6 mm.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630M TU I

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117/50-17

Flange

Type	Weight	Scale
A	1.890	1:2

Sheet | Sheets 1

Steel 12Cr18Ni9Ti
GOST 5632-72

Copied by

Format A4

First use | Approved by shop | Reference No. | Approved KTONI | Sign and Date | Dupl. Inv. No. | Approved TOsb | Alternate Inv. No | Sign and Date | Approved OGMet | Orig. Inv. No.

First use	Reference No.	Format	Zone	Pos.	Designation	Nomenclature	Qty.	Remarks
						Documents		
		A2			AK-630 Sb117/50-100 SB	Assembly drawing	1	
						Components		
		A1		1	AK-630 117/50-101	Flange	1	
		A4		2	AK-630 117/50-102	Pipe	4	

Sign and Date	Amend.	Sheet	Doc. No.	Sign	Date
	Developed by				
Orig. Inv. No.	Checked by				
	Head of Q.C.D				
	Approved by				

AK-630 Sb 117/50-100

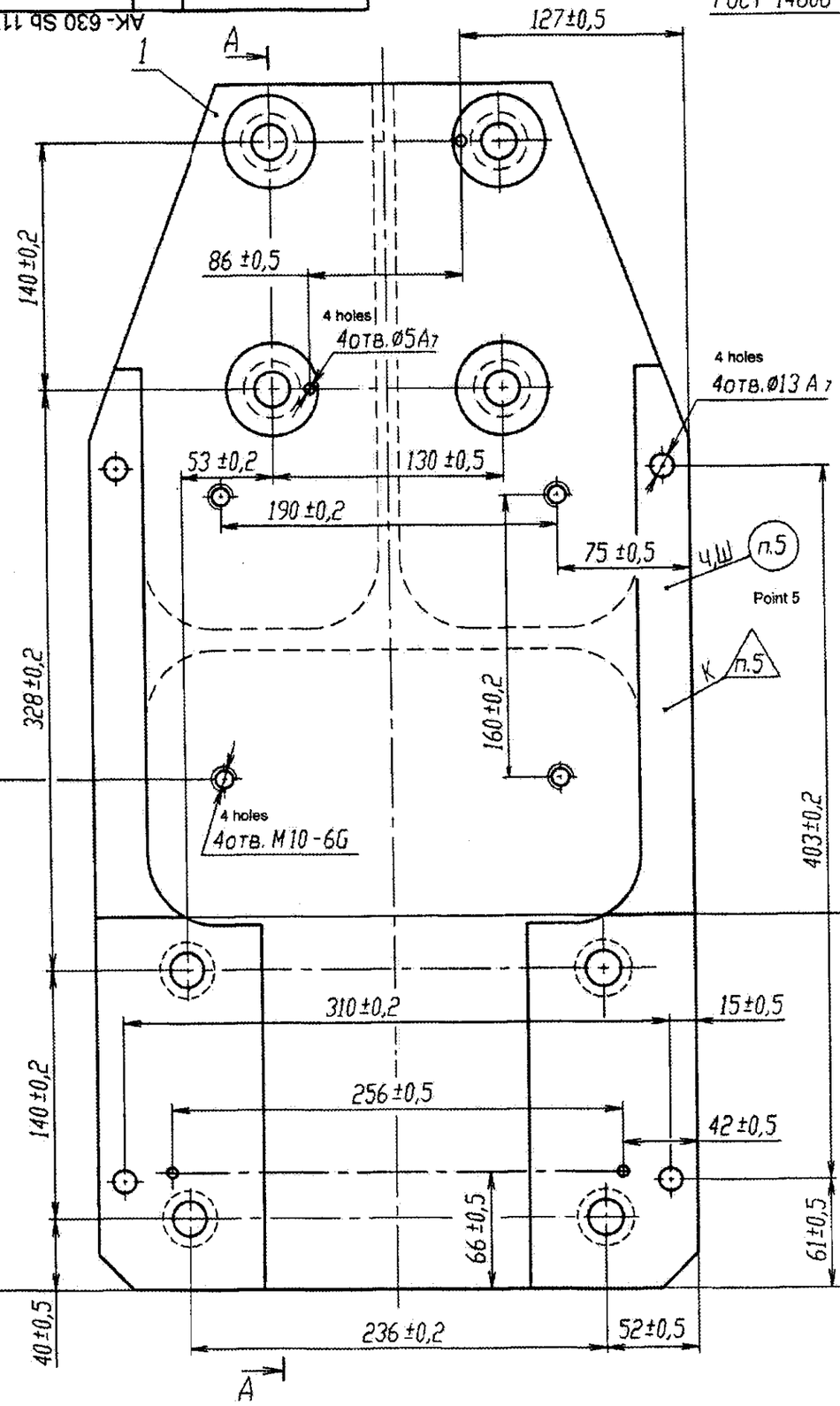
Plate

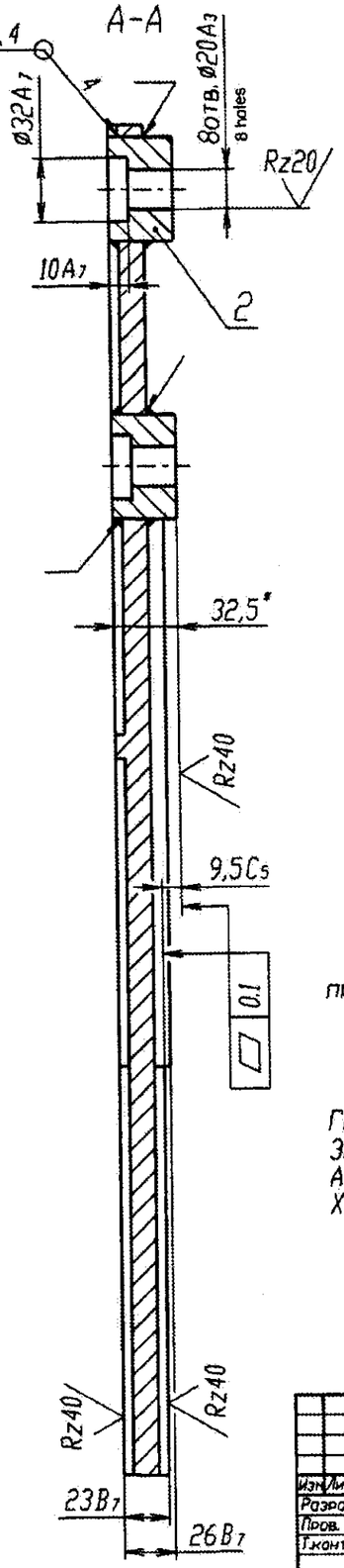
Type	Sheet	Sheets
A		1

АК-630 Сб 117/50-100СБ

АК- 630 Sb 117/50-100SB

GOST
ГОСТ 14806-80-Т1-РИНп-△4





Rz80

1. Argon-arc welding with the use of filler rod 3.15 Sv-AMg6 GOST 7871-75.
2. * - Dimensions for reference.
3. Blunt the sharp edges ~ 0.6 mm.
4. Coating: Anodic Oxide Chrome
   Primer AK-070, yellow, (2). Enamel Kh V-124, gray (4), IV, OM2.
   AK -070 GOST 25718-83. Kh V-124 GOST 10144-89, except the seating places.
5. Mark and stamp as per AK-630, AK-630M TU I.

1. Сварка аргонодуговая с применением присадочной проволоки 3,15 Св АМг6 ГОСТ 7871-75.
2.* Размеры для справок.
3. Острые ребра скруглить ~ 0,6мм.
4. Покрытие: Ан. Окс. хр.
Грунтовка АК-070, желтая, (2).
Эмаль ХВ-124, серая, (4), IV, ОМ2.
АК-070 ГОСТ 25718-83.
ХВ-124 ГОСТ 10144-89, кроме посадочных мест.
5. Маркировать и клеймить по АК-630, АК-630М ТУ I.

Перв. примен.
Справ.N
Подп. и дата
Инв.N подл.
Взам.инв.N
Инв.N дубл.
Подп. и дата

АК- 630 Sb 117 / 50 - 100SB

АК-630 Сб 117/50-100СБ

Изм.	Лист	N докум.	Подп.	Дата
Разраб.				
Пров.				
Т.контр.				
Н.контр.				
Утв.				

Plate Плита

Сборочный чертеж
Assembly Drawing

Type	Mass	Scale
Лит.	Масса	Масштаб
A	12,9	1:2
Лист Sheet	Листов 1 Total Sheets 1	

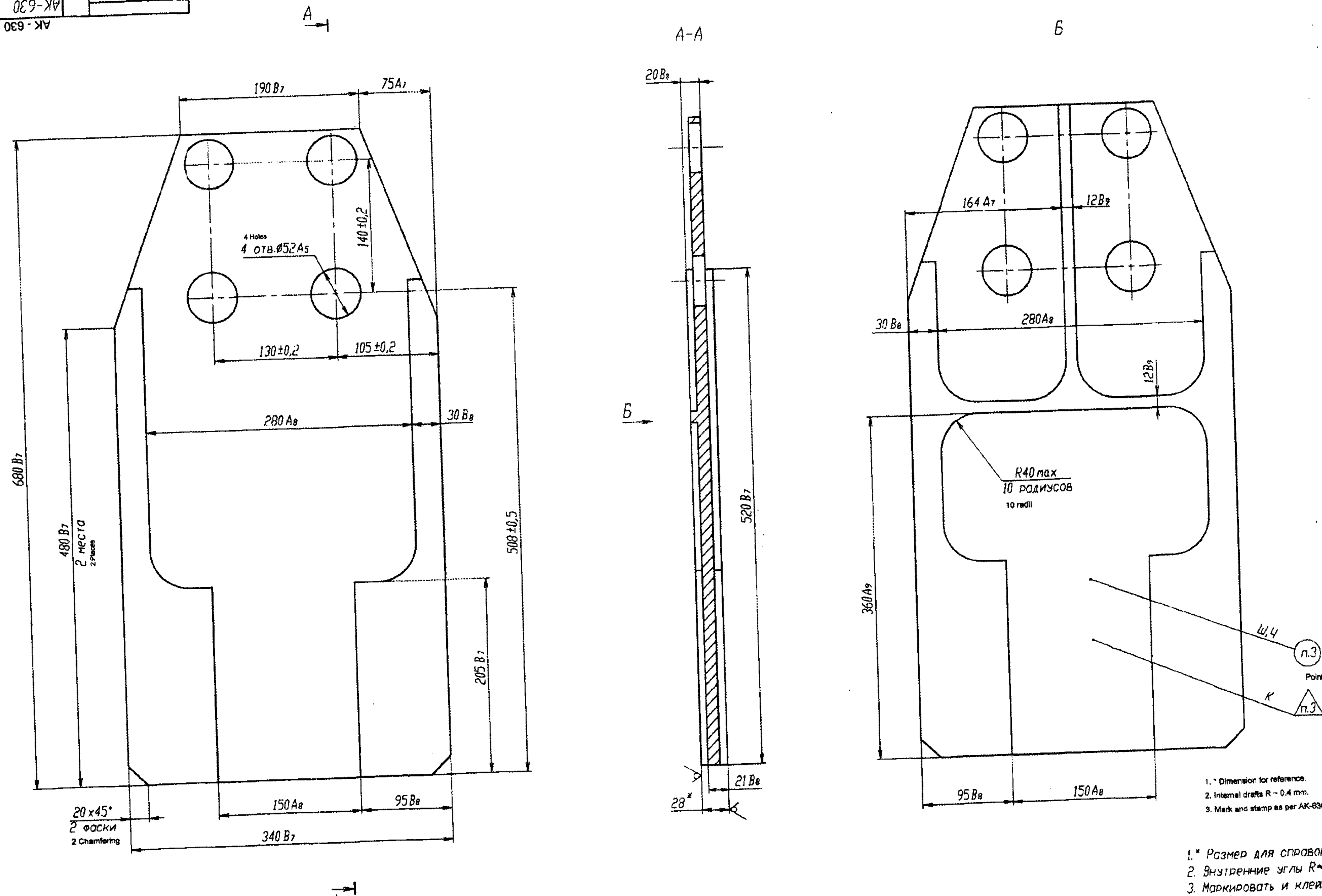
Bale 8 container 2

Формат А2

АК-630 117/50-101

АК-630 117/50-101

Rz80 (✓)



1. * Dimension for reference.
2. Internal drafts R ~ 0.4 mm.
3. Mark and stamp as per AK-630, AK-630M TU I.

