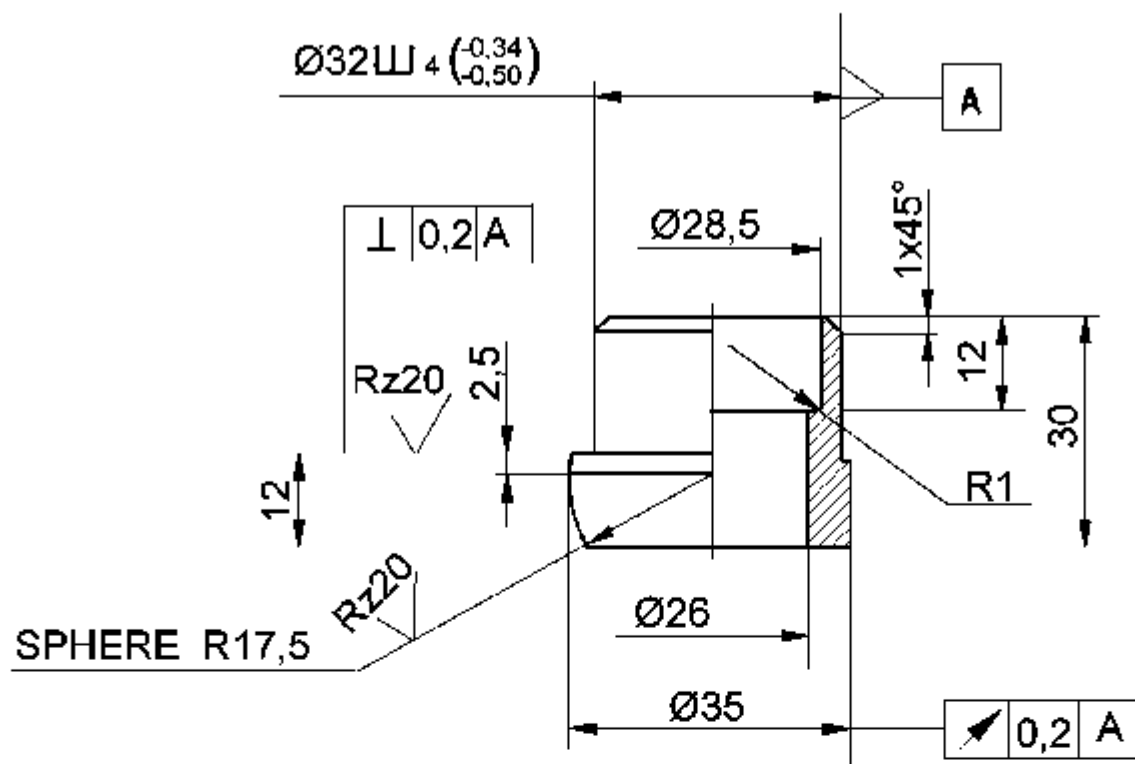
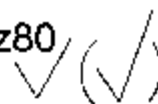


1-29-90-02

Rz80



TECNICAL CONDITIONS

1. INSPECTION GROUP V AS PER TECHNICAL REQUIREMENTS TT -11.
2. ALTERNATE MATERIAL IS STEEL 40 AND 50, GOST 1050-74, 38 x A, 40 x , GOST 4543 71.
3. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS FOLLOWS: FOR HOLES - AS PER A₇, SHAFTS - AS PER B₇, OTHERS - AS PER CM₈.
4. COATING ZINC - PLATED, 15 MICRONS THICK, OILED
5. APPLY STAMP ON TO THE TAG (PART 540-551) FOR BATCH OF PARTS AND SEAL.

APPROVED

M. VASIN

CHECKED

H. VASIN (U.P.R.)

20-06-57-1

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

NIPPLE

45 GOST 1050-74

WEIGHT

SCALE

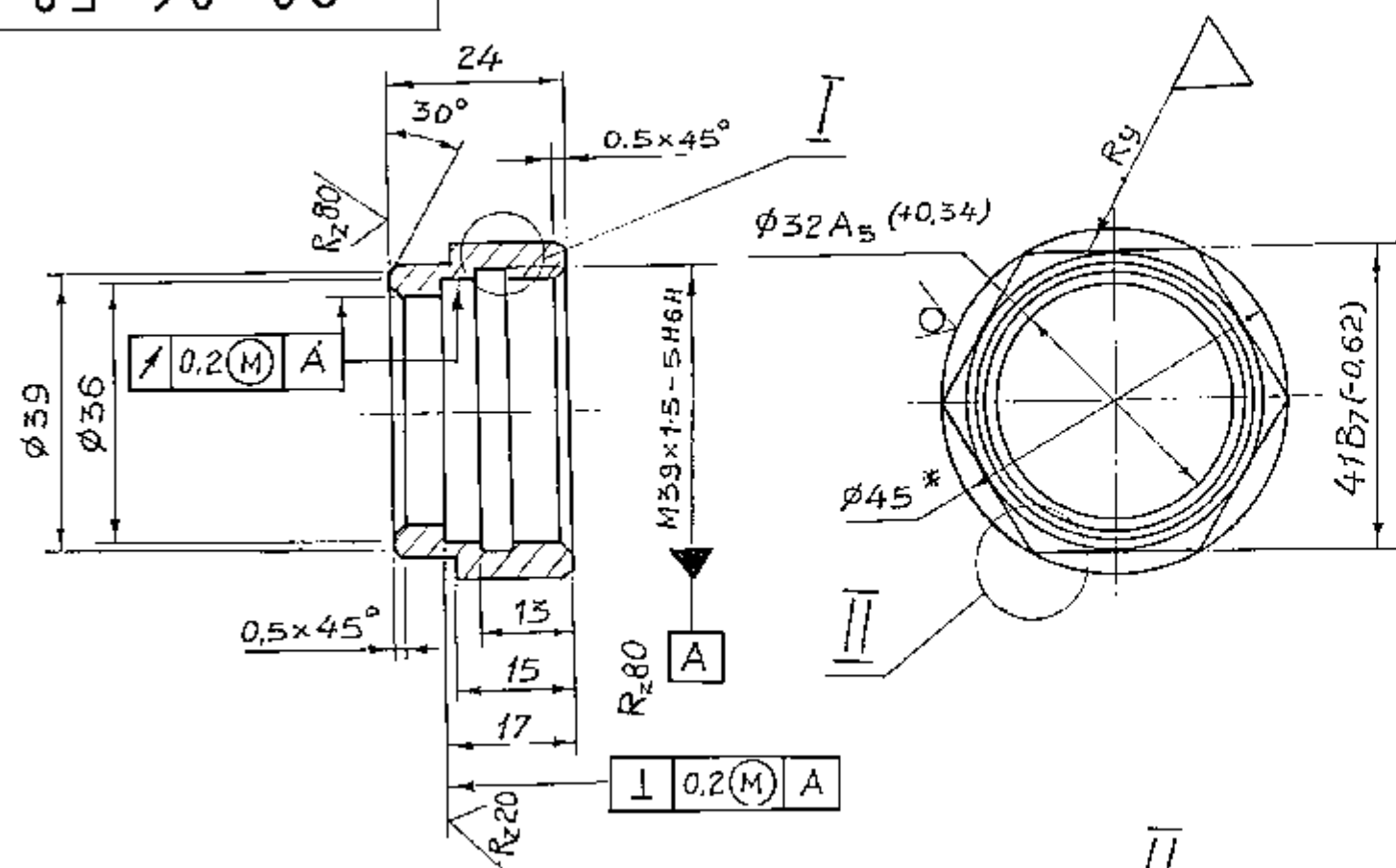
0.06

1:1

SHT

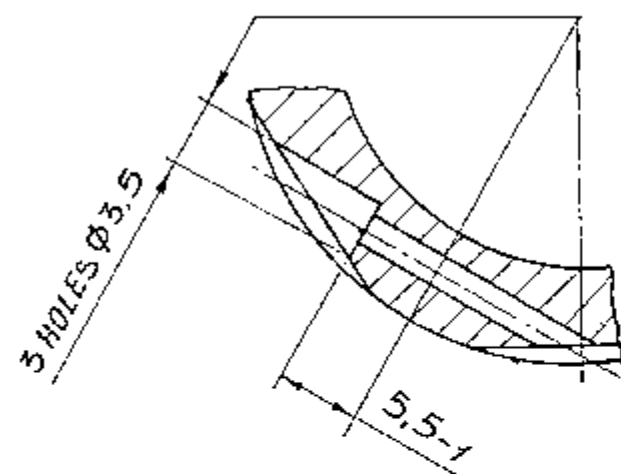
SHTS

85-90-02

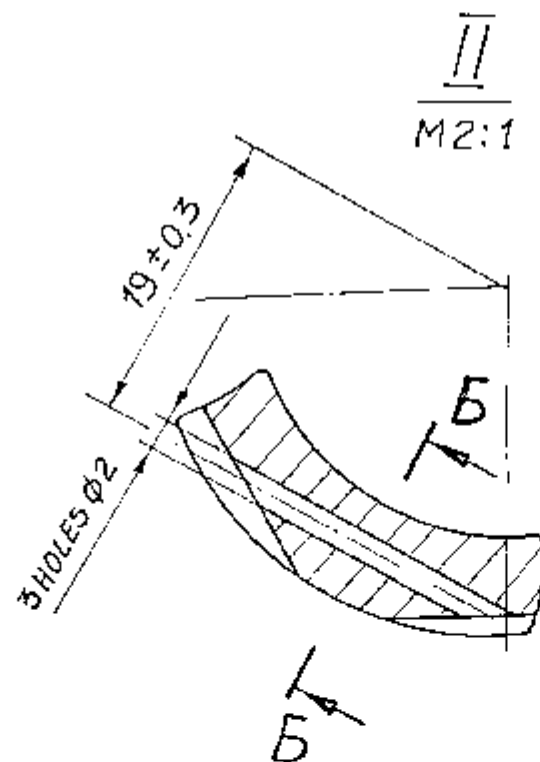
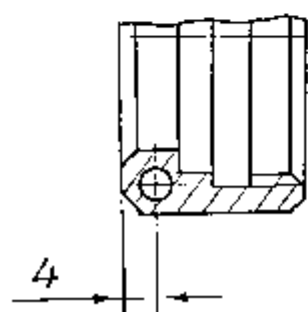
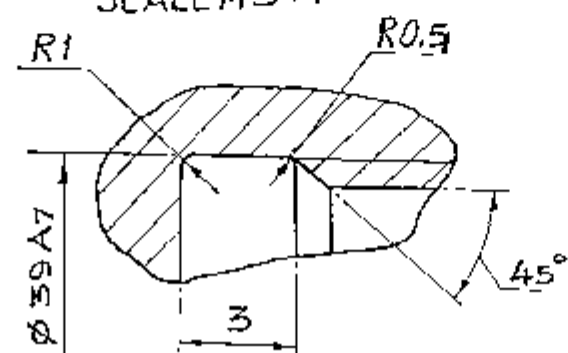
R_z 40/ (✓)

II ALTERNATE

SCALE M2:1



B-B REVOLVED

I
SCALE M5:1

TECHNICAL CONDITIONS

1. INSPECTION GROUP V AS PER TECHNICAL REQUIREMENTS TT-11
2. ALTERNATE MATERIAL IS STEEL 40 AND 50, GOST 1050-74; 38XA, 40X, GOST 4543-71.
3. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS FOLLOWS: FOR HOLES - AS PER A₇
SHAFTS - AS PER B₇
OTHERS - AS PER CM₈
4. * DIMENSIONS ARE GIVEN FOR REFERENCE.
5. COATING: ZINC-PLATED 15 MICRONS THICK, OILED.
6. ABSENCE OF ZINC ON THE INTERNAL SURFACE OF THE PARTS IS ALLOWED.

Ⓐ EQ. MATERIAL:- COLD DRAWN BRIGHT STEEL BAR GRADE 40 Cr1 M028 TO IS: 5517-64.

DRN. - Sd. -	WT. - (Kg) -	20-06-58
TCD. - Sd. -	0.07	
CHD. - Sd. -		
APD. - Sd. -		
DC(I) NO. & DATE	ISSUE	AMENDMENTS

MATERIAL :- CIRCULAR CALIBAR 45-5 GOST 7417-75/ 45 GOST 1050-74		
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF	ALL THREADS TO CONFORM TO SPECIFICATION	STAMP OR ETCH, PART NO. MANUFACTURERS NAME & YEAR OF MFG.
ORG. NOT TO BE SCALED	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED	USED ON:-
SCALE 1:- 1:1		
DATE :- 16-12-03		
DRN. - Sd. -	WT. - (Kg) -	20-06-58
TCD. - Sd. -	0.07	
CHD. - Sd. -		
APD. - Sd. -		
NUT		

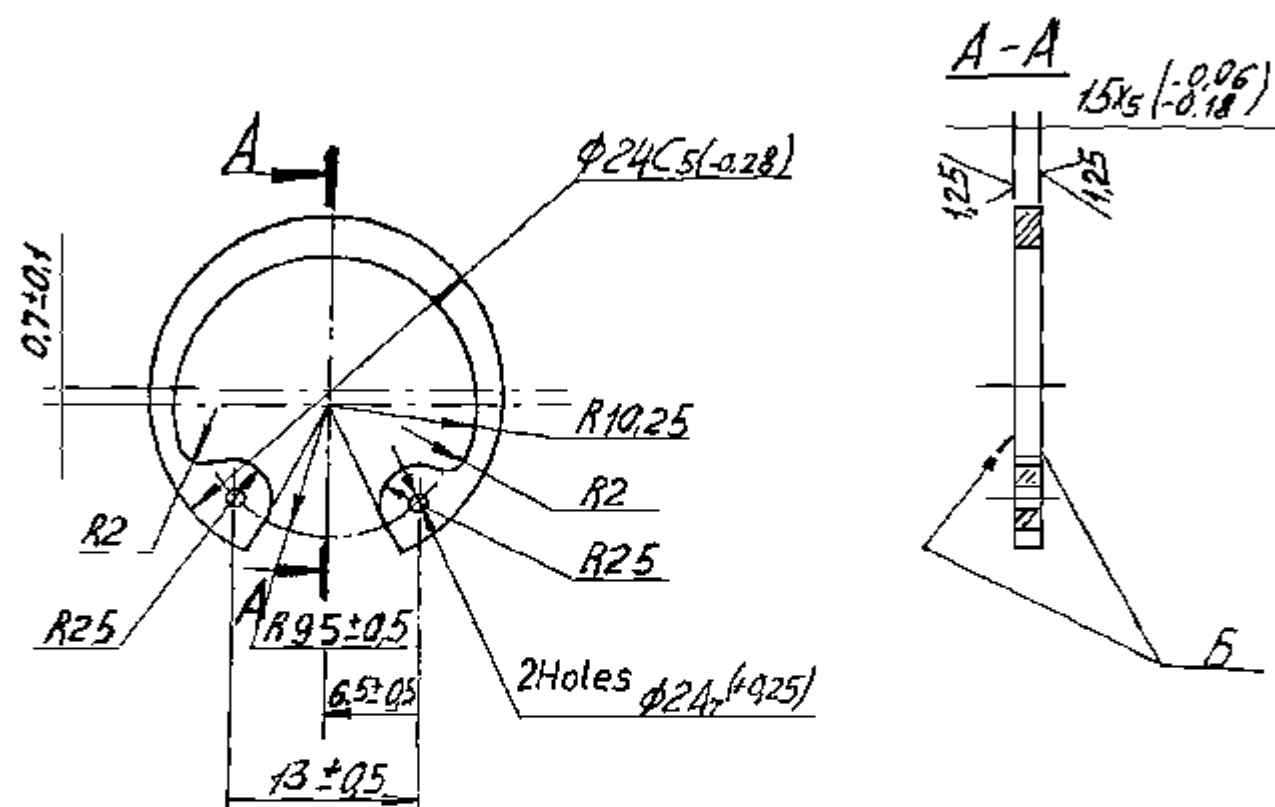
CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

272-41-114

Rz80
V (✓)

TECHNICAL CONDITIONS

- 1 HRC 40 to 48
 - 2 Coating Chemically parkerized oiled or chemically oxidized oiled
 - 3 Variation of the ring width in the narrowest sections should not exceed 0.4 mm
 - 4 Non-flatness of butt-ends δ should not exceed 0.3 mm under load of 2 Kg
 - 5 Draft not exceeding 0.15 mm is allowed on each side
 - 6 Check dimensions before heat treatment
 - 7 Temper colours and reduction of the part hardness not in excess of 3 HRC units, in section with a length not exceeding 6 mm from the slot butt-ends are allowed
- Ⓐ EQ MATERIAL:- COLD ROLLED STEEL STRIP GRADE 75C6 TO IS: 2507-75.



THE ABBRIVATIONS AND SYMBOLS ARE
BASED ON RUSSIAN SPECIFICATIONS.

ALL DIMENSIONS ARE IN mm.

00805-ICV
31-08-2000
DC(I) No.
& DATE

Ⓐ

EQ. MATERIAL ADDED.

ISSUE

AMENDMENTS

APPROVED

H VASU

CHECKED

Rln

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

272-41-114

LOCKING RING

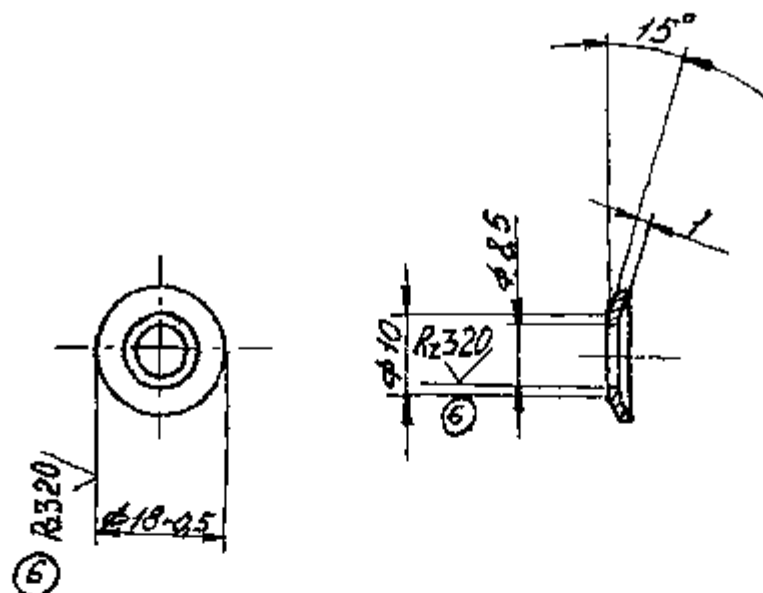
STEEL 65Г, GOST 14959-79

WEIGHT SCALE

0.015 2:1

SHT 1 SHTS 1

311-36-1A



TECHNICAL CONDITIONS

2. Dimensions without deviations should conform to accuracy of $\pm 0,3\text{mm}$.
3. Displacement of hole centre with respect to the external diameter should not exceed $0,3\text{mm}$.
4. Sharp edges and burrs are not allowed.
5. Washer may be made of sheet with thickness of $1,5\text{mm}$.
Alternate material is steel 20x13 GOST 5632-72.

- ①EQ.MATERIAL:-1. STAINLESS STEEL SHEET GRADE 04C818 N110 TI 20
TO IS: 6911-72.
2. STAINLESS STEEL PLATE GRADE 20 C813 TO
IS: 6911-72.

00837-ICV
N. H. J. S.
04-12-2000

IC(I) No.
& DATE

①
G. S. S.

ISSUE

EQ. MATERIAL ADDED,

AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

311-36-1A

WASHER

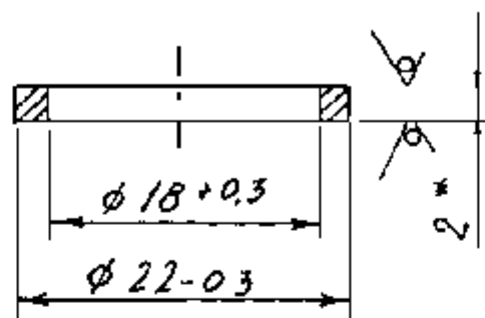
matl

WEIGHT SCALE

0.0015 1:1

SHT 1 SHTS 1

08-678



1. Alternate material is copper of grade M_2 and M_3 GOST 859-78
 2. Anneal.
 3. *Dimension is given for reference.
- ⓑ EQ.MATERIAL-GRADE-ETP, 'O' CONDITION TO IS: 1972-77.

00831-11V N. V. Kaly 16.11.2000	ⓑ Comm	EQ.MATERIAL ADDED IN THE DRAWING.
00799 -ICV V. R. K. S. 01.09.2000	Ⓐ Comm	DS.CAT No. ADDED
DCU/No DATE	ISSUE	NATURE OF AMENDMENTS

APPROVED

CHECKED

329-30

DS CAT PART No. Ⓐ
LV2/RCV 5330-021396

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

GASKET

WEIGHT SCALE

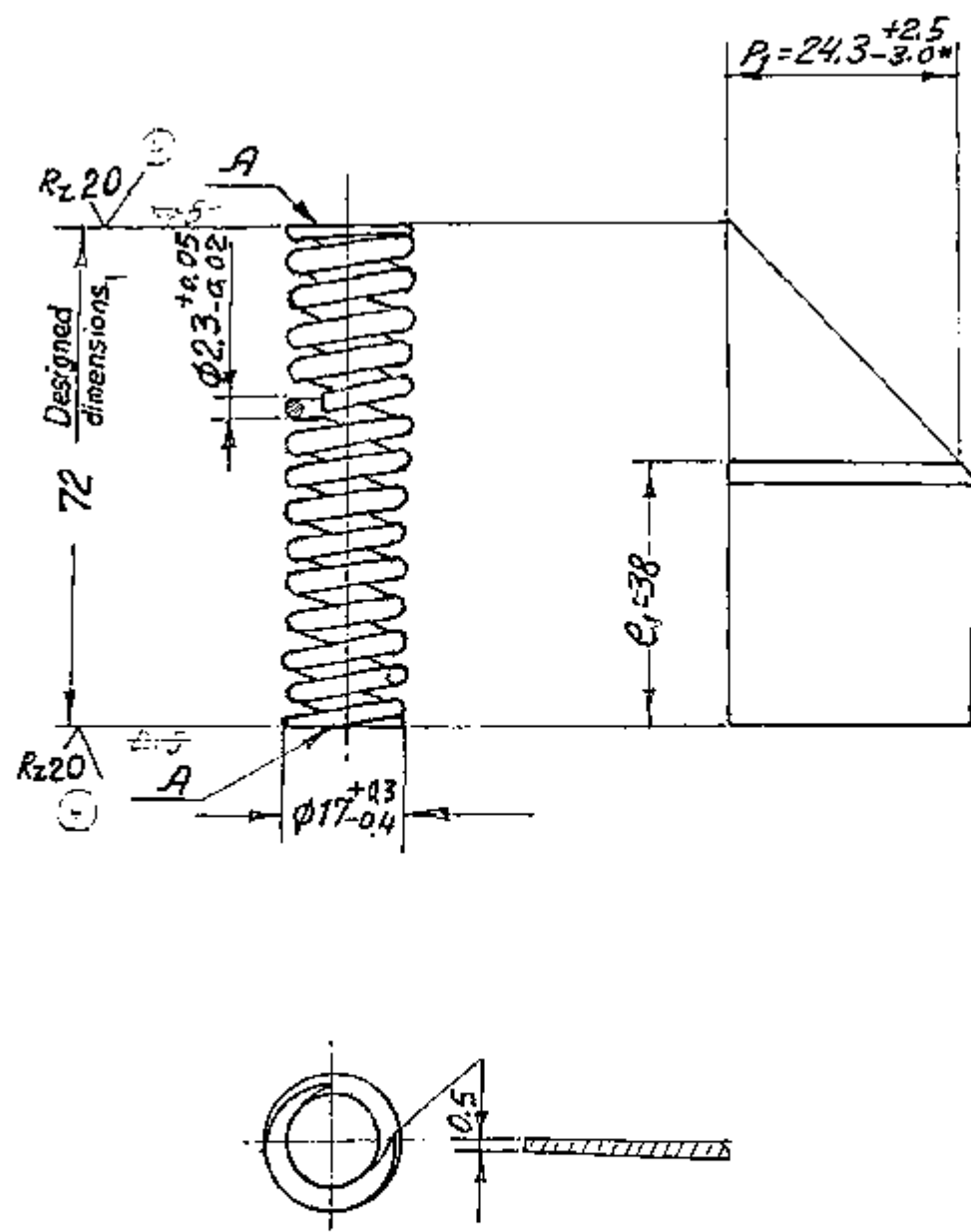
0.0029 2:1

SHT 1 SHTS 1

SHEET 2nPHM 2 M1, GOST 495-77

411-33

✓(✓)



1. Variation in pitch $t \leq 1.0\text{mm}$.
 2. Non-squareness of surface "A" with respect to axis should not exceed 1.5mm, along angle piece over length of spring. Increase in external diameter of base coils may be up to $\phi 17.8\text{ mm}$.
 3. Gap between pressed coils may be 0.15mm.
 4. Base surface of coil should be at least 0.75 of circumference length, besides, thickness of base coil butt end should be at least 0.5mm.
 5. Every spring must be checked under load P_1 .
 6. Residual deformation is not allowed while bending the spring up to touching of coils.
 7. Blunt sharp edges.
 8. Bakelite varnish may be absent at 2 places with diameter up to 2mm and at touching places of non-working coils.
 9. Check the dimensions before coating.
 10. Alternate coating may be cadmium plated, 12 micron thickness, parkerized.
 11. Coating: cadmium plated, 12 micron thickness chromated, with removal of Hydrogen embrittlement Bakelite varnish ABC-1 GOST 901-78.
- EQ. MATERIAL: Gde 3 To IS: 4454 (Part-I)-81.

00733-ICV ✓ R. M. VASU 22.9.99	EQ. MATERIAL ADDED
BCD/NO DATE	ISSUE NATURE OF AMENDMENT

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

411-33

SPRING

WIRE II-2.3, GOST 9389-75

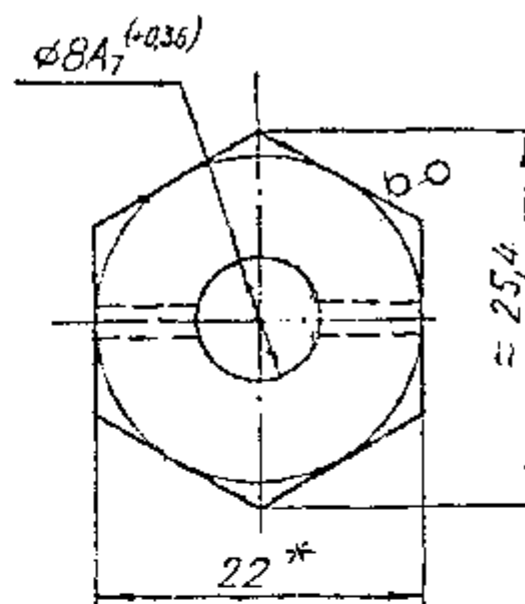
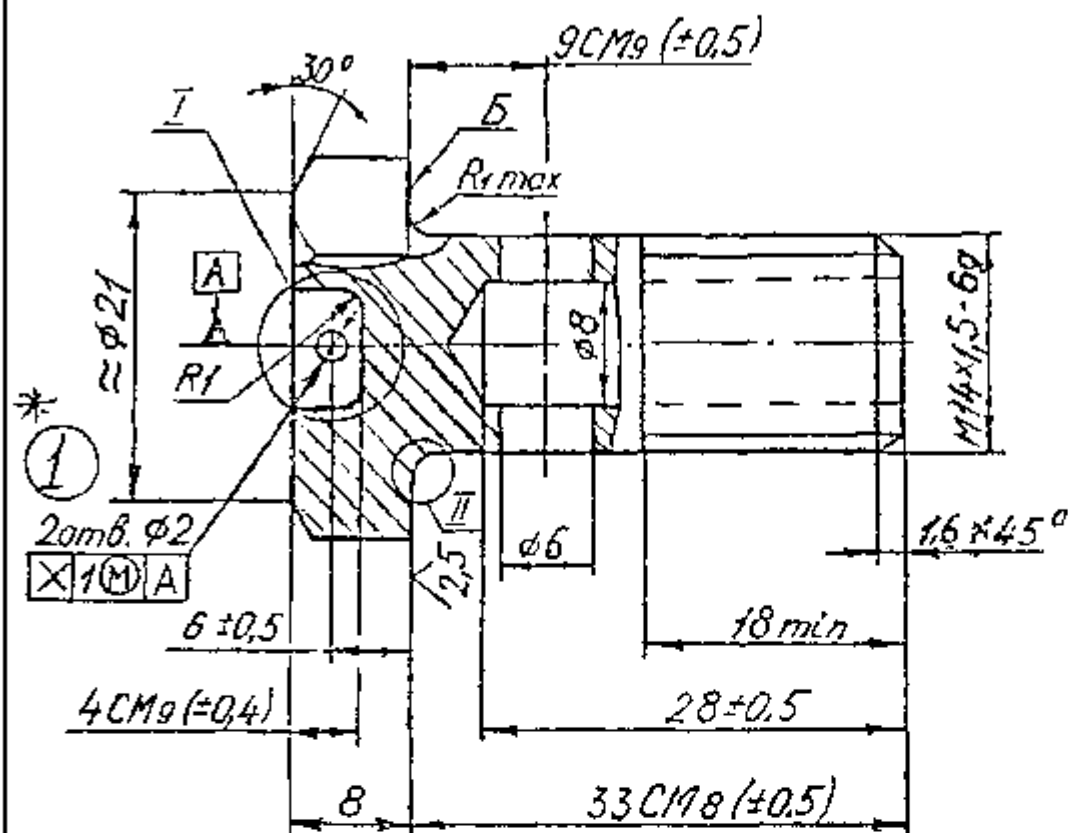
WEIGHT SCALE

0.023 1:1

SHT 1 SHTS 1

672-28-52

Rz 80 (✓)

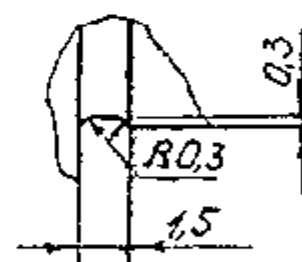
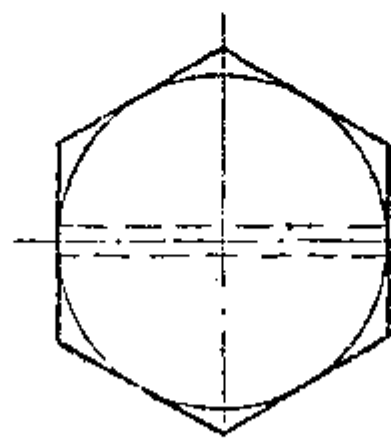
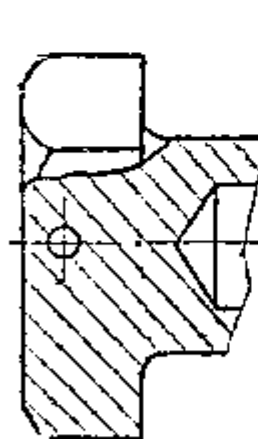


TECHNICAL CONDITIONS

- * (1) Two holes
 *(2) Version I
 *(3) Version II
 Scale 4:1
 *(4) 1. Substitute for material - steel 6 ГОСТ 380-71 and steels 20, 25, 30, 35, 40 ГОСТ 1050-74.
 2. Unspecified limit deviations of sizes: for holes - according to A₇; for shafts - according to B₇; others - according to CM₇.
 3. Perpendicular misalignment of surface B relative to thread mean diameter - 0.06 mm, maximum, over length of 20 mm (qualified tolerance).
 4. Coating: zinc plating, 9 microns thick chromatinized. Remove hydrogen embrittlement. Absence of coating on inner surfaces is tolerable.
 5. *Size is given for reference.

Ⓐ EQ MATERIAL:- CARBON STEEL HEXAGONAL BLACK BAR GRADE C45 OR C40 TO IS: 2073.

* ② Версия I

* ③ Версия II
M 4:1

01044-12V 18 MAY 07	Ⓑ	DS CAT NO ADDED AND NOMENCLATURE "BOLT MACHINE" WAS "BOLT"
00805-1CV 31.08.2007 DCQ No. DATE	Ⓐ	EQ MATERIAL ADDED.
ISSUE NATURE OF AMENDMENTS		

APPROVED

CHECKED

 CONTROLLERATE
 OF
 QUALITY ASSURANCE
 (ICV)

672-28-52

Ⓑ

BOLT MACHINE

 HEXAHEDRON 22-5 GOST 8560-78
 45-B GOST 1050-74

 DS CAT PT No. Ⓑ
 LV2/ICVS 5306-042889

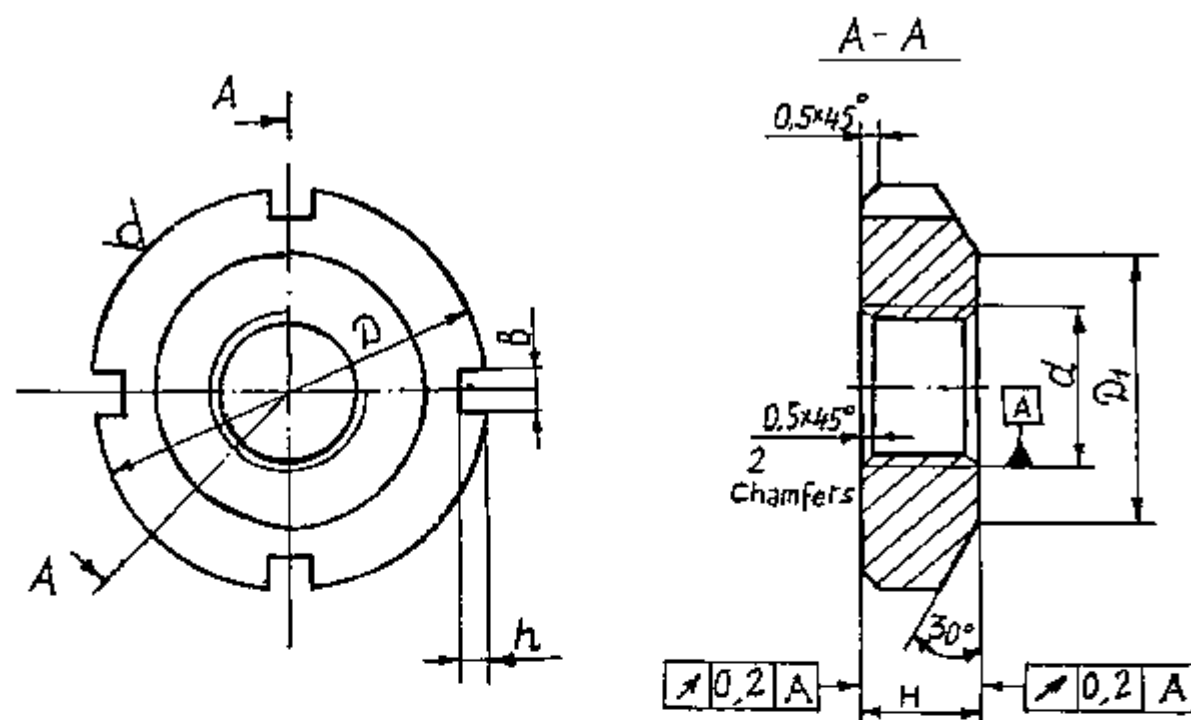
WEIGHT SCALE

0.4 2:1

SHT 1 SHTS 1

672-30-23

Rz40 ✓(✓)



1. Alternate material: Round bar D-5 GOST 7417-75
40 GOST 1051-73.

Round bar D-5 GOST 7417-75
50 GOST 1051-73

2. HB 241 to 285 (ϕ 3,9 to 3,6).
or HRC 20 to 27.

3. Coating: Zinc-plated, 9 microns thick, oiled. Remove
hydrogen embrittlement.

(A) EQ. MATERIAL:- 45 CB TO IS: 9550-80

(B) EQ. MATERIAL:- COLD DRAWN BAR GRADE C50 OR C40 TO IS: 1570.

Designation	d, MM	D(B7) MM		D1, MM		H(B7) MM		B(A7), MM		h(A9), MM		Mass kg
		Nominal	Deviation	Nominal	Deviation	Nominal	Deviation	Nominal	Deviation	Nominal	Deviation	
672-30-23	M12x1,25-6H	24	-0,52	18	$\pm 0,3$	6	-0,3	4				0,014
-01	M22x1,5-6H	36	-0,62	30		8	-0,36	5	+0,3	3	+0,6	0,036
-02	M27x1,5-6H	42		36								0,047
-03	M30x1,5-6H	45		39								0,052
-04	M33x1,5-6H	48		42								0,056

00805-ICV 4-08-2000 00721-ICV 31-08-99 DCO) No. & DATE	⑧	EQ. MATERIAL ADDED
	⑨	EQ. MATERIAL ADDED
ISSUE		AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

LOCKING NUT

ROUND BAR D-5, GOST 7417-75
45B, GOST 1051-73

672-30-23

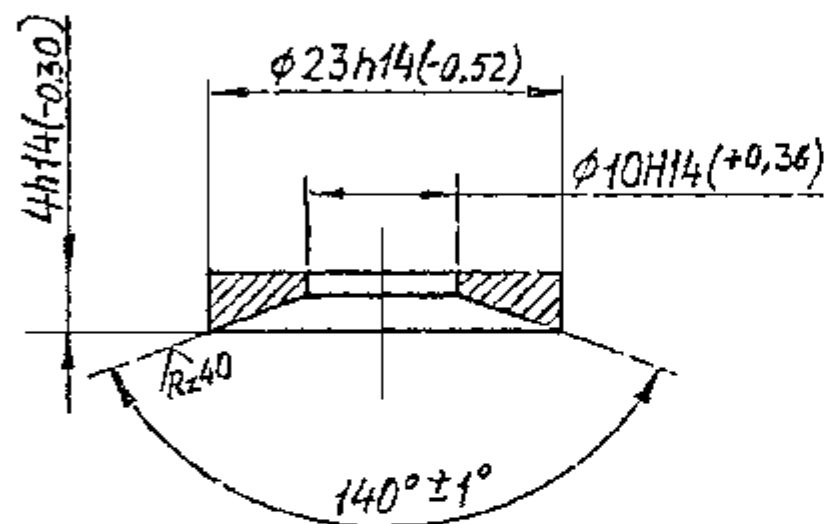
WEIGHT SCALE

SEE
TABLE

SHT 1 SHTS 1

672-31-87

Rz 80
✓(✓)



TECHNICAL CONDITIONS

1. COATING ZINC COATING, 9 MICRONS THICK. HYDROGEN EMBRITILEMENT SHOULD BE REMOVED.
2. TECHNICAL REQUIREMENTS SHOULD BE AS PER OST 3-943-72.

NOTE:-

THE ABBRIVATIONS AND SYMBOLS ARE BASED ON RUSSIAN SPECIFICATIONS.

ALL DIMENSIONS ARE IN mm.