1.* Размер для справок.
2. Внутренние углы R≈ 0,4 мм.
3. Маркировать и клеймить по АК-630, АК-630М ТУ I.

Bale 8 Container 3

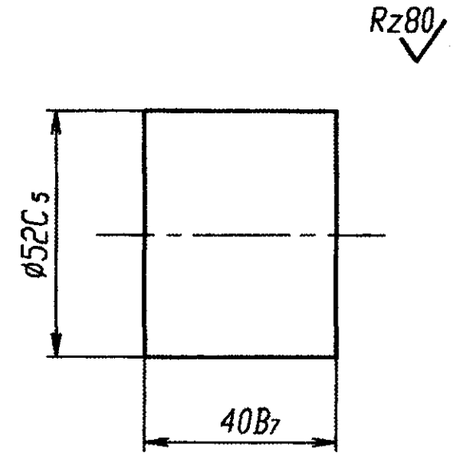
АК-630 117/50-101

АК-630	117/50-101
Plate Плита	Type / Лит.: А; Mass / Масса: 12; Scale / Масштаб: 1:2
Plate AMg6 28x2000x4000 Плита АМг6 28x2000x4000 ГОСТ 17232-99 GOST 17232-99	Sheet / Лист; Total Sheets 1 / Листов 1

Изм. Лист N докум. Подп. Дата; Разраб.; Пров.; Т.контр.; Н.контр.; Утв.

Формат А1

AK-630 117/50-102



Mark Ш, Ч and stamp К on tag.

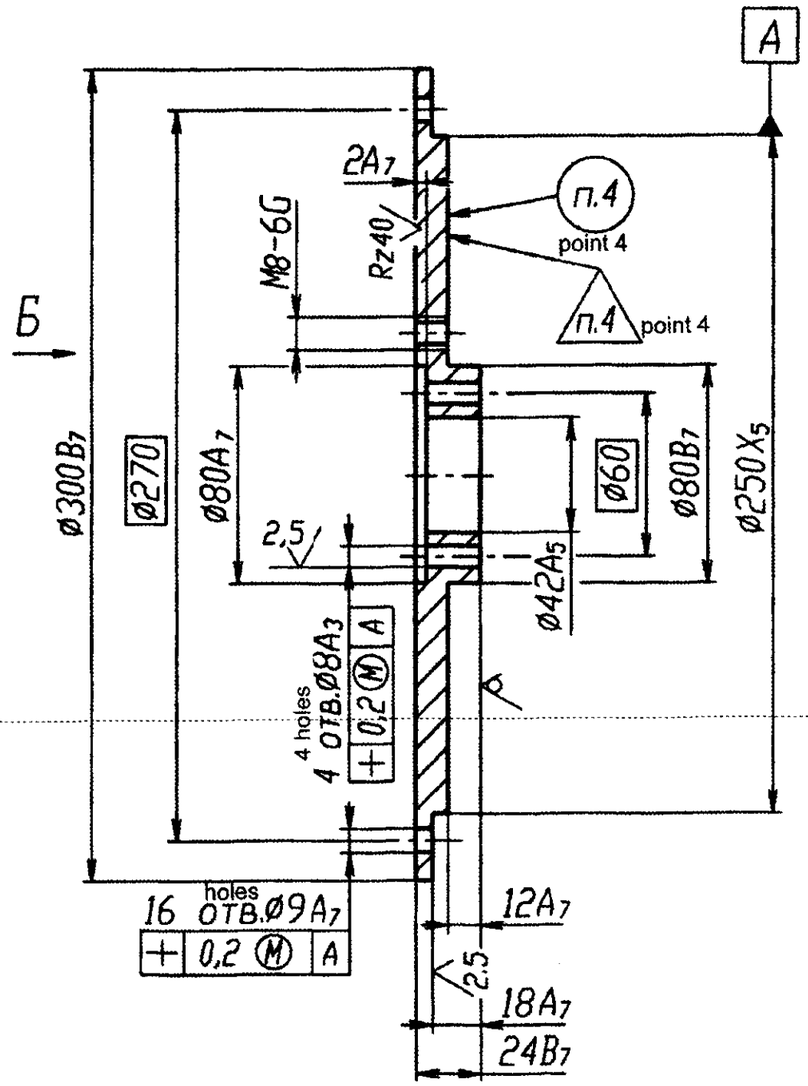
Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOstb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

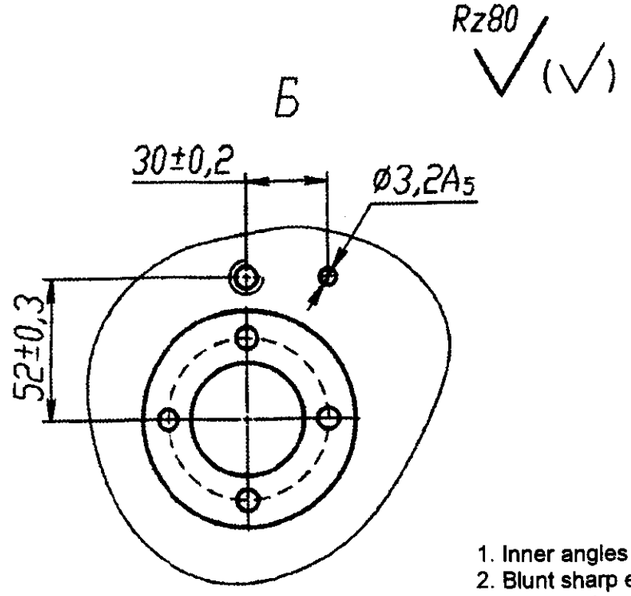
AK-630 117/50-102

Amend.	Sheet	Doc. No.	Sign	Date		Type	Weight	Scale
Developed by					**Insert**	A	0.23	1:1
Checked by						Sheet		Sheets 1
Head of Q.C.D								
Design bureau chief					Rod AMg6 KR.55 GOST 21488-97			
Head of Q.C.D								
Approved by								

Copied by | Format A4

AK-630 117-2



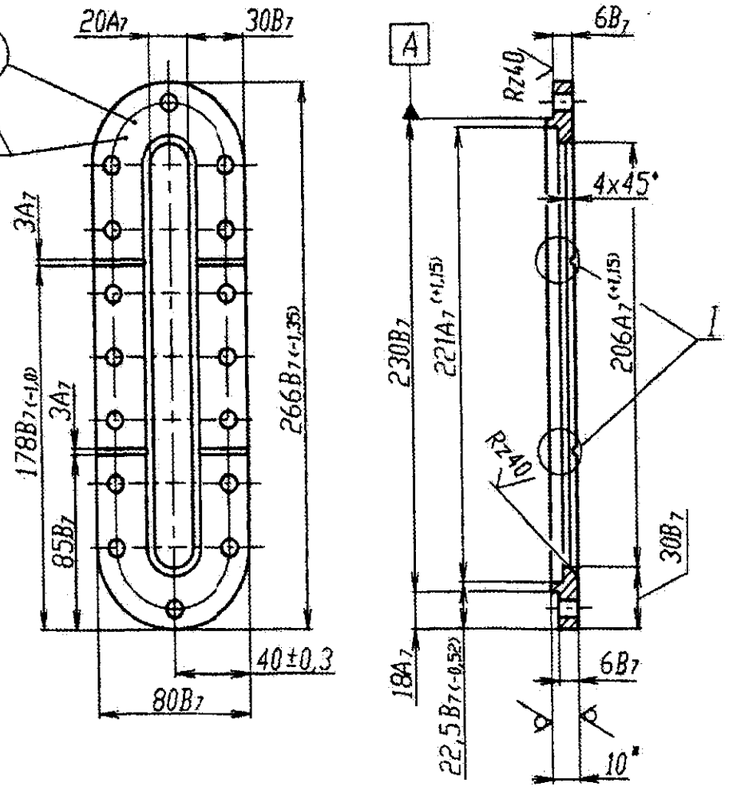


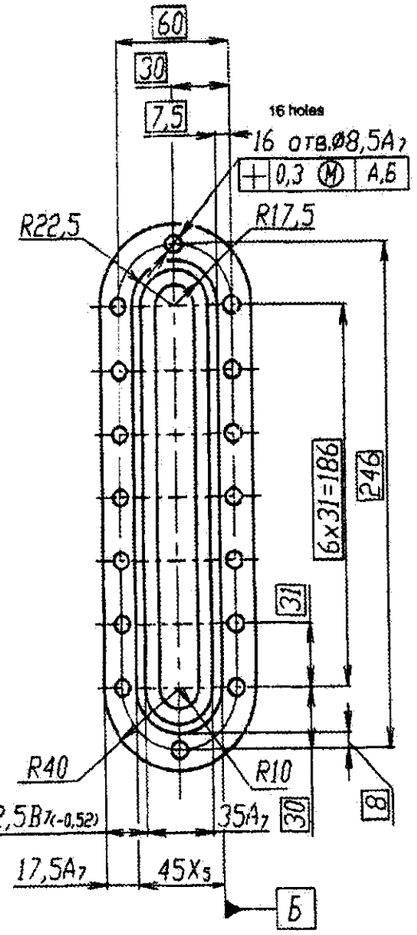
1. Inner angles R~0.4 mm.
2. Blunt sharp edges ~0.6 mm.
3. Coating Anodic Oxi.Cr.
Primer AK-070, yellow (2)
Enamel KhV-124, gray (4) IV, OM2, except fitting places
AK-070 GOST 25718-83
KhV-124 GOST 10144-89.
4. Mark Ч, Ш and stamp K as per AK-630, AK-630M TU I.

Comment:

					AK-630 117-2			
					Cover	Type	Weight	Scale
Amend.	Sheet	Doc.No.	Sign	Date		A	1.185	1:2
Developed by						Sheet	Sheets	1
Checked by								
Head of Q.C.D					Plate AMg 6B-28 GOST 17232-99			
Approved by								

АК-630 117-3





Rz80 (√)

1. * - Dimension for reference.
2. Internal angles R ~ 0.4 mm.
3. Blunt the sharp edges ~ 0.6 mm.
4. Coating Anodic Oxide Chrome.
   Primer AK-070, yellow (2).
   Enamel Kh V - 124, grey (4) IV. OM2.
   except seating surfaces.
   AK -070 GOST 25718-83
   Kh V-124 GOST 10144-89
5. Fill the markings with enamel PF-115 red GOST 6465-76.
6. Mark Ш Ч and stamp K as per AK-630, AK-630M TU 1.

I(2:1)

1. * Размер для справок.
2. Внутренние углы R~ 0,4 мм.
3. Острые ребра притупить ~ 0,6 мм.
4. Покрытие Ан. Окс. хр.
   Грунтовка АК-070, желтая (2)
   Эмаль ХВ-124, серая (4) IV, ОМ2,

кроме посадочных поверхностей.
   АК-070 ГОСТ 25718-83
   ХВ-124 ГОСТ 10144-89

5. Риски залить эмалью ПФ-115 красной ГОСТ 6465-76.
6. Маркировать Ш, Ч, и клеймить К по АК-630, АК-630М ТУ 1.

Изм.	Лист	N докум.	Подп.	Дата	АК-630 117-3		
Разраб.					Cover	Лит.	Масса	Масштаб
Пров.					Крышка	A	0,240	1:2
Т.контр.					Sheet AMg6M-10 GOST 21631-76	Лист	Листов 1
Н.контр.					Лист АМг6М-10 ГОСТ 21631-76	Sheet	Sheets 1
Утв.							

Lit Wt Scale

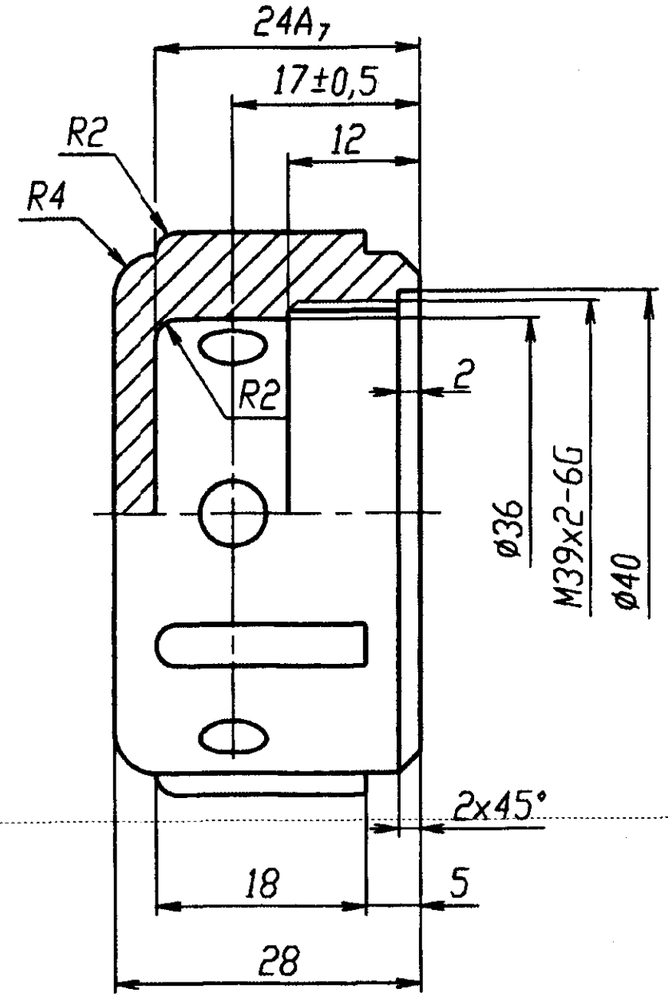
Перв. примен.

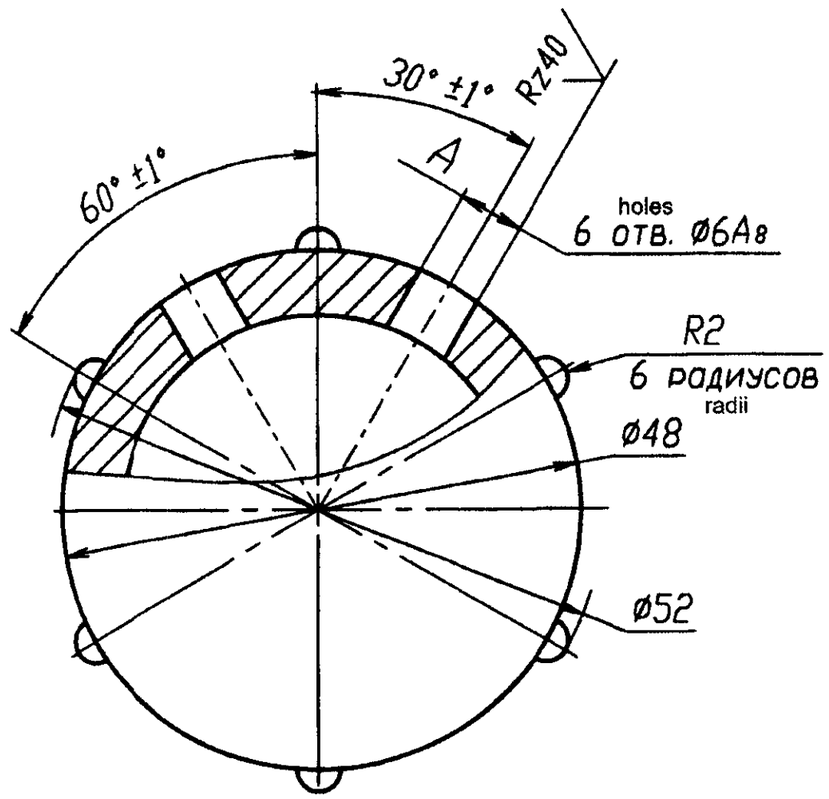
Справ.N

Подп. и дата | Инв.N дубл. | Взам.инв.N | Подп. и дата | Инв.N подл.

Bale 8 container 2

AK-630 117-4





1. Moulding gradient up to 1^0.
2. Surface finish of formation surfaces of press mould $^{0.32}\sqrt{}$.
3. Other technical requirements as per OST 4.GO.005.051.
4. Machining of hole A is permissible.
5. Mark Ш , Ч and stamp K on tag.

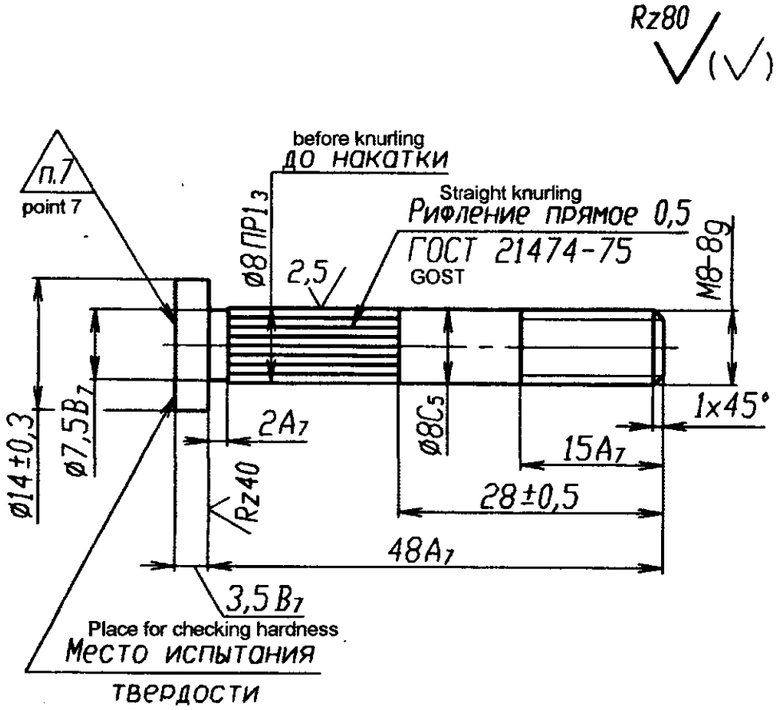
					AK-630 117-4
Amend.	Sheet	Doc.No.	Sign	Date	Cover
Developed by					
Checked by					
Head of Q.C.D					DSV-4-0 GOST 17478-95
Approved by					

Type	Weight	Scale
A	0.03	2:1
Sheet	Sheets	1

Comment:

Blank No. 406

AK-630 117-5



1. 31..40.5 HRC_E.
2. It is permissible to make component by electric upsetting.
3. Inner angles R~0.4 mm.
4. Blunt sharp edges R~0.6 mm.
5. Coating Cd6.phos.Oil.
6. Mark Ш, Ч and stamp К on tag.
7. Stamp И as per AK-630, AK-630M TU I.

Approved by shop	First use
	Reference No.
Approved KTONI	Sign and Date
	Dupl. Inv.
Approved TOsb	Alternate Inv. No
	Sign and Date
Approved OGMet	Orig. Inv. No.

AK-630 117-5

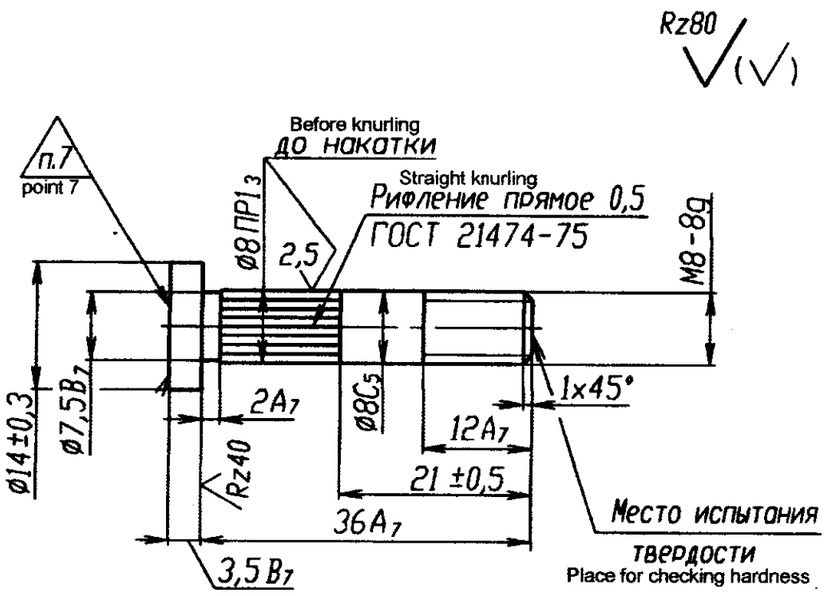
Amend.	Sheet	Doc. No.	Sign	Date		Type		Weight	Scale
Developed by					**Screw**		A	0.025	2:1
Checked by						Sheet		Sheets 1	
Head of Q.C.D									
Design bureau chief					Steel 40Kh GOST 4543-71				
Head of Q.C.D									
Approved by									

Copied by

Format A4

Blank No. 406

AK-630 117-6



1.31..40.5 HRC_E.
2. It is permissible to make component by electric upsetting.
3. Inner angles R~0.4 mm.
4.Blunt sharp edges R~0.6 mm.
5. Coating Cd6.phos.Oil.
6.Mark Ш, Ч and stamp К on tag.
7. Stamp И as per AK-630, AK-630M TU I.