NEAREST EQ. MATERIAL

ЖСр. 0.5 - 7.0

OST 3-493-72

ORGL MATERIAL:-

DC(1)No.
& DATE

ISSUE

AMENDMENTS

ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF

ALL THREADS TO CONFORM TO SPECIFICATION

STAMP OR ETCH, PART No, MANUFACTURER's NAME & YEAR OF MFR.

DRG. NOT TO BE SCALED

SCALE: 2:1

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED

USED ON:

DATE: 24 MAR 94

DRN.

СР. СР.

WT :- (Kg)

TCD.

0.007

CHD

СР. СР.



WASHER

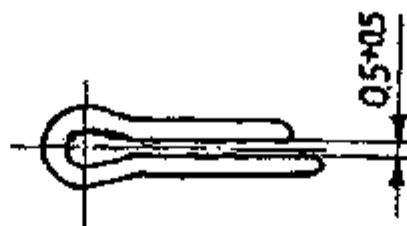
DS CAT No.

LV2/

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

672-31-87

11-23-219



(B)

EQ. MATERIAL :-

LOW CARBON STEEL (0.2 % MAX.)

COATING :- FeZn12 TO IS:1573-70

(A)

EQUIVALENT: SPLIT PIN 6.3x20-15:549-74

ZINC PLATED 9 MICRONS THICK WITH CHROMATIZING

00533-1CV <i>Amur</i> 14-11-95	(B) <i>Amur</i>	DRG. AMENDED BASED ON APPROVAL OF 4/94 N OF A
00452-1CV <i>Amur</i> 23 AUG 94	(A) <i>Amur</i>	IS: EQUIVALENT SPECN. ADDED.
DC(1) No & DATE	ISSUE	NATURE
AMENDMENTS		

MATERIAL:- BLANK COTTER PIN 6.3x20-019, GOST 397-79

ALL SHARP EDGES & CORNERS TO BE
ROUNDED OFF

DRG. NOT TO BE SCALED

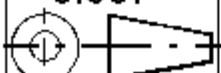
SCALE: 1:1

DATE: 26-10-95

DRN. *Amur*TCD. *Amur*CHD. *Amur*APD. *Amur*

WEIGHT: (Kg.)

0.007

ALL THREADS TO CONFORM
TO SPECIFICATIONTOLERANCE ON DIMENSIONS UNLESS
OTHERWISE SPECIFIEDSTAMP OR ETCH, PART NO, MANUFACTURERS
NAME & YEAR OF MFR.

USED ON:

765-38-Sb164

672-32-11

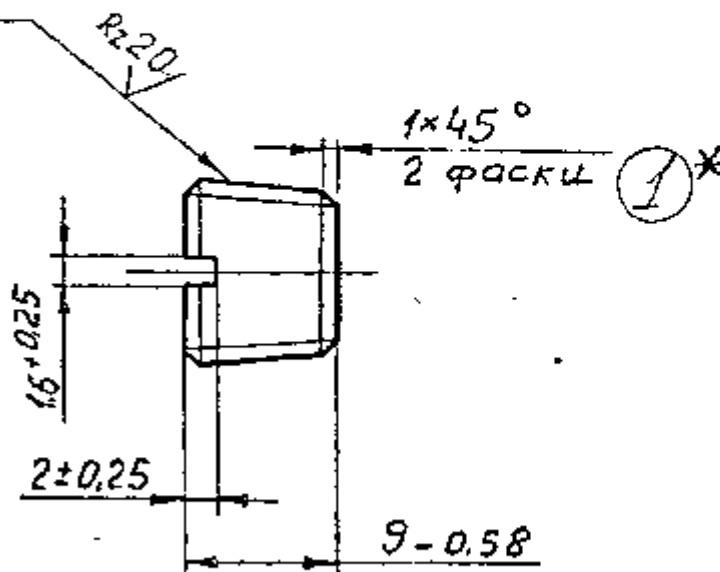
COTTER PIN

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

672-37-17

Rz40/ (✓)

K1/8 ГОСТ 6111-52



* (1) Two chamfers

1. Substitute for material - steels 40, 50 ГОСТ 1050-74.
2. Coating: copper plating 9 microns thick.

Ⓐ EQ MATERIAL: - CARBON STEEL BLACK BAR GRADE C40 OR C45 OR C55 Mn75 TO IS: 2073.

00805 -ICV P. 10.02	Ⓐ	EQ MATERIAL ADDED.
11-08-2000		
DCOJNO DATE	ISSUE	NATURE OF AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
INSPECTION
(ICV)

672-37-17

158 of 3124

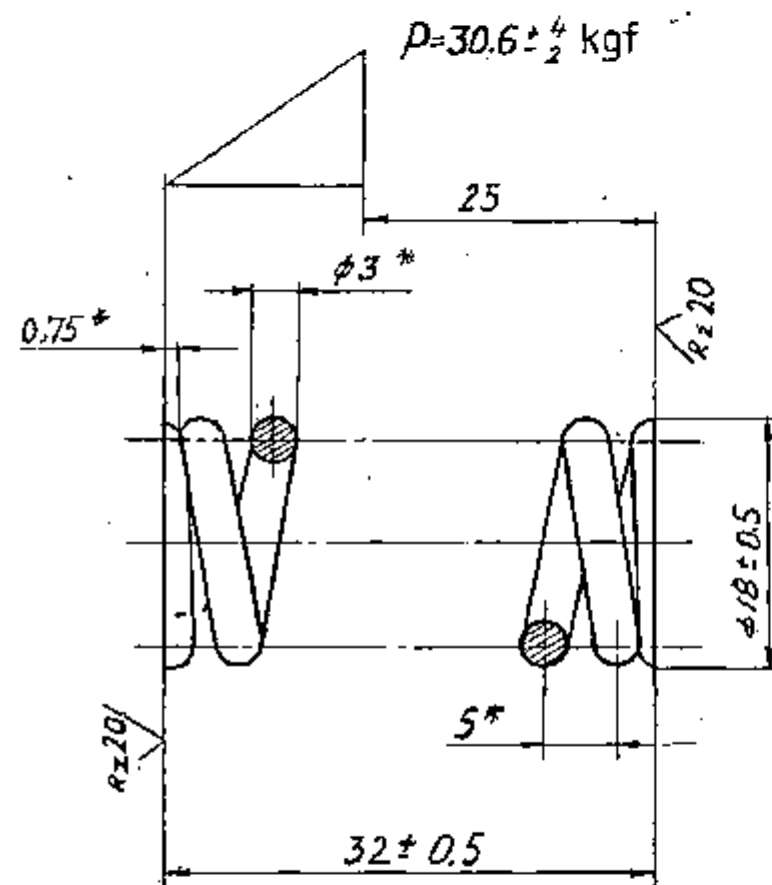
PLUG

WEIGHT SCALE

0.0043 2:1

SHT 1 SHTS 1

STEEL 45 GOST 1050-74



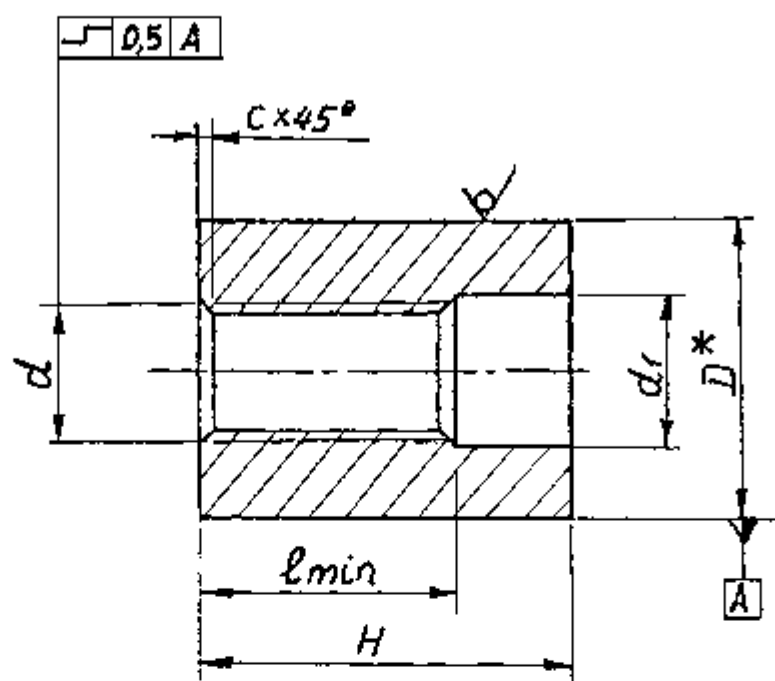
1. Shear modulus is $G^* = 8000 \text{ kgf/mm}^2$
2. Tangential torsional stress (maximum) is $\tau_3^* = 72 \text{ kgf/mm}$.
3. Compress the ready made spring thrice under load till coils come in contact to each other. Residual deformation is not allowed after compressing the spring. Check the spring after preliminary technological compression.
4. Total length of the spring is $L^* = 380 \text{ mm}$.
5. Number of working coils is $n = 5.5$
6. Total number of coils is $n_1 = 7.5 \pm 0.5$
7. Direction of coiling is arbitrary.
8. Machined surface of butt-ends should be at least $3/4$ of coil.
9. Deviation of generatrix of spring from perpendicular to the butt-ends should not exceed 0.5 mm .
10. After grinding of butt-ends temper colours should not appear on the surface of the spring.
11. * Dimension is given for reference.
12. Coating: Solder 4 nocy 30-2, GOST 21930-76.

Ⓐ EQ. MATERIAL: - SPRING STEEL WIRE GRADE 3 TO IS: 4454 (P1-1)-75

00805 -ICV 21/08-2008	Ⓐ	EQ. MATERIAL ADDED.
DCI No. DATE	ISSUE	NATURE OF AMENDMENTS

APPROVED	672-38-89	159 of 374
CHECKED		
CONTROL RATE OF INSPECTION (ILV)	SPRING	WEIGHT SCALE 0.0211 2:1
	WIRE II-3 ГОСТ 9389-75	SHT SHTS 08

672-51-36

R_z80 ✓(✓)

1. Alternate material is AMF5, GOST 4784-74.
2. Nonsquareness of butt-ends with respect to thread axis should not exceed 1,5°.
3. * Dimensions are given for reference.

Ⓐ EQ. MATERIAL:- ALUMINIUM ALLOY Gde. 54300, CONDITION 'D' TO IS: 733-83.

Ⓑ EQ. MATERIAL:- ALUMINIUM ALLOY BAR GRADE 54300 TO IS: 733-83 OR ALUMINIUM ALLOY BAR GRADE 55000 TO IS: 734-74.

Designation	d, MM	D*MM	H(B8)MM		d1(A7)MM		l, MM	C, MM	Mass, kg.
			Nominal	Deviation	Nominal	Deviation			
672-51-36			15	-0,7					0,004
-01	M6-7H	12	25	-0,24	7	+0,36	12	1,0	0,0055
-02			30	-0,84					0,007
-03	M8-7H	16	22		9		16	1,6	0,009

00502-ICV 18-8-2000	Ⓑ	GRADE 54300 TO IS: 733-83 OR GRADE 55000 TO IS: 734-74 ADDED AS EQ. MATERIAL
00581-ICV 27-8-96	Ⓐ	EQ. MATERIAL ADDED. (2/96 N OF A)
DC(1) No. & DATE	ISSUE	AMENDMENTS

THE ABBRIVATIONS AND SYMBOLS ARE
BASED ON RUSSIAN SPECIFICATIONS.

ALL DIMENSIONS ARE IN mm.

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

672-51-36

BOSS

Продукт АМГБ кр. Д-П
ГОСТ 21488-76

WEIGHT SCALE

SEE
TABLE

SHT 1 SHTS 1

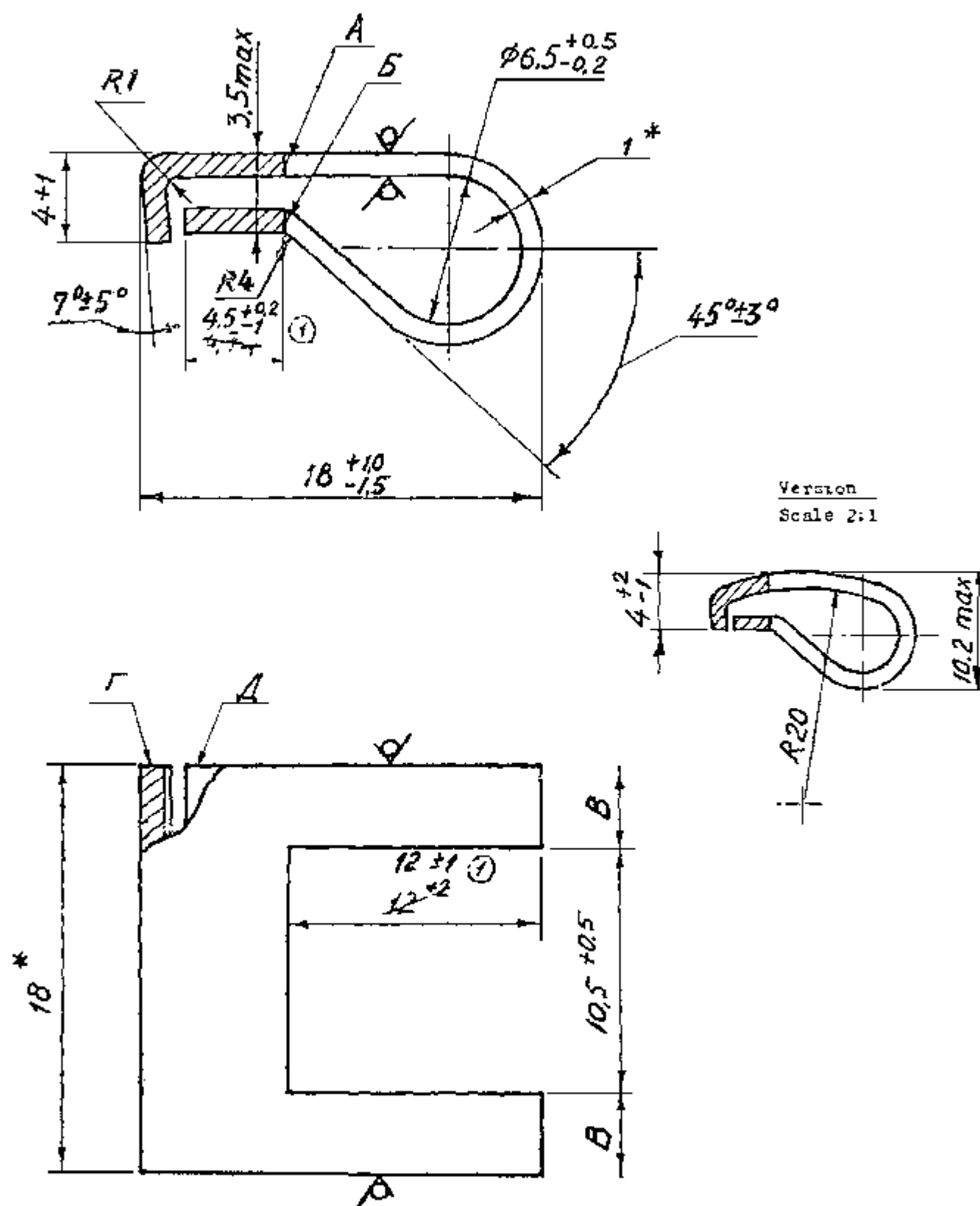
672-54-5

K2520 (✓)

TECHNICAL CONDITIONS

1. Substitute material: steel 08kn, 10kn, ГОСТ 1050-74.
2. Limit deviations of sizes are ± 0.5 mm unless otherwise specified.
3. Displacement of surface A relative to surface B should not exceed 1.8 mm.
4. Displacement of surface F relative to surface A should not exceed 0.7 mm.
5. The difference of sizes B should not exceed 0.8 mm.
6. Cracks are intolerable.
7. Coating: zinc coating followed by chromate treatment, zinc coat 9 microns thick. Eliminate hydrogen brittleness.
8. *Sizes for reference.

- ⑨. EQUIVALENT MATERIAL: COLD ROLLED CARBON STEEL STRIP GRADE 'D' 1/4 HARD TO IS: 513-86.
- ⑩. EQUIVALENT MATERIAL: COLD ROLLED STEEL STRIP GRADE 'D' TO IS: 4030-74.

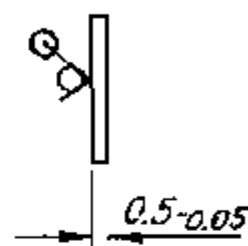
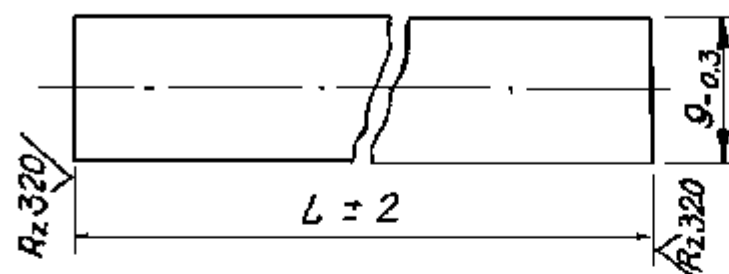


07089-ICV	①	DS CAT NO' LV2/ICVs 4730-078657 ADDED AND NOMENCLATURE AMENDED AS 'SPIKE MAST BASE'
19/05/2011		
00818-ICV	②	EQ. MATERIAL ADDED.
10/02/2000		
00497-ICV	③	NOTE NO 9 FOR EQUIVALENT MATERIAL ADDED
16-1-95		
DATE	ISSUE	NATURE

AMENDMENT

APPROVED	CR	672-54-5		DS CAT PART No LV2/ICVs 4730-078657	
CHECKED	BV				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		FRAME SPIKE MAST BASE		WEIGHT	SCALE
				0.004	1:1
		BAND 10-M-A-1x18 GOST 503-81		SHT 1	SHTS 1

672-54-6



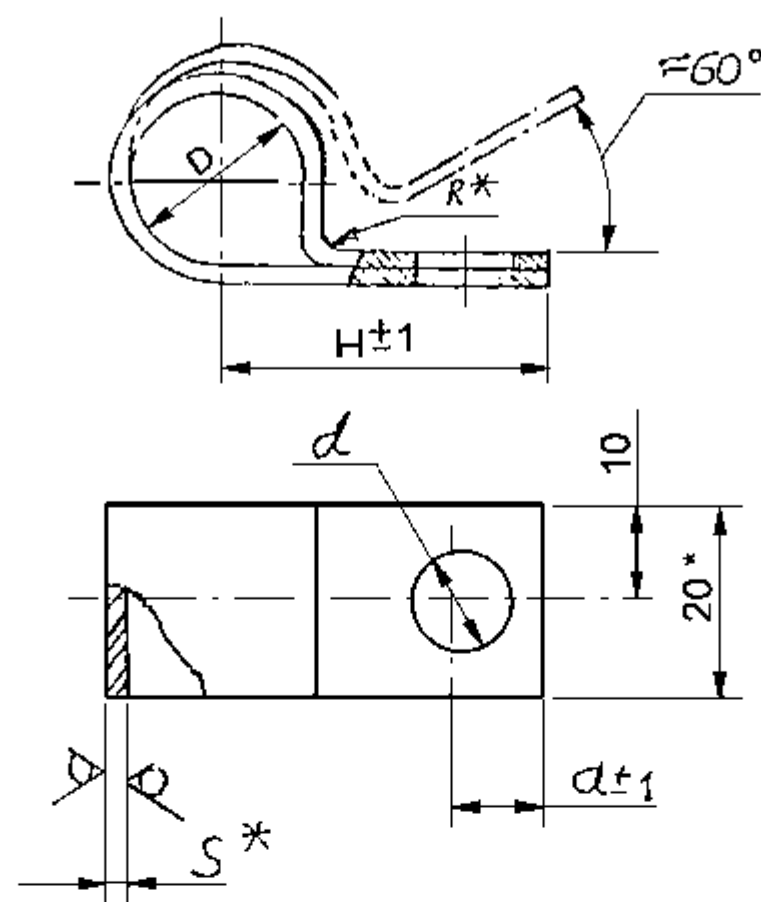
Designation	L, mm	Mass, kg	Designation	L, mm	Mass, kg
672-54-6	200	0.007	672-54-6-21	1700	0.060
-01	225	0.008	-22	2350	0.063
-02	250	0.009			
-03	275	0.01			
-04 (B)	300	0.011			
-05	325	0.012			
-06	350	0.012			
-07	375	0.013			
-08	400	0.014			
-09 (B)	425	0.015			
-10	450	0.016			
-11	475	0.017			
-12	500	0.018			
-13 (B)	525	0.019			
-14	600	0.022			
-15	625	0.022			
-16	650	0.023			
-17	725	0.026			
-18	800	0.028			
-19	920	0.033			
-20	980	0.035			

- (2) 1. Substitute material: steel 08kn, 10kn, ГОСТ 1050-74.
 2. Coating: zinc plating followed by chromate treatment, zinc coat 9 microns thick. Eliminate hydrogen brittleness.
 3. The rest of the technical requirements are according to ГОСТ 503-81.
 (A) 4. EQUIVALENT MATERIAL: COLD ROLLED CARBON STEEL STRIP GRADE 'D' 1/4 HARD TO IS: 513-86.
 (B) EQ MATERIAL: COLD ROLLED STEEL STRIP GRADE 'D', D6 OR 'ED6' KILLED STEEL TO IS: 4030-73

00 514-1CV 03-10-2000 Rmg	(B)	EQ MATERIAL ADDED
00 497-1CV 15-1-95 Rmg	(A)	NOTE NO 4 FOR EQUIVALENT MATERIAL ADDED
DOC) No. & DATE	ISSUE	AMENDMENTS

APPROVED	<i>C. plan</i>	672-54-6		
CHECKED	<i>B. Binn</i>			
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		BAND		
		BAND 10-M-2-A-0.5x9 GOST 503-81		
		WEIGHT	SCALE	
		SEE TABLE	2:1	
		SHT 1	SHTS 1	

672-54-9



DESIGNATION	WIRE DIA mm	D, mm	d, mm	H, mm	α , mm	S, * mm	R, mm	MASS, Kgs.
672-54-9	4	3,5	7			0,5		0,0074
-01			9					
-02	6	5,5	7			0,8		0,008
-03						0,5		0,003
-04			9					
© (E) -05			7			0,8		0,008
-06	8	7,5	9					
-07			7			0,5		0,005
-08			9					
-09			7			0,8		0,008
-10	10	9,5	9			0,5	2	0,005
-11			7			0,8		0,009
-12			9			0,5		0,007
-13	12	11,5	7					
-14			9			0,8		0,016
© -15			7			1,5		0,026
DS CAT PART No. LV2/ICVs 5340-017034 -16	15	14	9	41	11			0,010
-17			13					0,011
-18								0,013
-19	18	17	7			0,8		0,015
-20			9					0,017
-21	20	19		30				0,018
-22	24	23						0,019
DS CAT PART No. LV2/ICVs 5340-017033 -23	27	26						0,023
DS CAT PART No. LV2/ICVs 5340-017032 -24	30	29	7	35	8			
-25	32	31					4	
-26	36	35		40				
-27	42	41		45				

TECHNICAL CONDITIONS

1. Substitute for material- steel 08kn, 10kn, 10, GOST 1050-74
2. Unspecified limit deviations of sizes ± 0.5 mm.
3. *Sizes are given for reference.
4. Coating: Zinc plated 9 microns thick chromotized. Remove hydrogen embrittlement.
- ⑤ EQ. MATERIAL:- Gde 'D' To IS: 513-86.
- ⑥ EQ. MATERIAL:- Cold rolled steel strip Gr 'D' or 'DD' To IS: 4030-74.
- ⑦ EQ. MATERIAL:- Cold rolled steel strip Grade 'D' killed steel To IS:- 4030-73 For 672-54-9-05 and 672-54-9-15.
- ⑧ EQ. MATERIAL:- Gde 'D' To IS: 513-94 (For 672-54-9-05).

01005-10v 18.10.85 24.10.85 01005-10v	⑤	EQ. MATERIAL ADDED.
18.10.85 06.08.85 00818 -10v	⑥	DS CAT PART No. ADDED.
18.10.85 00717-10v	⑦	EQ. MATERIAL ADDED.
12.08.85 0063-10v	⑧	EQ. MATERIAL ADDED.
01.06.86 0063-10v	⑨	Gde 'D' TO IS: 513-86 ADDED AS EQ. MATERIAL.
01.06.86 0063-10v	⑩	AMENDMENTS

NEAREST EQ. MATERIAL

BAND 10-M-HT-2-S, GOST 503-81

ORGL. MATERIAL:-

ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF

DRG. NOT TO BE SCALED
SCALE:

DATE: 27-2-91

DRN.

TCD.

CHD

APPD

WT: (Kg)

SEE TABLE

ALL THREADS TO CONFORM TO SPECIFICATION

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED

STAMP OR ETCH, PART No. MANUFACTURER'S NAME & YEAR OF MFR.

USED ON:
675-05-Sb2

672-54-9

CLAMP

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)THE ABBRIVATIONS AND SYMBOLS ARE
BASED ON RUSSIAN SPECIFICATIONS.

ALL DIMENSIONS ARE IN mm.

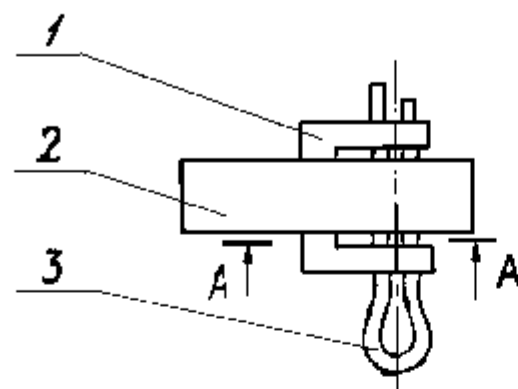
Ref. No.	Designation	Description	Qty	Remarks
① 3	672-54-c62 GE	<u>List of Documents</u> Assembly drawing		
	672-54-5	<u>Parts</u> Frame	1	
	672-32-11	Standard Item ① Cotter pin 6.3x20.019 IUCI 397-79	1	
		<u>Variable Data for Versions</u> <u>672-54-c62</u>		
		<u>Parts</u>		
	2 672-54-6	Band <u>672-54-c62-01</u>	1	
		<u>Parts</u>		
	2 672-54-6-01	Band <u>672-54-c62-02</u>	1	
		<u>Parts</u>		
	2 672-54-6-02	Band <u>672-54-c62-03</u>	1	
		<u>Parts</u>		
	2 672-54-6-03	Band <u>672-54-c62-04</u>	1	
		<u>Parts</u>		
	2 672-54-6-04	Band <u>672-54-c62-05</u>	1	
		<u>Parts</u>		
	2 672-54-6-05	Band <u>672-54-c62-06</u>	1	
		<u>Parts</u>		
	2 672-54-6-06	Band <u>672-54-c62-07</u>	1	
		<u>Parts</u>		
	2 672-54-6-07	Band <u>672-54-c62-08</u>	1	
		<u>Parts</u>		
	2 672-54-6-08	Band <u>672-54-c62-09</u>	1	
		<u>Parts</u>		
	2 672-54-6-09	Band	1	
		0529 ICV 10 OCT 95 DC (I) NO. & DATE	①	REF. NO. 3 :- DESIGNATION 672-32-11 ADDED. DESCRIPTION COLUMN :- HEADING, STANDARD ITEMS DELETED.
		NATURE OF AMENDMENTS		

APPROVED		672-54-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		MULTIPURPOSE CLAMP		WEIGHT
				SCALE
				SHT 1 SHTS 2

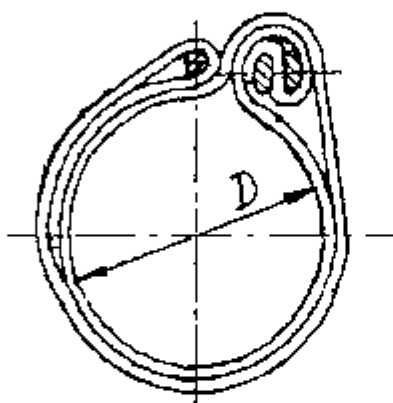
Ref. No.	Designation	Description	Qty	Remarks
2	672-54-6-10	<u>672-54-c62-10</u> <u>Parts</u> Band	1	
2	672-54-6-11	<u>672-54-c62-11</u> <u>Parts</u> Band	1	
2	672-54-6-12	<u>672-54-c62-12</u> <u>Parts</u> Band	1	
2	672-54-6-13	<u>672-54-c62-13</u> <u>Parts</u> Band	1	
2	672-54-6-14	<u>672-54-c62-14</u> <u>Parts</u> Band	1	
2	672-54-6-15	<u>672-54-c62-15</u> <u>Parts</u> Band	1	
2	672-54-6-16	<u>672-54-c62-16</u> <u>Parts</u> Band	1	
2	672-54-6-17	<u>672-54-c62-17</u> <u>Parts</u> Band	1	
2	672-54-6-18	<u>672-54-c62-18</u> <u>Parts</u> Band	1	
2	672-54-6-19	<u>672-54-c62-19</u> <u>Parts</u> Band	1	
2	672-54-6-20	<u>672-54-c62-20</u> <u>Parts</u> Band	1	
2	672-54-6-21	<u>672-54-c62-21</u> <u>Parts</u> Band	1	
2	672-54-6-22	<u>672-54-c62-22</u> <u>Parts</u> Band	1	

APPROVED		672-54-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		MULTIPURPOSE CLAMP		WEIGHT
				SCALE
			SHT 2	SITS 2

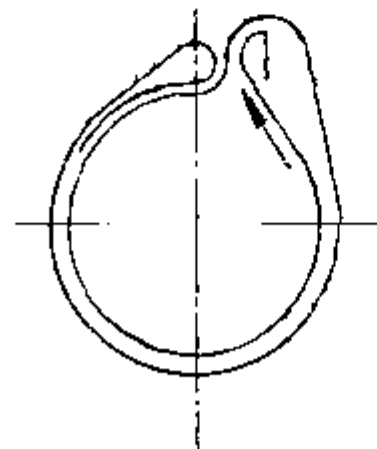
672-54-Sb2Sb



A - A



Band WRAPPING DIAGRAM



DESIGNATION	HOSE OUTER DIA, mm	MASS kg	DESIGNATION	HOSE OUTER DIA, mm	MASS kg
672-54-cd 2	13 - 16	0.019	672-54-cd 2-18	97 - 103	0.04
Ⓐ DS CAT. No. LV2/ICVS 4730 071487	17 - 20	0.019	-19	113 - 120	0.044
-01	21 - 24	0.021	-20	121 - 130	0.046
-02	25 - 28	0.022	-21	230 - 235	0.072
-03	29 - 32	0.022	-22	310 - 318	0.095
Ⓐ LV2/ICVS. 4730 071488	33 - 35	0.023			
-04	37 - 40	0.024			
Ⓐ LV2/ICVS. 4730 071488	41 - 44	0.025			
-05	45 - 48	0.026			
Ⓐ LV2/ICVS 4730 071485	49 - 52	0.026			
-06	53 - 56	0.027			
Ⓐ LV2/ICVS 4730 071483	57 - 60	0.028			
-07	61 - 64	0.029			
Ⓐ LV2/ICVS 4730 071484	65 - 68	0.03			
-08	77 - 80	0.033			
-09	81 - 84	0.033			
-10	85 - 88	0.034			
-11	93 - 96	0.037			
-12					
-13					
-14					
-15					
-16					
-17					

(3) when the clamp is tightened, one end of band 2 should have at least two turns on cotter pin 3 and its second end should be unbent at approximately 1/4 of the hose circumference length.

 01047-ICV
 18-07-07

Ⓐ

 DS CAT PART No. ADDED AND
 NOMENCLATURE WAS
 "CLAMP HOSE".

 DCC(1) No.
 & DATE

ISSUE

AMENDMENTS

APPROVED

Cph

CHECKED

BMS

 CONTROLLERATE
 OF
 QUALITY ASSURANCE
 (ICV)

672-54-Sb2Sb

MULTIPURPOSE CLAMP

WEIGHT

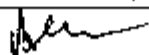
SCALE

SEE
TABLESEE
TABLE

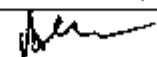
SHT 1

SHTS 1

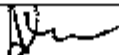
Designation	Description	Parent unit			Remark
		designation	Qty	Total qty	
675-08-c62	Cooling and preheating system		1	1	
675-08-c6108	Pipe	675-08-c62	1	1	
675-08-c6122	Pipe	675-08-c62	1	1	
675-08-c6124	Pipe	675-08-c62	1	1	
675-08-c6127	Pipe	675-08-c62	1	1	
675-08-c6128	Pipe	675-08-c62	1	1	
675-08-c6129	Pipe	675-08-c62	1	1	
675-08-c6130	Hose	675-08-c62	1	1	
675-08-c6122-01	Pipe	675-08-c62	1	1	
675-08-c6131	Pipe	675-08-c62	1	1	
675-08-c6132	Pipe	675-08-c62	1	1	
675-08-c6133	Pipe	675-08-c62	1	1	
675-08-c6134	Pipe	675-08-c62	1	1	
675-08-c6135	Pipe	675-08-c62	1	1	
672-54-c62-04	Multipurpose clamp	675-08-c62	8	8	
672-54-c62-09	Multipurpose clamp	675-08-c62	2	2	
672-54-c62-13	Multipurpose clamp	675-08-c62	2	2	
765-05-c6221	Retainer	675-08-c62	1	1	
765-08-c6138	Fuel pump	765-08-c6147	1	1	
or					
765-08-c6488					
765-08-c6141	Drawing of combined machining				
765-08-c6147	Preheater reduction gear	675-08-c62	1	1	
765-08-c6148	Special blower (modification)	765-08-c6147	1	1	
765-08-c6152	Rod	675-08-c62	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLER OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 1	SHTS 32

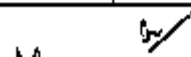
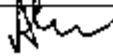
Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
765-08-c6166 765-08-c6173 Pt No LV2/ICV 5330-014863 (DCI No - 00358/ICV)	Handle, Hook SEAL, PLAIN	675-08-c62 765-08-c6138 765-08-c6488	1	1	Pt No LV2/ICV 5340- 010896 1 piece - 00358/ when using fuel pump 765-08-c6138 2 pieces when using fuel pump 765-08-c6488
765-08-c6178 765-08-c6184 LV2/ICV 4820-004225	Support Vacuum and pres- sure Valve Regulating sure relief valve	675-08-c62 675-08-c62	1 1	1 1	Ref DCI No 00371- ICV
765-08-c6193	Bracket	675-08-c62	1	1	
765-08-c6211	Roller assy	675-08-c62	1	1	
765-08-c6212	Union	675-08-c62	2	2	
765-08-c6247	Bracket	675-08-c62	1	1	
765-08-c6261	Pipe	675-08-c62	1	1	
765-08-c6264	Pipe	675-08-c62	1	1	
765-08-c6288	Pipe	765-08-c6264	1	1	
765-08-c6305	Valve	675-08-c62	2	2	
765-08-c6306	Valve body	765-08-c6305	1	2	
765-08-c6310	Shaft	765-08-c6264	1	1	
765-08-c6357	Hose	675-08-c62			3 pieces maximum quantity
765-08-c6357-01	Hose	675-08-c62	1	1	Selection
765-08-c6358	Hose	675-08-c62			5 pieces maximum quantity
765-08-c6358-01	Hose	675-08-c62	1	1	Selection
765-08-c6359	Hose	675-08-c62	3	3	
765-08-c6360	Hose	675-08-c62			7 pieces maximum quantity

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 2	SHTS 32

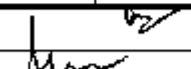
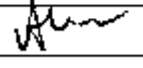
Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
765-08-c6360-01	Hose	675-08-c62	1	1	Selection
765-08-c6361	Hose	675-08-c62	3	3	
LV2/ICV 4710-005164 765-08-c6376	Pipe Assy	675-08-c62	1	1	REF DC(1) 01019-ICV
765-08-c6383	Pipe	675-08-c62	1	1	
765-08-c6384	Tank	675-08-c62	1	1	
or					
765-08-c6554					
765-08-c6385	Pipe	765-08-c6384	1	1	
		765-08-c6554	1	1	
LV2/ICV 4710-005165 765-08-c6387	Pipe Assy	675-08-c62	1	1	REF DC(1) 01019-ICV
LV2/ICV 4710-005167 765-08-c6389	Pipe Assy	675-08-c62	2	2	
765-08-c6390	Cock	675-08-c62	1	1	
LV2/ICV 4710-005157 765-08-c6398	Pipe Assy	675-08-c62	1	1	REF DC(1) 01019-ICV
LV2/ICV 4710-005166 765-08-c6400	Pipe Assy	675-08-c62	1	1	
LV2/ICV 4710-005162 765-08-c6418	Pipe Assy	675-08-c62	1	1	
765-08-c6422	Pipe	675-08-c62	1	1	
765-08-c6424	Wire rope	675-08-c62	1	1	
765-08-c6426	Pipe	675-08-c62	1	1	
765-08-c6427	Pipe Flange pipe	675-08-c62	1	1	Ref DC(1) 00971-ICV
LV2/ICVS 4730-007029 765-08-c6450	Pipe	675-08-c62	1	1	
765-08-c6466	Pipe	675-08-c62	1	1	
765-08-c6467	Pipe Assy	675-08-c62	1	1	REF DC(1) 00932-ICV
LV2/ICV 4710-003641 765-08-c6471	Pipe Assy	765-08-c6384	1	1	Ref DC(1) 00971-ICV
LV2/ICVS 4710-003619		765-08-c6554	1	1	
765-08-c6473	Pipe Assy	675-08-c62	1	1	REF DC(1) 00971-ICV
LV2/ICVS 4710-003609 765-08-c6476	Pipe	765-08-c6471	1	1	
{ 765-08-c6480	Pipe Assy	675-08-c62	1	1	REF DC(1) 01019-ICV
{ LV2/ICV 4710-005158 765-08-c6480-01	Pipe Assy	675-08-c62	1	1	REF DC(1) 01007-ICV
{ LV2/ICVS 4710-003606 765-08-c6484	Pipe Assy	675-08-c62	1	1	REF DC(1) 01019-ICV
LV2/ICV 4710-005161 765-08-c6511	Pipe Assy	675-08-c62	1	1	
LV2/ICV 4710-005159 765-08-c6512	Hose	675-08-c62	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE	
			SHT 3	SHTS 32	