AK-630 117-6

Amend.	Sheet	Doc. No.	Sign	Date		Type	Weight	Scale
Developed by					**Screw**	A	0.015	2:1
Checked by						Sheet		Sheets 1
Head of Q.C.D								
Design bureau chief								
Head of Q.C.D					Steel 40Kh GOST 4543-71			
Approved by								

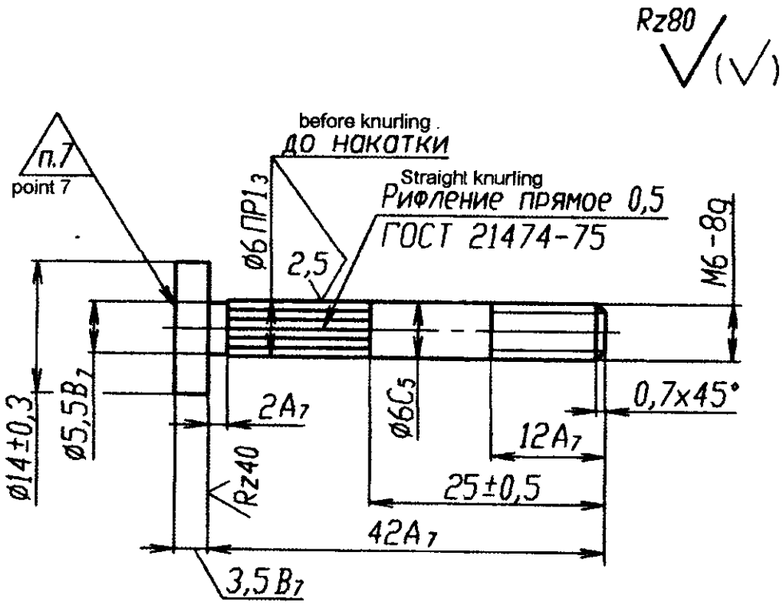
Approved KTONI | Approved by shop | First use | Reference No. | Sign and Date | Dupl. Inv. No. | Approved TOsb | Alternate Inv. No | Sign and Date | Approved OGMet | Orig. Inv. No.

Copied by

Format A4

Blank No. 406

AK-630 117-7



1. 31..40.5 HRC_E. Check hardness on 3-5% of the batch but not less than 3 nos.
2. It is permissible to make component by electric upsetting.
3. Inner angles R~0.4 mm.
4. Blunt sharp edges R~0.6 mm.
5. Coating Cd6.phos.Oil.
6. Mark Ш, Ч and stamp К on tag.
7. Stamp И as per AK-630, AK-630M TU I.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-7

Screw

Steel 40Kh GOST 4543-71

Type	Weight	Scale
A	0.015	2:1

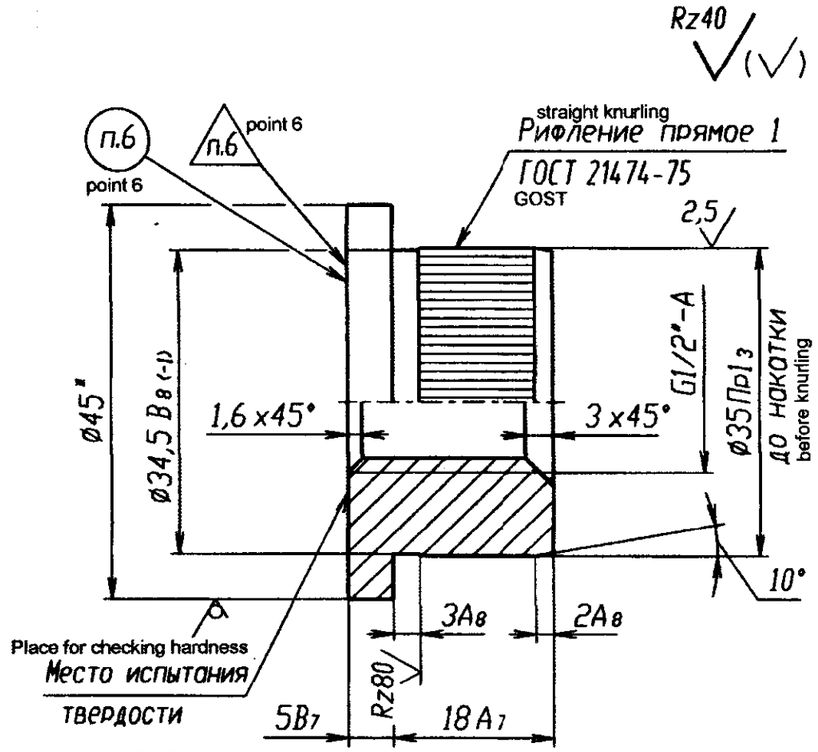
Sheet | Sheets 1

Format A4

Approved TOsb | Approved by shop | First use
Alternate Inv. No | Reference No.
Approved KTONI | Sign and Date
Dupl. Inv. No. | Sign and Date
Approved OGMet | Sign and Date
Orig. Inv. No.

Blank No. 406

АК-630 117-8



1. 38.5...44.5 HRC_E.
2. * Reference dimension.
3. Inner angles R~0.4 mm.
4. Blunt sharp edges R~0.6 mm.
5. Coating Cd6.phos.Oil.
6. Mark Ш, Ч and stamp К, И as per АК-630, АК-630М ТУ I.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

АК-630 117-8

Bush

Type	Weight	Scale
A	0.105	2:1

Sheet | Sheets 1

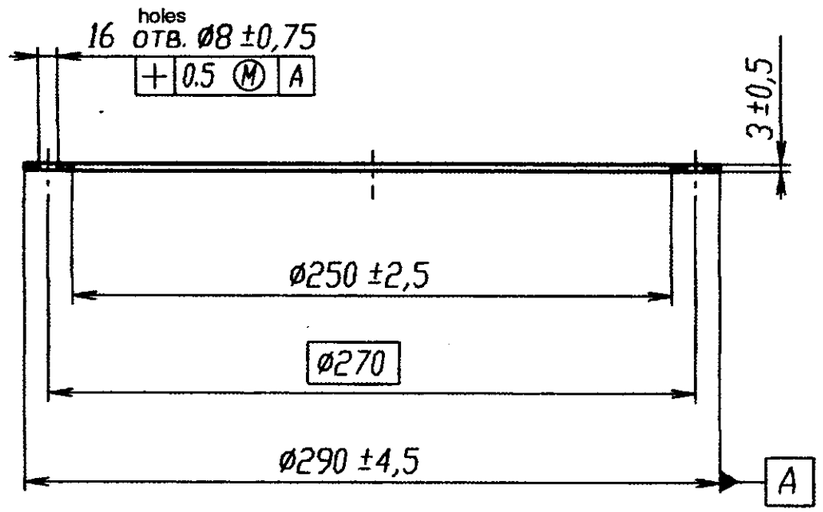
Wheel $\frac{45-V\,GOST\,2590-88}{50A-3-T\,OST\,3-98-80}$

Approved by shop | First use | Reference No.
Approved KTONI | Sign and Date
Approved Tosb | Dupl. Inv. No
Alternate Inv. No | Sign and Date
Approved OGMet | Orig. Inv. No.

Copied by | Format A4

Blank No. 406

AK-630 117-9



1. Substitute material- rubber stock NO-68-1 NTA TU 38.005.1166-98.
2. Dimensions ensured by tool.
3. Surface finish of moulding surfaces of press mould $^{0.32}\sqrt{}$.
4. Technical requirements for external view as per III group table 6 TU 38.105.1959-90.
5. Mark Ш, Ч and stamp К on tag.

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117-9

Gasket

Type	Weight	Scale
A	0.128	2:1

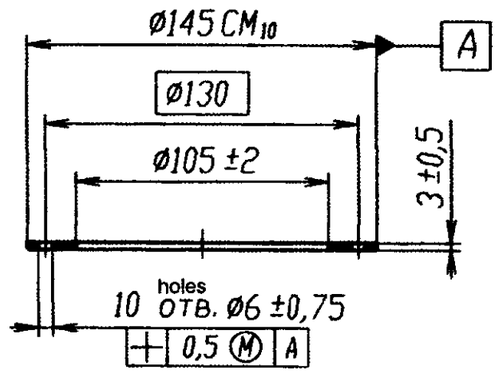
Sheet | Sheets 1

Rubber stock V-14NTA
TU 38.005.1166-98

Copied by

Format A4

AK-630 117-10



1. Substitute material- rubber stock NO-68-1 NTA TU 38.005.1166-98.
2. Dimensions ensured by tool.
3. Surface finish of moulding surfaces of press mould $^{0.32}\sqrt{}$.
4. Technical requirements for external view as per III group table 6 TU 38.105.1959-90.
5. Mark Ш, Ч and stamp К on tag.

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Approved TOsb
Dupl. Inv.
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-10

Gasket

Type	Weight	Scale
A	0.052	1:2

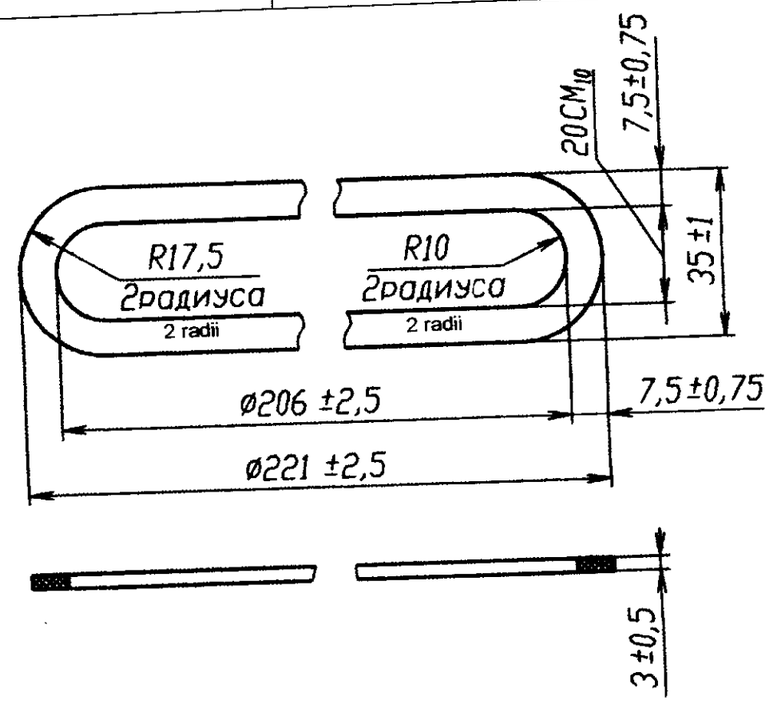
Sheet | Sheets 1

Rubber stock V-14NTA
TU 38.005.1166-98

Format A4

Blank No. 406

AK-630 117-11



1. Substitute material- rubber stock NO-68-1 NTA TU 38.005.1166-98.
2. Dimensions ensured by tool.
3. Surface finish of moulding surfaces of press mould $^{0.32}\sqrt{}$.
4. Technical requirements for external view as per III group table 6 TU 38.105.1959-90.
5. Mark Ш, Ч and stamp К on tag.

Approved by shop | First use | Reference No.
Approved KTONI | Sign and Date
Approved TOsb | Dupl. Inv. No. | Alternate Inv. No
Approved OGMet | Sign and Date | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-11

Gasket

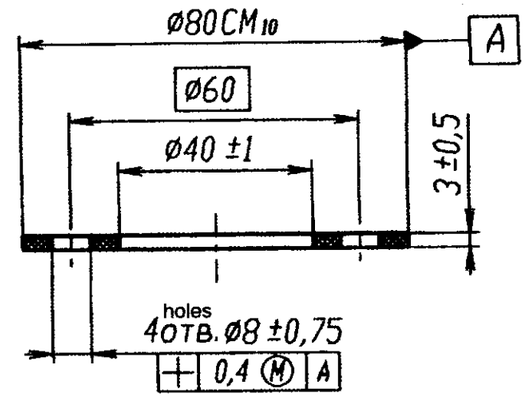
Type	Weight	Scale
A	0.016	1:1

Sheet | Sheets 1

Rubber stock V-14NTA
TU 38.005.1166-98

Format A4

AK-630 117-12



1. Substitute material- rubber stock NO-68-1 NTA TU 38.005.1166-98.
2. Dimensions ensured by tool.
3. Surface finish of moulding surfaces of press mould $\overset{0.32}{\sqrt{}}$.
4. Technical requirements for external view as per III group table 6 TU 38.105.1959-90.
5. Mark Ш, Ч and stamp К on tag.

Deleted: ¶

Deleted: ¶

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-12

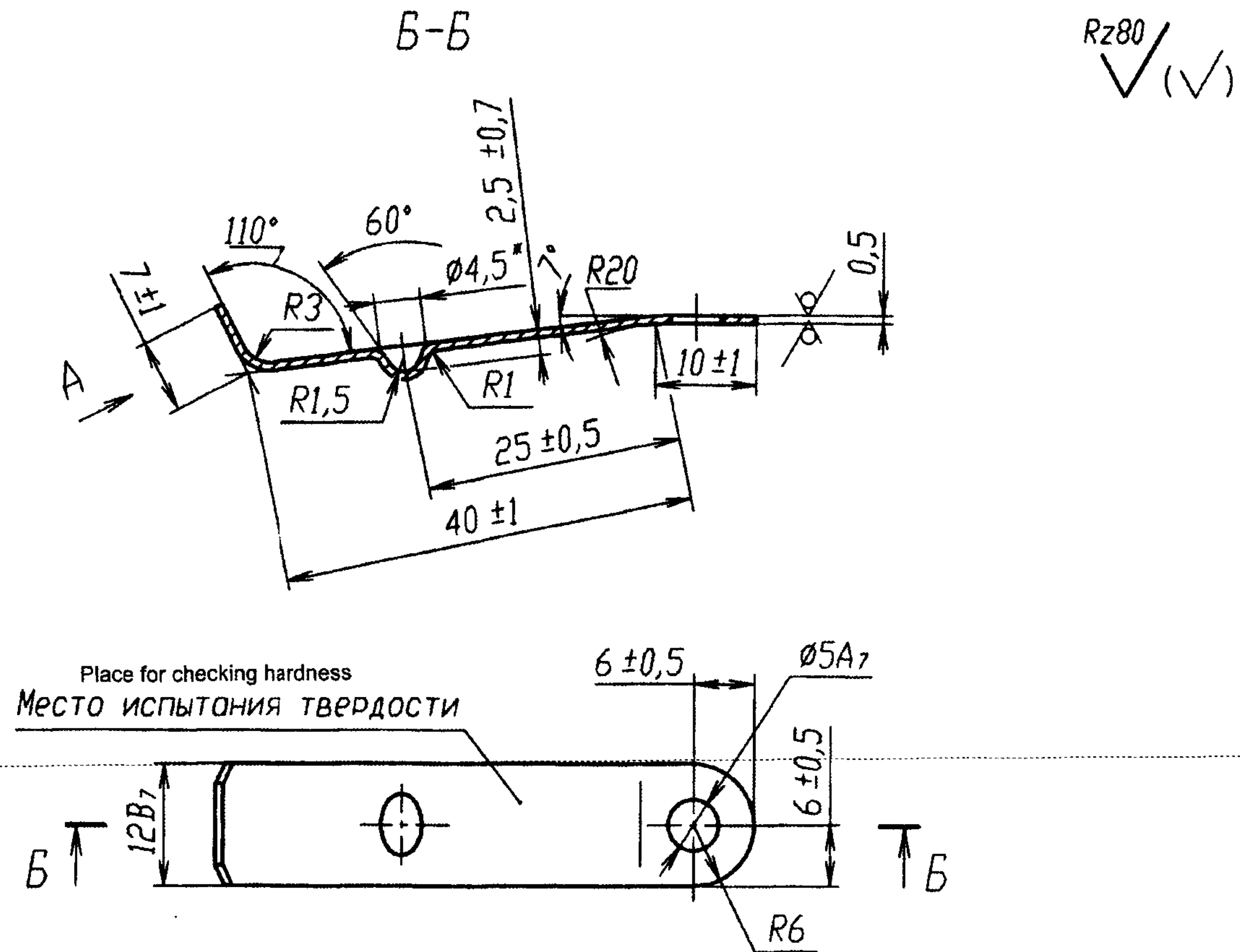
Gasket

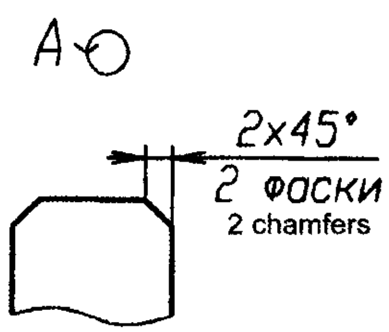
Type	Weight	Scale
A	0.030	1:1

Sheet | Sheets 1

Rubber stock V-14NTA
TU 38.005.1166-98

Format A4



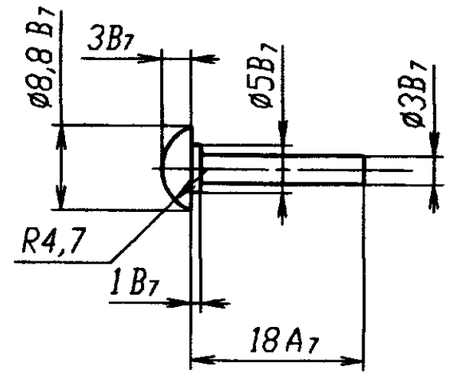


1. Substitute material- band 65 G-S-0.5x85 GOST 2283-79.
2. 73.5…76.5 HRA.
3.* Reference dimensions.
4. Coating-Chem.phos.accel.
Primer AK-070, (2), red GOST 6465-76 IV, OM2
5. Mark Ш , Ч and stamp K on tag.

					AK-630 117-14			
Amend.	Sheet	Doc.No.	Sign	Date		Type	Weight	Scale
Developed by					Plate	A	0.004	2:1
Checked by								
						Sheet	Sheets	1
Head of Q.C.D					Band 65G-0.5x85 GOST 2283-79			
Approved by								

AK-630 117-15

Rz40



1.Blunt sharp edges ~0.2 mm.
2. Coating Cd6.Cr.
3.Mark Ш, Ч and stamp K on tag.

					AK-630 117-15			
Amend.	Sheet	Doc. No.	Sign	Date	Pin	Type	Weight	Scale
Developed by						A	0.004	2:1
Checked by						Sheet		Sheets 1
Head of Q.C.D								
Design bureau chief					Steel 10 GOST 1050-88			
Head of Q.C.D								
Approved by								

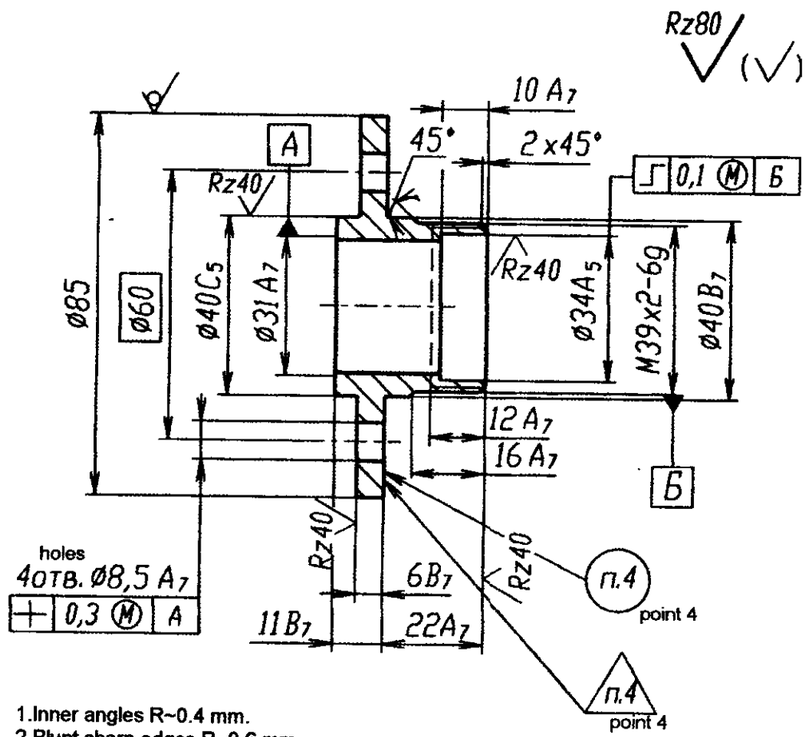
Approved KTONI | Approved by shop | First use | Approved TOsb | Approved OGMet | Sign and Date | Reference No. | Alternate Inv. No | Dupl. Inv. No. | Orig. Inv. No.

Copied by

Format A4

Blank No. 406

AK-630 117-46



1.Inner angles R~0.4 mm.
2.Blunt sharp edges R~0.6 mm.
3.Coating: Primer AK-070, yellow (2)
Enamel KhV-124, gray (4) IV, OM2- external surfaces except fitting places, inner and threaded surfaces.
AK-070 GOST 25718-83
KhV-124 GOST 10144-89.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630M TU I.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117-46

Body

Type	Weight	Scale
A	0.270	1:1

Sheet | Sheets 1

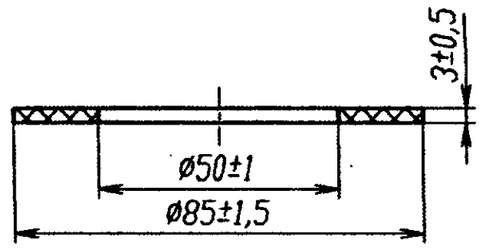
Wheel $\frac{85-V\ GOST\ 2590-88}{12Cr18Ni9Ti\ GOST\ 5949-75}$

Approved KTONI | Approved by shop | First use | Reference No. | Sign and Date
Approved TOsb | Dupl. Inv. No. | Alternate Inv. No | Sign and Date
Approved OGMet | Orig. Inv. No.