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
765-08-c6550	Flange	765-08-c6512			1 piece replacemant by part 765-08-882 is allowed
765-10-c6259	Handle	675-08-c62	1	1	
765-71-c6415	Clamp	675-08-c62	1	1	
700-77-K134	Special blower		1	1	For order purchase
(FOR REFERENCE) ONLY	18.01.TY-1 Special blower 18.01.001- 5 III	765-08-c6148	1	1	Purchase. Order according to drawing 700-77-Y 4
Ⓐ 272-41-114	Locking Ring	765-08-c6138 or 765-08-c6488	1	1	REF DC(1) 00224/ICV
672-28-52	Bolt	675-08-c62	3	3	
Ⓐ 672-30-23-02	Locking Ring	675-08-c62	2	2	REF DC(1) 00224/ICV
Ⓐ 672-30-23-03	Locking Ring	675-08-c62	1	1	
Ⓐ 672-30-23-04	Locking Ring	675-08-c62	1	1	
672-37-17	Plug	765-08-c6138 or 765-08-c6488	2	2	
672-38-89	Spring	765-08-c6184	1	1	
672-51-36	Boss	765-08-c6384	1	1	
		765-08-c6554	1	1	
672-54-5	Frame	672-54-c62-04	1	8	
		672-54-c62-09	1	2	
		672-54-c62-13	1	2	
672-54-6-04	Band	672-54-c62-04	1	8	
672-54-6-09	Band	672-54-c62-09	1	2	
672-54-6-13	Band	672-54-c62-13	1	2	

APPROVED		675-08-cn2			
CHECKED		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)					
				SHT 4	SHTS 32

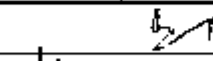
Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
675-08-10	Pipe	675-08-c6108	1	1	W/out dwg
675-08-28	Branch pipe	675-08-c6127	1	1	W/out dwg
675-08-29	Pipe	675-08-c6127	1	1	W/out dwg
675-08-31	Pipe	675-08-c6127	1	1	W/out dwg
675-08-32	Pipe	675-08-c6124	1	1	W/out dwg
675-08-33	Pipe	675-08-c6124	1	1	W/out dwg
675-08-34	Branch pipe	675-08-c6124	1	1	W/out dwg
675-08-35	Pipe	675-08-c6122	1	1	W/out dwg
675-08-35-01	Pipe	675-08-c6122-01	1	1	W/out dwg
675-08-37	Pipe	675-08-c6127	1	1	W/out dwg
675-08-38	Branch pipe	675-08-c6128	1	1	W/out dwg
675-08-39	Branch pipe	675-08-c6127	1	1	W/out dwg
675-08-40	Pipe	675-08-c6128	1	1	W/out dwg
675-08-41	Pipe	675-08-c6129	1	1	W/out dwg
675-08-43	Pipe	675-08-c6131	1	1	W/out dwg
675-08-44	Pipe	675-08-c6132	1	1	W/out dwg
675-08-45	Pipe	675-08-c6133	1	1	W/out dwg
675-08-46	Pipe	675-08-c6133	1	1	W/out dwg
675-08-47	Pipe	675-08-c6134	1	1	W/out dwg
675-08-48	Pipe	675-08-c6134	1	1	W/out dwg
675-08-49	Pipe	675-08-c6135	1	1	W/out dwg
700-28-478	Bolt	675-08-c62	1	1	
700-30-241	Union nut	765-08-c6422	1	1	
700-30-442	Nut	765-08-c6138	1	1	
		or			
		765-08-c6488			
700-31-267	Washer	675-08-c62	2	2	
700-31-388	Washer	675-08-c62	2	2	
700-31-634	Washer	765-08-c6184	1	1	
700-31-656	Washer	765-08-c6184	1	1	
700-31-760 or 672-31-87	Washer	765-08-c6305	1	2	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 5	SHTS 32

Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
700-33-36	Union nut	675-08-c6135	1	1	
		675-08-c6128	1	1	
		675-08-c6134	1	1	
		765-08-c6376	1	1	
700-33-80	Union nut	765-08-c6467	1	1	
700-33-99	Nut	765-08-c6138	1	1	
		or			
		765-08-c6488			
700-33-115	Union nut	675-08-c6127	1	1	
		675-08-c6128	1	1	
		675-08-c6134	1	1	
		765-08-c6385	1	1	
		765-08-c6398	2	2	
		765-08-c6422	1	1	
		765-08-c6466	1	1	
700-33-116	Union nut	675-08-c6108	1	1	
		675-08-c6124	1	1	
		675-08-c6127	1	1	
700-33-117	Union nut	675-08-c6133	1	1	
		765-08-c6418	1	1	
		765-08-c6426	1	1	
		765-08-c6427	1	1	
		765-08-c6450	1	1	
		765-08-c6473	1	1	
		765-08-c6484	2	2	
700-33-118	Union nut	675-08-c6108	1	1	
		675-08-c6129	1	1	
		675-08-c6133	1	1	
		675-08-c6134	1	1	
		765-08-c6383	1	1	
700-33-119, or 765-08-1030	Union nut	765-08-c6387	1	1	
		765-08-c6473	3	3	
		765-08-c6480	1	1	
		765-08-c6480-01	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
		SHT 6 SHTS 32			

Designation	Description	Parent unit		Total Qty	Remark
		designatation	Qty		
700-33-121	Coupling	675-08-c6130	2	2	Selection
		765-08-c6361	2	6	Selection
700-33-122	Coupling	675-08-c6130	2	2	Selection
		765-08-c6361	2	6	Selection
700-33-123	Coupling	675-08-c6130	2	2	Selection
		765-08-c6361	2	6	Selection
700-33-125	Coupling	765-08-c6358	2	10	Selection
		765-08-c6358-01	2	2	Selection
700-33-126	Coupling	765-08-c6358	2	10	Selection
		765-08-c6358-01	2	2	Selection
700-33-128	Coupling	765-08-c6360	2	14	Selection
		765-08-c6360-01	2	2	Selection
700-33-129	Coupling	765-08-c6360	2	14	Selection
		765-08-c6360-01	2	2	Selection
700-33-131	Coupling	765-08-c6357	2	6	Selection
		765-08-c6357-01	2	2	Selection
		765-08-c6512	2	2	Selection
700-33-132	Coupling	765-08-c6357	2	6	Selection
		765-08-c6357-01	2	2	Selection
		765-08-c6512	2	2	Selection
700-33-134	Coupling	765-08-c6359	2	6	Selection
700-33-135	Coupling	765-08-c6359	2	6	Selection
Ⓐ 700-33-136	Union Nut	675-08-c6122	1	1	REF DC (1) 00224/ICV
		675-08-c6122-01	1	1	
		675-08-c6124	1	1	
		675-08-c6127	1	1	
		675-08-c6128	1	1	
		675-08-c6132	2	2	
		765-08-c6376	1	1	
		765-08-c6389	2	4	
		765-08-c6400	2	2	
		765-08-c6418	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 7	SHTS 32

Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
700-33-137	Union nut	675-08-c6122	1	1	
		675-08-c6122-01	1	1	
①700-33-138 OR 765-08-1054	Union nut	765-08-c6471	1	1	DC() No.00166-ICV
700-35-390	Screw	765-08-c6138	1	1	
		or			
700-38-44	Spring	765-08-c6488			
700-38-105 (LV2/ICV 5360-007476)	Spring helical compression	765-08-c6305	1	2	
		765-08-c6166	1	1	REF. DC() 00992-ICV
		765-10-c6259	1	1	
700-38-459	Spring	675-08-c62	1	1	
700-38-1003	Spring	765-08-c6138			1 piece when using fuel pump
		765-08-c6488			2 pieces when using fuel pump
					765-08-c6138
700-38-1909	Spring	765-08-c6390	1	1	
700-38-1910	Spring	765-08-c6138	1	1	
		or			
		765-08-c6488			
700-40-95	Gasket	765-08-c6147			3 pieces, maximum
700-40-98	Gasket	765-08-c6147			2 pieces, maximum
700-40-215	Washer	675-08-c62	1	1	
700-40-260-09	Gasket	675-08-c62	2	2	
700-40-260-10	Gasket	675-08-c62	1	1	
700-40-260-12	Gasket	765-08-c6384	1	1	
		765-08-c6554	1	1	
700-40-260-13	Gasket	675-08-c62	4	4	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT	8 SHTS 32

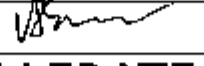
Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
700-40-260-14	Gasket	765-08-c6384	1	1	
		765-08-c6554	1	1	
700-40-260-17	Gasket	675-08-c62	2	2	
		765-08-c6390	2	2	
700-40-260-20	Gasket	675-08-c62	1	1	
700-47-217	Shaft with Pin	675-08-c62	2	2	
700-47-358	Axle	675-08-c62	2	2	
700-54-14	Clamp	675-08-c62	3	3	
700-54-112	Clamp	675-08-c62	4	4	
{ 700-54-182 1V2/ICV 5340-017035	Clamp	675-08-c62	1	1	REF. DCU 01002
(A) 700-56-18	Elbow	675-08-c6129	1	1	REF DC (t) 00224/ICV
or					
765-08-1004	Elbow				
700-57-48	Union	675-08-c6130	2	2	
		765-08-c6361	2	6	
700-57-51	Union	765-08-c6357	2	6	
		765-08-c6357-01	2	2	
		765-08-c6512	1	1	
700-57-52	Union	765-08-c6383	1	1	
700-57-53	Union	765-08-c6360	2	14	
		765-08-c6360-01	2	2	
700-57-54	Union	765-08-c6359	2	6	
700-57-55	Union	765-08-c6358	2	10	
		765-08-c6358-01	2	2	
700-57-56	Union	675-08-c6135	1	1	
		675-08-c6124	1	1	
		675-08-c6127	1	1	
		675-08-c6131	2	2	
(A) 700-57-57	Through Connector	765-08-c6390	1	1	REF DCU 00224/ICV
(A) 700-57-58	Through Connector	765-08-c6390	1	1	
700-57-59	Union	765-08-c6387	1	1	
700-57-68	Union	765-08-c6467	1	1	
700-57-403	Nipple	765-08-c6422	1	1	

APPROVED	675-08-cn2			
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
			SHT 9	SHTS 32

Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
700-57-415	Nipple	675-08-c6127	1	1	
		675-08-c6128	1	1	
		675-08-c6134	1	1	
		765-08-c6385	1	1	
		765-08-c6398	2	2	
		765-08-c6422	1	1	
700-57-416	Nipple	765-08-c6466	1	1	
		675-08-c6122	2	2	
		675-08-c6122-01	2	2	
		675-08-c6124	1	1	
		675-08-c6127	1	1	
		675-08-c6128	1	1	
		675-08-c6132	2	2	
		765-08-c6376	1	1	
		765-08-c6389	2	4	
		765-08-c6400	2	2	
700-57-417	Nipple	765-08-c6418	1	1	
		675-08-c6108	2	2	
		675-08-c6124	1	1	
		675-08-c6127	1	1	
		675-08-c6129	1	1	
		675-08-c6133	1	1	
		675-08-c6134	1	1	
		765-08-c6383	1	1	
700-57-418	Nipple	675-08-c6133	1	1	
		765-08-c6418	1	1	
		765-08-c6426	1	1	
		765-08-c6427	1	1	
		765-08-c6450	1	1	
		765-08-c6473	1	1	
		765-08-c6484	2	2	
		765-08-Sb450	1	1	
20-06-57-1	Nipple	765-08-Sb484	1	1	REF DC(1) No. 00760-10
20-06-58	Nut	765-08-Sb450	1	1	REF DC(1) No. 00760-10
		765-08-Sb484	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 10	SHTS 32

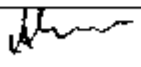
Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
700-57-419	Nipple	765-08-c6387	1	1	
		765-08-c6473	3	3	
		765-08-c6476	1	1	
		765-08-c6480	1	1	
		765-08-c6480-01	1	1	
		765-08-c6484	1	1	
701-13-27	End piece	675-08-c6135	1	1	
		675-08-c6128	1	1	
		675-08-c6134	1	1	
		765-08-c6376	1	1	
701-119-11 LV2/ICV5355-001939	Lever head KNOB	765-08-c6166	1	1	REF DC(1) 00392-ICV
		765-08-c6390	1	1	
		765-10-c6259	1	1	
703-08-63	Fork	675-08-c62	1	1	
Ⓐ730-08-251	Braiding Of Wire Rope	765-08-c6178	1	1	REF DC(1) 00224/ICV
730-08-329	Gasket	765-08-c6305	1	2	
730-26-469	Shaft	765-08-c6390	1	1	
765-05-378	Body	765-08-c6390	1	1	
or					
765-05-792	Body				
765-05-380	Flange	765-05-c6221	1	1	
765-05-381	Retainer	765-05-c6221	1	1	
765-05-383	Handle	765-08-c6166	1	1	
		765-08-c6390	1	1	
		765-10-c6259	1	1	
765-05-384	Rod	765-08-c6390	1	1	
765-05-385	Pin	765-08-c6166	1	1	
		765-08-c6390	1	1	
		765-10-c6259	1	1	
765-05-386	Ring	765-08-c6390	2	2	
765-05-387	Valve	765-08-c6390	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 11	SHTS 32

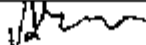
Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
765-05-382 or 765-05-1005	Lever	765-08-c6390	1	1	
765-06-456	Lever				
765-06-457	Gasket	675-08-c62	3	3	
765-06-458	Gasket	675-08-c62	15	15	
765-06-459	Gasket	675-08-c62	1	1	
765-08-124	Gasket	675-08-c62	1	1	
	Cover	765-08-c6138	1	1	
		or			
		765-08-c6488			
765-08-129	Body	765-08-c6138			1 piece when using fuel pump 765-08-c6138
(A) 765-08-133	Frame	765-08-c6173			1 piece ^{REF DC (1)} _{DOZ 29/10} when using fuel pump 765-08-c6138
					2 pieces when using fuel pump 765-08-c6488
765-08-142	Shaft	765-08-c6147	1	1	
765-08-143	Block	765-08-c6147	1	1	Do not in- stall when sing fuel pump 765-08-c6488
765-08-144	Nut	765-08-c6138			1 piece when using fuel pump 765-08-c6138

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 12	SHTS 32

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
765-08-148	Chamber	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-149	Cylinder	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-150	Pipe	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-224	Handle	765-08-c6166	1	1	
or					
765-08-1000	Handle				
765-08-226	Support	765-08-c6178			1 piece when using support 765-08-226
765-08-227	Gasket	675-08-c62	1	1	
672-54-9-21	Clamp	675-08-c62	11	11	
672-54-9-24	Clamp	675-08-c62	4	4	REF DC(1) 01002-1CV
765-08-228	Rod	765-08-c6152	1	1	
765-08-230	Flange	765-08-c6511	1	1	
765-08-252	Bracket	765-08-c6147	1	1	
765-08-253	Union	765-08-c6138	1	1	
		or			
		765-08-c6488			
765-08-264	Plate	765-08-c6184	1	1	
765-08-265	PACKING PREFORMED	765-08-c6184	1	1	
765-08-268	Valve	765-08-c6184	1	1	
765-08-272	Support	765-08-c6184	1	1	
or					
765-08-929	Support				
765-08-273	Upper insulator	765-08-c6184	1	1	
or					
765-08-930	Upper insulator				

APPROVED		675-08-cn2		
CHECKED				
CONTROLLER OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT SCALE
			SHT 13	SHTS 32

Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
765-08-274	Lower insulator	765-08-c6184	1	1	REF DC(1) No 00165/ICV
765-08-277	Cover	765-08-c6184	1	1	
765-08-278 OR ⑦ 765-08-1057	Body	765-08-c6184	1	1	
⑦ 765-08-279	Ring	765-08-c6184	1	1	
765-08-280	Rod	765-08-c6184	1	1	
765-08-297	Bracket	765-08-c6193	1	1	REF DC(1) No 00224/ICV
⑧ 765-08-298	Strap	765-08-c6193	1	1	
765-08-299	Gasket	765-08-c6184	1	1	
765-08-300	Cap	765-08-c6305	1	2	
or					
765-08-916	Cap				REF DC(1) No 00224/ICV REF DC(1) No 00224/ICV
765-08-303	Shell	765-08-c6384	1	1	
765-08-304	Bracket	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-306	Pipe	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-363	Roller	765-08-c6211	1	1	
⑧ 765-08-367	Pipe Union	765-08-c6212	1	2	
⑧ 765-08-438	Shutter	765-08-c6384	2	2	
		765-08-c6554	2	2	
765-08-442	Bracket	765-08-c6247	1	1	
765-08-443	Bracket	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-450	Washer	675-08-c62	1	1	
765-08-452	Body	765-08-c6138	1	1	
		or			
		765-08-c6488			
765-08-460	Pipe	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-464	Flange	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-465	Flange	765-08-c6384	1	1	
		765-08-c6554	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 14	SHTS 32

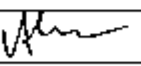
Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
⑧ 765-08-467	Pipe Union	765-08-c6385	1	1	REF DC(1) NO 002
765-08-490	Pipe	765-08-c6288	1	1	W/out dwg
765-08-491	Shaft	765-08-c6310	1	1	
765-08-492	Eye	765-08-c6288	1	1	
765-08-493	Gasket	675-08-c62	1	1	
⑧ 765-08-494	Shutter	765-08-c6264	1	1	REF DC(1) NO 002
765-08-495	Lever	765-08-c6310	1	1	
765-08-496	Flange	765-08-c6288	1	1	
765-08-532	Pipe	765-08-c6261	1	1	W/out dwg
⑧ 765-08-580 or 765-08-1052	valve Body	765-08-c6306	1	2	see DC(1) 00167-
⑧ 765-08-581	valve Body	765-08-c6306	1	2	REF DC(1) 00224
765-08-581	Branch pipe	765-08-c6306	1	2	
765-08-582	Gasket	675-08-c62	2	2	
765-08-594	Pipe	765-08-c6376	1	1	W/out dwg
765-08-617	Flange	765-08-c6383	1	1	
765-08-663	Hose	765-08-c6357			3 pieces maximum
765-08-663-01	Hose	765-08-c6357-01	1	1	
765-08-663-02	Hose	765-08-c6512	1	1	
765-08-664	Hose	765-08-c6358			5 pieces, maximum
765-08-664-01	Hose	765-08-c6358-01	1	1	
765-08-665	Hose	765-08-c6359	1	3	
765-08-666	Hose	765-08-c6360			7 pieces, maximum
765-08-666-01	Hose	765-08-c6360-01	1	1	
765-08-667	Hose	765-08-c6361	1	3	
765-08-703	Pipe	765-08-c6376	1	1	W/out dwg
765-08-708	Pipe	765-08-c6480	1	1	W/out dwg
765-08-709	Pipe	765-08-c6383	1	1	W/out dwg
765-08-711	Pipe	765-08-c6473	1	1	
765-08-713	Pipe	765-08-c6385	1	1	W/out dwg
765-08-716	Pipe	765-08-c6387	1	1	
765-18-302	Washer	765-08-c6147	1	1	max. qty

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 15	SHTS 32

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
765-08-718	Pipe	765-08-c6473	1	1	W/out dwg
765-08-719	Pipe	765-08-c6389	1	2	W/out dwg
765-08-722	Pipe	765-08-c6484	1	1	W/out dwg
765-08-723	Pipe	765-08-c6484	1	1	W/out dwg
765-08-724	Pipe	765-08-c6484	1	1	W/out dwg
765-08-725	Pipe	765-08-c6484	1	1	W/out dwg
765-08-727	Pipe	765-08-c6480-01	1	1	W/out dwg
765-08-730	Pipe	765-08-c6479	1	1	W/out dwg
765-08-732	Pipe	765-08-c6398	1	1	W/out dwg
765-08-733	Pipe	765-08-c6398	1	1	W/out dwg
765-08-734	Pipe	765-08-c6398	1	1	W/out dwg
765-08-736	Pipe	765-08-c6400	1	1	W/out dwg
765-08-737	Pipe	765-08-c6418	1	1	W/out dwg
765-08-789	Pipe	765-08-c6376	1	1	W/out dwg
Ⓐ765-08-790	Pipe Union	765-08-c6418	1	1	REF DC(U) No. 00224-ICV
765-08-791	Pipe	765-08-c6418	1	1	W/out dwg
765-08-793	Pipe	765-08-c6422	1	1	W/out dwg
Ⓐ765-08-794	Bushing	675-08-c62	4	4	REF DC(U) 00224/IC
765-08-801	Gasket	675-08-c62	2	2	
765-08-802	Flange	765-08-c6426	1	1	
or					
765-08-1027		765-08-c6427	1	1	
765-08-803	Pipe	765-08-c6426	1	1	W/out dwg
765-08-804	Pipe	765-08-c6427	1	1	W/out dwg
765-08-845	Pipe	765-08-c6450	1	1	W/out dwg
765-08-846	Pipe	765-08-c6473	1	1	W/out dwg
765-08-863	Gear	765-08-c6138			1 piece when using fuel pump 765-08-c6138
765-08-864	Gear	765-08-c6138 or 765-08-c6488	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLER OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
		SHT 16 SHTS 32			

Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
765-08-866	Pipe	765-08-c6466	1	1	W/out dwg
765-08-867	Pipe	765-08-c6467	1	1	W/out dwg
765-08-868	Bracket	675-08-c62	1	1	
765-08-875	Bottom	765-08-c6384	1	1	
Ⓑ 765-08-876	Strip	765-08-c6384	1	1	REF DC(I) NO 00224/ICV
		765-08-c6554	1	1	
765-08-877	Flange	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-878	Pipe	765-08-c6476	1	1	W/out dwg
Ⓐ 765-08-879 OR 765-08-1051	Flange	765-08-c6471	1	1	DC(I) No. 00166- ICV
765-08-881	Pipe	765-08-c6511	1	1	W/out dwg
765-08-882	Flange	765-08-c6512			1 piece replacement by part 765-08-c6550 is allowed
765-08-884	Gasket	675-08-c62	1	1	
765-08-886	Gasket	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-890	Flange	765-08-c6261	1	1	
765-08-894	End piece	765-08-c6480	1	1	
		765-08-c6480-01	1	1	
765-08-895	Branch pipe	765-08-c6484	1	1	
765-08-901	Body	765-08-c6488			1 piece when using fuel pump 765-08-c6488
Ⓑ 765-08-902	Shaft	765-08-c6488			1 piece when using fuel pump 765-08-c6488 REF DC(I) NO. 00224/ICV

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 17	SHTS 32

Designation	Description	Parent unit		Total Qty	Remark
		Designation	Qty		
765-08-903	Gear	765-08-c6488			1 piece when using fuel pump 765-08-c6488
765-08-913	Lock	765-08-c6193	1	1	
(A)765-08-914	Strap	765-08-c6193	1	1	REF DC(I) NO. 00224-ICV
765-08-917	Cover	765-08-c6384	1	1	
(A)765-08-918	Screw Stopper	765-08-c6384	1	1	REF DC(I) NO. 00224-ICV
		765-08-c6554	1	1	
765-08-919	Gasket	765-08-c6384	1	1	
		765-08-c6554	1	1	
765-08-920	Flange	765-08-c6384	1	1	
or		765-08-c6554	1	1	
765-08-921	Flange				
765-08-922	Ring	765-08-c6384	1	1	
or		765-08-c6554	1	1	
Ring					
045-051-35-2-2					
ROCT 9833-73					
765-08-923	Ring	675-08-c62	1	1	
or					
765-08-923K	Ring				
765-08-928	Ring	675-08-c62	2	2	
or					
765-08-928K	Ring				
(A)765-08-1001	Pipe Union	765-08-c6560	1	1	REF DC(I) NO. 00224-ICV
765-08-1002	Flange	765-08-c6550	1	1	
765-08-1003	Support	765-08-c6178			1 piece when using support 765-08-1003
765-08-1005	Union nut	765-08-c6480	1	1	
		765-08-c6480-01	1	1	

APPROVED

CHECKED

675-08-cn2

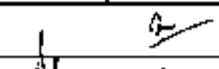
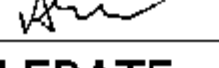
CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

COOLING AND PREHEATING
SYSTEM

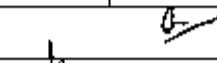
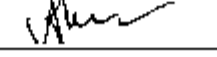
WEIGHT SCALE

DNY 18 DNYC 32

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
765-08-1008	Washer	765-08-c6184	1	1	4 pieces, maximum
765-08-1009	Washer	765-08-c6184	2	2	
765-08-1010	Washer	765-08-c6184			
765-08-1011	Spring	765-08-08-c6184	1	1	
765-08-1013	Valve	765-08-c6305	1	2	
765-08-1014	Gasket	675-08-c62	1	1	
(A) 765-08-1017	Screen	765-08-c6471	1	1	REF DC(I) NO. 00224-ICV
765-08-1028	Cover	765-08-c6554	1	1	
765-08-1029	Bottom	765-08-c6554	1	1	
EF (C.C.) 9971-ICV (A) 765-08-1031	Plate	675-08-c62	2	2	REF DC(I) NO. 00224-ICV
765-10-445	Limiter	675-08-c62	1	1	
765-10-753	Handle	765-10-c6259	1	1	
765-10-754	Bracket	675-08-c62	1	1	Drawing 700-96-T50
765-10-755	Limiter	675-08-c62	1	1	
765-10-1580	Roller	675-08-c62	1	1	
(A) 765-10-1581	Eye	675-08-c62	2	2	REF DC(I) NO. 00224-ICV REF DC(I) NO. 00224-ICV
(A) 765-12-473	Swiveling Elbow	765-08-c6398	2	2	
		765-08-c6466	1	1	
(A) 765-22-11	Screw Stopper	765-08-c6384	1	1	REF DC(I) NO. 00224-ICV
		765-08-c6554	1	1	
(A) 765-33-54	Sealing Ring Plate	765-08-c6261	1	1	REF DC(I) NO. 00224-ICV
(A) 765-71-702		675-08-c62	1	1	
765-71-1024	Clamp	765-71-c6415	1	1	
765-71-1025	Gasket	765-71-c6415	1	1	
765-78-65	Elbow union	765-08-c6138	1	1	
		or			REF DC(I) NO. 00224-ICV
		765-08-c6488			
(A) 770-04-101	Lug	765-08-c6384	2	2	
		765-08-c6554	2	2	
770-08-144	End piece	765-08-c6467	1	1	

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
		SHT 19 SHTS 32			

Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
311-36-1A	Washer	765-08-c6390	2	2	
329-30	Gasket	765-08-c6138	2	2	
		or			
411-33	Spring	765-08-c6488			
Ⓐ 32263	Round Lock Pin	765-08-c6390	1	1	
37102	Plug	765-08-c6306	2	4	REF DC(1)
Ⓐ KB-50-969	Lug For Sealing	765-08-c6118 or	2	2	00224/ICV
20-06-57-1	Nipple	765-08-c6488	1	1	
		765-08-c6484	1	1	REF DC(1)
		675-08-c6133	1	1	00224/ICV
					Supplied
					complete
					with engine
20-06-58	Nut	675-08-c6133	1	1	Supplied
					complete
					with engine
672-32-11	Cotter pin	672-54-c62-04	1	8	
		672-54-c62-09	1	2	
		672-54-c62-13	1	2	
	Bolt	675-08-c62	30	30	
	M6x14.46.019	765-08-c6384	6	6	
	FOCT 7798-70	765-08-c6554	6	6	
	Bolt	675-08-c62	6	6	
	M6x16.46.019	765-08-c6138	3	3	
	FOCT 7798-70	or			
		765-08-c6488			
		765-08-c6147	1	1	
	Bolt M6x35.46.019	675-08-c62	4	4	
	FOCT 7795-70				
	Bolt	675-08-c62	13	13	
	M8x16.46.019				
	FOCT 7796-70				
	Bolt	675-08-c62	4	4	
	M8x20.46.019				
	FOCT 7796-70				

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 20	SHTS 32

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
4368-0812	Bolt	675-08-c62	4	4	
	8x25.46.019				
	FOCT 7796-70				
	Bolt	675-08-362	2	2	
	M6x40.46.019				
	FOCT 7795-70				
	Bolt	675-08-362	2	2	
	M8x45.46.019				
	FOCT 7795-70				
	Boss M8x16x12	765-08-36247	2	2	
4368-0616	OCT 3-1496-72				
	Boss M6x12x16	675-08-36119	1	1	
	OCT 3-1496-72				
	Screw	675-08-c62	4	4	
	A1.M2-6gx5.48.016	765-08-c6184	1	1	
	FOCT 17473-80				
	or				
	A.M2-6gx5.66.016				
	FOCT 1491-80				
	Screw	765-08-c6264	2	2	
CHEECC HEAD SCREW M2x5 TO IS:1366-A-8 FULLTHREAD HEAD EDGE TO BE ROUNDED SCREW END TO BE CHAMFERED. ZINC PLATED 6 MIC THICK. (REF. DCQ) NO 00354-ICV)	B1.M3-8h6hx8.48.016				REF DCQ) NO 00353-ICV
	FOCT 17475-80				
	Screw	765-08-c6184	4	4	
	B1.M4-8h6hx10.48.016				
	FOCT 17475-80				
	Screw	765-08-c6138	2	2	
	M6x8.66.019	or			
	FOCT 1477-75	765-08-c6488			
	Screw	675-08-c62	2	2	
	B1.M4-8h6hx16.48.016				
FOUNTERSUNK SCREW M3x8 TO IS:1365-A-8 PITCH 0.8 mm. AS PER IS:4218 (PT-III) 76 ZINC PLATED 6 MIC THICK. (REF. DCQ) NO 00360-ICV)	FOCT 17473-80 or				
	B.M4-8h6hx16.66.016				
	FOCT 1491-80				

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

675-08-cn2

COOLING AND PREHEATING
SYSTEM

WEIGHT SCALE

SHT 21 SHTS 32

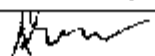
Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
	Washer 6T65P06 FOCT 6402-70	675-08-c62 765-08-c6138 or 765-08-c6488	46 3	46 3	
	Washer 120T65P06 FOCT 6402-70	765-08-c6384 765-08-c6554 675-08-c62	6 6 1	6 6 1	
	Washer, 12x2.01.01 or 12x2.02.019 FOCT 11371-78	675-08-c62	1	1	
	Washer 4.01.019 or 4.02.019 FOCT 11371-78	765-08-c6138 65-08-c6488			1 piece when using fuel pump 765-08-c6138 1 piece when using fuel pump 765-08-c6488
	Cotter pin 1.6x10.019 FOCT 397-79	675-08-c62 765-08-c6390	4 1	4 1	
	Cotter pin 3.2x25.019 FOCT 397-78	75-08-c62	1	1	
	Stud M8x $\frac{P.2}{6E}$ x22.66.019 FOCT 22034-76	765-08-c6384 765-08-c6554	6 6	6 6	vi+nout dividing into groups
	Lockpin 5Hp2 _{2B} x16 OCT 3-2234-80	765-08-c6138 or 765-08-c6488	2	2	HB 255 207 (#3.8 - 4.2

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE	
			SMT 23	SMTS	32

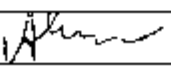
Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
Q. M S WIRE, GALVANISED 0.5 φ, HARD TO IS 280-78 UTS 37kgf/m	Ball B10-100	765-08-c6138	1	1	ICV 00475-ICV
	FOCT 3722-81 and	or			
	ETV 500	765-08-c6488			
	Bearing B-80029	765-08-c6211	1	1	
	FOCT 7242-70 and				
	ETV 500				
	Wire K0-18, L=1470	765-08-c6424	0.45	0.45	
	Wire K0-0,5	765-08-c6424			
	FOCT 792-67				
	Wire K0-1	765-08-c6138	0.1m	0.1m	
do 1 φ	FOCT 792-67	or			ICV 00475-ICV
		765-08-c6488			
		765-08-c6147	0.22	0.22	
		765-08-c6384	0.1m	0.1m	
		765-08-c6554	0.1m	0.1m	
		675-08-c62	12.5	12.5	
do 1.6 φ	Wire K0-1,6	765-08-c6390	0.1m	0.1m	
	FOCT 792-67				
	Pipe 3C 24.0x2.0	675-08-c6108	0.4	0.4	
	FOCT 5496-78	675-08-c6129	1.2	1.2	
	TY 005.6016-80				Maximum quantity
	40Y18-1.3(13)	675-08-c62	3	3	
	ℓ = 100 ±2.5				
	40Y38-1.3(13)	675-08-c62	1	1	
	ℓ = 100 ±2.5				
	40Y48-1.3(13)	675-08-c62	1	1	
	ℓ = 100 ±2.5				
	40Y12-1.3(13)	675-08-c62	1	1	
	ℓ = 50 ±2.5				
	ℓ = 100 ±2.5	675-08-c6130	1	1	
	40Y18-1.3(13)	675-08-c62	1	1	
	ℓ = 200 ±2.5				Maximum quantity
	Wire rope 2 Z, 40ST 270	765-08-c6182			
	-71, L=1300				

APPROVED		675-08-cn2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT SCALE
				SHT 24 SHTS 32

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
	Pigment white zinc ГОСТ 482-77	675-08-cn2 765-08-c6184 765-08-c6357 765-08-c6358 765-08-c6359 765-08-c6360 765-08-c6361 765-08-c6384 765-08-c6512 675-08-c6130 765-08-c6360-01			
	Sealant ТУ6-10-1010-80	765-08-c6184 765-08-c6138			
		or			
	Primer ФН-03 Ж ГОСТ 9109-81	765-08-c6488 765-08-c6261 765-08-c6288 765-08-c6384 765-08-c6511 765-08-c6554			
	Primer ФН-03 К ГОСТ 9109-81	675-08-c6108 765-08-c6193 765-08-c6376 765-08-c6383 765-08-c6387 765-08-c6389 765-08-c6398 765-08-c6400 765-08-c6480 765-08-c6480-01 765-08-c6484 765-08-c6212 765-08-c6247			

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 25	SHTS 32

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
		675-08-c0122			
		675-08-c0124			
		675-08-c0127			
		675-08-c0128			
		675-08-c0129			
		675-08-c0131			
		675-08-c0132			
		675-08-c0133			
		675-08-c0134			
		675-08-c0122-01			
		675-08-c0135			
	Primer	765-08-c0418			
	ФЛ-03 К	765-08-c0422			
	ГОСТ 9109-81	765-08-c0426			
		765-08-c0427			
		765-08-c0450			
		765-08-c0466			
		765-08-c0467			
		765-08-c0471			
		765-08-c0473			
		703-08-63			
		700-54-112			
	Glue БФ-2	765-08-c0166			
	ГОСТ 12172-74	765-08-c0390			
		765-10-c0259			
	Glue 88-НН	765-71-c0415			
	ТУ38-105540-73				
	Bakelite varnish	675-08-c0108			
	mark ЛБС-1	765-08-c0288			
	ГОСТ 901-78	765-08-c0261			
		675-08-c0131			
		675-08-c0132			
		675-08-c0122-01			

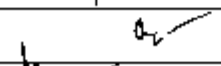
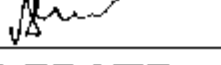
APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 26	SHTS 32

Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
	Bakelite varnish mark ЛБС-1 FOCT 901-78	675-08-c6135 765-08-c6554 765-08-c6376 765-08-c6480 765-08-c6383 765-08-c6384 765-08-c6385 765-08-c6387 765-08-c6389 765-08-c6484 765-08-c6480-01 765-08-c6398 765-08-c6400 765-08-c6418 765-08-c6422 765-08-c6426 765-08-c6427 765-08-c6450 765-08-c6466 765-08-c6467 765-08-c6471 765-08-c6473 765-08-c6511 675-08-c6122 675-08-c6124 675-08-c6127 675-08-c6128 675-08-c6129 675-08-c6133 675-08-c6134 675-08-c6108 675-08-c6129			
	Surgical tape K-20 FOCT 4514-78				

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 27	SHTS 32

Designation	Description	Parent unit		Total Qty	Remark
		designation	Qty		
	Oil MT-167 TV38001117 or FOCT 6360-58 Thread made of natural silk No. 13 FOCT 22665-83 Rubber 4326-1 TV 005216-75 Solder NOCC _y 30-2 FOCT 21931-76 Solder NOCC _y 40-2 FOCT 21931-76 Solder Л-63 FOCT 15527-70 Polyethylene film FOCT 10354-82 Solder POP4 NOCCy30-2 FOCT 21930-76 Grease УМАТМ-201 FOCT 16267-74 Preservation oil K17 FOCT 10877-76	765-08-c6166 765-10-c6259 765-08-c6138 or 765-08-c6488 765-08-c6138 or 765-08-c6488 765-08-c6173 765-08-c6152 765-08-c6184 765-08-c6424 765-08-c6138 or 765-08-c6488 765-08-c6178 765-08-c6306 765-08-c6384 765-08-c6354 765-08-1017 675-08-c62 765-08-c6305 765-08-c6138 or 765-08-c6488 765-08-142 765-08-144 765-10-445 765-10-755 700-38-44			

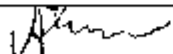
APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 28	SHTS 32

Designation	Description	Parent unit		Total qty	Remark
		iesignation	Qty		
	White enamel NO-223 - 1 POCT 14923-78	765-08-c6357 765-08-c6358 765-08-c6359 765-08-c6360 765-08-c6361 765-08-c6512 675-08-c6130			
	Green enamel NO-223 POCT 14923-78	675-08-c6108 765-08-c6376 765-08-c6383 765-08-c6384 765-08-c6387 765-08-c6389 765-08-c6398 765-08-c6400 765-08-c6480 765-08-c6480-01 765-08-c6484 675-08-c6122 675-08-c6124 675-08-c6127 675-08-c6128 675-08-c6129 675-08-c6131 675-08-c6132 675-08-c6133 675-08-c6134 675-08-c6122-01 675-08-c6135 765-08-c6554 765-08-c6261			
APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT SCALE	
				SHT 30	SHTS 32

Designation	Description	Parent unit			Remark
		designation	Qty	Total qty	
	Green enamel ND-223 POCT 14923-78	765-08-c6418 765-08-c6422 765-08-c6426 765-08-c6427 765-08-c6450 765-08-c6466 765-08-c6467 765-08-c6471 765-08-c6473 765-08-c6511 700-54-112			
TY6-10-1010-80	Sealant				
	Specifications				
TY005.6016-80	Specifications				
	Hoses and clamps of spacing structure				
TY38-105540-73	Glue 88HN				
	Specifications				
053.25273.000. 10	Bakelite plating of parts				
	Instructions				
TY81-04-395-75	Parts made of fibre				
	Specifications				
TY38001117-73	Oil MT-16N				
	Specifications				
TY005216-75	Technical rubber parts, plates and rubber mixtures for special vehicles and their engines				

APPROVED		675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 31	SHTS 32

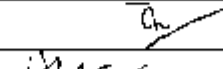
Designation	Description	Parent unit		Total qty	Remark
		designation	Qty		
053.25289.00002	Impregnation of phosphate and chrome plated parts with preser vation oil K-17 Instructions				

APPROVED	94-	675-08-cn2			
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
				SHT 32	SHTS 32