Copied by | Format A4

Blank No. 406

AK-630 117/50-1



1. Substitute material- rubber stock NO-68-1 NTA TU 38.005.1166-98.
2. Dimensions ensured by tool.
3. Surface finish of moulding surfaces of press mould $^{0.32}\sqrt{}$.
4. Technical requirements for external view as per III group table 6 TU 38.105.1959-90.
5. Mark Ш, Ч and stamp К on tag.

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

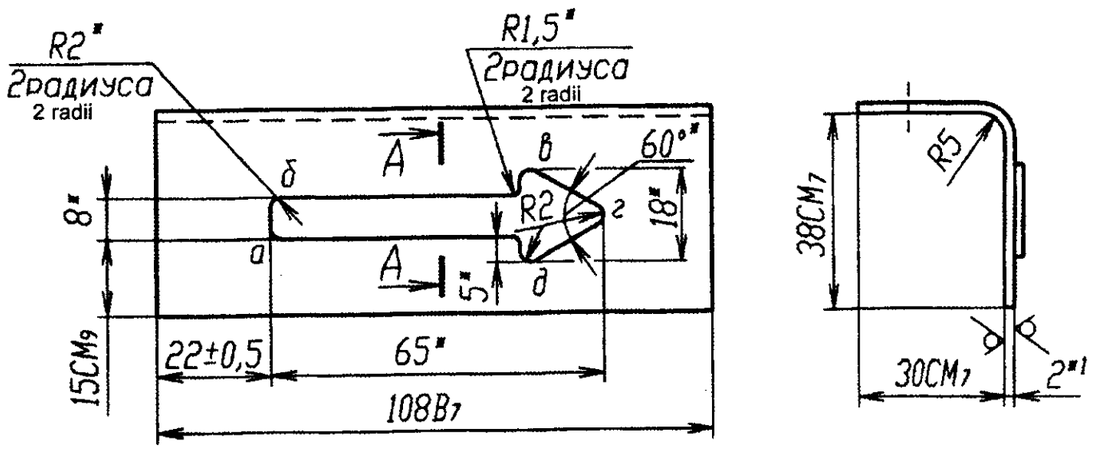
AK-630 117/50-1

Gasket

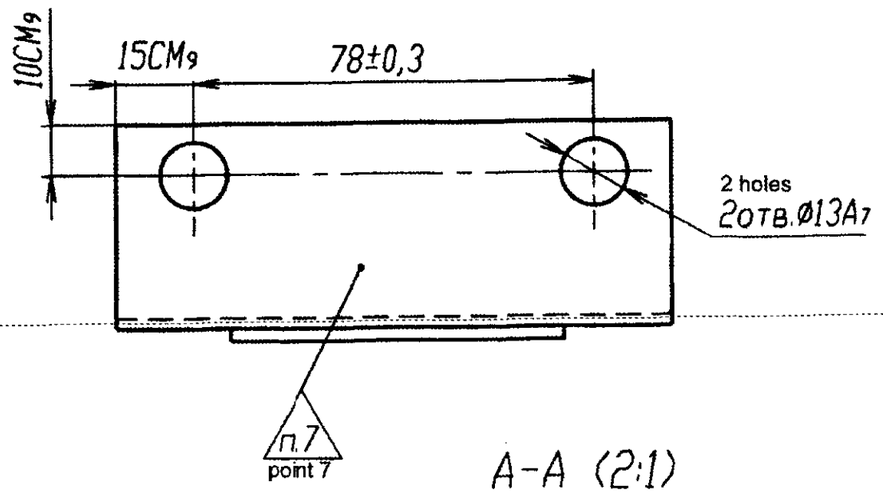
Type	Weight	Scale
A	0.018	1:1
Sheet	Sheets 1	

Rubber stock V-14NTA
TU 38.0051166-98

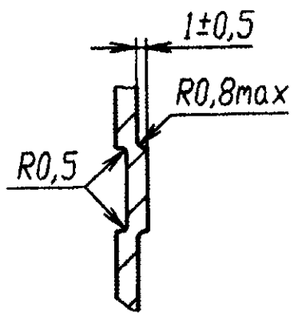
Format A4



Rz80 (√)



А-А (2:1)



1. It is permissible to make by extrusion method.
2. * Dimensions ensured by tool.
3. *1 Reference dimension.
4. Tolerance of contour "абвгд" 0.5 mm.
5. Blunt sharp edges ~0.4 mm.
6. Coating Cd6. phos.
Primer AK-070, yellow, (2).
Enamel KhV-124, gray , (4), IV, OM2.
AK-070 GOST 25718-83.
KhV-124 GOST 10144-89.
External surface of the pointer- enamel PF-115 red (2) GOST 6465-76.
7. Mark Ш, Ч and stamp К as per АК-630, АК-630 М ТУ I.

Comment:

Amend.	Sheet	Doc.No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Approved by				

АК-630 117/50-2

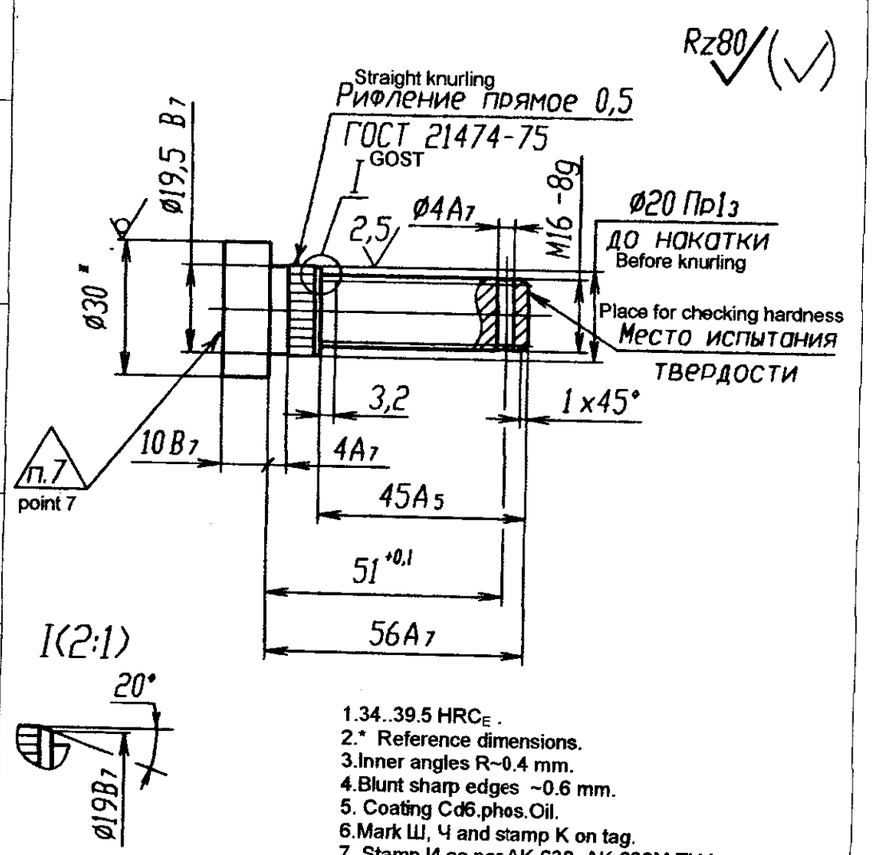
Pointer

Type	Weight	Scale
A	0.125	1:1
Sheet	Sheets 1	

Sheet $\frac{B-PN-02GOST19903-74}{K390V4-III-25GOST16523-97}$

Blank No. 406

AK-630 117/50-4



1. 34..39.5 HRC_E .
2. * Reference dimensions.
3. Inner angles R~0.4 mm.
4. Blunt sharp edges ~0.6 mm.
5. Coating Cd6.phos.Oil.
6. Mark Ш, Ч and stamp K on tag.
7. Stamp И as per AK-630, AK-630M TU I.

Approved by shop | First use | Reference No.
Approved KTONI | Sign and Date
Approved TOsb | Dupl. Inv. | Alternate Inv. No | Sign and Date
Approved OGMet | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117/50-4