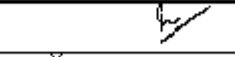
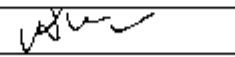
No.	Designation	Description	QUANTITY	REMARKS
		<u>List of Documents</u>		
	675-08-c62CE	Assembly drawing		
		<u>Assembly Units</u>		
1	675-08-c6108	Pipe	1	
REF DCO No 01007-ICV 3	675-08-c6135	Pipe PIPE ASSY	1	OS CAT No LV2/ICVS-4710-003612
REF DCO No 0968-ICV 10	675-08-c6122	Pipe PIPE ASSY	1	OS CAT No LV2/ICVS/4710-003611
11	675-08-c6122-01	Pipe	1	
13	675-08-c6124	Pipe	1	
15	675-08-c6127	Pipe	1	
16	675-08-c6128	Pipe	1	
17	675-08-c6129	Pipe	1	
18	675-08-c6130	Pipe	1	
19	675-08-c6131	Pipe	1	
20	675-08-c6132	Pipe	1	
21	675-08-c6133	Pipe	1	
REF DCO No 00918-ICV 22	675-08-c6134	Pipe	1	Supp ERSEDES DRN No 765-08-05395
REF DCO No 01019-ICV 23	765-08-c6147 LV2/ICVS 2540-003059	Preheater reduction gear	1	
24	765-08-c6178	Support	1	
25	765-08-c6184 LV2/ICVS 4820-004225	Vacuum and pressure Valve Regulating relief Valve	1	Ref DCO 00971-ICV
26	765-08-c6152	Rod	1	
27	765-08-c6211	Roller assy	1	
28	765-08-c6212	Union	2	
29	765-08-c6247	Bracket	1	
30	765-08-c6261	Pipe	1	
31	765-08-c6264	Pipe	1	
32	765-08-c6305	Valve	2	
34	765-08-c6357-01	Hose	1	Selection see Ref.No.18

APPROVED		675-08-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM	WEIGHT	SCALE
			SHT 1	SHTS 7

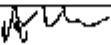
No.	Designation	Description	QUANTITY	Remarks
35	765-08-c6357	Hose	3	Maximum quantity
36	765-08-c6358	Hose	5	Maximum quantity
37	765-08-c6359	Hose	3	
38	765-08-c6360	Hose		7 pieces maximum quantity
39	765-08-c6361	Hose	3	
40	765-08-c6360-01	Hose	1	Selection see Ref. No.18
41	LV2/ICV 4710-005164 765-08-c6376	Pipe Assy	1	REF. DC(1) 01019-ICV
⑧ 42	765-08-c6166	Handle, HOOK	1	Pl. No. LV2/ICV ⑧
43	LV2/ICV 5340-174289 765-08-c6193 }	Bracket Ref. DC(1) 01065-ICV	1	5340-010896 DC(1) No. 00358/ICV
45	765-08-c6383	Pipe	1	
46	765-08-c6384	Tank		1 piece replacement by Ref. No. 75 is allowed
47	LV2/ICV 4710-005165 765-08-c6387	Pipe Assy	1	} REF. DC(1) 01019-ICV
48	LV2/ICV 4710-005167 765-08-c6389	Pipe Assy.	2	
49	765-08-c6390	Cock	1	
51	765-08-c6358-01	Hose	1	Selection see Ref. No.18
⑨ { 52	672-54-c62-04	Multipurpose Clip	8	} REF. DC(1) No 00224-ICV
53	672-54-c62-09	Multipurpose Clip	2	
54	672-54-c62-13	Multipurpose Clip	2	
55	LV2/ICV 4710-005157 765-08-c6398	Pipe Assy	1	} REF. DC(1) 01019-ICV
57	LV2/ICV 4710-005166 765-08-c6400	Pipe Assy	1	
58	LV2/ICV 4710-005162 765-08-c6418	Pipe Assy	1	
59	765-08-c6422	Pipe	1	

APPROVED		675-08-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM	WEIGHT	SCALE
			SHT 2	SHTS 7

No.	Designation	Description	QUANTITY	Remarks
60	765-08-c6424	Wire rope	1	Ref DCC(1) 00371- ICV
61	765-08-c6426	Pipe	1	
62	765-08-c6427 LV2/ICVS 4710-007029	Pipe Flange pipe	1	
63	765-08-c6450	Pipe	1	
64	765-08-c6466	Pipe	1	REF DCC(1) 00392- ICV
65	765-08-c6467 LV2/ICV 4710-003641	Pipe Assy	1	
REF DCC(1) 00371-ICV	66	765-08-c6473 LV2/ICVS 4710-003609	Pipe Assy	1
67	765-05-c6221 LV2/ICV 4710-005159	Retainer	1	REF DCC(1) 01019- ICV
68	765-08-c6511	Pipe Assy.	1	
69	765-08-c6512 LV2/ICV 4710-005161	Hose	1	REF DCC(1) 01019- ICV
70	765-08-c6484	Pipe Assy.	1	
71	765-10-c6259	Handle	1	REF DCC(1) 01019- ICV
72	765-71-c6415 LV2/ICV 4710-005158	Clamp	1	
73	765-08-c6480	Pipe ASSY	1	
REF DCC(1) 0 01007-ICV	74	765-08-c6480-01 LV2/ICVS 4710-003606	Pipe Pipe Assy	
75	765-08-c6554	Tank	1	1 piece replac ment by Ref.No. 46 is allow- ed
<u>Parts</u>				
77	765-06-456	Gasket	3	REF DCC(1) 00224-ICV
78	765-06-457	Gasket	15	
79	765-06-458	Gasket	1	
80	765-06-459	Gasket	1	
76	765-08-923 or 765-08-923-K	Ring	1	
81	765-08-227	Gasket	1	
82	765-08-868	Bracket	1	
83	765-08-450	Washer	1	
84	765-08-493	Gasket	1	
85	765-08-582	Gasket	2	
(A) 86	765-08-794	Bushing	4	

APPROVED		675-08-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT
				SCALE
			SHT. 3	SHTS 7

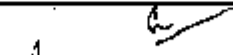
No.	Designation	Description	Qty	Remark
87	765-08-801	Gasket	2	
88	765-08-884	Gasket	1	
89	765-08-928 or 765-08-928-K	Ring RING	2	
90	765-10-445	Limiter	1	
91	765-10-754	Bracket	1	Drawing 700-96-T50
92	765-10-755	Limiter	1	
93	765-10-1580	Roller	1	
94	765-10-1581	Eye	2	REF DCU 00224-1CV Ref DCU 00971-1CV
(A) { 95	LV2/ICVS 5340-015789 765-08-1031	Plate	2	
96	765-08-1014	Gasket	1	
97	672-30-23-02	Locking nut	2	REF DCU 00224-1CV
(A) { 98	672-30-23-03	Locking nut	1	
99	672-30-23-04	Locking nut	1	
101	700-28-478	Bolt	1	
103	700-31-267	Washer	2	
104	700-31-388	Washer	2	
106	700-38-459	Spring	1	
107	700-40-215	Washer	1	
109	700-40-260-09	Gasket	2	
110	700-40-260-10	Gasket	1	
111	700-40-260-13	Gasket	4	
112	700-40-260-17	Gasket	2	
113	700-47-217	Shaft with head	2	
114	700-47-358	Axle	2	
115	700-54-14	Clamp	2	
116	700-40-260-20	Gasket	1	
117	700-54-112	Clamp	4	
118	700-54-182	Clamp	1	REF.DCU 01002-1CV
119	LV2/ICVS 5340-017085 672-28-52	Bolt	3	
120	703-08-63	Fork	1	
(A) 124	765-71-702	Plate	1	REF DCU 00224-1CV
238	672-54-9-21	Clamp	11	
239	LV2/ICVS 5340-017032 672-54-9-24	Clamp	4	REF.DCU 01002-1CV

APPROVED		675-08-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT
				SCALE
				QMT 4 SHTS 7

No.	Designation	Description	Qty	Remark
		<u>Standard Items</u>		
127		Bolt M6x14.46.019 FOCT 7798-70	30	
128		Bolt M6x16.46.019 FOCT 7798-70	6	
130		Bolt M6x35.46.019 FOCT 7795-70	4	
131		Bolt M8x16.46.019 FOCT 7796-70	13	
132		Bolt M6x40.46.019 FOCT 7795-70	2	
133		Bolt M8x20.46.019 FOCT 7796-70	4	
134		Bolt M8x25.46.019 FOCT 7796-70	4	
135		Bolt M8x45.46.019 FOCT 7795-70	2	
136	CHEESE HEAD SCREW M2 X5 TO IS: 1366-A-8 FULL THREADED, HEAD EDGES TO BE ROUNDED. SCREW END TO BE CHAMFERED ZINC PLA TED 6 MICRAS THICK.	Screw A1.M2-6gx5.48.016 FOCT 17473-80 or AM2-6gx5.66.016 FOCT 1491-80	4	
138		Nut M6.6.019 FOCT 5927-70	8	
139		Nut M8.6.019 FOCT 5927-70	15	
140		Nut M12.6.019 FOCT 5929-70	1	
145		Ring 14x20 MH 4152-62	4	

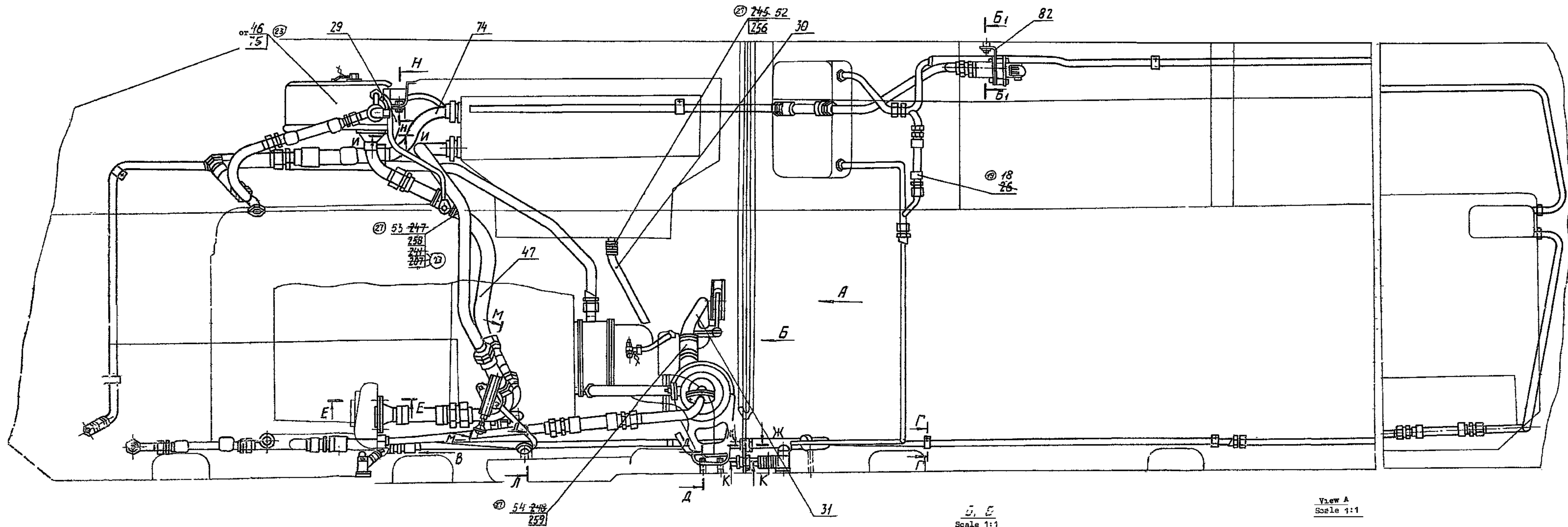
APPROVED		675-08-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT SCALE
			SHT 5	SHTS 7

No.	Designation	Description	Qty	Remark
137		Screw B1.M4-8h6hx16.48.016 FOCT 17473-80 or B.M4-8h6hx16.66.016 FOCT 1491-80	2	
208		Cotter pin 3.2x2.5x019 FOCT 397-79	1	
209		Cotter pin 1.6x10x019 FOCT 397-79	4	
210	EQ MAT C-30 TO IS 1570-79	Washer 6x1.01.019 or 6x1.02.019 FOCT 11371-78	14	(Ref DCU) 00957-ICV
211	EQ MAT C-30 TO IS 1570-79	Washer 8.01.019 or 8.02.019 FOCT 11371-78	19	Maximum (Ref DCU) quantity 00957-ICV
212		Washer 8.01.019 or 8.02.019 FOCT 6958-78	6	
213		Washer 12x2.01.019 or 12x2.02.019 FOCT 11371-78	1	
214		Washer 4T65P05 FOCT 6402-70	2	
215		Washer 6T65P06 FOCT 6402-70	46	
216		Washer 8T65P06 FOCT 6402-70	27	
217		Washer 120T65P06 FOCT 6402-70	1	
218		Washer 6.01.019 or 6.02.019 FOCT 6958-78	5	

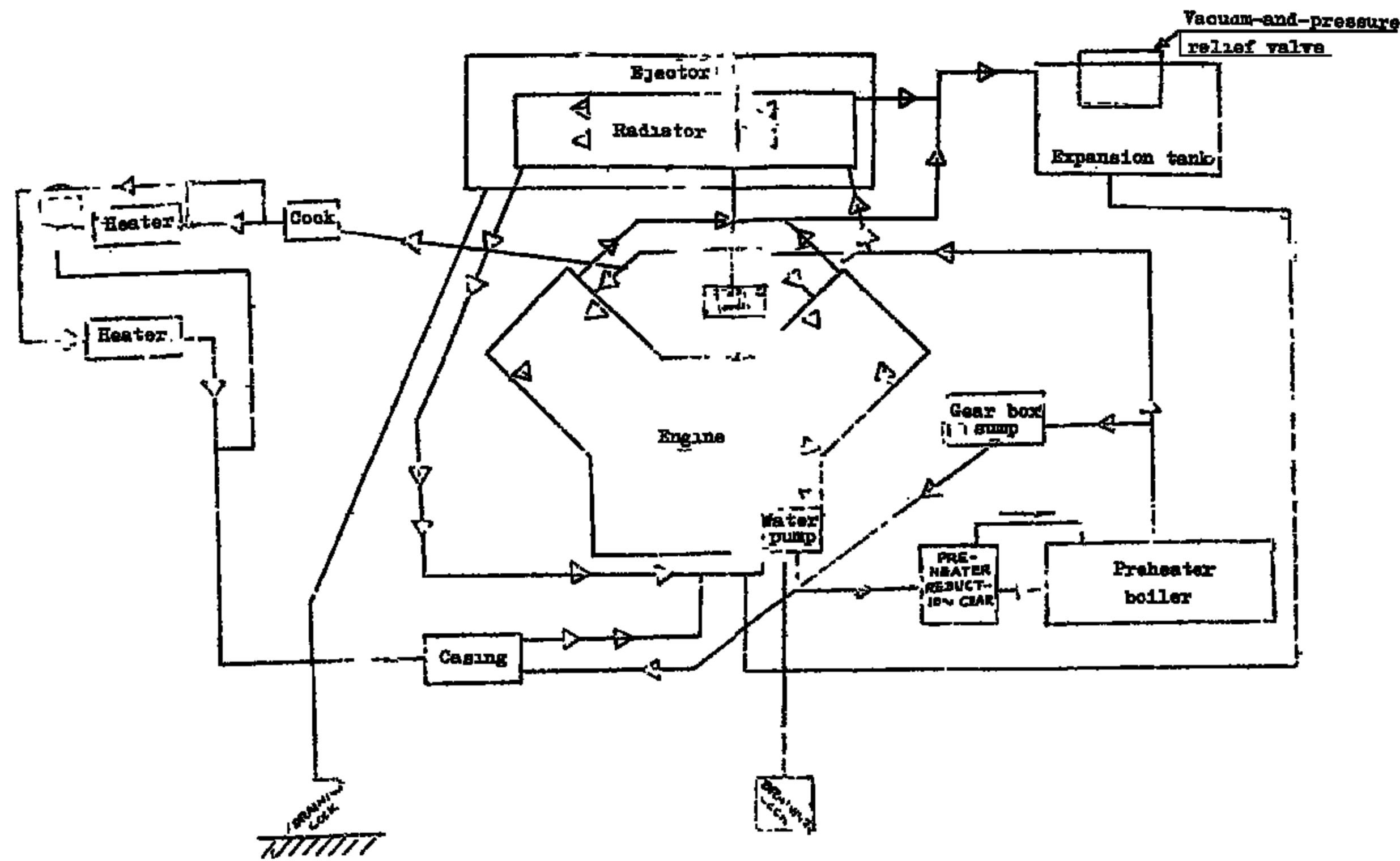
APPROVED		675-08-Sb2		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM	WEIGHT	SCALE
			SHT 6	SHTS 7

No.	Designation	Description	Qty	Remark									
		Materials											
(C)	EQ.- MS WIRE, GALVANI- SED 1 ϕ , 1/4 HARD TO 15: 280-78 UTS 37 kg/mm ²	Wire KO 1.0											
251		POCT 792-67 $l \approx 90$ mm	28										
250		$l \approx 180$ mm	14										
252		$l \approx 250$ mm	28										
254		$l \approx 450$ mm	1										
		TV 005.6016-80											
255		40Y12-1.3(13) $l = 50 \pm 2.5$	1										
256		40Y18-1.3(13) $l = 100 \pm 2.5$	3										
257		40Y18-1.3(13) $l = 200 \pm 2.5$	1										
258		40Y38-1.3(13) $l = 100 \pm 2.5$	1	Maximum quantity									
259		40Y48-1.3(13) $l = 100 \pm 2.5$	1										
<table><tr><td>00475 -ICV <i>Bm</i> 26-9-94</td><td>(C) <i>92</i></td><td>EQUIVALENT ADDED FOR WIRE KO 1.0 GDST 792-67</td></tr><tr><td>00258- ICV <i>CD</i> JUL95</td><td>(B) <i>CDM</i></td><td>REF No A2-DS CAT PT No. ADDED. NAMENG LATURE WAS HANDLE</td></tr><tr><td>DECLIN S DATE</td><td>ISSUE</td><td>AMENDMENTS</td></tr></table>					00475 -ICV <i>Bm</i> 26-9-94	(C) <i>92</i>	EQUIVALENT ADDED FOR WIRE KO 1.0 GDST 792-67	00258- ICV <i>CD</i> JUL95	(B) <i>CDM</i>	REF No A2-DS CAT PT No. ADDED. NAMENG LATURE WAS HANDLE	DECLIN S DATE	ISSUE	AMENDMENTS
00475 -ICV <i>Bm</i> 26-9-94	(C) <i>92</i>	EQUIVALENT ADDED FOR WIRE KO 1.0 GDST 792-67											
00258- ICV <i>CD</i> JUL95	(B) <i>CDM</i>	REF No A2-DS CAT PT No. ADDED. NAMENG LATURE WAS HANDLE											
DECLIN S DATE	ISSUE	AMENDMENTS											

APPROVED	<i>[Signature]</i>	675-08-Sb2		
CHECKED	<i>[Signature]</i>			
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		COOLING AND PREHEATING SYSTEM		WEIGHT
				SCALE
				SHT 7 SHTS 7

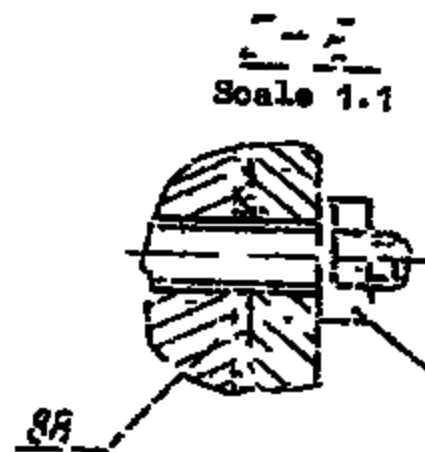


Schematic diagram of cooling system.

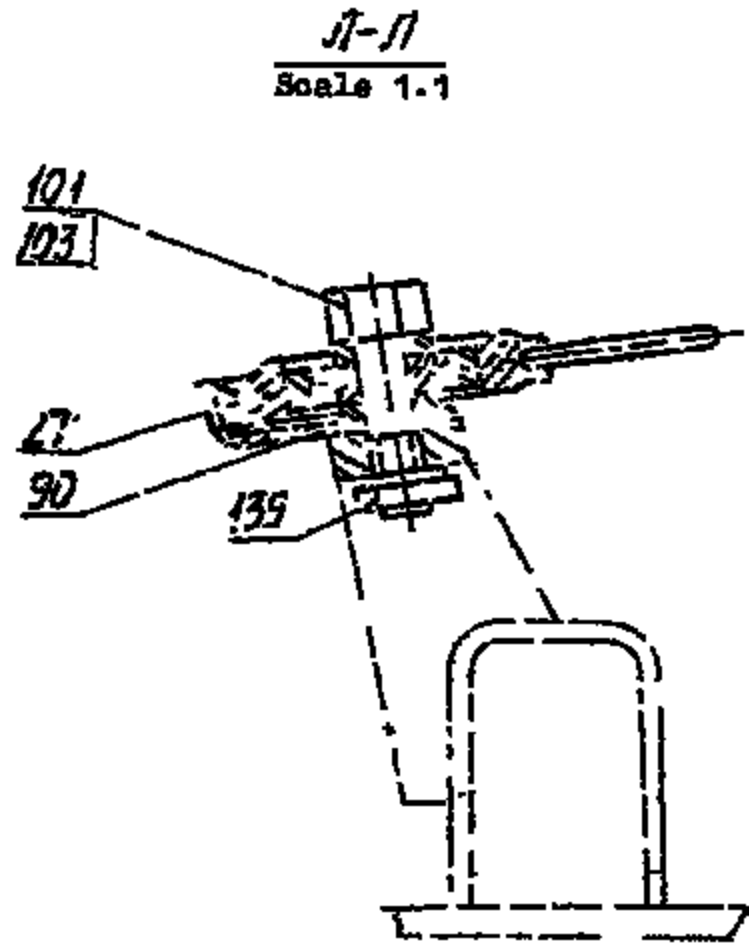


Symbols of routes

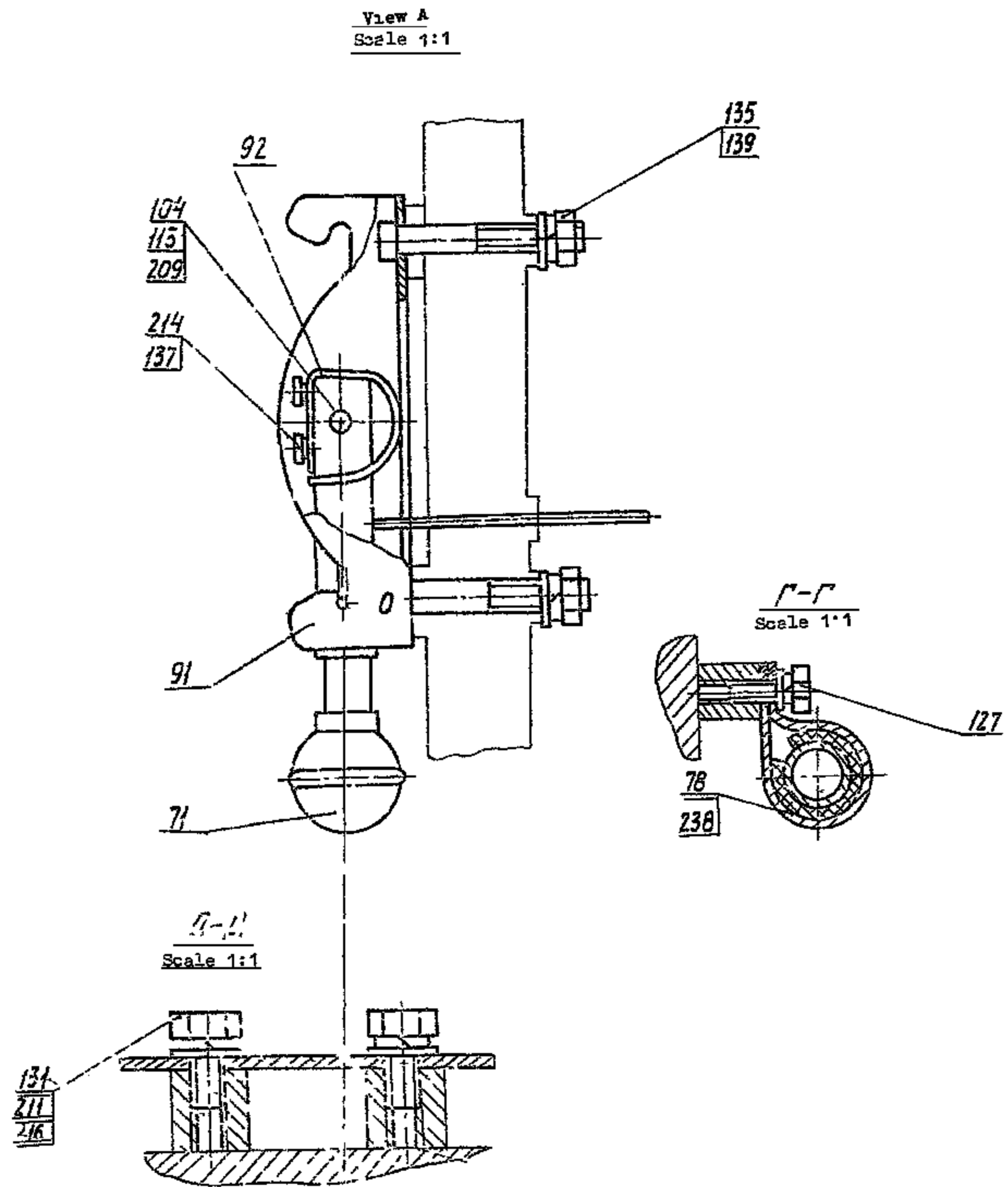
- Cooling liquid with engine being operative
- Cooling liquid with preheater being operative
- Steam and air discharge
- Fuel



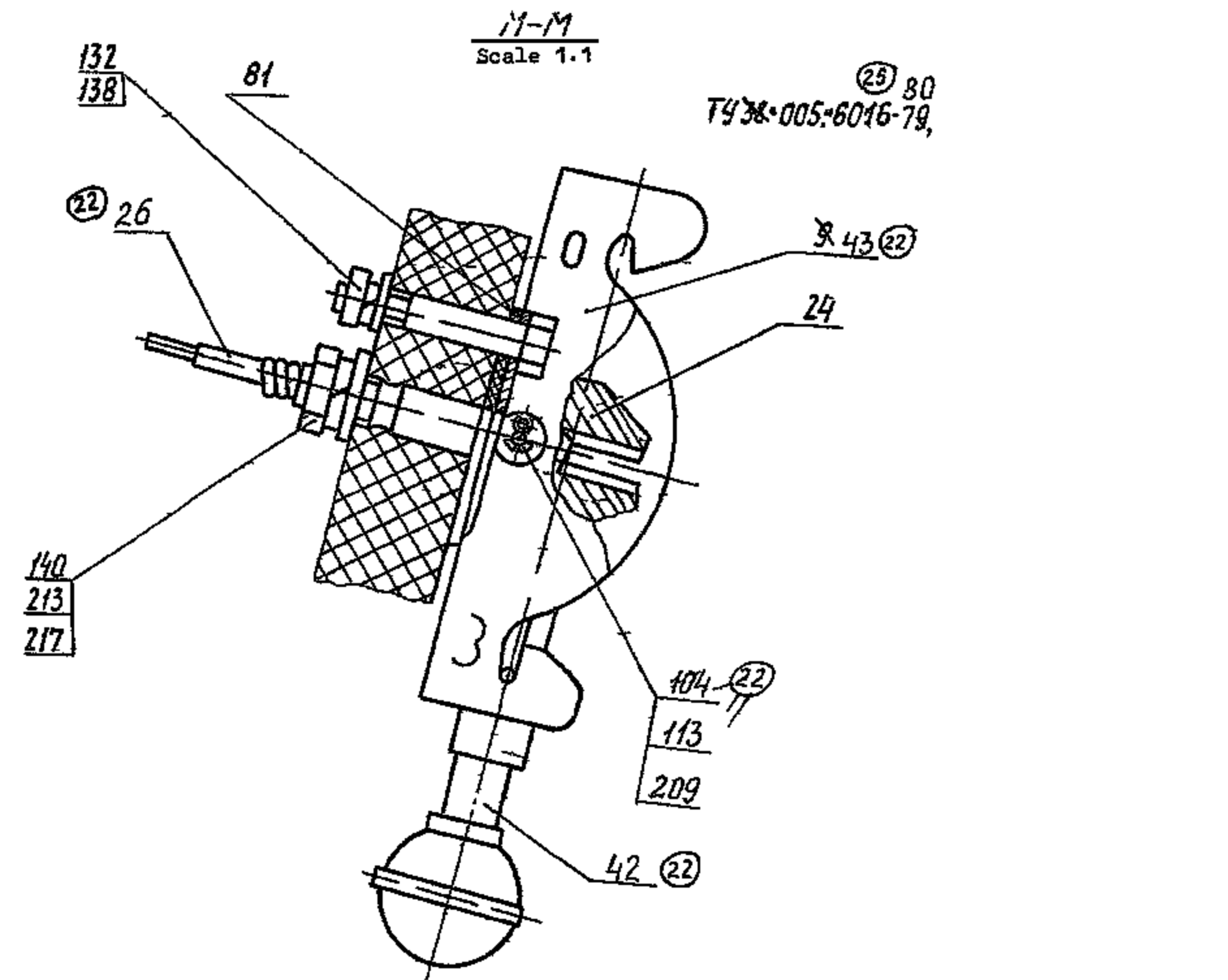
Scale 1:1



Scale 1:1

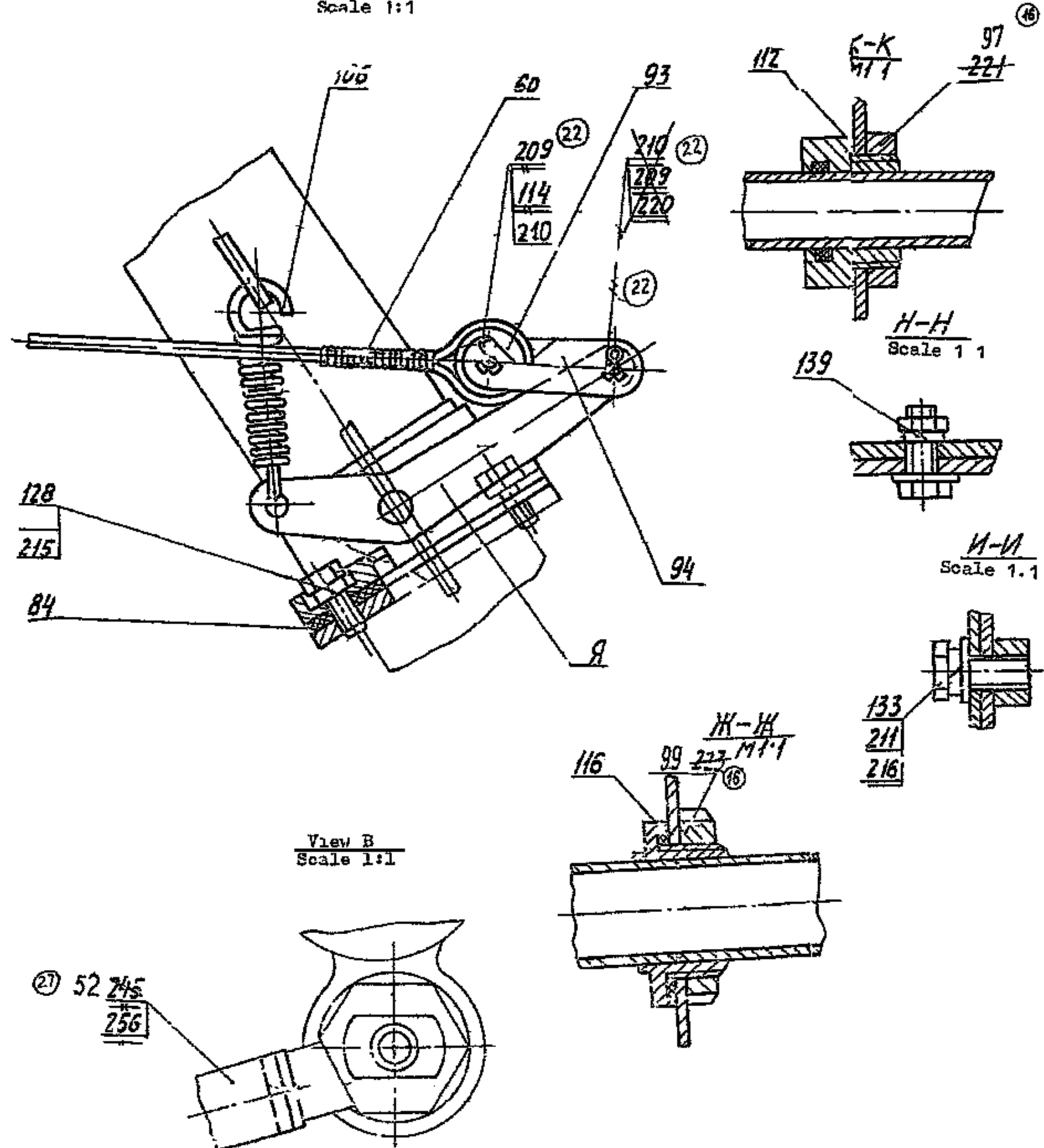


Scale 1:1



Scale 1:1

View B
Scale 1:1



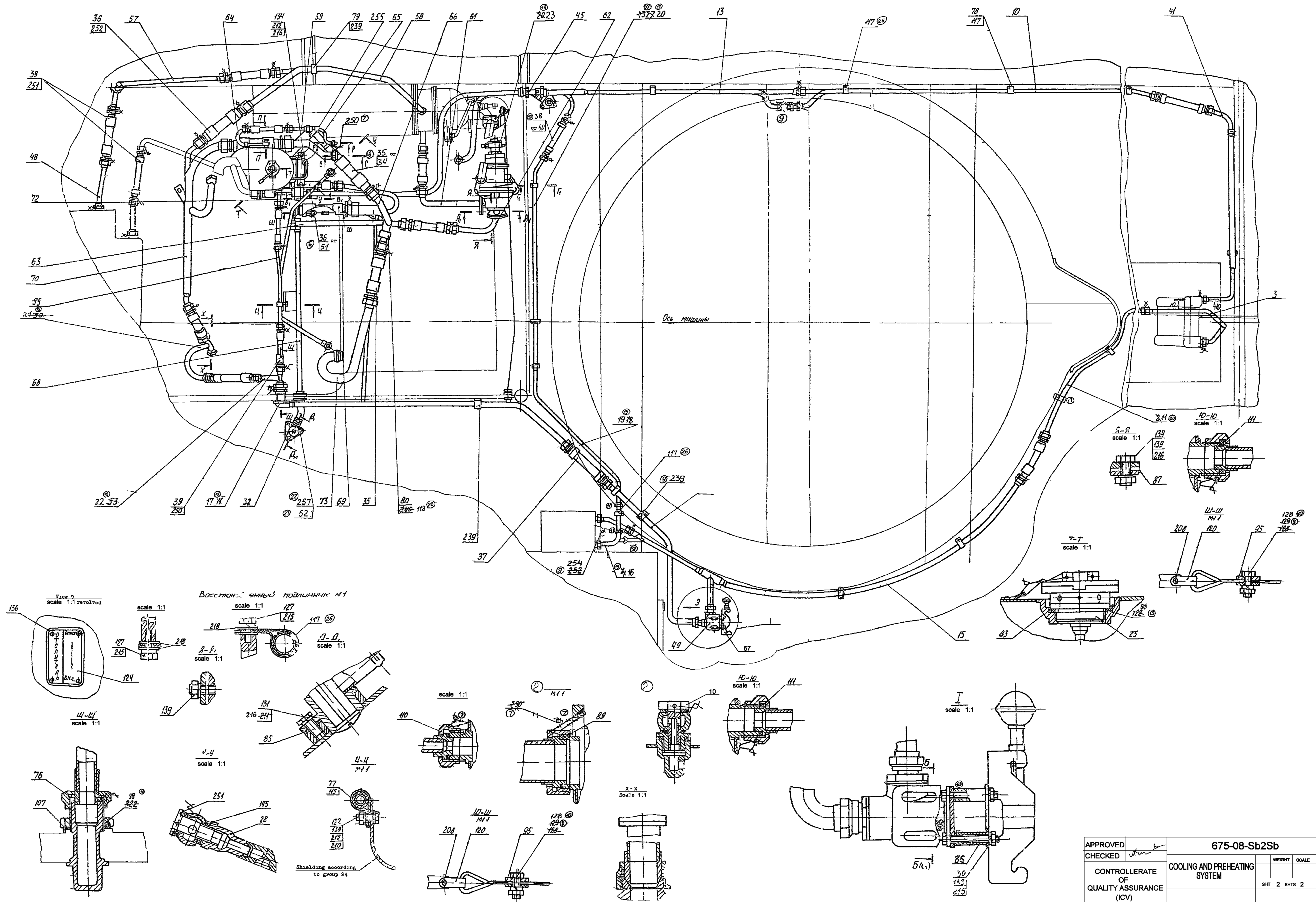
View B
Scale 1:1

TECHNICAL CONDITIONS

1. The internal and external surfaces of the pipes and hoses must be clean.
2. Arrangement of pipes should ensure complete draining of water and air escape when filling the system. Water is drained from the power train sump through special cock.
3. During assembly bending of pipes is allowed, but in this case out-of-roundness for pipes of 12 mm and 18 mm in dia. should not exceed 1 mm, for other pipes out-of-roundness should not exceed 1.5 mm.
4. All round nuts, hoses and parts 87, 88 are to be installed on pigment white zinc, ГОСТ 482-77 or iron minimum, ГОСТ 8866-76, in this case the pipe should be lubricated; it is not allowed to lubricate hoses.
5. Clearance between the pipe end faces of hose joints should not exceed 10 mm.
6. Connection hoses should tightly fit the pipes and should be reliably tightened by means of clamps. No leakage through joints is allowed.
7. Inconsiderable seepage of water in form of spots on the outer surfaces of pipes and hoses near the joints without sweating and running of drops is allowed.
8. Coupling clamps should be installed at a distance of at least 3 mm from the hose end face. Arrange the clamp frames in situ for the better convenience of mounting, dismounting and tightening.
9. To install expansion tank in the horizontal position, place three shims 211, maximum for each bolt under brackets.

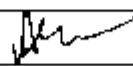
10. When mounting the pipe union, pipes and hoses should be lubricated with grease UNATSK 201 ГОСТ 6267-74. The union nuts should be reliably tightened and locked.
11. At the moment of handling the boiler at a temperature below -20°, handle 71 should be set in position CLOSED (ЗАКРЫТО); in this case lever "H" should lie on the limiter, the cable must be tightened; after handling the boiler, the handle should be set in position OPEN (ОТКРЫТО).
12. Adjustment of length of the cable of the cock for draining the water from the engine should ensure the cock-rod travel of 10⁺² mm; in closed position of the cock the cable should not be tightened.
13. On completion of mounting the vehicle, the system should be subjected to stationary test according to Specifications 371.
14. The split hose 258 should be installed in place of contact of pipe 47 with article 20 or with the oil tank and in places of contact of pipes with the surrounding parts.
15. Increase of clearance not exceeding 40 mm and misalignment not exceeding 10 mm are allowed between pipe 30 and branch pipe of drain valve 32. In this case hose 4GV18-1.3(13) ТУ 005.6016-80, L = 120 ± 2.5 may be installed instead of hose 256.
16. The rod fixed braiding may touch the surrounding units.
17. Pipes 1, 17 and 16 may touch neighbouring fixed units and parts.
18. Requirements of assembling should be ensured by installation on one of assemblies 35 and 34, 36 and 51, 38 and 40.
19. The threaded connections of the article bottom should be lubricated with grease Igthol 24 ГОСТ 21150-75 or MС-70 ГОСТ 9762-76.