Screw

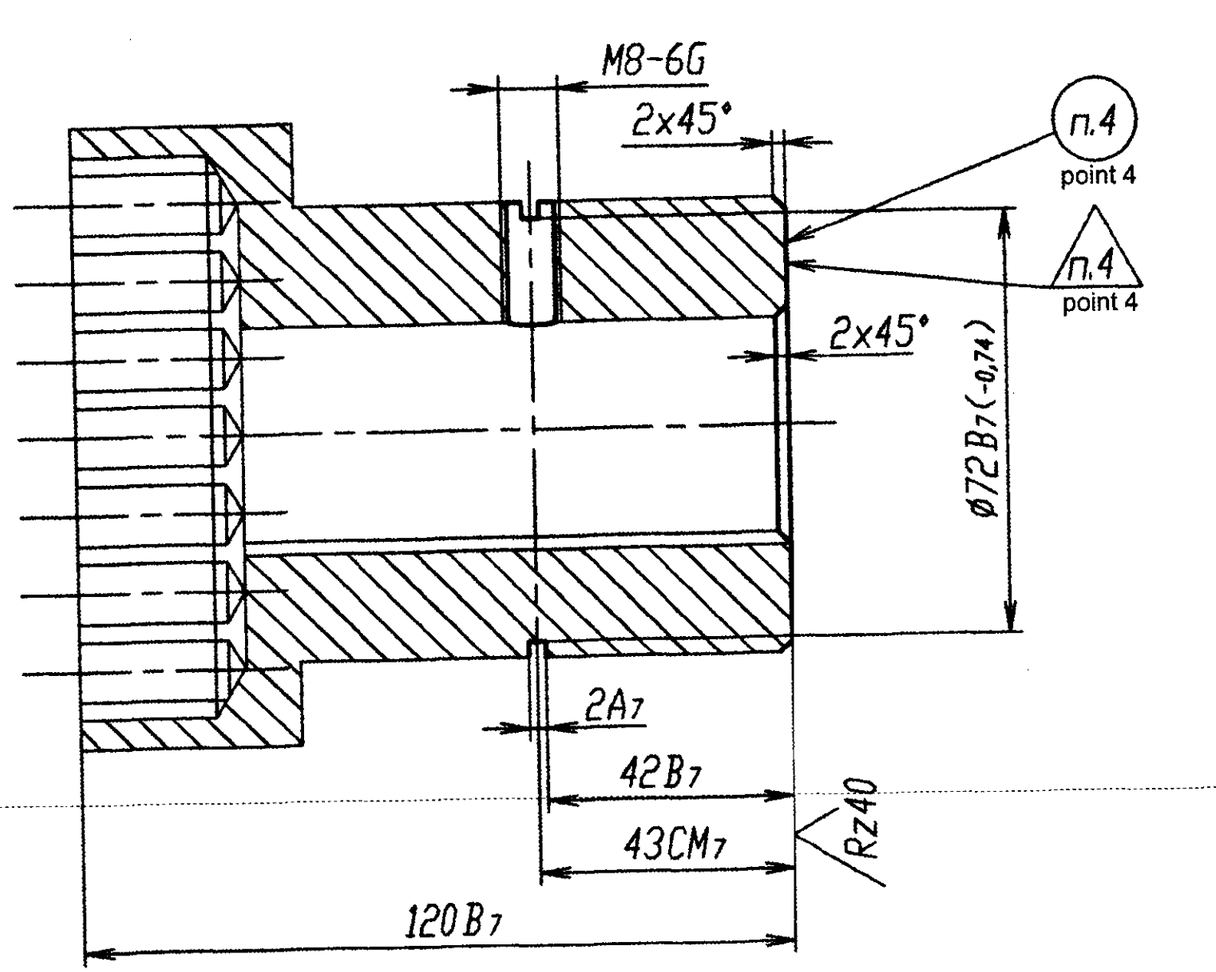
Type	Weight	Scale
A	0.155	1:1

Sheet | Sheets 1

Wheel $\frac{30 - V\,GOST\ 2590 - 88}{50A - B - T\ OST3 - 98 - 80}$

Format A4

AK-630 117/50-5



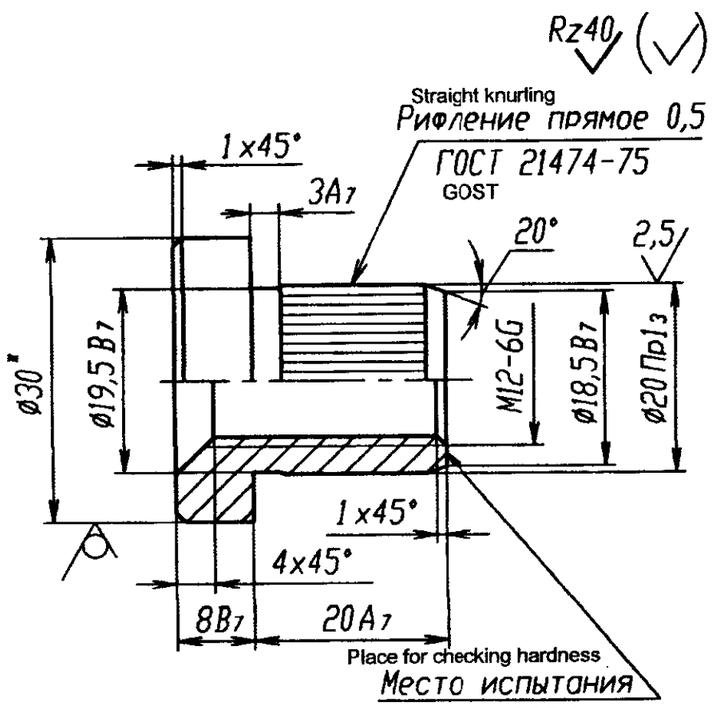
Comment:

1.* Half coupling N48.547-14002-05 (part of pump VK5/24 A-T2 GOST 10392-89).
2. Blunt sharp edges ~0.4 mm.
3. Coating Chem.phos.
Primer AK-070, yellow, (2).
Enamel KhV-124, gray , (4), IV, OM2.
AK-070 GOST 25718-83.
KhV-124 GOST 10144-89.
4. Mark Ш, Ч and stamp K as per AK-630, AK-630 M TU I.

					AK-630 117/50-5	
Amend.	Sheet	Doc.No.	Sign	Date	Half coupling	Type: A; Weight: 0.650; Scale: 1:1
Developed by						Sheet; Sheets 1
Checked by						
Head of Q.C.D					Blank*	
Approved by						

Blank No. 406

AK-630 117/50-31



1.34..39.5 HRC_E .
2.* Reference dimensions.
3.Inner angles R~0.4 mm.
4.Blunt sharp edges ~0.4 mm.
5. Coating Cd6.phos.Oil.
6.Mark Ш, Ч and stamp К, И as per AK-630, AK-630M TU I on tag.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117/50-31

Bush

Type	Weight	Scale
A	0.020	2:1

Sheet | Sheets 1

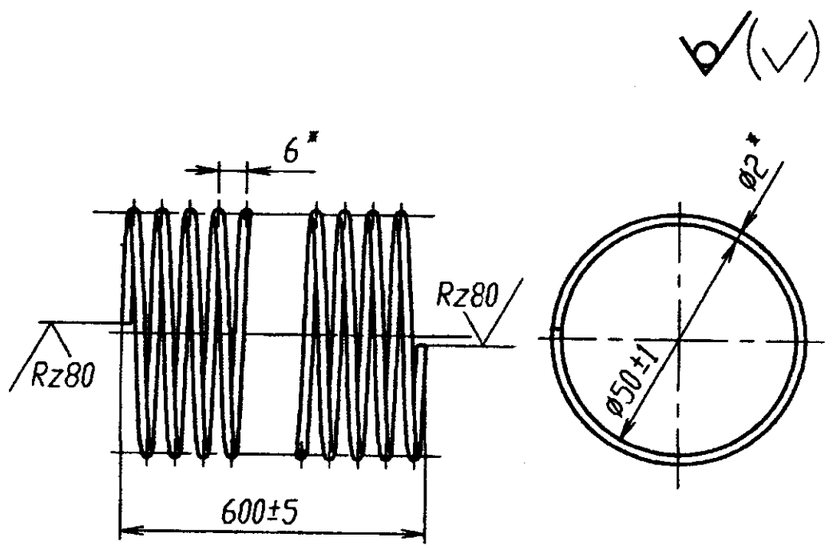
Wheel $\frac{V-30\,GOST\,2590-71}{50A-B-T\,OST\,3-98-80}$

Format A4

Approved KTONI
Approved by shop
First use
Reference No.
Sign and Date
Dupl. Inv.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Blank No. 406

AK-630 117/50-32



1. Heat treatment- tempering 240°-260°C.
2. length of uncoiled spring L* = 16470 mm.
3. Coiling direction- right.
4. No. of turns n = 100*.
5. Blunt the ends.
6.* Reference dimensions.
7. Coating Cd9. phos.accel.
   Lacquer BF-4, black, 2 coats, IV, OM2
   Made as per OST 3-4123-78.
8. Change in dimension 600 ± after coating up to 570 mm is permissible.
9. Mark Ш, Ч and stamp K on tag.

Approved KTONI | Approved by shop | First use | Reference No.
Approved TOsb | Dupl. Inv. | Alternate Inv. No | Sign and Date
Approved OGMet | Orig. Inv. No. | Sign and Date

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117/50-32

Armoured hose

Type	Weight	Scale
A	0.410	1:1

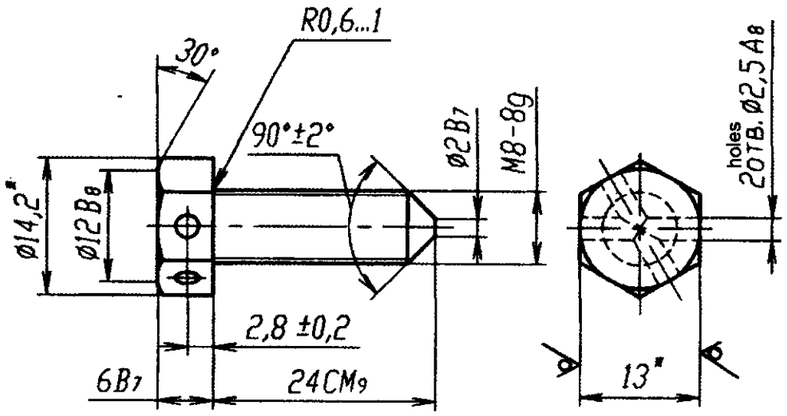
Sheet | Sheets 1

Wire V-1-2.0 GOST 9389-75

Format A4

AK-630 117/50-33

Rz80 (✓)



1.31..40.5 HRC_E .Check 3-5% components from batch but not less than 3 nos.
2..* Reference dimension.
3.Blunt sharp edges ~0.4 mm.
4. Coating Cd6.phos.Oil.
5. Mark Ш, Ч and stamp К, И on tag.

Approved by shop | Reference No. | First use
Approved KTONI | Sign and Date
Approved TOsb | Dupl. Inv. No. | Alternate Inv. No
Approved OGMet | Sign and Date | Orig. Inv. No.

AK-630 117/50-33

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Bolt

Type	Weight	Scale
A	0.015	2:1

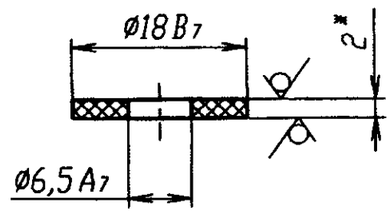
Sheet | Sheets 1

Hexagon $\frac{13-5GOST\,8560-78}{40Kh-T-VGOST\,1051-73}$

Copied by | Format A4

AK-630 117/50-34

Rz320 (√)



1. Substitute material- fibre board- FT-2 TU 5458-835-0248643-92.
2.* Reference dimension.
3. Dimensions ensured by tool.
4. Mark Ш, Ч and stamp К, И on tag.

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117/50-34

Gasket

Type	Weight	Scale
A	0.005	2:1

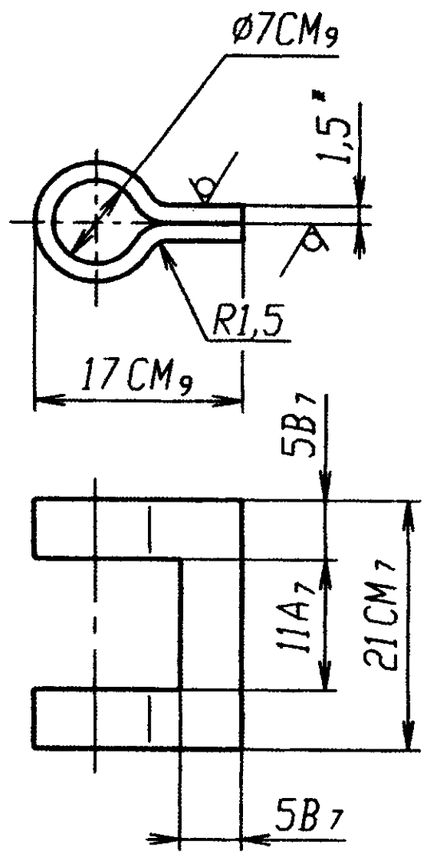
Sheet | Sheets 1

Fibre board FT-2
GOST

Format A4

AK-630 108-3

Rz80 (√)



1.* Reference dimension
2.Sharp angles R≈ 0.4 mm.
3.Blunt sharp edges ≈ 0.4 mm.
4.Coating Cd12.phos.
5.Mark Ш, Ч and stamp K on tag.

Approved KTONI | Approved by shop | First use
Approved TOsb | Reference No. | Dupl. Inv. No.
Approved OGMet | Sign and Date | Alternate Inv. No
Orig. Inv. No. | Sign and Date

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Head of Q.C.D				
Approved by				

AK-630 108-3

Loop

Type	Weight	Scale
A	0.006	2:1

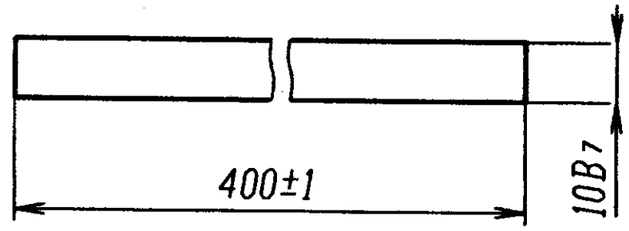
Sheet | Sheets 1

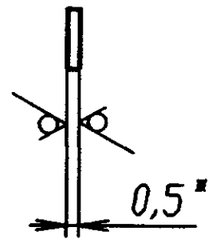
Sheet $\frac{B-PN-01.5GOST19903-90}{K390V4-III-25GOST16523-97}$

Copied by | Format A4

Blank No. 406

AK-630 108-4			





Rz80 (√)

1.* Reference dimension.
2.Blunt sharp edges ≈ 0.2 mm.
3. Coating Cd12.phos.
4. Mark Ш, Ч and stamp К on tag.

Approved by shop | First use | Reference No. | Approved KTONI | Sign and Date | Dupl. Inv. No. | Approved TOsb | Alternate Inv. No | Sign and Date | Approved OGMet | Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Head of Q.C.D				
Approved by				

Copied by

AK-630 108-4

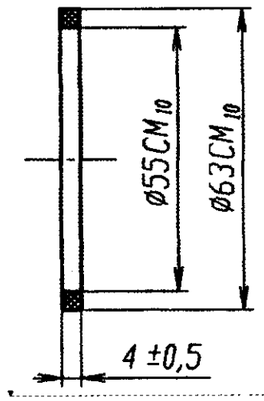
Band	Type	Weight	Scale
	A	0.013	1:1
	Sheet		Sheets 1

Sheet $\frac{BT - PN - 0.5 GOST 19904 - 90}{II - Sh - VG - 08kp GOST 9045 - 93.}$

Format A4

Blank No. 406

AK-630 117-13



1. Substitute material- rubber stock NO-68-1 NTA TU 38.005.1166-98.
2. Dimensions ensured by tool.
3. Surface finish of moulding surfaces of press mould $^{0.32}\sqrt{}$.
4. Technical requirements for external view as per III group table 6 TU 38.105.1959-90.
5. Mark Ш, Ч and stamp К on tag.

Deleted: .

Deleted: .

Approved by shop | First use
Reference No.
Approved KTONI
Sign and Date
Dupl. Inv. No.
Approved TOsb
Alternate Inv. No
Sign and Date
Approved OGMet
Orig. Inv. No.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

Copied by

AK-630 117-13

Gasket

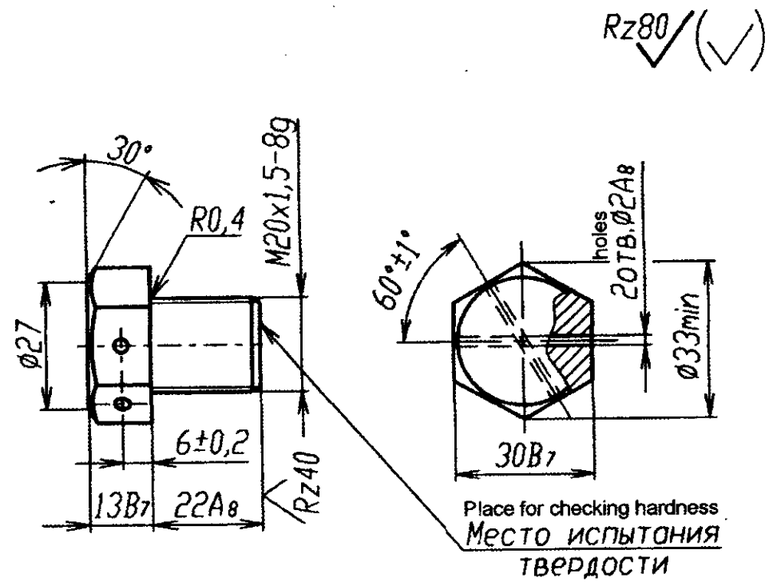
Rubber stock V-14NTA
TU 38.005.1166-98

Type	Weight	Scale
A	0.016	1:1
Sheet	Sheets 1	

Format A4

Blank No. 406

AK-630 117/50-6



1.31..40.5 HRC_E.
2. Blunt sharp edges R~0.6 mm.
3. Coating Cd9 Cr.
4. Mark Ш, Ч and stamp К, И on tag.

Amend.	Sheet	Doc. No.	Sign	Date
Developed by				
Checked by				
Head of Q.C.D				
Design bureau chief				
Head of Q.C.D				
Approved by				

AK-630 117/50-6

Plug

Steel 40 Kh
GOST 4543-71

Type	Weight	Scale
A	0.04	1:1

Sheet | Sheets 1

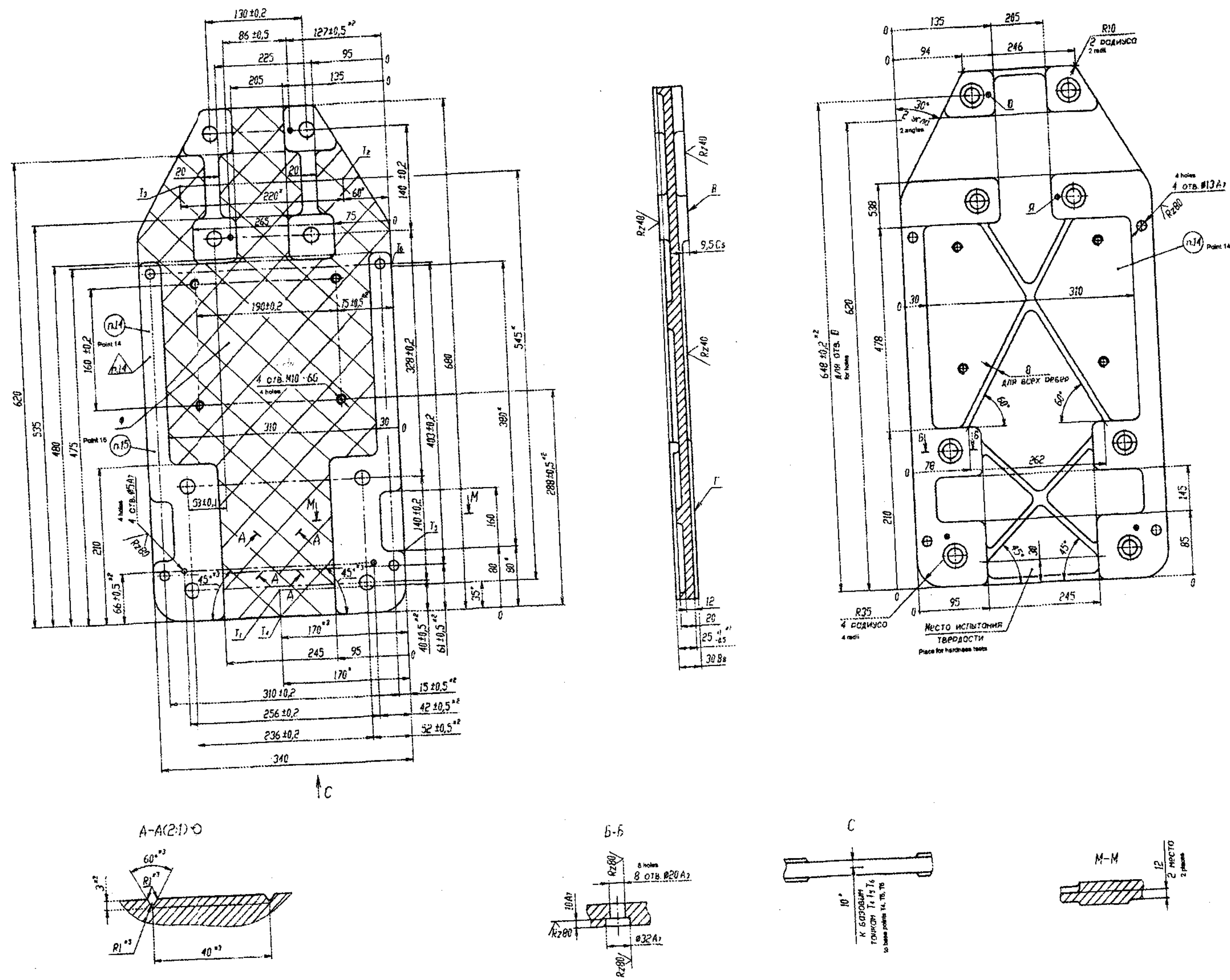
Copied by | Format A4

Approved TOsb | Approved by shop | Approved KTONI | Approved OGMet

Dupl. Inv. | Alternate Inv. No | Reference No. | First use | Sign and Date | Orig. Inv. No.

Rz630 (✓)

АК-630 117/50-3



1. Accuracy of casting 9-0-0-8 GOST 26645-85
2. Unspecified casting radii - not more than 10 mm.
3. External drafts as per GOST 3212-92.
4. Roughness of casting surface is as per test specimen.
5. The buckling of casting surface Ф is permitted for not more than 2 mm.
6. Non-flatness of surfaces "В" and "Г" is not more than 0.1 mm.
7. Dimensions are ensured by tool.
8. *1 - Dimension is given in respect of base points T1, T2, T3.
9. *2 - Dimensions are given in respect of base points T4, T5, T6.
10. *3 - Technological dimensions are related to casting mesh, not subjected to inspection.
11. Internal angles R ~ 0.4 mm.
12. Blunt the sharp edges ~ 0.6 mm.
13. Coating: An. Ox. in chromatic acid.
Primer AK - 070 yellow (2).
Enamel KhV-124, grey (4), IV, OM2
AK-070 GOST 25718 – 83
KhV-124 GOST 10144-89
14. Mark Ш Ч and stamp К, И as per AK-630, AK-630M TU I.
15. Mark П as per AK-630, AK-630M TU I.

1. Точность отливки 9-0-0-8 ГОСТ 26645-85.
2. Неуказанные литейные радиусы не более 10мм.
3. Формовочные уклоны по ГОСТ 3212-92 в сторону увеличения размеров.
4. Шероховатость литейной поверхности по контрольному образцу.
5. Допускается коробление литой поверхности Ф не более 2мм.
6. Неплоскостность поверхностей "В" и "Г" не более 0,1мм.
7. Размеры обеспеч. инстр.
8. *1 Размер задан относительно базовых точек T_1, T_2; T_3
9. *2 Размеры заданы относительно базовых точек T_4; T_5; T_6.
10. *3 Размеры технологические относятся к литейной сетке, контролю не подлежат.
11. Внутренние углы R ≈ 0,4 мм.
12. Острые ребра притупить ≈ 0,6 мм.
13. Покрытие Ан. Окс. в хромовой кислоте
Грунтовка АК-070, желтая, (2).
Эмаль ХВ-124, серая, (4), IV, ОМ2.
АК-070 ГОСТ 25718-83
ХВ-124 ГОСТ 10144-89 –
все необработанные наружные поверхности.
14. Маркировать Ч, Ш и клеймить К, И по АК-630, АК-630М ТУ I.
15. Маркировать Пу по АК-630, АК-630М ТУ I.

АК-630 117/50-3

АК-630 117/50-3	
Plate / Плита	Лит. (Type): А; Масса (Mass): 13; Масштаб (Scale): 1:2
Casting / Отливка 11-ОСТ3-4227-79 (II OST 4227-79)	Лист (Sheet); Листов (Total sheets) 1
АМг6 Лч-3-Т4 ГОСТ 1583-93 (AMg6 Lh-3-T4 GOST 1583-93)	

Изм. Лист № докум. Подп. Дата
Разраб.
Пров.
Т.контр.
Н.контр.
Утв.