APPROVED		675-08-Sb2Sb			
CHECKED		COOLING AND PREHEATING SYSTEM	WEIGHT	SCALE	
			47.27	1:5	
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			SHT 1	SHTS 2	

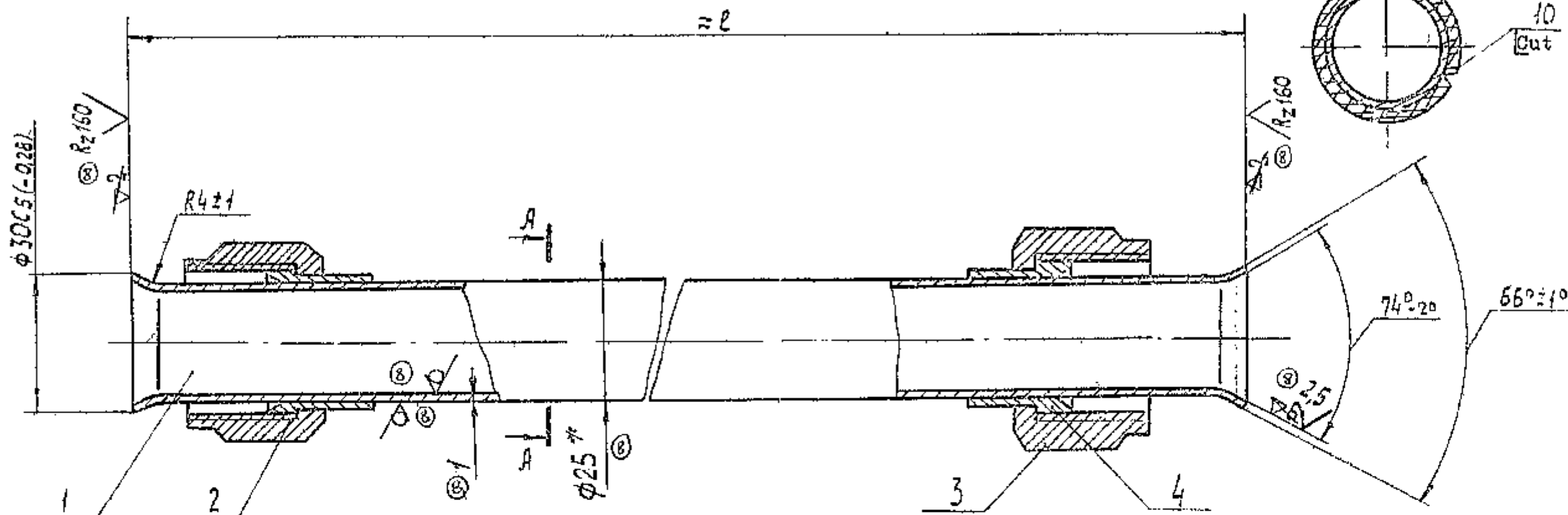


APPROVED		675-08-Sb2Sb			
CHECKED		COOLING AND PREHEATING SYSTEM		WEIGHT	SCALE
CONTROLLATE OF QUALITY ASSURANCE (ICV)					
			SHT 2	SHTS 2	

No.	Designation	Description	Qty	Remark
	675-08-c6108 CB	<u>List of Documents</u> Assembly drawing		
		<u>Parts</u>		
1	675-08-10	Pipe Pipe 25x1 ГОСТ 8734-75 810 ГОСТ 8733-74 ℓ = 550 mm	1	0.35 kg
2	700-33-116	Union nut	1	
3	700-33-118	Union nut	1	
4	700-57-417	Nipple	2	
		<u>Materials</u>		
10		Pipe 30 24,0x2,0 ГОСТ 5496-78 ℓ = 400 mm	1	

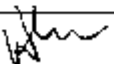
APPROVED		675-08-Sb108		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE		WEIGHT SCALE
			SHT	SHTS

675-08-Sb108Sb



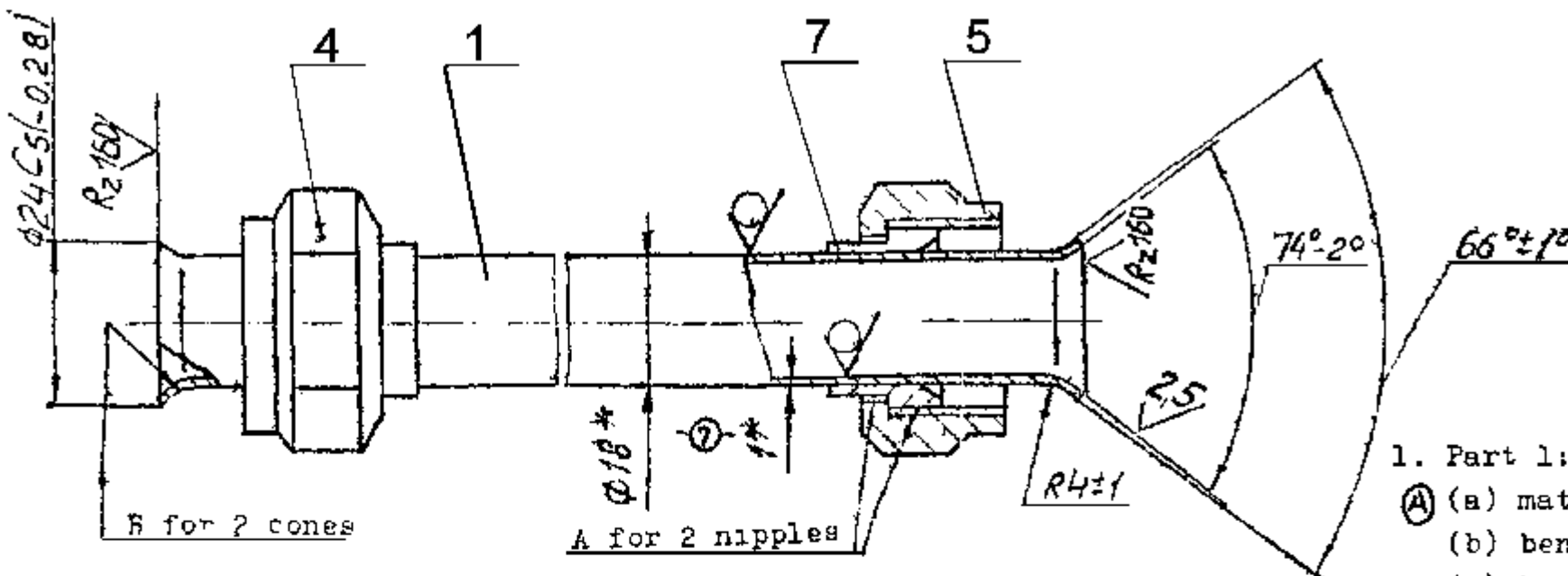
TECHNICAL CONDITION

- 1 Part 1:
 - a) clean to remove scale;
 - b) bend, specify length according to standard made in situ,
 - c) bending radii should be at least 2 diameters,
 - d) out-of-roundness not exceeding 1.5 mm and corrugation not exceeding 2 mm are allowed at places of bending
- 2 The internal surface of pipe except for the mating surfaces should be bakelite plated with bakelite varnish, mark ЛБС-1 ГОСТ 901-78 according to Instructions 053 25273 000.10 It is allowed to bakelite plate all over except for the threads and mating surfaces with subsequent painting from outside
3. Coat surfaces with primer ФЛ-03 К ГОСТ 9109-81 from outside except for the mating surfaces, nipples, surface under nipple and threads Paint with green enamel ЛФ-223 ГОСТ 14923-79 Presence of paint on nipples and under nipples is allowed
4. Test for air tightness by air pressure of 4 ± 0.5 kg/cm² in water bath for at least 0.5 min Leakage is not allowed
- 5 Bind pipe 1 over rubber pipe with surgical tape К-20 ГОСТ 4514-78 and coat with bakelite varnish ГОСТ 901-71
6. In general view the rubber pipe is conventionally not shown
7. * Sizes are given for references

APPROVED		675-08-Sb108Sb			
CHECKED		PIPE		WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)				0.48	1:1
			SHT SHTS		

No.	Designation	Description	Qty	Remark
	675-08-c6122CB	<u>List of Documents</u> Assembly drawing		
		<u>Parts</u>		
4	700-33-136	Union nut	1	
5	700-33-137	Union nut	1	
7	700-57-416	Nipple	2	
	Variable Data to be used			
		<u>675-08-c6122</u>		
		<u>Parts</u>		
1	675-08-35	Pipe		
(A)	COLD DRAWN SEAMLESS STEEL TUBE GRADE CDS 2, OR CDS 3 TO IS 3074-79	Pipe 18x1 TOCT 8734-75 B20 TOCT 8733-74 (A) ℓ = 1500 mm	1	0.63 kg
		<u>675-08-c6122-01</u>		
		<u>Parts</u>		
1	675-08-35-01	Pipe		
(A)	COLD DRAWN SEAMLESS STEEL TUBE GRADE CDS 2, OR CDS 3 TO IS 3074-79	Pipe 18x1 TOCT 8734-75 B20 TOCT 8733-74 (A) ℓ = 1050 mm	1	0.44 kg
		00814 -1CY 25-10-2000 DCG No DATE (A) EQ MATERIAL ADDED FOR REF No 1 ISSUE NATURE OF AMENDMENTS.		

APPROVED	02	(B)	675-08-Sb122	DS CAT No. LV2/ICVs 4710-003611
CHECKED	02		PIPE	WEIGHT
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			PIPE ASSEMBLY (C)	SCALE
			SHT	SHTS 1



Designation	Description	Mass, kg
675-08-c6122CE	Pipe	0.742
-01	Pipe Assy	0.552

TECHNICAL CONDITIONS

1. Part 1:
 - (a) material substitute is pipe 18x1 ГОСТ 8734-75;
Б10 ГОСТ 8733-74;
 - (b) bend, specify length according to standard made in situ,
 - (c) bending radius is not less than 2 diameters of the pipe,
 - (d) out-of-roundness not exceeding 1 mm and corrugation not exceeding 3 mm are allowed at places of bending.
2. Coating. For outer surfaces except for surface A and under nipples 7:
primer ФН-03 К ГОСТ 9109-81;
enamel МЭ-223 of green colour ГОСТ 14923-78;
bakelite varnish, mark ЛБС-1 ГОСТ 901-78 for inner surface except for surface B according to Instructions 053.25273.000.10
3. Test for air tightness by air pressure of 4.5 ± 0.5 kg/cm² in water bath for at least 0.5 min. Leakage is not allowed.
4. *Sizes are given for reference

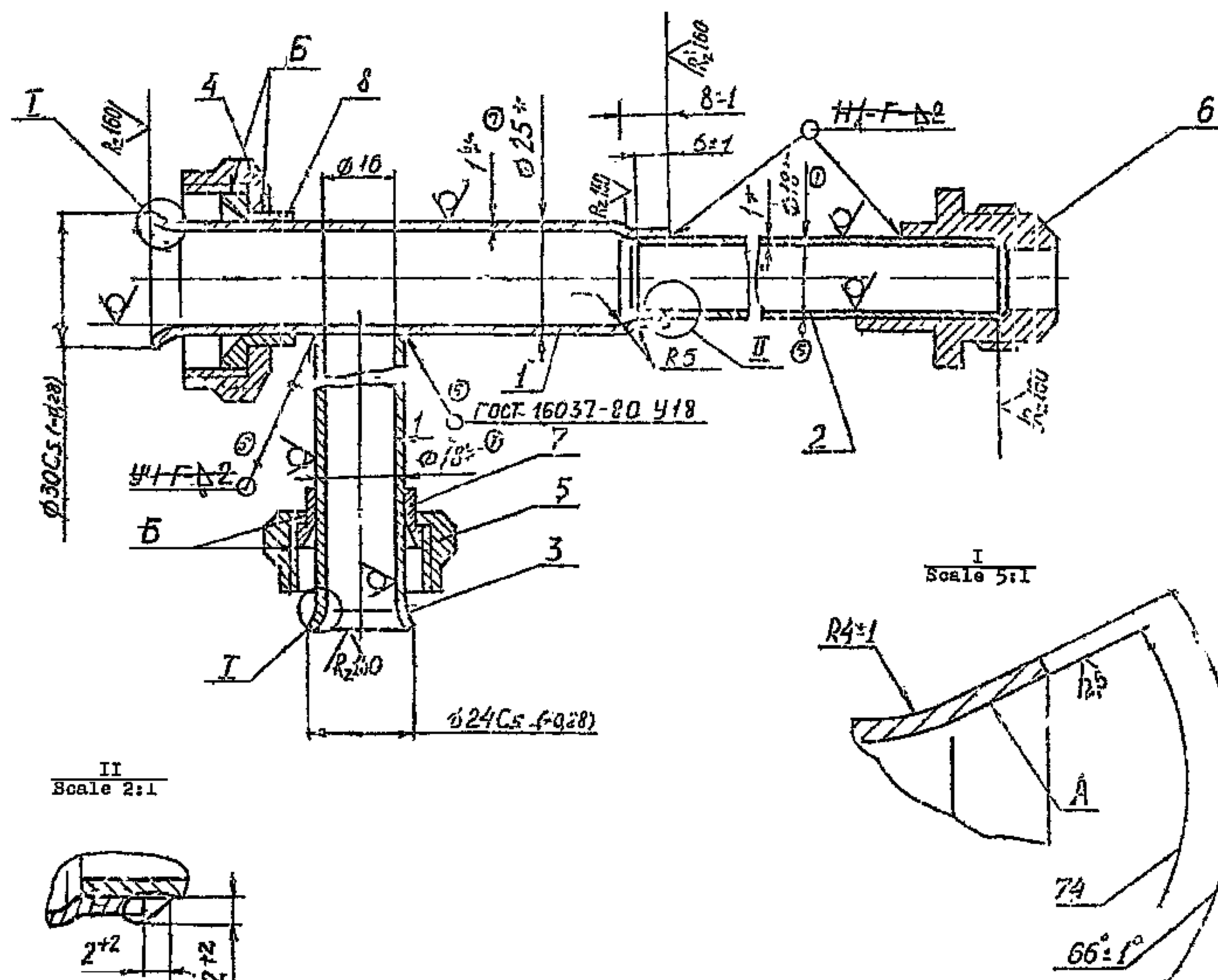
① EQ MATERIAL - COLD DRAWN SEAMLESS STEEL TUBE
GRADE CDS2, OR CDS3 TO IS: 3074-79

00968- 1CV Jhh	(B)	DS CAT No LV2/1CVS 4710-003611 AND DES- SCRIPTION PIPE ASSY ADDED.
2304 04 00814 -1CV Jhh	(A)	EQ MATERIAL ADDED
3-12-2000 DEC/NO DATE	ISSUE	NATURE OF AM.

APPROVED		⑧ 675-08-Sb122Sb	DS CAT No. LV2/ICVs	
CHECKED			4710-003611	
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE PIPE ASSEMBLY ⑧	WEIGHT	SCALE
			SEE TABLE	1:1
			SHT	SHTS

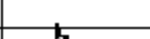
No.	Designation	Description	Qty	Remark
List of Documents 675-08-c6124CB Assembly drawing Parts				
1	675-08-32	Pipe	1	0.07 kg
①	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2, OR CDS3 TO IS 3074-79	Pipe 25x1 FOCT 8734-75 B10 FOCT 8733-74 ① ℓ = 120 mm		
2	675-08-33	Pipe	1	0.43 kg
①	COLD DRAWN SEAMLESS STEEL TUBE (GFA)E CDS2, OR CDS3 TO IS 3074-79	Pipe 18x1 FOCT 8734-75 B20 FOCT 8733-74 ① ℓ = 1030 mm		
3	675-08-34	Branch pipe	1	0.06 kg
①	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2, OR CDS3 TO IS 3074-79	Pipe 18x1 FOCT 8734-75 B20 FOCT 8733-74 ① ℓ = 150 mm		
4	700-33-116	Union nut	1	
5	700-33-136	Union nut	1	
6	700-57-56	union	1	
7	700-57-416	Nipple	1	
8	700-57-417	Nipple	1	
00814 -ICV 03.10.2000 DC(I) No DATE ① Am ISSUE EQ MATERIAL ADDED FOR REF Nos 1, 2 & 3 NATURE OF AMENDMENTS				

APPROVED	<i>h</i>	675-08-Sb124		
CHECKED	<i>Am</i>			
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE	WEIGHT	SCALE
			SHT	SHTS 1



TECHNICAL CONDITIONS

1. Parts 1, 2, 3
 - (a) bend, specify the length and mutual arrangement of parts according to standard made in situ;
 - ④ (b) material substitute. parts 1 B20 POCT 8733-74 for parts 2 and 3 B10 POCT 8733-74,
 - (c) bending radii are not less than 2 diameters of pipe,
 - (d) corrugation at places of bending should not exceed 2 mm,
 - (e) out-of-roundness of parts 1 at places of bending should not exceed 1.5 mm, and that of parts 2, 3 should not exceed 1 mm,
 - (f) traces caused by bending tools without damage to surface are allowed,
 - (g) unspecified limit deviations of sizes are ± 0.5 mm.
2. Gas welding.
3. Coating. For outer surfaces except for surface B, and under nipples 7 and 8:
Primer CH-03 K POCT 9109-81,
enamel MO-223 of green colour POCT 14923-78,
bakelite varnish, mark MBG-1 POCT 901-78 for inner surfaces except for surface A according to Instructions 053.2573.000.10
4. Test for air tightness by air in water bath by pressure of $4.5_{-0.5}^{+0.5}$ kg/cm² for at least 0.5 min. Leakage is not allowed. Back-up welding with subsequent testing is allowed.
5. Check flow section of part 3 by steel ball, $\phi 12_{-0.2}^{+0.1}$.
6. Misalignment of hole in pipe 1 with inner diameter of pipe 3 along the traverse axis of section should not exceed 1 mm and that along the longitudinal axis should not exceed 5 mm.
7. All other requirements to quality of seams should comply with OCT 3-4001-77 for unspecified welded joints.
8. *Sizes are given for reference.
- ④ EQ MATERIAL:~ COLD DRAWN SEAMLESS STEEL TUBE 6
CDS 3 TO IS 3074-79

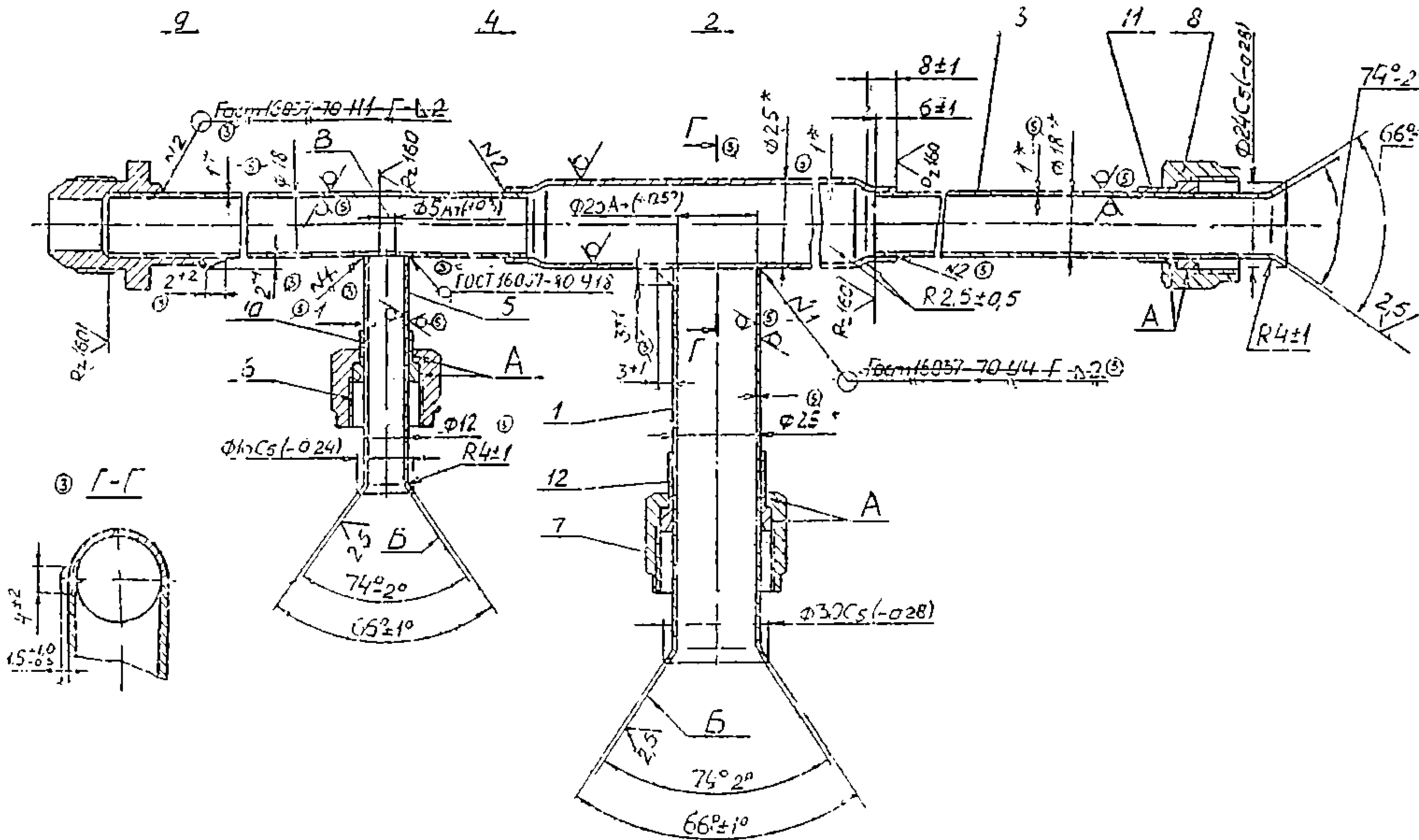
APPROVED		675-08-Sb124Sb			
CHECKED		PIPE ASSEMBLY DRAWING		WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)				0.74	1:1
			SHT SHTS		

DO BY FICV <i>[Signature]</i> 25-05-2006	(A) <i>[Signature]</i>	EQ MATERIAL ADDED.
DCOINO DATE	ISSUE	NATURE OF AMENDMENTS

No.	Designation	Description	Qty	Remark
		<u>List of Documents</u>		
	675-08-c6127CB	Assembly drawing		
		<u>Parts</u>		
1	675-08-28	Branch pipe		
(A)	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2 TO CDS3 TO IS: 3074-79.	Pipe 25x1 ROCT 8734-75 B10 ROCT 8733-74 (A) ℓ = 120	1	0.07 kg
2	675-08-29	Pipe		
(A)	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2 TO CDS3 TO IS: 3074-79	Pipe 25x1 ROCT 8734-75 B10 ROCT 8733-74 (A) ℓ = 120	1	0.07 kg
3	675-08-31	Pipe		
(A)	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2 TO CDS3 TO IS: 3074-79.	Pipe 18x1 ROCT 8734-75 B20 ROCT 8733-74 (A) ℓ = 920	1	0.38 kg
4	675-08-37	Pipe		
(A)	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2 TO CDS3 TO IS: 3074-79	Pipe 18x1 ROCT 8734-75 B20 ROCT 8733-74 (A) ℓ = 550	1	0.21 kg
5	675-08-39	Branch pipe		
(A)	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2 TO CDS3 TO IS: 3074-79	Pipe 12x1 ROCT 8734-75 B10 ROCT 8733-74 (A) ℓ = 40	1	0.01 kg
6	700-33-115	Union nut	1	
7	700-33-116	Union nut	1	
8	700-33-136	Union nut	1	
9	700-57-56	union	1	
10	700-57-415	Nipple	1	
11	700-57-416	Nipple	1	
12	700-57-417	Nipple	1	

EQ. MATERIAL ADDED FOR REF. NOS. 1, 2, 3, 4 & 5.	NATURE OF AMENDMENT
(A)	ISSUE
09/01/14 -ICV No. 14 3-15-2009	DCU No. DA

APPROVED		675-08-Sb127	
CHECKED			
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	PIPE	WEIGHT	SCALE
		SHT	SHTS



TECHNICAL CONDITIONS

1. Parts 1, 2, 3, 4:

(a) material substitute of parts 1, 2, 5 is pipe B20 OCT 8733-74, that of parts 3, 4 is pipe B10 OCT 8733-74;

(b) bend, specify the length and mutual arrangement of parts according to the standard made in situ;

(c) bending radius is not less than 2 diameters of pipe;

2. Corrugation not exceeding 2 mm and out-of-roundness of parts 1, 2 not exceeding 1.5 mm and that of parts 3, not exceeding 1 mm are allowed at places of bending;

3. Coatings: For outer surfaces except for surface A, the and under nipples 10, 11, 12:

primer 30-03 K OCT 9109-81;

enamel R2-223 of green colour OCT 14923-78;

bakelite varnish, mark BEC-1 OCT 901-78 for inner surfaces except for surface B and thread according to instructions 053.25273.00010.

4. Check hole B after bakelite coating.

5. Test for air tightness by pressure of 4.5-0.5 kg/cm² in water bath for at least 0.5 min. Leakage is not allowed. Back-up welding with subsequent testing is allowed.

6. Gas welding.

7. Misalignment of hole in pipe 2 with inner diameter of pipe 1 along the traverse axis of section should not exceed 1 mm and that along the longitudinal axis - 5 mm.

8. Check flow section of part 1 by steel ball, $\phi 19^{+0.1}_{-0.3}$.

9. Other requirements to quality of seams are according to OCT 3-4001-77 for unspecified welded joints.

10. Sizes are given for reference.

(A) EQ MATERIAL - COLD DRAWN SEAMLESS STEEL TUB
GRADE CDS2 OR CDS 3 TO IS 3071

APPROVED
CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

675-08-Sb127Sb

PIPE
ASSEMBLY DRAWING

WEIGHT SCALE

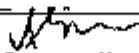
0.85 1:1

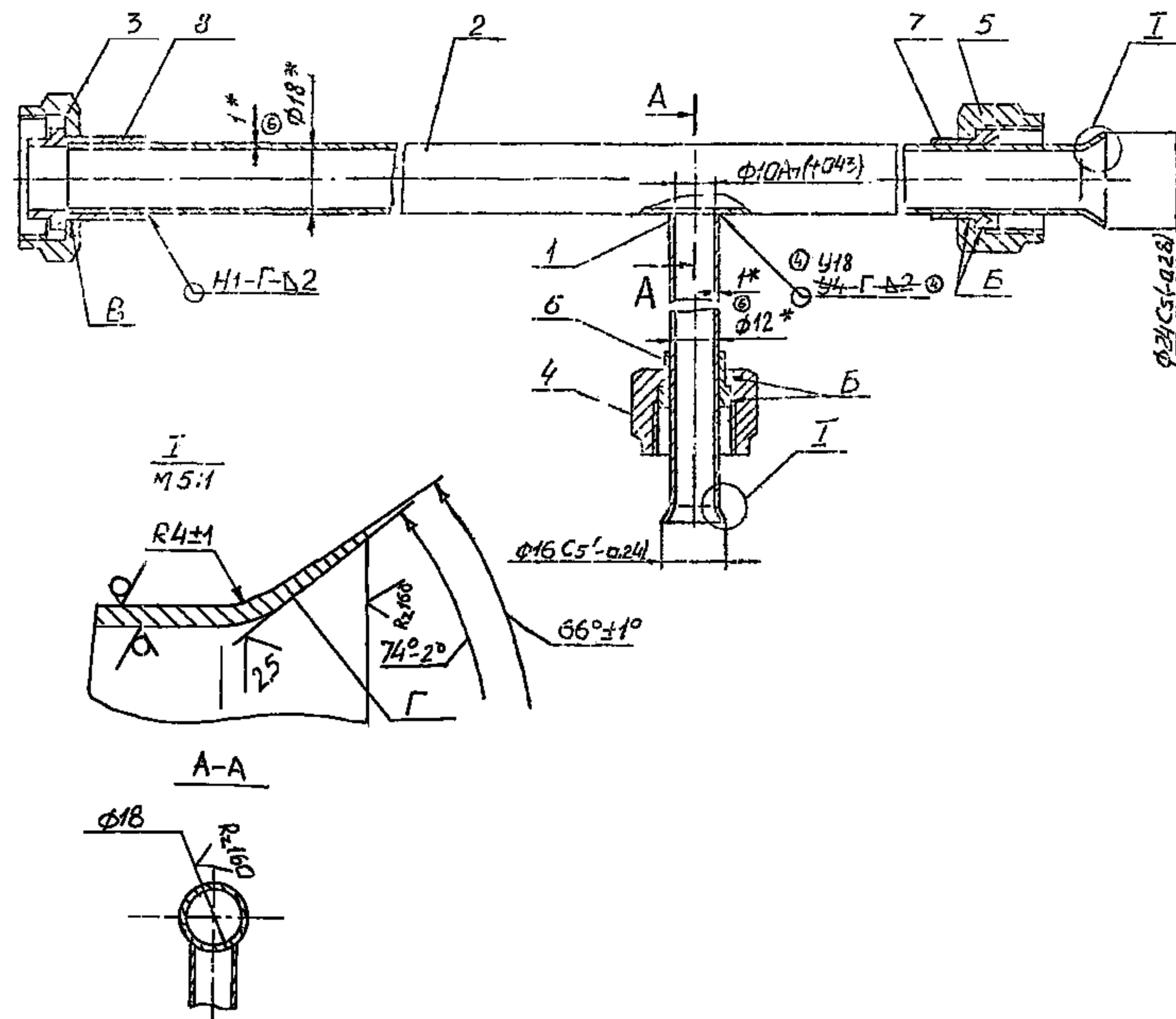
SHT SHTS

00 014 (A) EQ MATERIAL ADDED

DATE ISSUE NATURE OF AMENDMENTS

No.	Designation	Description	Qty	Remark
	675-08-c6128CB	<u>List of Documents</u> Assembly drawing		
		<u>Parts</u>		
1	675-08-38	Branch pipe Pipe 12x1 TOCT 8734-75 B10 TOCT 8733-74 ℓ = 100	1	0.02 kg
2	675-08-40	Pipe Pipe 18x1 TOCT 8734-75 B20 TOCT 8733-74 ℓ = 1090	1	0.451 kg
3	700-33-36	Union nut	1	
5	700-33-136	Union nut	1	
6	700-57-415	Nipple	1	
7	700-57-416	Nipple	1	
8	701-13-27	End piece	1	
4	700-33-115	Union nut	1	

APPROVED		675-08-Sb128		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE	WEIGHT	SCALE
			SHT	SHTS



TECHNICAL CONDITIONS

- Parts 1 and 2:
 - material substitute of part 1 is pipe B20 ГОСТ 8733-74, of part 2 is pipe B10 ГОСТ 8733-74;
 - bend, specify the length and mutual arrangement of parts according to the standard made in situ;
 - bending radius is not less than 2 diameters of pipe;
 - at place of bending the out-of-roundness should not exceed 1 mm and corrugation - 2 mm.
- Welds are according to ГОСТ 16037-80;
- Coating: for outer surfaces except for surfaces B and B and under nipples 6 and 7:

Primer ФН-03 К ГОСТ 9109-81;

enamel ФБ-223 of green colour ГОСТ 14923-78;

bakelite varnish ВБС-1 ГОСТ 901-78 according to Instructions 053-25273.000.10 for inner surface except for surface Г and thread.
- Test for air tightness by air pressure of 4.5-0.5 kg/cm² in water bath for at least 0.5 min. Leakage is not allowed. Back-up welding with subsequent testing is allowed.
- Check flow section of part 1 by steel ball, $\phi 7^{+0.05}_{-0.10}$.
- Misalignment of hole in pipe 2 with inner diameter of pipe 1 along the traverse axis of section should not exceed 1 mm and that along the longitudinal axis - 3 mm.
- Other requirements to quality of welds are according to OCT 3-4001-77 for unspecified welded joints.
- *Sizes are given for reference

APPROVED		675-08-Sb128Sb		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	PIPE ASSEMBLY DRAWING	WEIGHT	SCALE	
		0.677	1:1	
		SHT	SHTS	

No.	Designation	Description	Qty	Remark
	675-08-c6129CE	<u>List of Documents</u> Assembly drawing <u>Parts</u>		
1	675-08-41 COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2,OR CDS3 TO IS: 3074-79.	Pipe Pipe 25x1 ROCT 8734-75 B10 ROCT 8733-74 (A) L = 1250	1	0.65 kg
2	765-08-1004	Elbow		1 piece is allowed to be re- placed by Ref. No. 4
3	700-33-118	Union nut	1	
4	700-56-18	Elbow		1 piece is allowed to be replac- ed by Ref. No. 2
5	700-57-417	Nipple	1	
8		<u>Materials</u> Pipe 3C 24.0x2.0 ROCT 5496-78 L = 1200	1	
00 B14 -ICV 10/11/2000 DCU No. DATE (A) EQ. MATERIAL ADDED, FOR REF. No. 1 ISSUE NATURE OF AMENDMENTS				
APPROVED		675-08-Sb129		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE		WEIGHT SCALE
			SHT	SHTS

675-08-Sb129Sb

TECHNICAL CONDITIONS

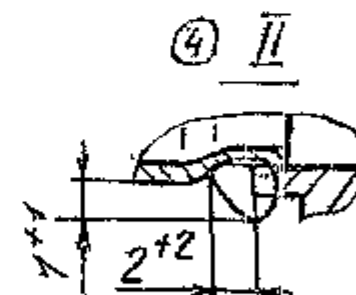
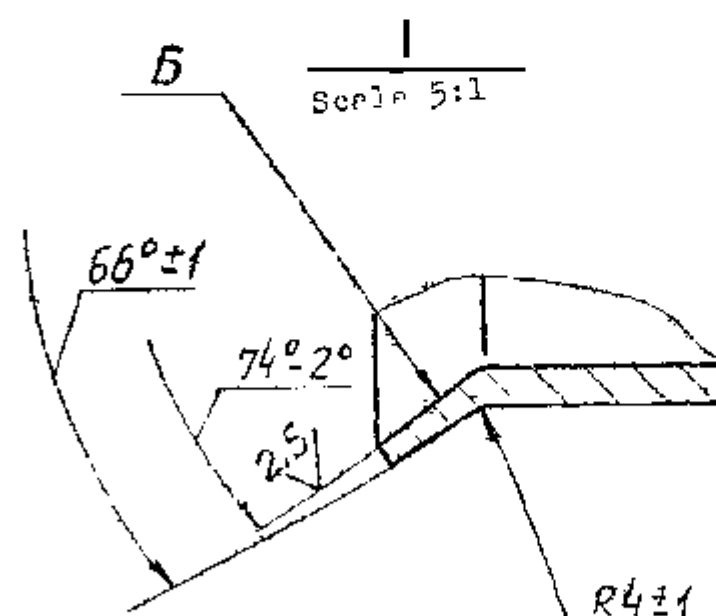
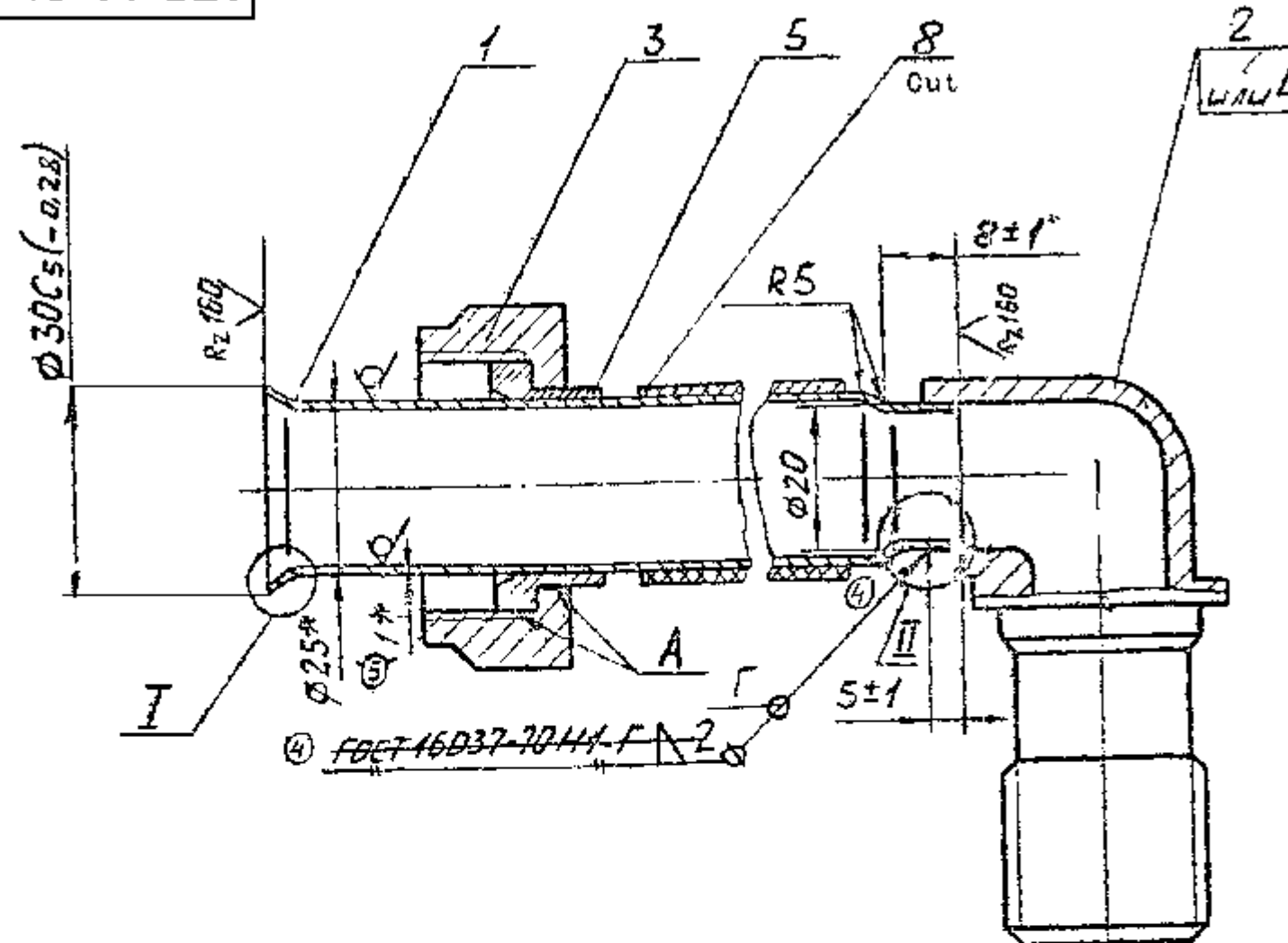
1. Part 1:

- (A) (a) material substitute is pipe B20 ГОСТ 8733-74;
 (b) bend, specify the length of the standard made in situ;
 (c) corrugation at place of bending should not exceed 2 mm;
 (d) out-of-roundness at place of bending should not exceed 1.5 mm;
 (e) traces caused by bending tools without damage to surface are allowed;
 (f) unspecified limit deviations of sizes are ± 0.5 mm.
2. Coating: bakelite varnish, mark ПБС-1 ГОСТ 901-78, according to Instructions 053.25273.000.10 for inner surface except for surface B;
 primer ФН-03-K ГОСТ 9109-81;
 enamel ИР-223 of green colour ГОСТ 14923-78 for outer surfaces except for surface A, thread and under nipple.
3. Test for air tightness by air pressure of $4.5_{-0.5}^{+0.5}$ kg/cm² for 0.5 min. Leakage is not allowed. Back-up welding with subsequent testing is allowed.
4. Bind pipe 1 over rubber pipe with surgical tape К-20 ГОСТ 4514-78 with overlapping not less than $\frac{1}{4}$ of tape width and coat with bakelite varnish, mark ПБС-1 ГОСТ 901-71.78
5. Requirements to quality of weld are according to OCT 3-4001-77 for unspecified welded joints.
6. *Sizes are given for reference

(A) EQ MATERIAL:- COLD DRAWN SEAMLESS STEEL TUBE
 GRADE CDS 2, OR CDS 3 TO IS 3074-79

00814-100 13-10-2000 DCU/No DATE	(A) Issue	EQ MATERIAL ADDED FOR Ref. (a).
NATURE OF AMENDMENTS		

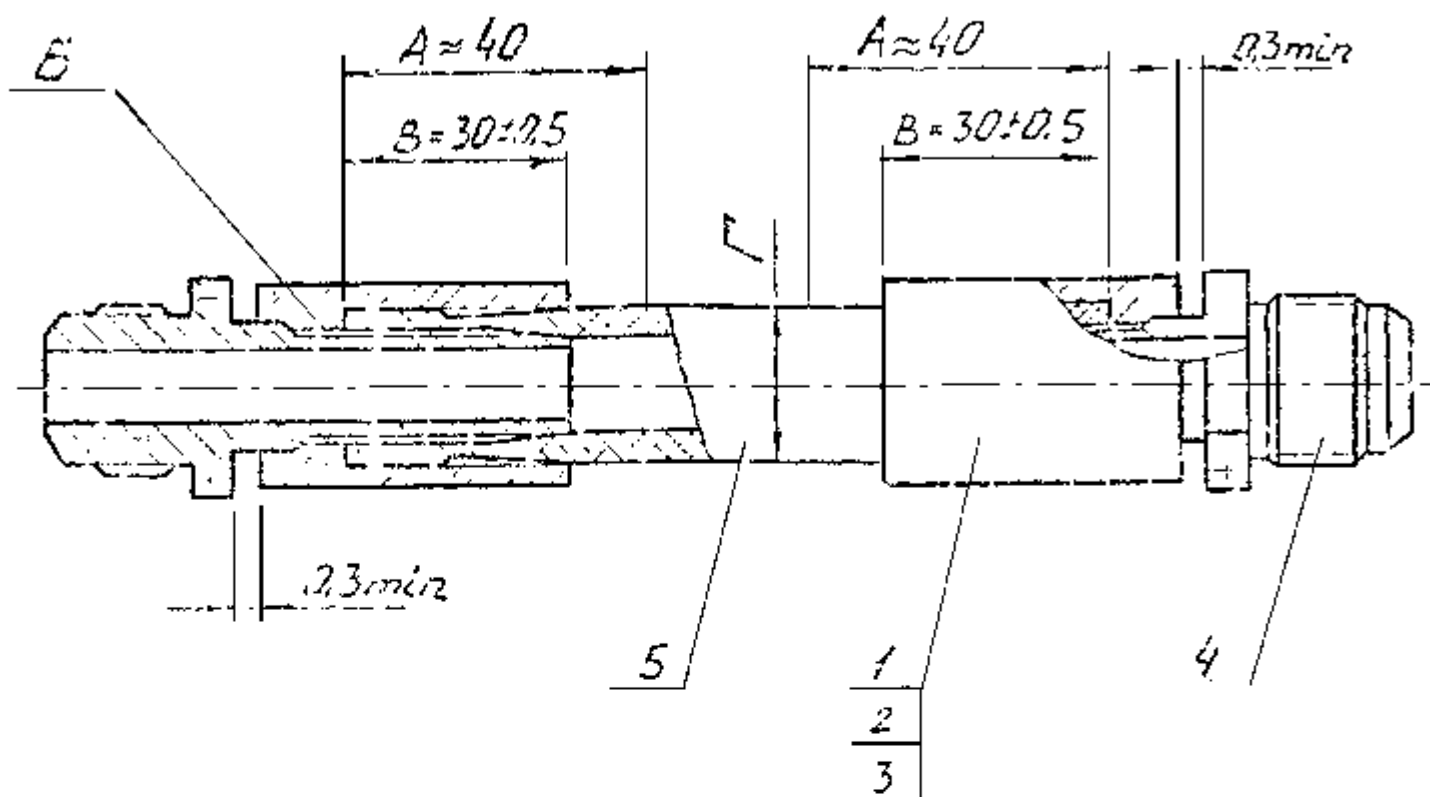
APPROVED	675-08-Sb129Sb		
CHECKED			
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	PIPE ASSEMBLY DRAWING	WEIGHT	SCALE
		0.93	1:1
		SHT	SHTS



No.	Designation	Description	Qty	Remark
	675-08-c6130CE	<u>List of Documents</u> Assembly drawing <u>Parts</u> 1 700-33-121 Coupling 2 Selection 2 700-33-122 Coupling 2 Selection 3 700-33-123 Coupling 2 Selection 4 700-57-48 Union 2 <u>Materials</u> 5 40Y12-1.3(13) 1 0.023 kg TY 005.6016-80 $\ell = (100 \pm 2.5) \text{ mm}$		

APPROVED		675-08-Sb130		
CHECKED		HOSE		WEIGHT SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)				
			SHT	SHTS

675-08-Sb130Sb



- Part 5: **TECHNICAL CONDITIONS**
 - divide into categories as to outer diameter Γ according to the Table. Measure diameter at section A. Apply No. of category to outer surface of the hose at a distance A from end faces with white enamel WD-223 POCT 14923-78 by type HO-8 POCT 2930-62;
 - make chamfer $1 \times 45^\circ$ on end faces of the hose over inner diameter, round off over outer diameter;
 - apply diametrical mark of about 20 mm long and 3 ± 1 mm wide to the hose from size B to end face with white enamel WD-223 POCT 14923-69.78.
- Assemble sleeve with the appropriate category of the hose according to the Table.
- Prior to assembling, lubricate the surface of unit B and groove of sleeve with pigment white zinc POCT 482-77.
- Perform assembling on special mandrel. Scores on inner surface of the hose are not allowed.
- Test for air tightness by summer fuel II-0.5 or winter fuel 3-0.5 POCT 305-73 by pressure of $5_{-0.5}^{+0.5}$ kg/cm² for at least 2 min. Fuel leakage is not allowed. After testing blow off with compressed air and stop the input holes of the unions by substitute plugs.
- Misalignment of mark with the sleeve end face should not exceed 2 mm.
- Screw the union into sleeve as far as it will go.

APPROVED		675-08-Sb130Sb		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		HOSE ASSEMBLY DRAWING	WEIGHT	SCALE
			0.160	1:1
			SHT	SHTS

No.	Designation	Description	Qty	Remark
	675-08-c6131CE	<u>List of Documents</u> Assembly drawing <u>Parts</u> Pipe Pipe 18x1 TOCT 8734-75 B20 TOCT 8733-74 L = 870 Union	1 2	0.364 kg
1	675-08-43	Pipe		
(A)	COLD DRAWN SEAMLESS STEEL TUBE GRADE CDS2 OR CDS3 To IS: 3074-79.	Pipe	1	0.364 kg
4	700-57-56	Union	2	
 DCC No. DATE (A) EQ. MATERIAL ADDED FOR REF. No.1. GIVEN ISSUE NATURE OF AMENDMENTS				
APPROVED		675-08-Sb131		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE	WEIGHT	SCALE
			SHT	SHTS

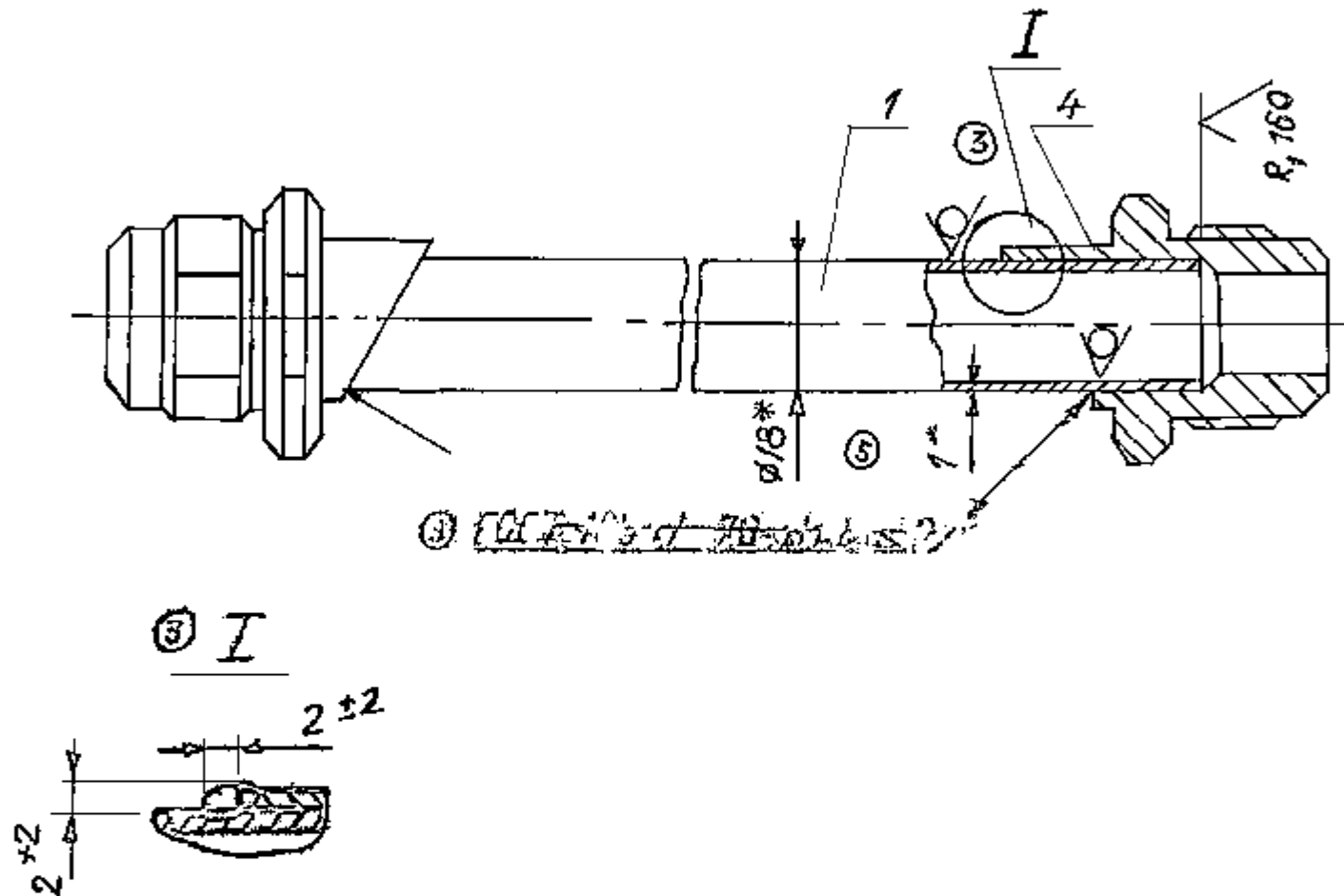
675-08-Sb131Sb

TECHNICAL CONDITIONS

1. Part 1:

- (A) (a) material substitute is pipe B10 ГОСТ 8733-74,
 (b) bend, specify the length according to the standard made in situ,
 (c) out-of-roundness at places of bending should not exceed 1 mm and corrugation should not exceed 3 mm,
 (d) traces caused by the bending tools are allowed
- 2 Coating For outer surfaces except for the thread primer ФМ-03 К ГОСТ 9109-81, enamel ПФ-223 of green colour ГОСТ 14923-78, bakelite varnish, mark МБС-1 ГОСТ 901-78 according to Instructions 053 25273 000 10 for inner surface
- 3 Test for air tightness by pressure of $4.5_{-0.5}^{+0.5}$ kg/cm² in water bath for at least 0.5 min Leakage is not allowed
- 4 Gas welding
- 5 Requirements to quality of welds are according to OCT 3-4001-77 for unspecified welded joints
- 6 *Sizes are given for reference

EQ MATERIAL - COLD DRAWN SEAMLESS STEEL STRIP
 GRADE 2, OR CD53 TO IS 3074 79



00814 -1CV 2-10 2000 DCU No DATE	(A)	EQ MATERIAL ADDED
ISSUE	NATURE OF AMENDMENTS	

APPROVED

CHECKED

CONTROLLERATE
 OF
 QUALITY ASSURANCE
 (ICV)

675-08-Sb131Sb

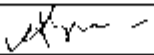
PIPE
 ASSEMBLY DRAWING

WEIGHT SCALE

0.47 1:1

SHT SHTS

No.	Designation	Description	Qty	Remark
		<u>List of Documents</u>		
	675-08-c6132CE	Assembly drawing		
		<u>Parts</u>		
1	675-08-44	Pipe		
		Pipe	1	0.293 kg
		18x1 POCT 8734-75		
		320 POCT 8733-74		
		ℓ = 700		
3	700-33-136	Union nut	2	
4	700-57-416	Nipple	2	

APPROVED		675-08-Sb132		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE		WEIGHT SCALE
			SHT	SHTS

675-08-Sb132Sb

TECHNICAL CONDITIONS

1. Part 1:

- material substitute is pipe B10 ГОСТ 8733-74;
- bend, specify the length according to the standard made in situ;
- bending radius is not less than 2 diameters of pipe;
- traces caused by the bending tools are allowed;
- out-of-roundness at places of bending should not exceed 1 mm and corrugation should not exceed 2.5 mm.

2. Coating:

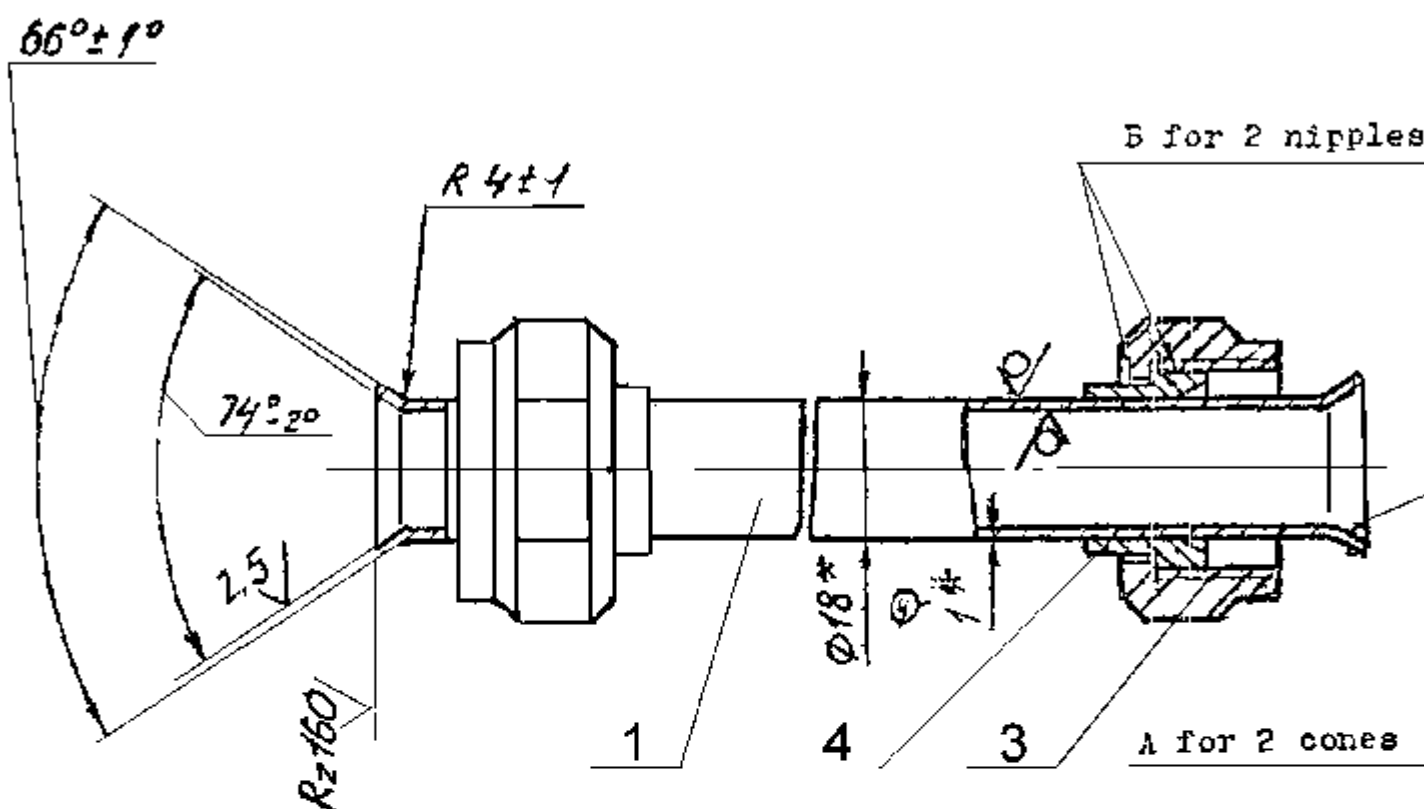
bakelite varnish, mark ЛБС-1 ГОСТ 901-78 according to Instructions 053.25273.000.10 for inner surface except for surface A;

primer ЭА-03 К ГОСТ 9109-81;

enamel ИА-223 of green colour ГОСТ 14923-78 for outer surfaces except for surface B and under nipples.

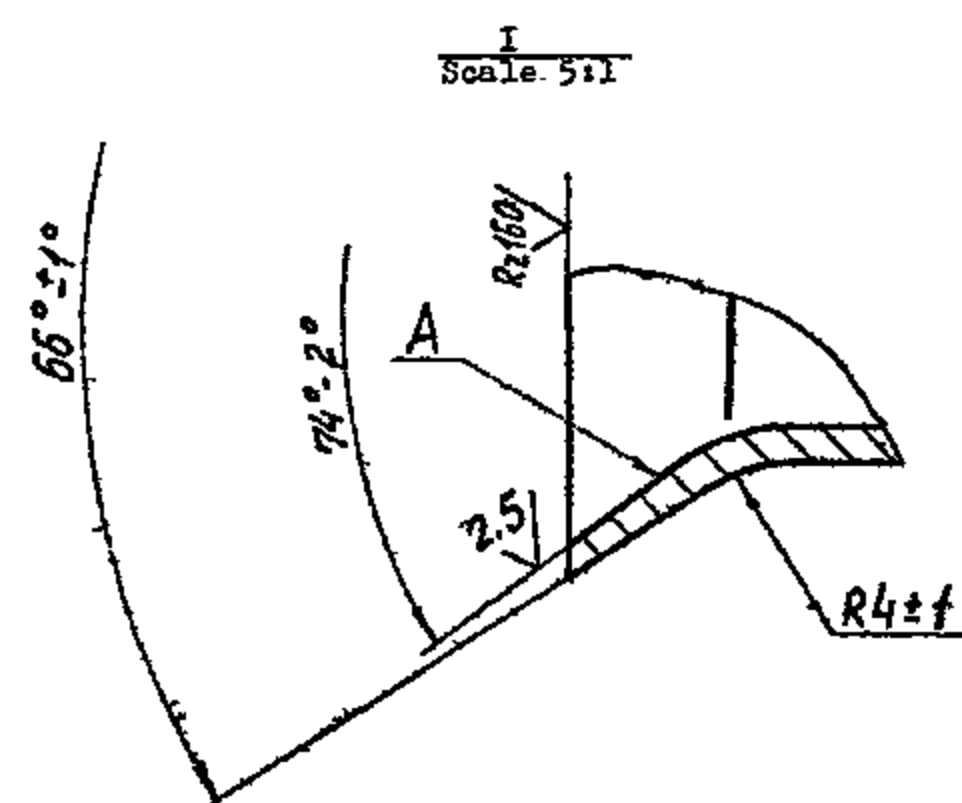
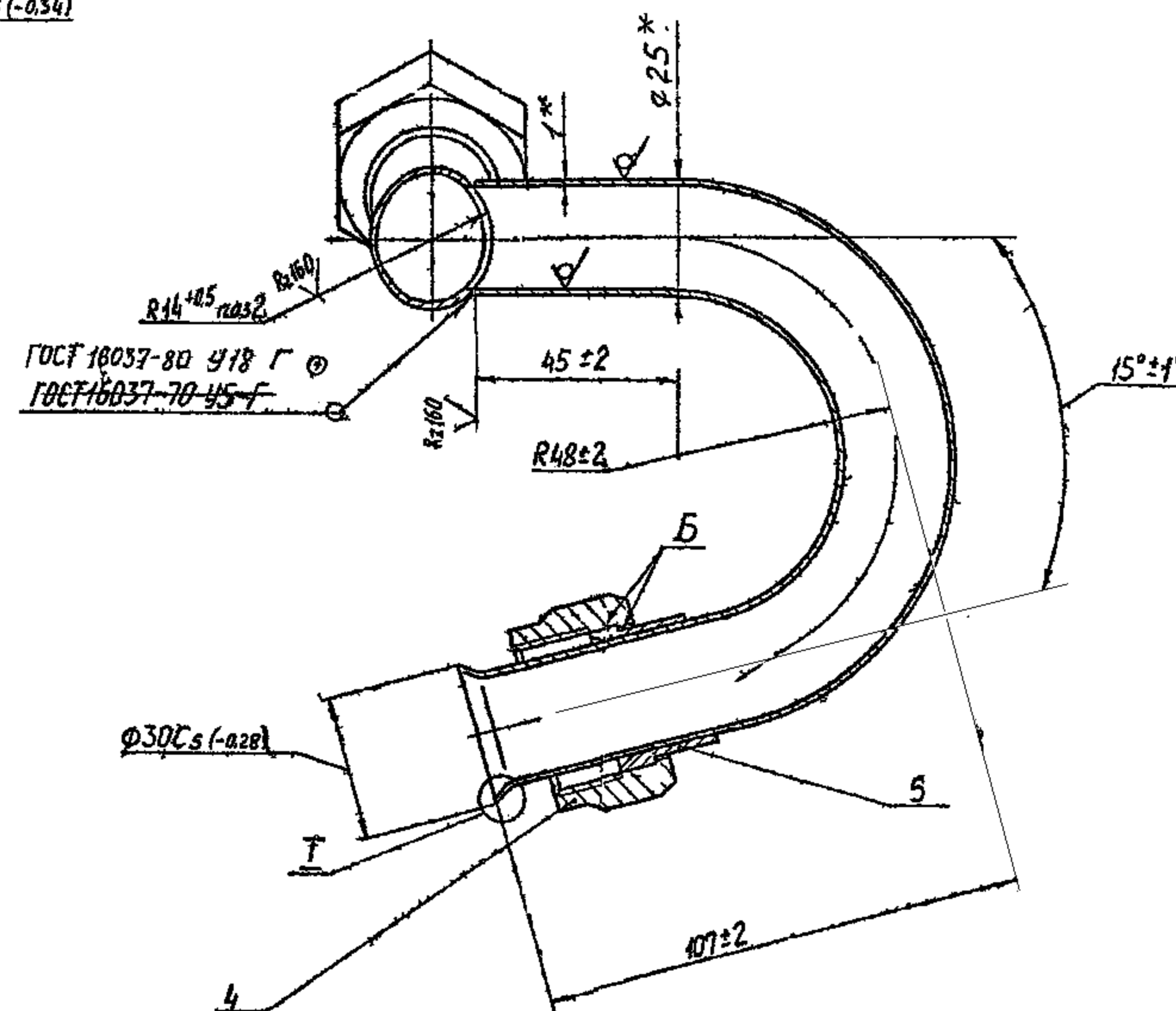
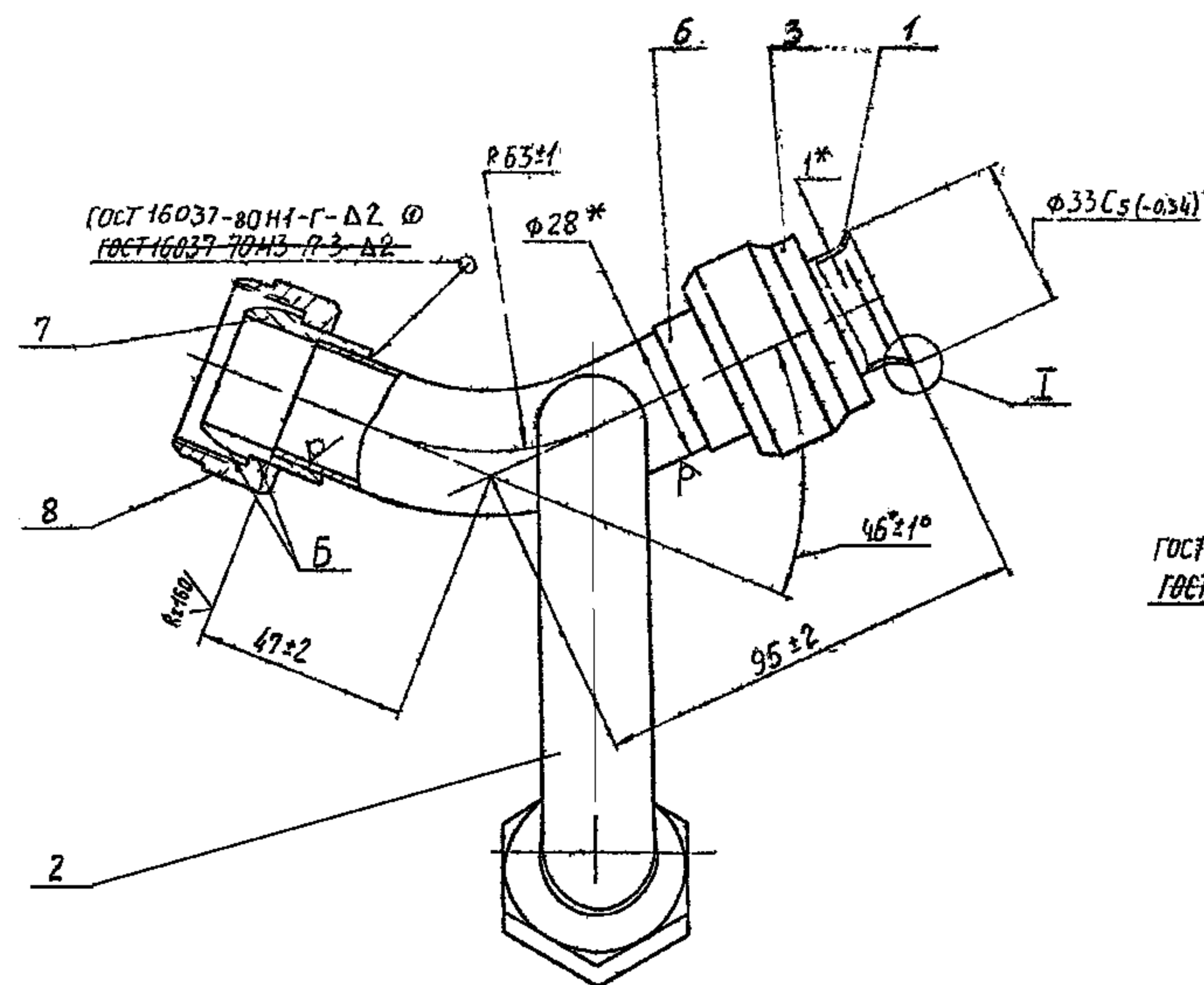
- Test for air tightness by pressure of $4.5_{-0.5}^{+0.5}$ kg/cm² in water bath for at least 0.5 min. Leakage is not allowed.

- *Sizes are given for reference.



APPROVED		675-08-Sb132Sb		
CHECKED				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE ASSEMBLY DRAWING	WEIGHT	SCALE
			0.330	1:1
			SHT	SHTS

No.	Designation	Description	Qty	Remark
	675-08-c6133CB	<u>List of Documents</u> Assembly drawing		
		<u>Parts</u>		
1	675-08-45 ④ COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2 OR CDS3 TO IS 3074-79	Pipe Pipe 28x1 ROCT 8734-75 B10 ROCT 8733-74 ℓ = 145 mm	1	0.096 kg
2	675-08-46 ④ COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS2 OR CDS3 TO IS 3074-79	Pipe Pipe 25x1 ROCT 8734-75 B10 ROCT 8733-74 ℓ = 275 mm	1	0.163 kg
3	700-33-117	Union nut	1	
4	700-33-118	Union nut	1	
5	700-57-417	Nipple	1	
6	700-57-418	Nipple	1	
7	20-06-51-1	Nipple	1	Supplied complete with engine
8	20-06-58	Nut	1	Supplied complete with engine
		00 614 -ICV ④ 3-10-2000 Guru DECLD No ISSUE DATE		
APPROVED		EQ MATERIAL ADDED FOR REF No 1 & 2		
CHECKED		NATURE OF AMENDMENTS		
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		675-08-Sb133		
		PIPE		
		WEIGHT SCALE		
		SHT SHTS		



TECHNICAL CONDITIONS

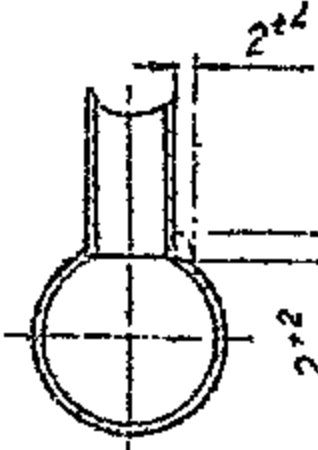
1. Material substitute of part 1 is pipe 28x1 POCT 8734-75, 120 POCT 8733-74, that of part 2 is pipe 25x1 POCT 8734-75, 120 POCT 8733-74.
 2. Bend, specify the length and arrangement of hole according to the standard made in situ.
 3. Out-of-roundness at places of bending of parts 1 and 2 should not exceed 1.5 mm.
 4. Corrugation at places of bending should not exceed 2 mm.
 5. Traces caused by bending tools which do not exceed the value of minus tolerance for material thickness are allowed.
 6. Check the flow section of part 2 by steel ball, $\phi 20^{+0.15}_{-0.3}$.
 7. Misalignment of hole in pipe 1 with inner diameter of pipe 2 should not exceed 1 mm.
 8. Other requirements to quality of welds are according to OCT 3-4001-77 for unspecified welded joints.
 9. Test for air tightness by pressure of $4.5^{+0.5}$ kg/cm² in water bath for 0.5 min. Leakage is not allowed. Back-up welding with subsequent testing is allowed.
 10. Coating. For inner surfaces varnish, mark NEC-1 POCT 901-78 except for surface A and thread. For outer surfaces, primer 0X-03K POCT 9109-81, enamel 1M-223 of green colour POCT 14923-78 except for surface 5 and under nipples. Presence of paint on nipples and under nipples is allowed.
 11. *Sizes are given for reference.
- ④ EQ MATL-COLD DRAWN SEAMLESS STEEL TUBE GRADE CDS 2, OR CDS-3 TO IS 3074-79

00814 -ICV <i>[Signature]</i> 10-2000	(A) <i>[Signature]</i>	EQ. MATERIAL ADDED.
DECLASS DATE	ISSUE	NATURE OF AMENDMENT

APPROVED		675-08-Sb133Sb		
CHECKED	<i>W</i>		WEIGHTS	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE	0.49	1:1
			SHT	SHTS

No.	Designation	Description	Qty	Remark
	675-08-06134CE	<u>List of Documents</u> Assembly drawing <u>Parts</u>		
1	675-08-47	Pipe		
(A)	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS 2 OR CDS 3 TO IS 3074-79.	Pipe 25x1 F OCT 8734-75 B10 F OCT 8733-74 ℓ = 165 mm	1	0.096 kg
2	675-08-48	Pipe		
(A)	COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS 2 OR CDS 3 TO IS 3074-79	Pipe 12x1 F OCT 8734-75 B10 F OCT 8733-74 ℓ = 145 mm	1	0.038 kg
3	700-33-36	Union nut	1	
4	700-33-115	Union nut	1	
5	700-33-118	Union nut	1	
6	700-57-415	Nipple	1	
7	700-57-417	Nipple	1	
8	701-13-27	End piece	1	
00814 -ICV <i>[Signature]</i> 210-2000 DCU No DATE (A) <i>[Signature]</i> ISSUE EQ MATERIAL ADDED FOR Ref 1&2. NATURE OF AMENDMENTS				

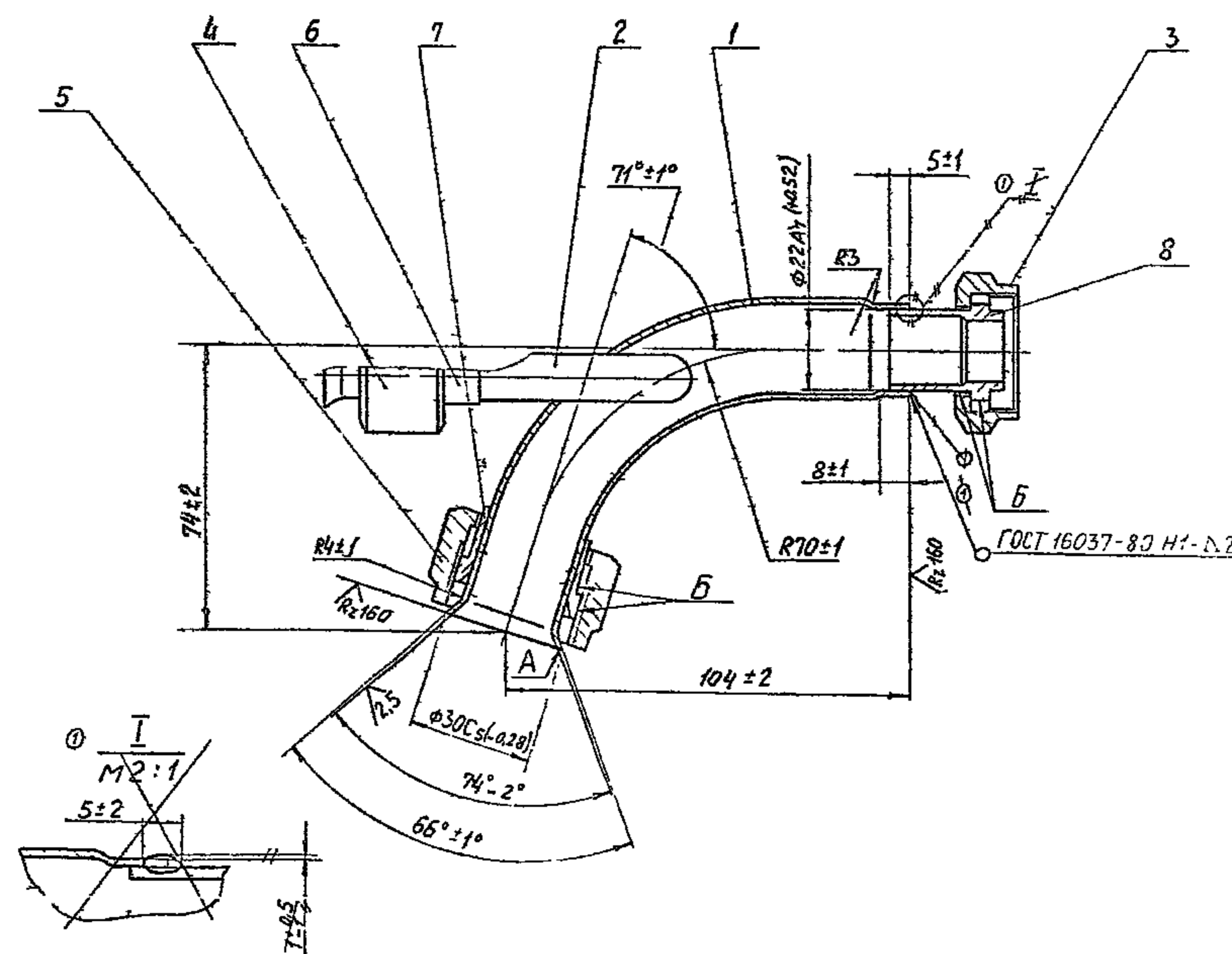
APPROVED	<i>[Signature]</i>	675-08-Sb134		
CHECKED	<i>[Signature]</i>			
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		PIPE		WEIGHT
				SCALE
			SHT	SHTS 1



TECHNICAL CONDITIONS

- A. Material substitute of part 1 is pipe 25×1 OCT 8734-75, B20 OCT 8733-74, that of part 2 is pipe 12×1 OCT² 8734-75, B20 OCT 8735-74.
2. Bend, specify the length and arrangement of hole according to the standard made in situ;
3. Out-of-roundness at places of bending of part 1 should not exceed 1.5 mm and that of part 2 should not exceed 1 mm.
4. Corrugation at places of bending should not exceed 2 mm.
5. Traces caused by bending tools which do not exceed the value of minus tolerance for material thickness are allowed.
6. Gas welding.
7. Protrusion of part 2 over surface B is not allowed.
8. Misalignment of hole in pipe 1 with inner diameter of pipe 2 should not exceed 1 mm.
9. Other requirements to quality of welds are according to OCT 3-4001-77 for unspecified welded joints.
10. Test for air tightness by pressure of $4.5^{+0.5}$ kg/cm² in water bath for 0.5 min. Leakage is not allowed. Back-up welding with subsequent testing is allowed.
11. Coating of inner surfaces: varnish, mark НБС-1 OCT 901-78 except for surface A and thread; coating of outer surfaces: primer ЭП-03К OCT 9109-81, enamel НБ-223 of green colour OCT 14923-78 except for surfaces B and under nipples. Presence of paint on nipples and under nipples is allowed.
12. ²Sizes are given for reference.

① EQ MATERIAL :- COLD DRAWN SEAMLESS STEEL TUBE GRADE CDS 20RCD55
TO IS: 3074-79.



<i>Transmit</i> <i>2/9, 6:04</i> 00814 <i>NO</i> <i>6-8-2000</i> END DATE	<i>Recd</i> (A) <i>Green</i> ISSUE	DO-ERROR CORRECTED / DRG.No.765-08-C5 395 SUPERSEDED BY DRG No. 675-08-C5 134 VIDE DCU No 00918-1C1 ES MATERIAL ADDED NATURE OF AMENDMENTS
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APPROVED		675-08-Sb134Sb			
CHECKED		PIPE	TEXEM	SCALE	
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			0.29	1:1	
			SHY	SHYS	

No.	Designation	Description	Qty	Remark									
	675-08-c61350B	List of Documents Assembly drawing <u>Parts</u>											
1 (A)	675-08-49 COLD DRAWN SEAM- LESS STEEL TUBE GRADE CDS 2 OR CDS-3 TO IS 3074-79	Pipe Pipe 18x1 POCT 8734-75 B20 POCT 8733-74 (A) ℓ = 700 mm	1	0.31 kg									
4	700-33-36	Union nut	1										
6	700-57-56	Union	1										
8	701-13-27	End piece	1										
<table border="1"> <tr> <td>01007-1 LV 03-11-05</td> <td>(B)</td> <td>DS CAT PART NO. ADDED & DESCRIPTION PIPE ASSY WAS PIPE</td> </tr> <tr> <td>00814 -ICV 03-10-2000</td> <td>(A)</td> <td>EQ MATERIAL ADDED FOR REF No 1</td> </tr> <tr> <td>DEC No DATE</td> <td>ISSUE</td> <td>NATURE OF AMENDMENTS</td> </tr> </table>					01007-1 LV 03-11-05	(B)	DS CAT PART NO. ADDED & DESCRIPTION PIPE ASSY WAS PIPE	00814 -ICV 03-10-2000	(A)	EQ MATERIAL ADDED FOR REF No 1	DEC No DATE	ISSUE	NATURE OF AMENDMENTS
01007-1 LV 03-11-05	(B)	DS CAT PART NO. ADDED & DESCRIPTION PIPE ASSY WAS PIPE											
00814 -ICV 03-10-2000	(A)	EQ MATERIAL ADDED FOR REF No 1											
DEC No DATE	ISSUE	NATURE OF AMENDMENTS											
APPROVED		675-08-Sb135											
CHECKED		(B) PIPE PIPE ASSY											
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			WEIGHT	SCALE									
			SMT	SHTS									
		(B) DS CAT PART No. LV2/ICVs 4710-003612											

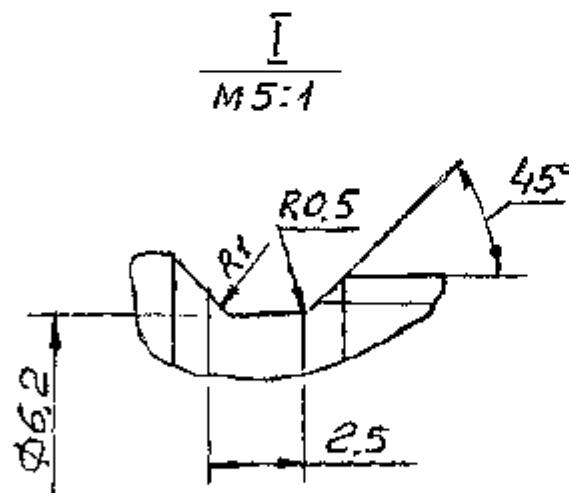
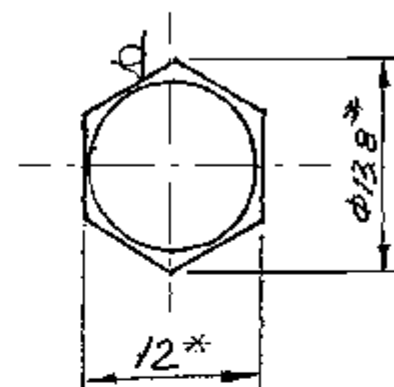
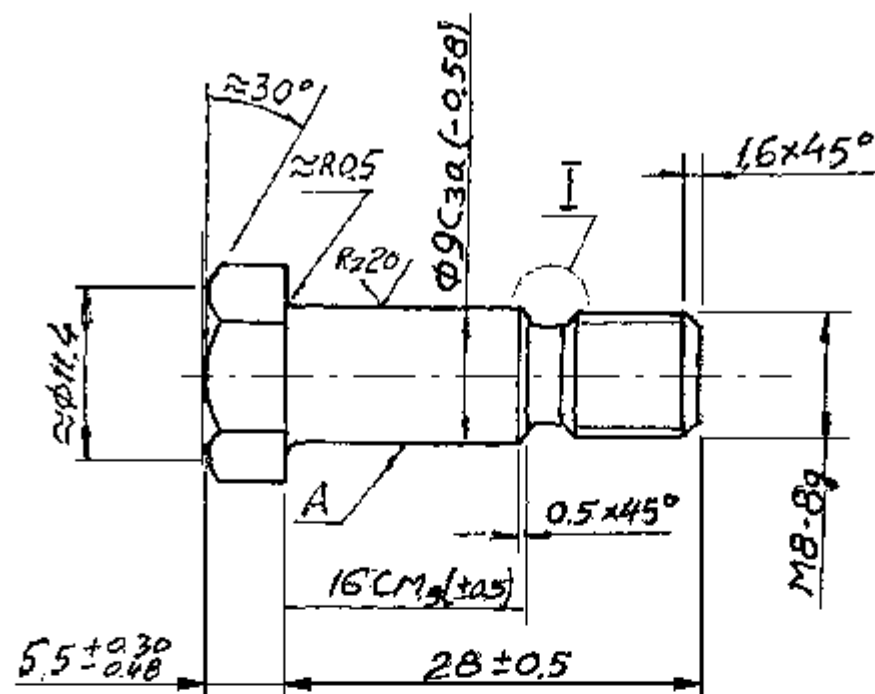


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|---|--|
| E | |
| F | |

700-28-478

Rz 80
✓(✓)

1. Alternate material is Steel cm5, GOST 380-71 and Steel 35, 40 and 50, GOST 1050-74
 2. Unspecified limit deviations of dimensions are as follows:
For holes -as per A₇,
for shafts -as per B₇
for others -as per CM₇
 3. Radial run-out of surface A with respect to the angle diameter of the thread should not exceed 0.2mm (Qualified tolerance).
 4. Displacement of the head with respect to the axis of the rod should not exceed 0.4mm.
 5. * Dimensions are given for reference.
 6. Coating: Chemical parkerizing, chromatizing oiling with preservation oil K-17 GOST 10877-76 as per Instructions 053.25289.00002 or with varnish KO-815 GOST 11066-74
 - 7K. Other technical requirements are as per GOST 1759-70. Section 1.
- Ⓐ EQ.MATERIAL:- CARBON STEEL BAR HEXAGONAL C45 Is: 2073
St. 50 TO Is: 7270-74.

00805-ICV
31 Aug 2000

Ⓐ

EQ. MATERIAL ADDED

DC(D)No.
& DATE

ISSUE

AMENDMENTS

APPROVED

H VASU

CHECKED

E. M. S. P. S. Y

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-28-478

BOLT

HEXAHEDRON 12-5, GOST 8560-78
45-B, GOST 1051-73

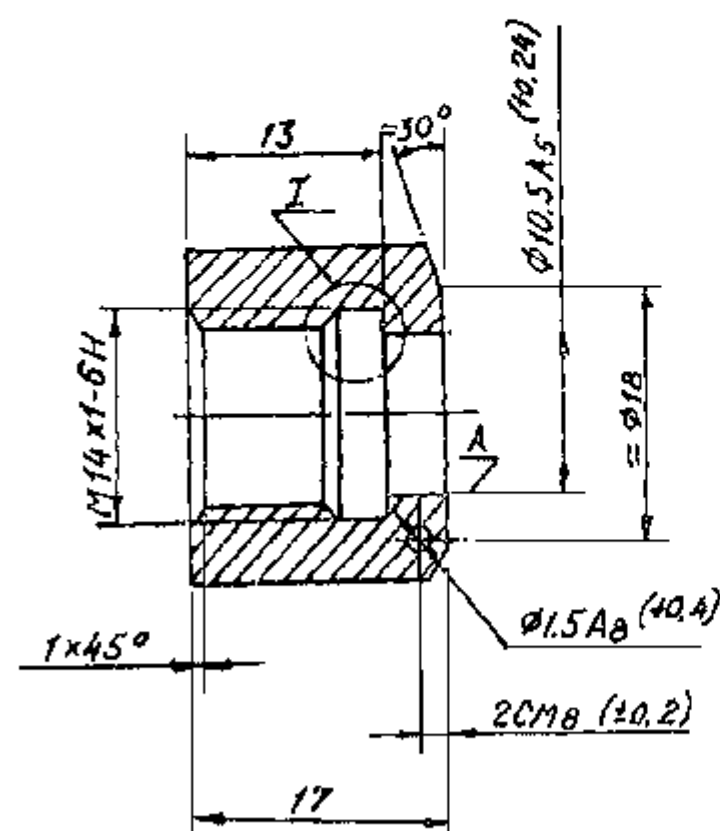
WEIGHT SCALE

0.015 2:1

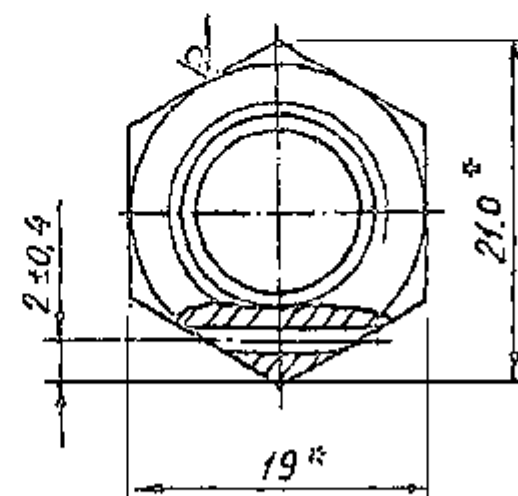
SHT 1 SHTS 1

TECHNICAL CONDITIONS

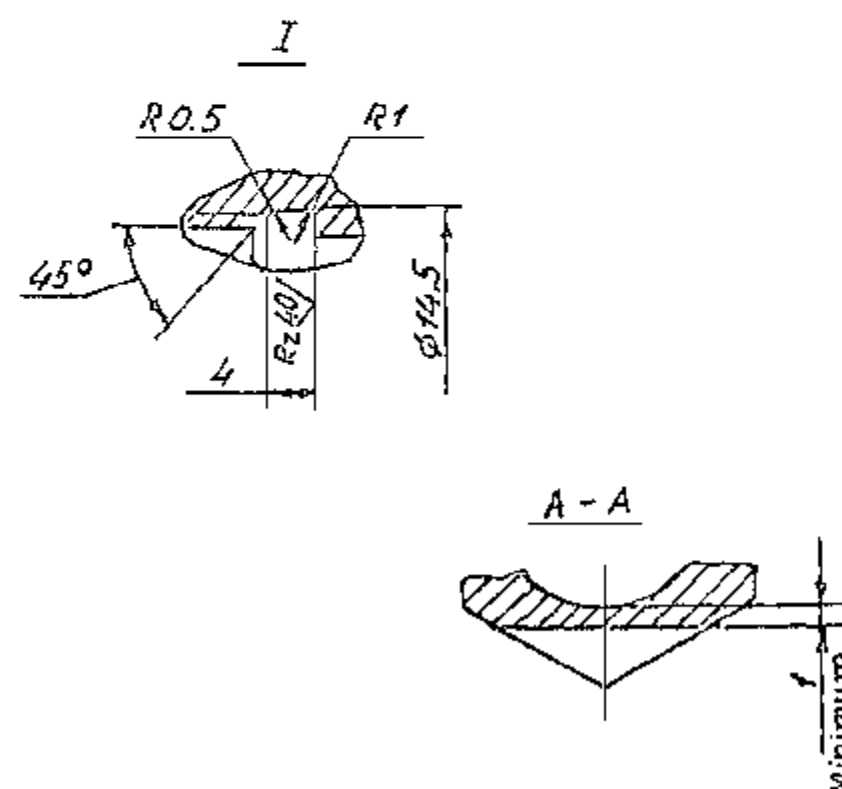
1. ALTERNATE MATERIAL IS STEEL 25, 30, 35 AND 40 GOST 1050 - 74
2. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS FOLLOWS :
FOR HOLES - AS PER A7, FOR SHAFT - AS PER B7 AND FOR THE REST
AS PER CM7
3. DISPLACEMENT OF SURFACE 'A' WITH RESPECT TO THREAD SHOULD
NOT EXCEED 0.2 MM.
4. *DIMENSIONS ARE GIVEN FOR REFERENCE.
5. COATING ZINC - PLATED, 9 MICRONS THICK CHROMATIZED, REMOVE
HYDROGEN EMBRITTLEMENT COATING ON INTERNAL SURFACE NEED
NOT BE CHECKED.
6. ROD WITH MINIMUM DIAMETER OF 1 MM SHOULD PASS THROUGH
HOLE 5



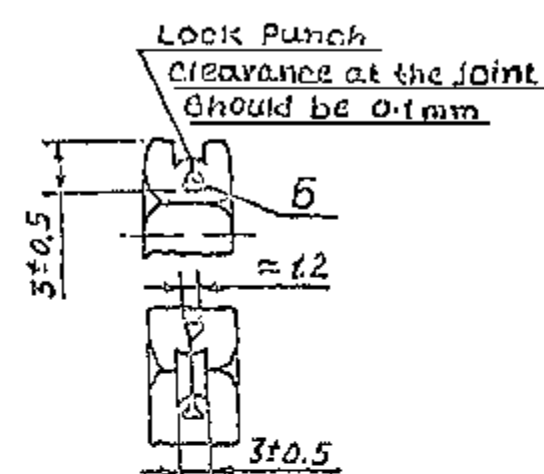
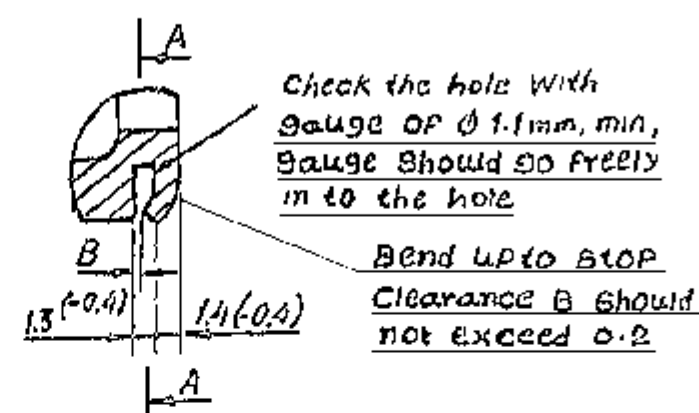
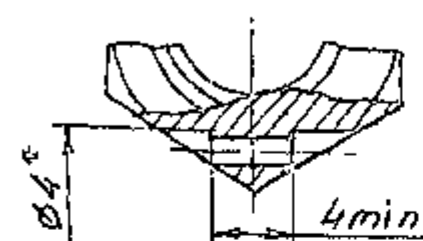
ALTERNATE-1



ALTERNATE-2



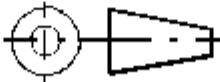
ALTERNATE-3

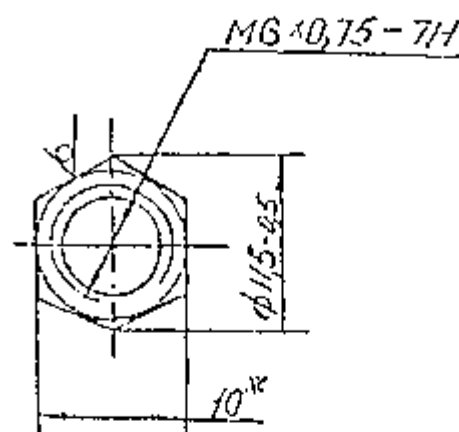
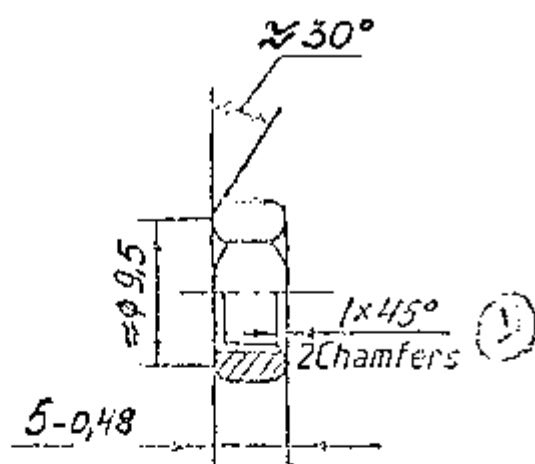


EQUIVALENT MATERIAL - IS 45 C8 Gr 2 to IS 9550 - 80

EQUIVALENT MATERIAL - CLASS 4 TO IS : 2004 - 78

EQUIVALENT MATERIAL :- (a) STEEL BAR C 45 TO IS : 2073 - 70
OR EN 8 TO BS : 970 OR EN-8 / EN 9.EQUIVALENT MATERIAL - CARBON STEEL C 50, C 40, C 30, C 25 TO
IS : 1570 - 61

NEAREST EQ. MATERIAL		00951-JCV	① 18-11-02 DC(No. & DATE)	DRAWING REVISED & RETRACED.
HEXAGON BAR 19.5, GOST 8560-78 45-B, GOST 1051-73		ISSUE		
ORGL MATERIAL:-		AMENDMENTS		
ALL SHARF EDGES & CORNERS TO BE ROUNDED OFF		ALL THREADS TO CONFORM TO SPECIFICATION		STAMP OR ETCH, PART No. MANUFACTURER's NAME & YEAR OF MFR.
DRG. NOT TO BE SCALED		TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED		USED ON:
SCALE: 2:1				
DATE : 18-11-02				
DRN. <i>ms hand</i>	WT :- (Kg)	700-30-241		
TCD. <i>ms hand</i>	0.023			
CHD <i>EDC hand</i>		UNION NUT		
APPD <i>ms hand</i>				
CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)				



- 1) Alternate material is steel cm5, GOST 380-71, steel 25, 30, 35, 40 and 45 GOST 1050-74
 - 2) Displacement of axis of hole should not exceed 0.3mm
 - 3) Coating Zinc-plated, 6 microns thick, chromitized. Remove hydrogen embrittlement.
 - 4) * Dimension is given for reference.
- Ⓐ EQ MATERIAL:- CARBON STEEL BLACK BAR C 45 TO IS: 2073.
S4 50 TO IS: 2270-74

00805-ICV

Ⓐ

EQ. MATERIAL ADDED.

31 AUG 00

DC(I) No.
& DATE

ISSUE

AMENDMENTS

APPROVED

M. VASU

CHECKED

G. S. N. S. S. S.

700-30-442

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

NUT

WEIGHT SCALE

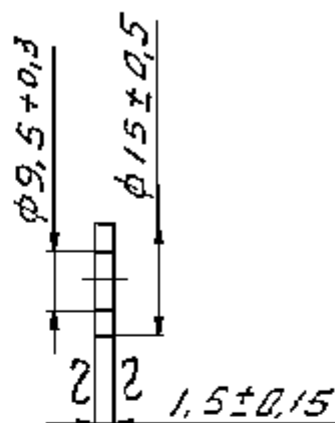
0.0004 2:1

SHT SHTS

HEXAEDRON 10-5-GOST 8560-78
20- GOST 1051-73

700-31-267

V (V)



1. Alternate material is steel Cm2, Cm3, GOST 380-71 and 08kn 10,15,20,25, GOST 1050-74.
2. Coating. Zinc-plated, 9 microns thick, chromitized.

Ⓐ EQ. MATERIAL :- STEEL SHEET Gde. 'O' QUARTER HARD TO IS: 513-86 OR Fe 410-1079 TO IS: 1079-73.

Ⓑ EQ. MATERIAL :- COLD STEEL STRIP GRADE 'O' OR 'D' TO IS: 4030-73.

00814-ICV

03 OCT 00

00605-ICV

21 APR 97

DC(I)No.

& DATE

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Ⓐ

ISSUE

AMENDMENTS

EQ. MATERIAL ADDED.

EQ. MATERIAL ADDED.
(2/97 N OF A)

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-31-267

WASHER

CT 3KN GOST 380-71

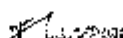
WEIGHT SCALE

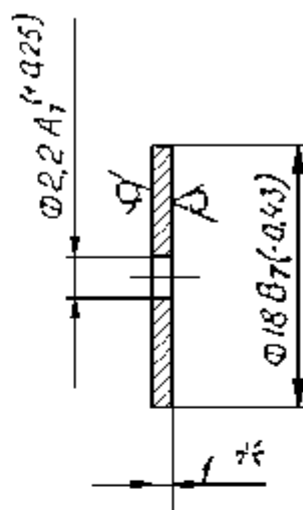
0.003 1:1

SHT SHTS

1. Unspecified limit deviations of dimensions are ± 0.5 mm.
 2. * Dimension is given for reference.
 3. Coating: 0.12 to 18.
- (A) EQ. MATERIAL:- BRASS SHEET GRADE CuZn 37 IS: 410-77.

00805-ICV	Ⓐ	EQ. MATERIAL ADDED.
31 AUG 00		
DC(I) No. & DATE	ISSUE	AMENDMENTS

APPROVED		700-31-634	
CHECKED	 20/03/2018		
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		WASHER	WEIGHT SCALE
			0.0027 2:1
			SHT SHTS
		SHEET 4 ПРХМ-1 Н Д П 63М ГОСТ 931-78	



1. Alternate material is Steel cm2, cm3, GOST 380-71 and 08kn, 10, 10kn, 15kn and 20, GOST 1050-74.
 2. Coating: Tin plated 12 to 18 microns thick
 3. * Dimension is given for reference
- Ⓐ EQ. MATERIAL:- COLD ROLLED STEEL STRIP GRADE 'D' (1/4 H) OR 'D' TO IS: 4030-73.

00805-ICV

Ⓐ

31 AUG 00

DC(I)No.
& DATE

ISSUE

EQ. MATERIAL ADDED.

AMENDMENT'S

APPROVED

CHECKED

700-31-656

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

WASHER

WEIGHT SCALE

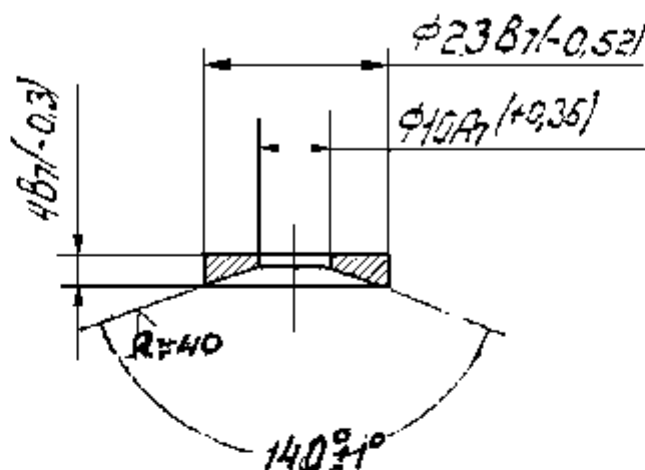
0.002 2:1

SHT SHTS

10 GOST 19903-74
SHEET 3-III-CM3kn GOST-16523-70

092-18-002

R223/11



1. Alternate material is Steel cm3cn GOST 380-71 and Steel 10, 15, 25 GOST 1050-74 as well as Steel 15Г and 20Г GOST 4543-71.
 2. Coating: Zinc-plated, 24 microns thick, chromitized. Coating i.e. Zinc-plating, 15 microns thick, chromitizing is allowed. Remove hydrogen embrittlement.
- Ⓐ EQ.MATERIAL: -- COLD ROLLED STEEL STRIP GRADE 'D' $\frac{1}{4}$ H OR 'D' TO IS: 4030-73.

00805-ICV

Ⓐ

31 AUG 00

DC(I)No.

& DATE

ISSUE

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

M. VASO

CHECKED

B. VASO

700-31-760

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

WASHER

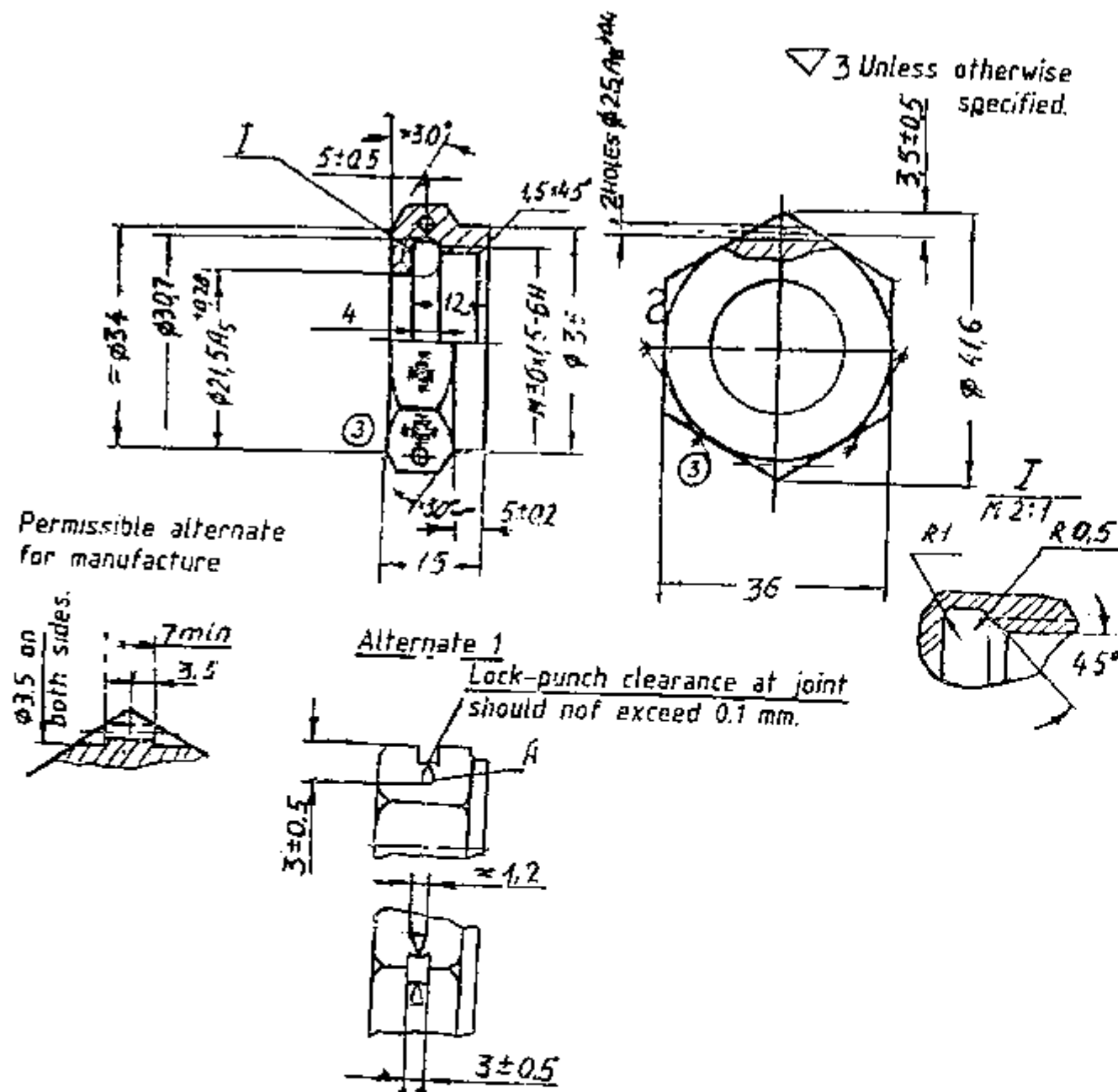
WEIGHT SCALE

0.007 2:1

SHT 1 SHTS 1

STEEL 20, GOST 1050-74

700-33-36



TECHNICAL CONDITIONS

1. Perform dimensions without deviations as per 7th class of accuracy. OSI 1010.
2. Alternate material is Steel 5, GOST 380-71 and 20, 25, 30, 35 and 40 GOST 1050-74
3. Coating: Zinc-plated, 9 microns thick, chromitized. Remove hydrogen embrittlement. Check dimensions before coating.
- 4k. Rod of diameter r should pass through hole A.

NOTE:-

1. All Dimensions are in mm.
2. The abbreviations and symbols are based on Russian Specifications.

NEAREST EQ. MATERIAL

CARBON STEEL BLACK BAR GRADC30, C40 or C45 TO IS; 2073-70

00814-ICV

03 OCT 00

DC(1)No. & DATE

ISSUE

DRAWING REVISED AND RETRACED.

ORGL MATERIAL:- 45 GOST - 1050-74

AMENDMENTS

ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF

ALL THREADS TO CONFORM TO SPECIFICATION

STAMP OR ETCH, PART No. MANUFACTURER'S NAME & YEAR OF MFR.

DRG. NOT TO BE SCALED

SCALE: 1:1

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED

USED ON:

DATE: 03 OCT 2000

765-08-Sb376

DRN.

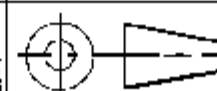
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TCD.

0.063

CHD

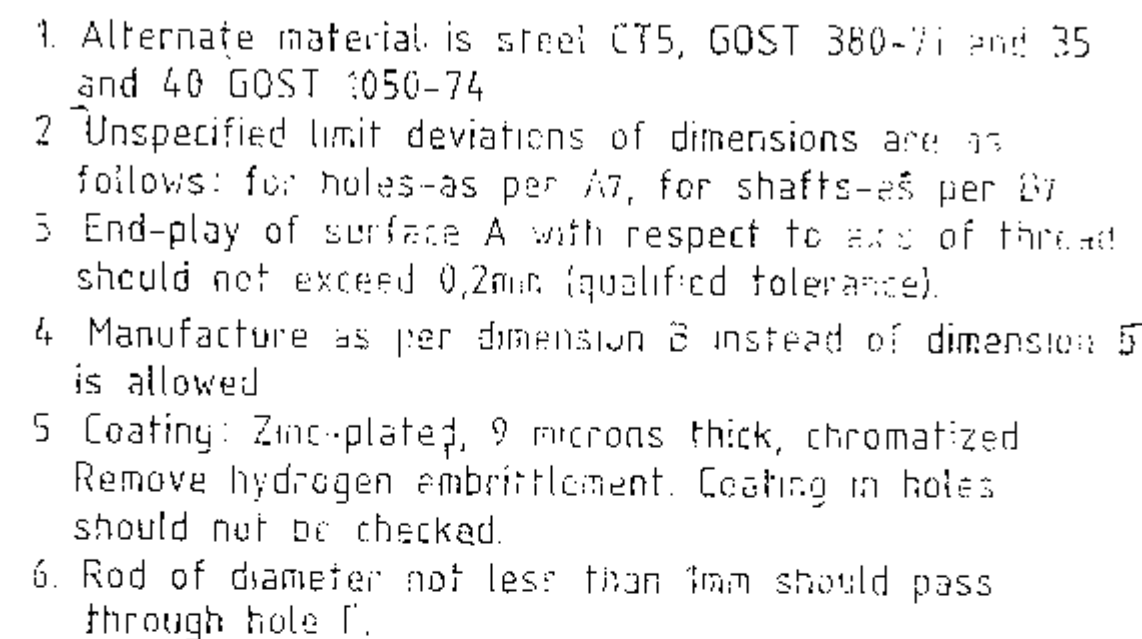
APPD



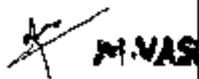
UNION NUT

DS CAT No.

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

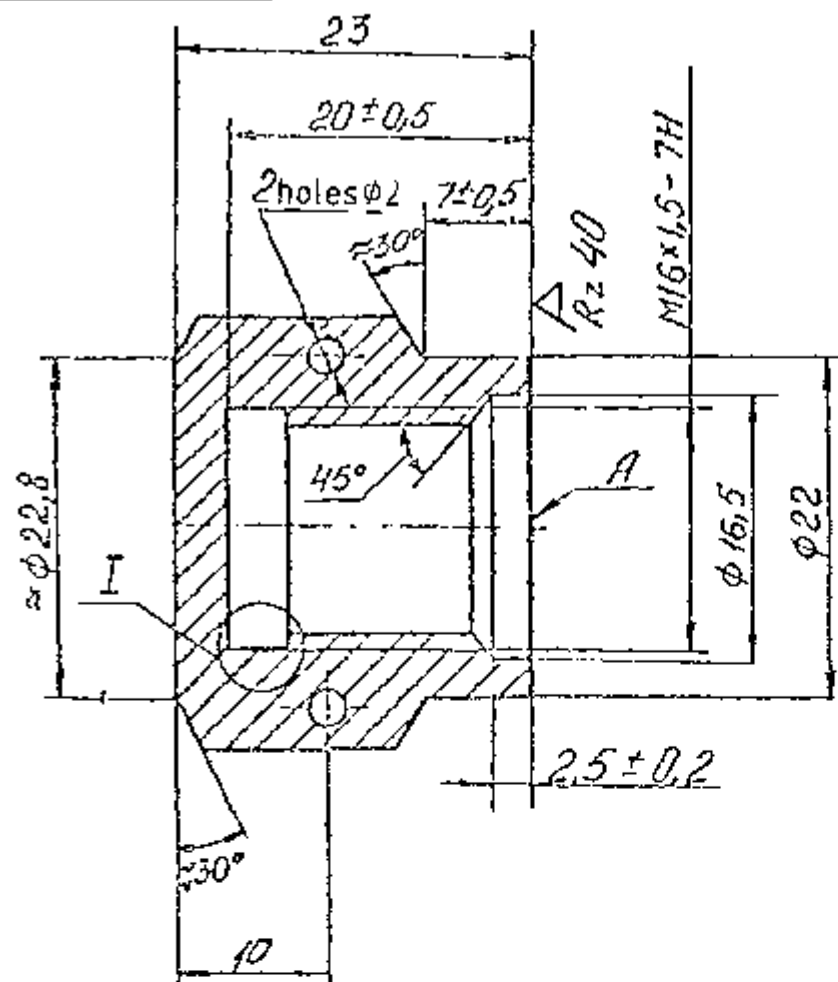
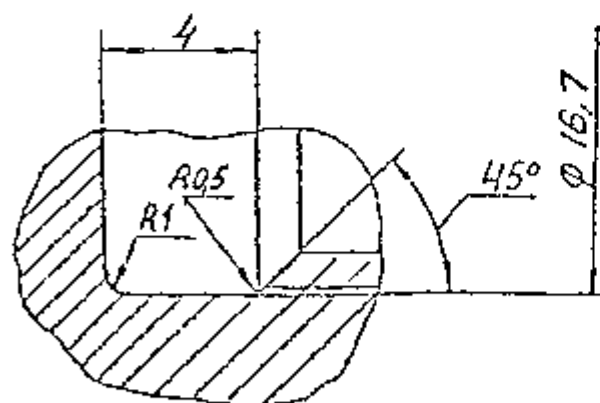


OR
CARBON STEEL BLACK BAR HEXAGONAL
GRADE C30 OR C40 TO IS: 2073-70.

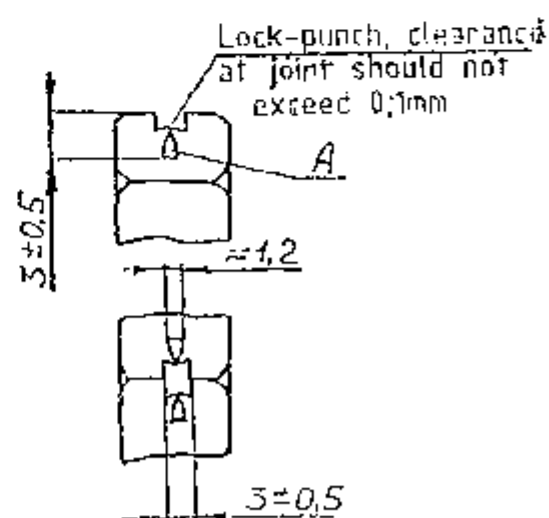
APPROVED		700-33-80		
CHECKED	UNIT B. MS RUDY		WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		UNION NUT	0.055	1:1
			SHT	SHTS
		45 GOST 1050-74		

66-33-007

Rz80 (✓)

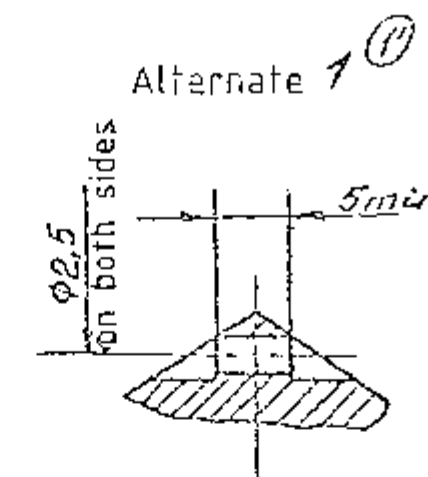
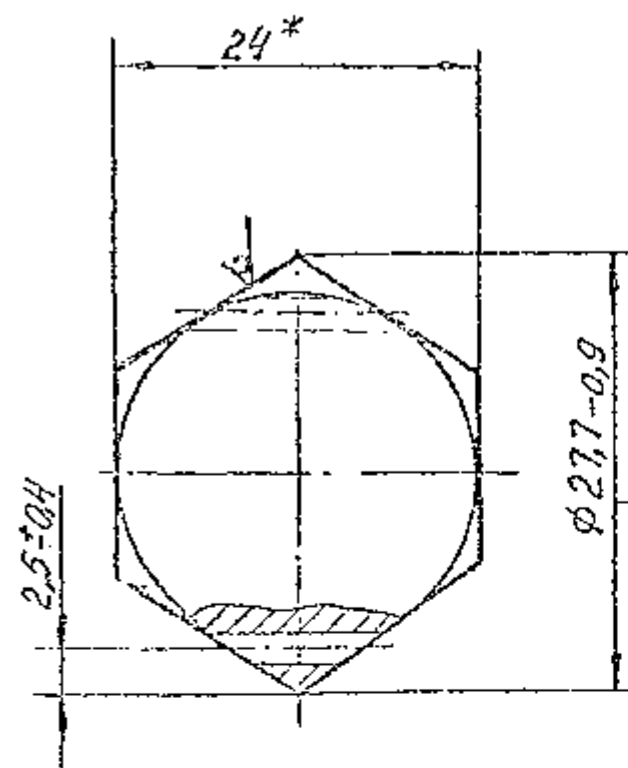
I
M5:1

Alternate 2 (P)



6 * Reference dimensions.

7K Rod, diameter not less than 1mm, should pass through hole A.

Material: Hexahedron bar
24-5 FUOT 8560-78
45 FUOT 1051-75

1. Alternate material is steel Cm6 GOST 380-71, steels 35,40,50 GOST 1050-74.
2. Unspecified limit deviations of dimensions are as follows: for holes as per A7, for shafts-as per B7, others-as per CM7.
3. Non-squareness of surface A with respect to axis of thread should not exceed 0.1mm
4. Coating. Zinc-plating, 9 microns thick, chromated.
5. Internal surfaces may be free of coating

EQ. MATERIAL: - CARBON STEEL BAR BLACK - HEXAGONAL C45 TO IS: 2073-70
OR C30 OR C40 TO IS: 2073-70

00805-ICV

31 AUG 00

DCI No. & DATE

A

ISSUE

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

CHECKED

 CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-99

NUT

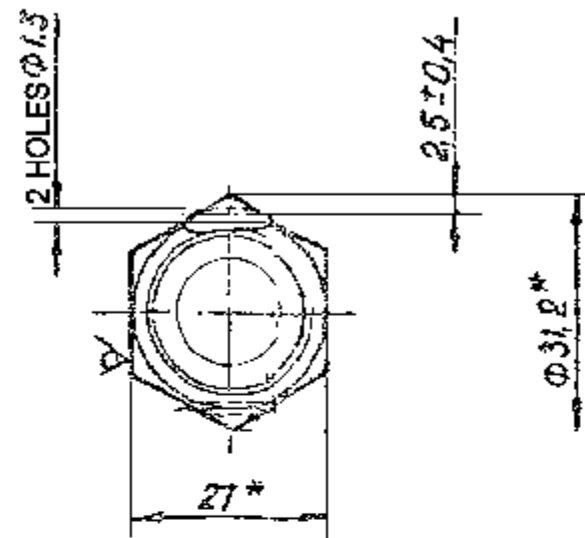
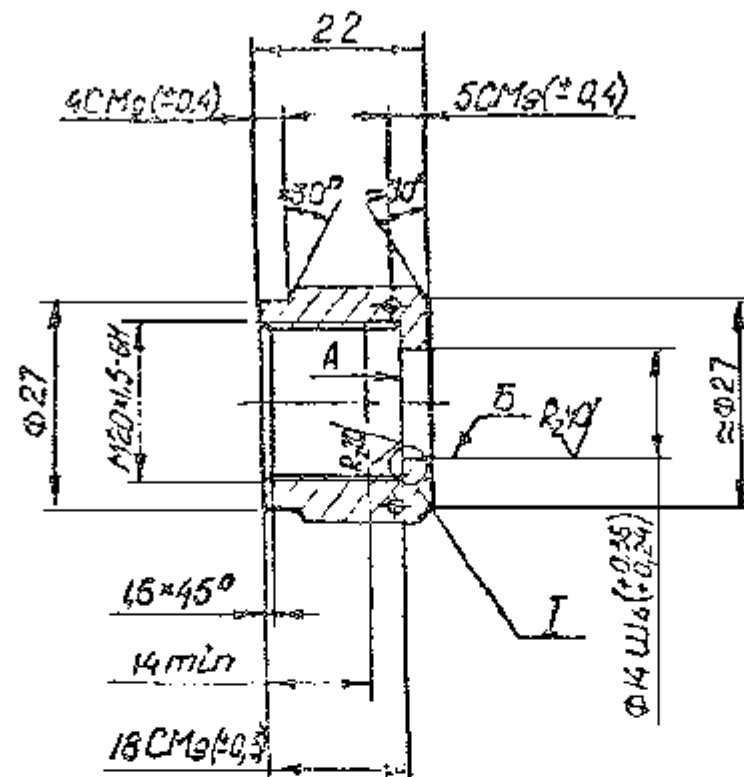
WEIGHT SCALE

0.028 2:1

SHT SHTS

700-33-115

Rz 80
V(✓)

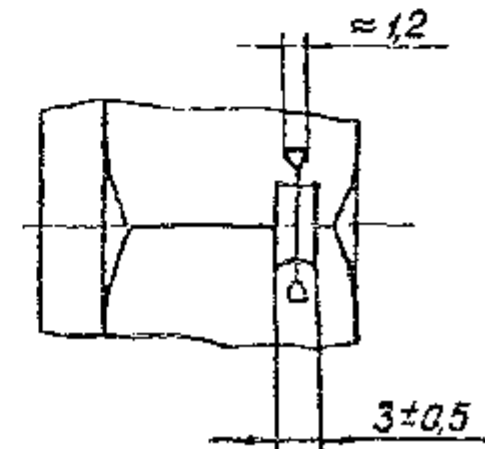
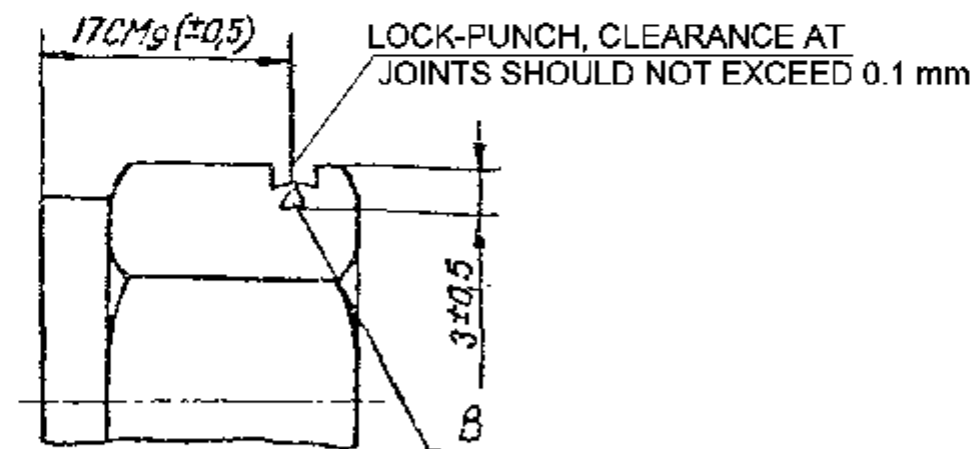
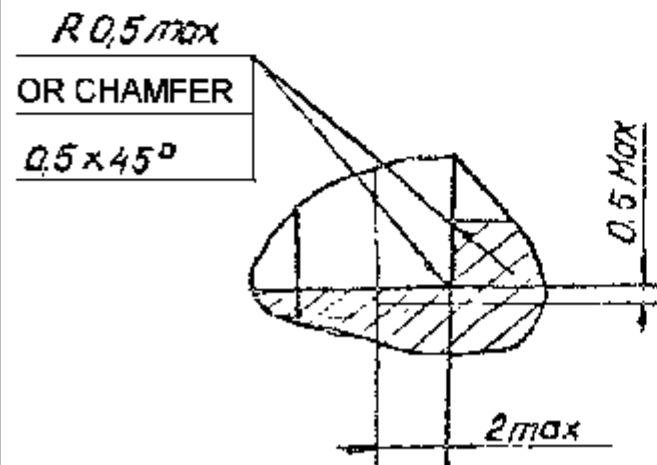


1/ALTERNATE
M 2:1

1. Unspecified limit deviations of dimensions are as follows: for holes -as per A7, for shafts-as per B7, others-as per CM7.
2. End-play of surface A with respect to angle diameter of thread should not exceed 0,1mm (qualified tolerance)
3. Radial run-out of surface 6 with respect to angle diameter of thread should not exceed 0,12mm (qualified tolerance).
4. Rod of diameter not less than 1mm should pass through hole B.
5. Manufacture as per dash-dot line is allowed.
6. * Dimensions are given for reference.
7. Coating: Anodically oxidized, chromated.

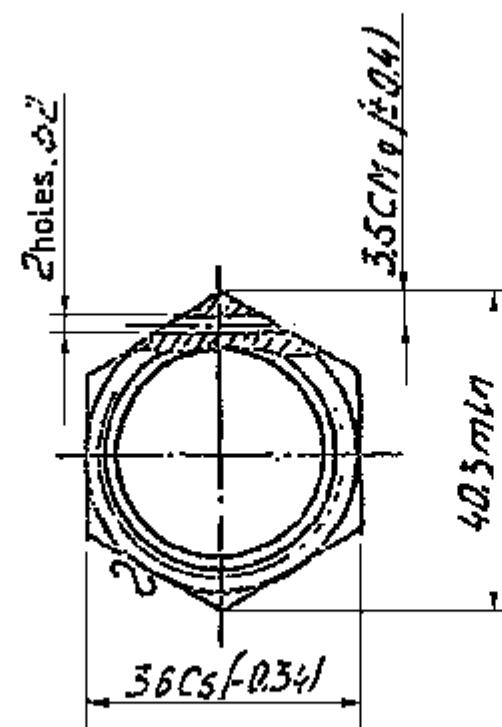
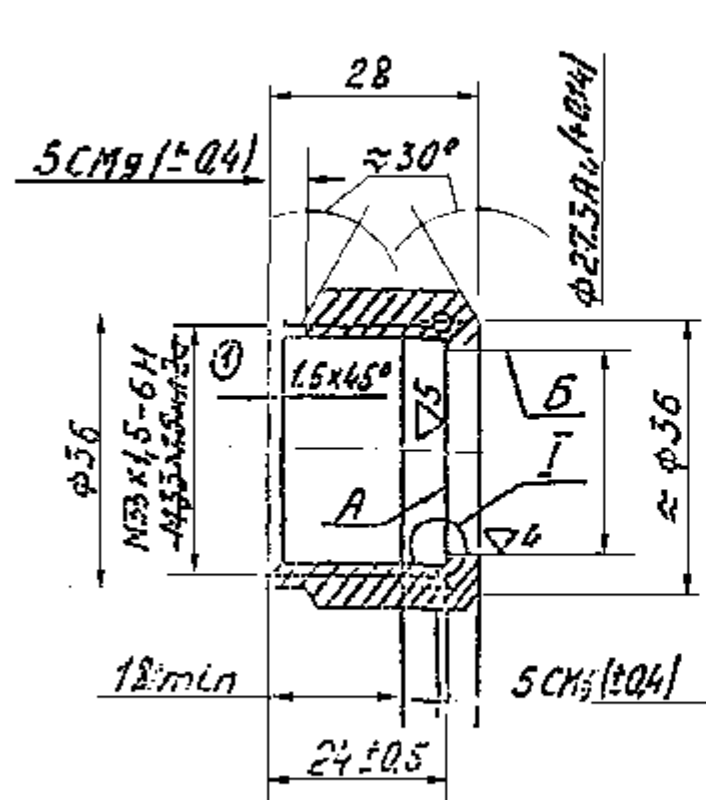
EQ. MATERIAL:- AL. ALLOY EXTRUDED BAR GRADE 24534 TO IS:733-83.

I
M 5:1



00805-ICV 31-08-2000	EQ. MATERIAL ADDED.
DCI No. & DATE	ISSUE
	AMENDMENTS

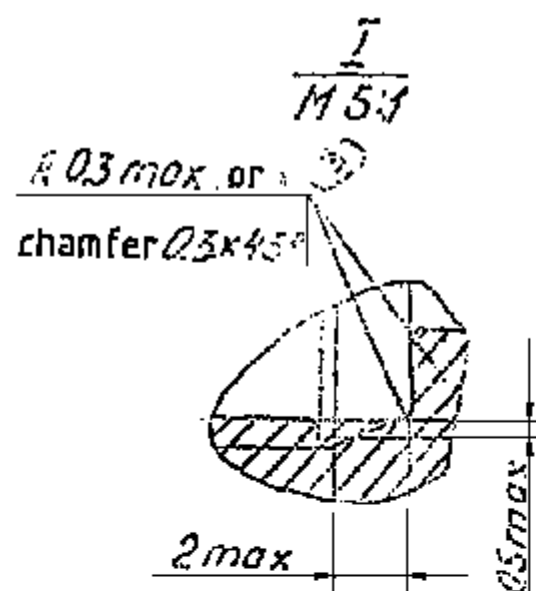
APPROVED	M.VASU	700-33-115
CHECKED	ASR	
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	UNION NUT	
	BAR A16T W27n GOST 21488-76	
		WEIGHT SCALE
		0.01 1:1
		SHT 1 SHTS 1



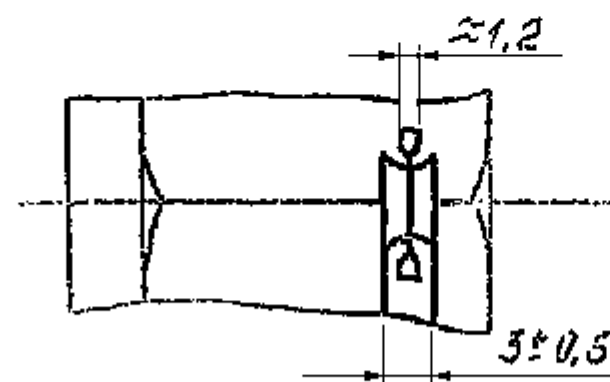
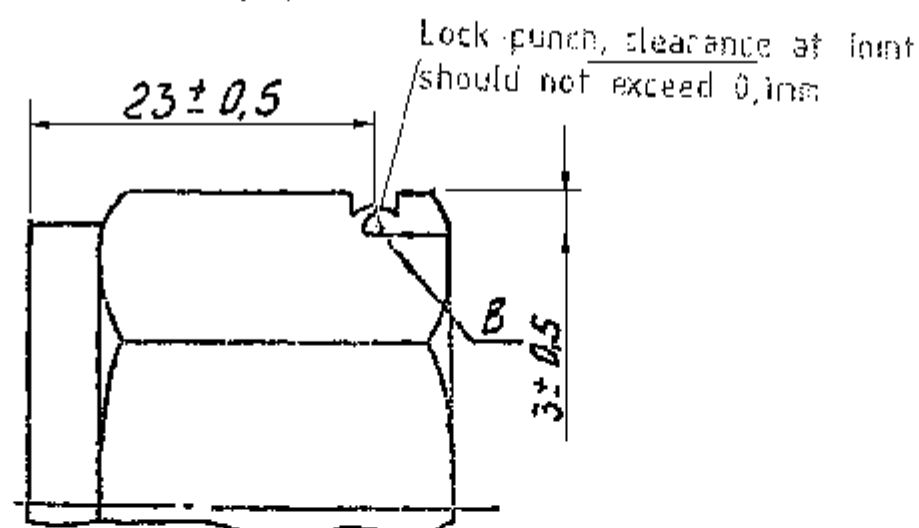
1. Alternate material is 35,40,50, GOST 1050-74 and 40 GOST 4543-71.
2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts as per B7.
3. End play of surface A with respect to angle diameter of thread should not exceed 0,1mm(qualified tolerance)
4. Radial run out of surface B with respect to angle diameter of thread should not exceed 0,12mm(qualified tolerance).
5. Turning of faces along hexahedron to $\phi 40Cs(-0,34)$ is allowed.
6. Manufacturing as per dotted line is allowed.
7. Coating. Zinc-plating, 9 microns thick, chromalized. Remove hydrogen embrittlement. Coating on hole may not be checked.
8. Rod, diameter not less than 1mm should pass through hole B.

(A) EQ MATERIAL:-CLASS 4(45C8) TO IS: 2004-78

(B) CARBON STEEL BLACK BAR GRADE C40,OR C45 TO IS:2073



/ Alternate
M 2:1



00014-1CV	(B)	EQUIVALENT MATERIAL ADDED IN THE DRAWING
03.10-2000	QW	
00 651-1CV	(A)	CLASS 4, 45 C8 TO IS: 2004-78 ADDED AS EQ MATERIAL
29.10-98	QW	
DL 1) NO DATE	ISSUE	NATURE AMENDMENT

APPROVED *[Signature]*

CHECKED *[Signature]*

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

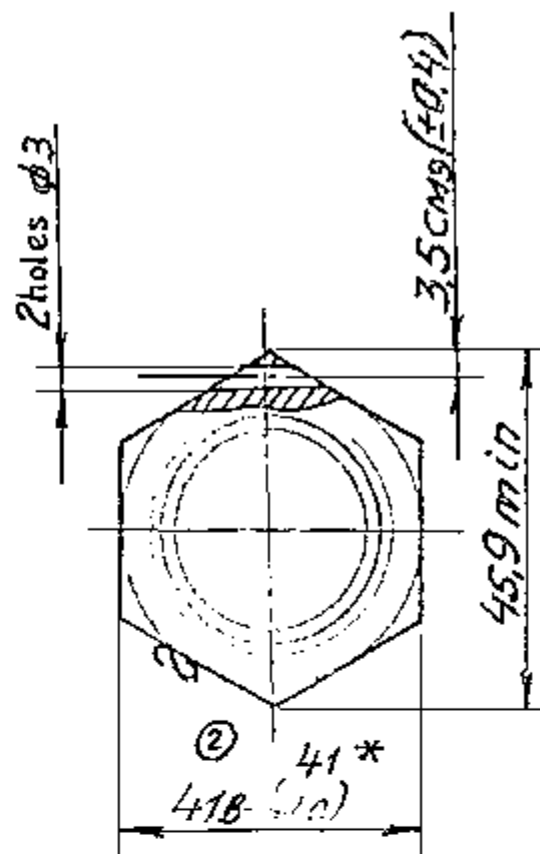
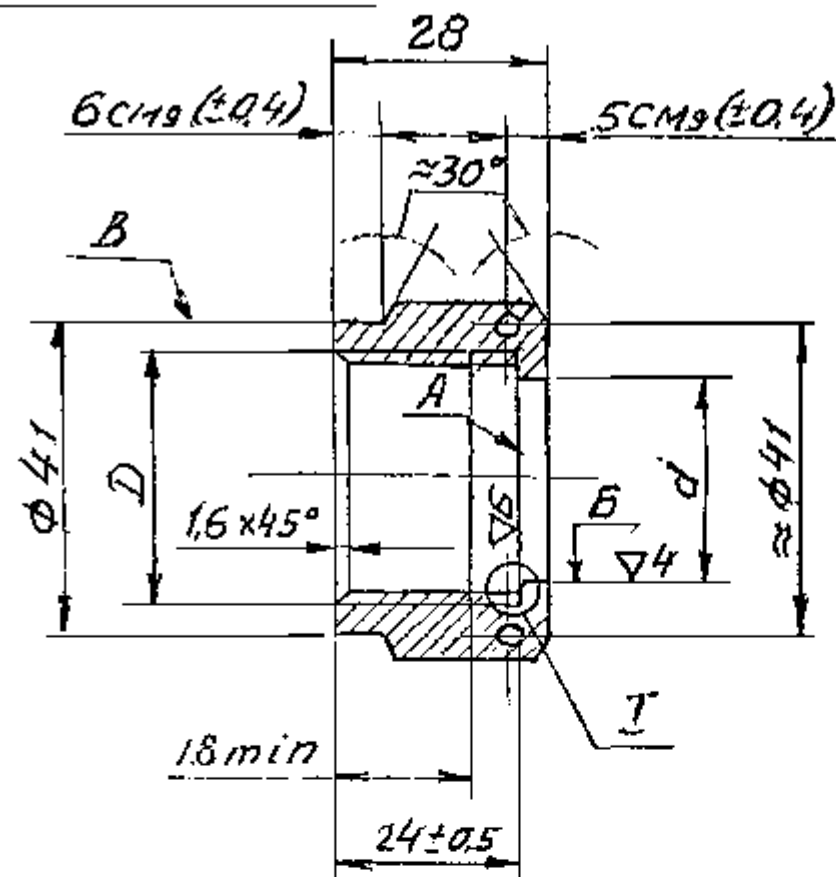
700-33-116

UNION NUT

45 GOST 1050-74

WEIGHT	SCALE
0.07	1:1
SHT	SHTS

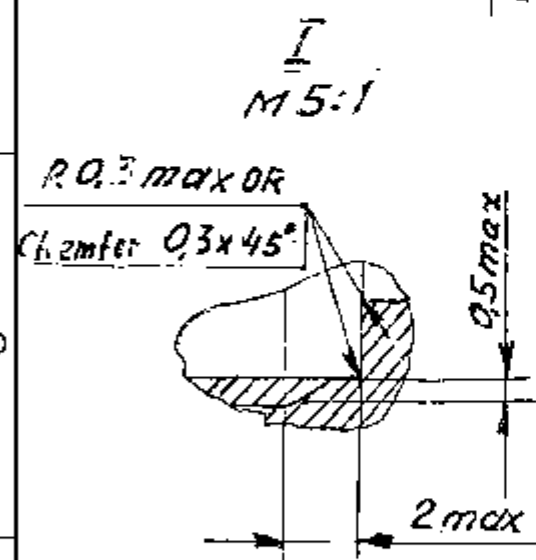
811/211-33-002



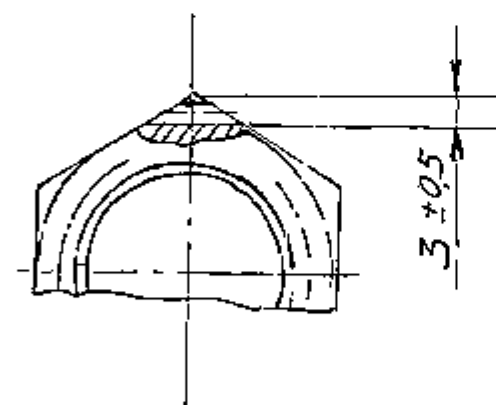
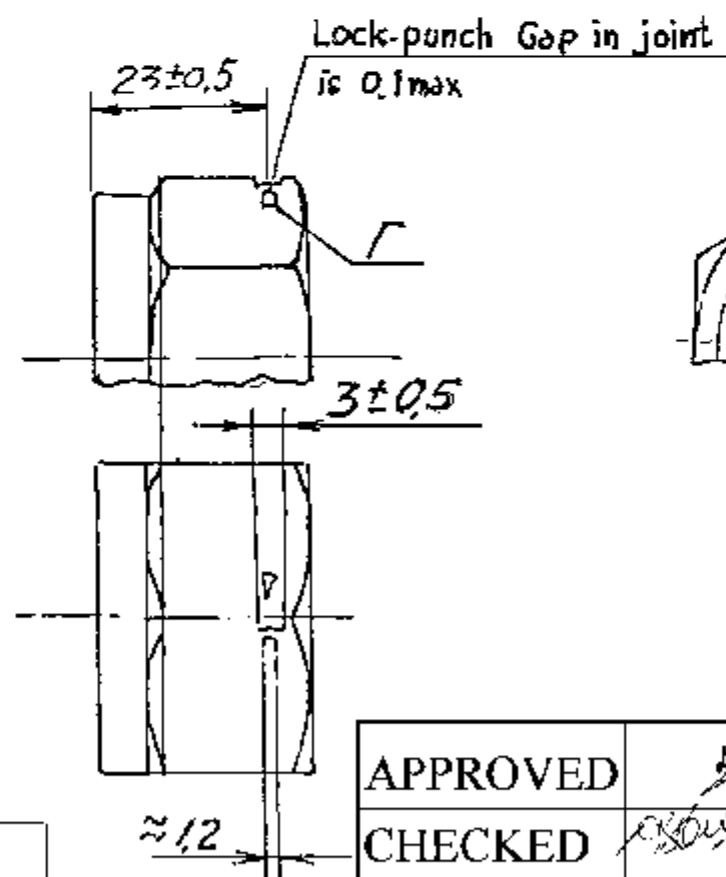
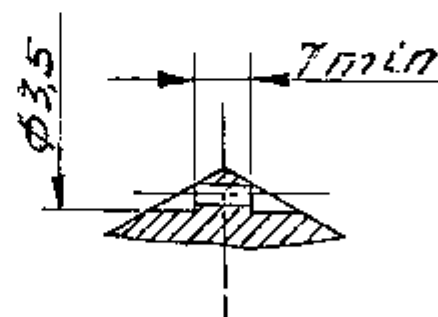
1. Unspecified limit deviations of dimensions are as follows for holes as per A7, for shafts as per B7.
2. End play of surface A with respect to angle diameter of thread should not exceed 0.1mm (qualified tolerance)
3. Radial run-out of surface B with respect to angle diameter of thread should not exceed 0.12mm (qualified tolerance)
4. Manufacture as per dotted line is allowed
5. Step or incision not exceeding 0.5mm is allowed on surface B
6. Turning of faces along hexahedron upto $\phi 4.6$ mm is allowed
7. Coating Anodically oxidized, chromated
8. Rod not less than $\phi 8$ mm should pass through hole F
- 9 * Reference dimension.

Ⓐ EQ. MATERIAL: Gde 24534 TO JS: 733-83

2 Alternate



1 Alternate



006521CV	Ⓐ	Gde 24534 TO JS: 733-83
30-11-98		ADDED AS EQUIVALENT MATERIAL
00111111	ISSUE	NATURE
DATE		AMENDMENT

Designation	D	d	Weight
700-33-117	M36x1.5 ^{-6H} Ⓐ	30.9 ₄ ^(+0.28) _(+0.14)	0.024
700-33-118	M33x1.5 ^{-6H} Ⓐ	27.3 _{A4} ^(+0.14)	0.03

APPROVED
CHECKED
CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-117/118

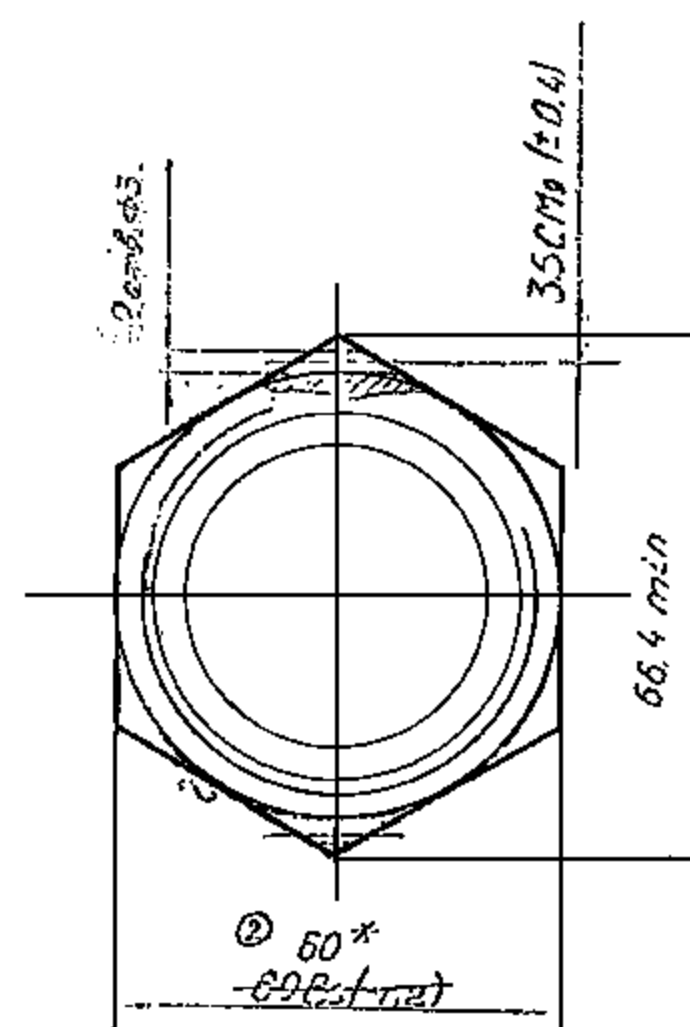
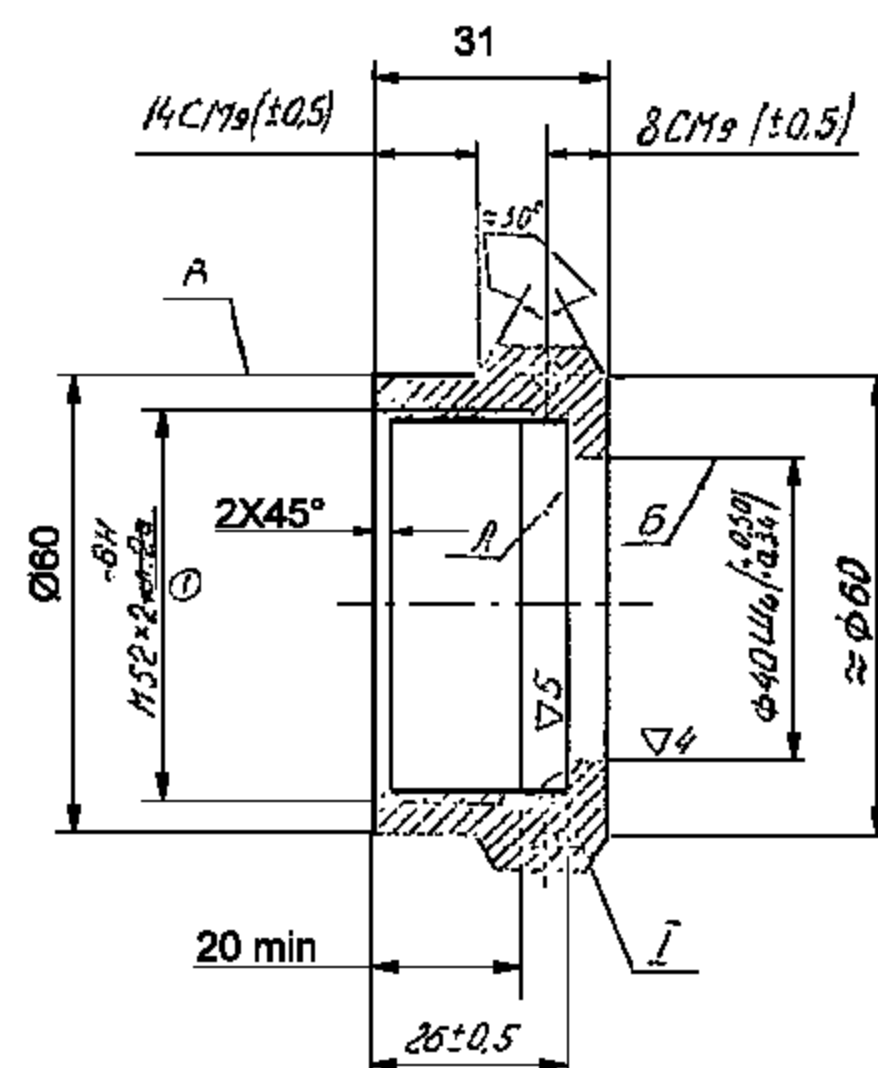
UNION NUT

BAR A10T W41n, GOST 21488-76

WEIGHT SCALE

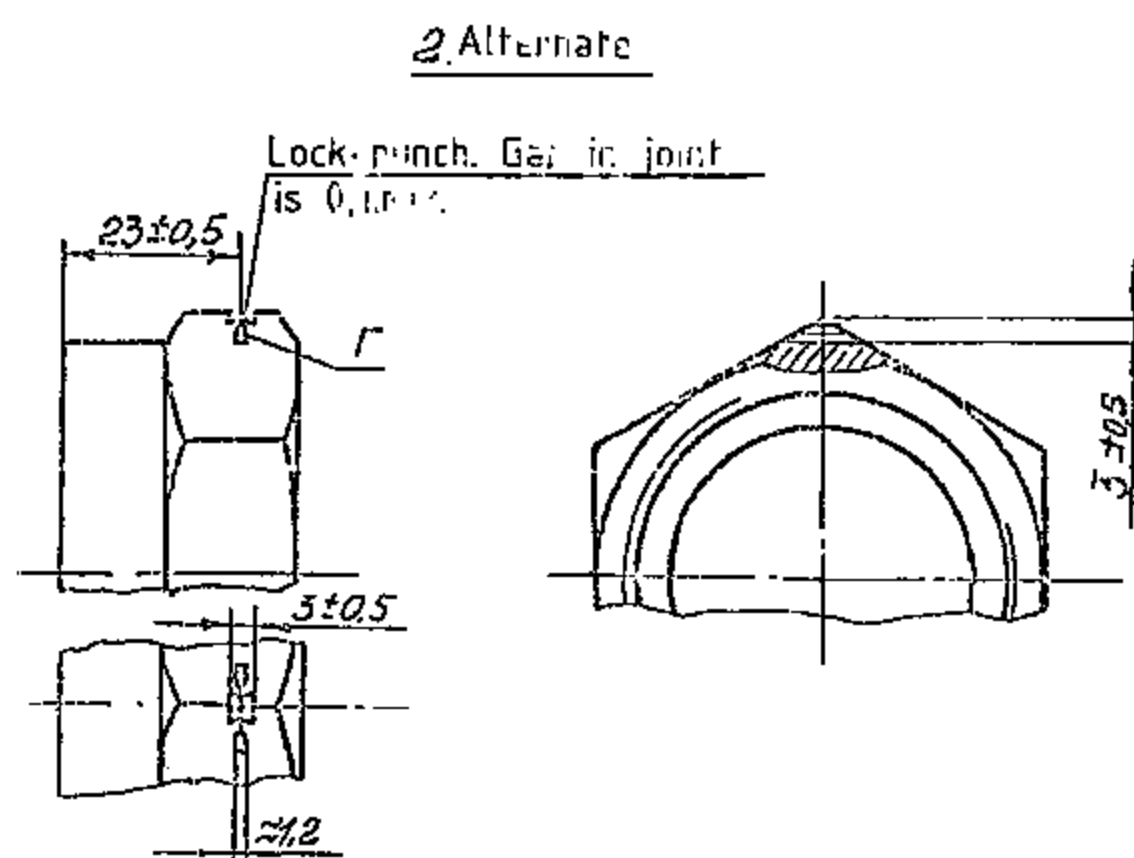
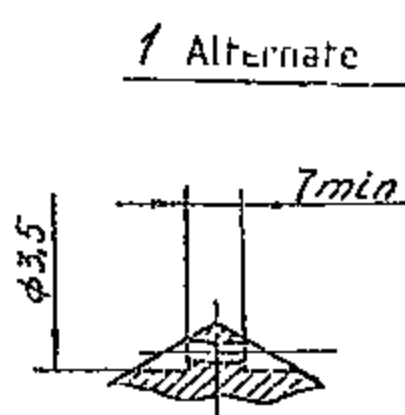
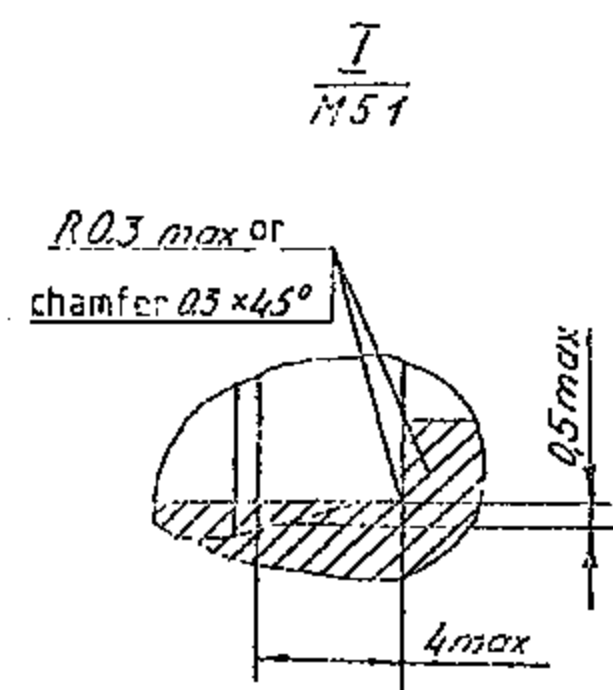
SEE TABLE 1:1

SHT 1 SHTS 1



1. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7.
2. End play of surface A with respect to angle diameter of thread should not exceed 0,1mm (qualified tolerance).
3. Radial run-out of surface B with respect to angle diameter of thread should not exceed 0,12mm (qualified tolerance).
4. Manufacture of union nut as per dotted line is allowed.
5. Turning of faces along hexahedron as per dimension $\phi 68C5 (-0,4)mm$ is allowed.
6. Dark spots on surface B are allowed.
7. Coating: anodically oxidized, chromitized
8. Rod not less than $\phi 1mm$ should pass through hole F.
9. * Reference dimensions.

Ⓐ EQ. MATERIAL:- AL. ALLOY EXTRUDED BAR GRADE 24534 TO IS: 733-83.

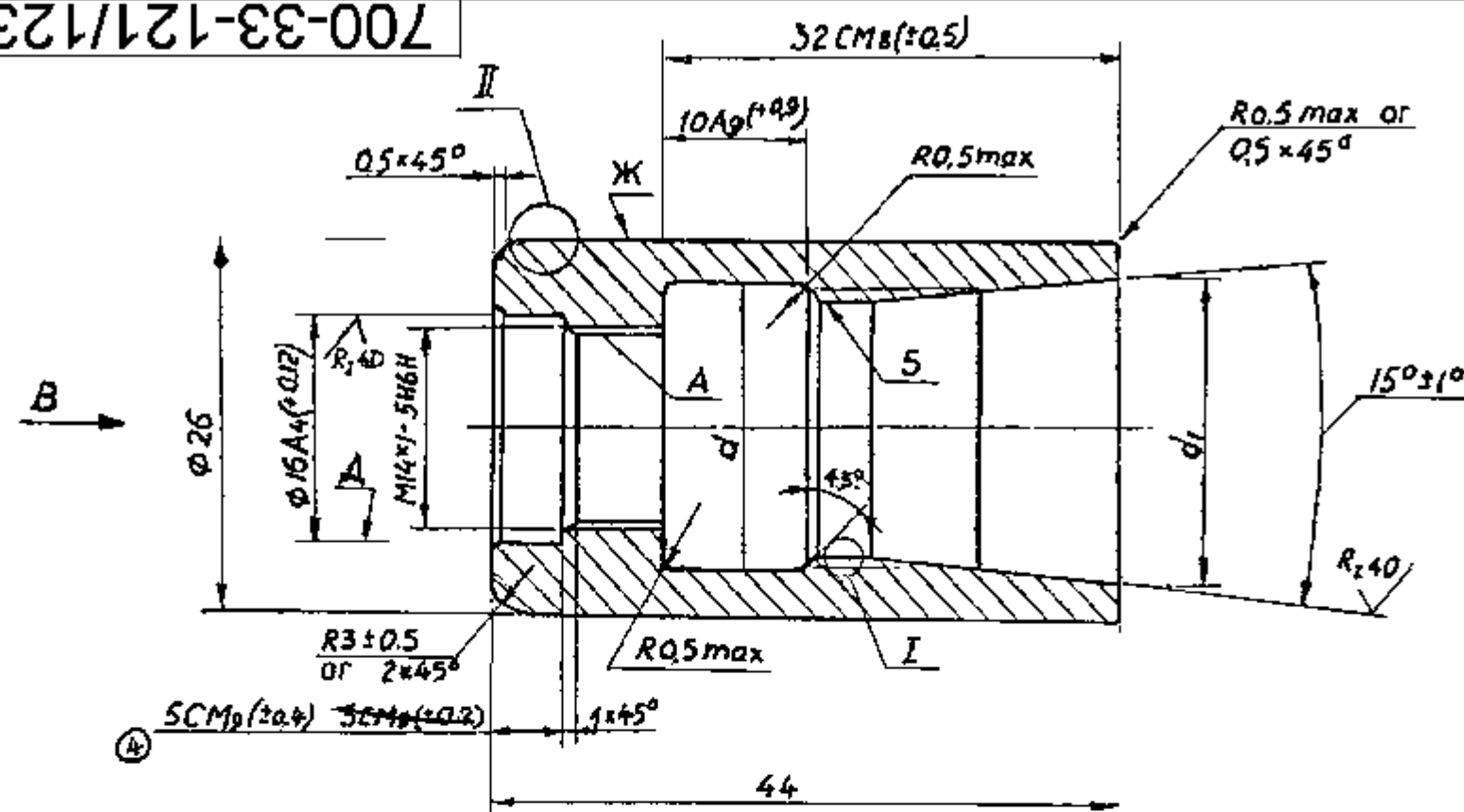
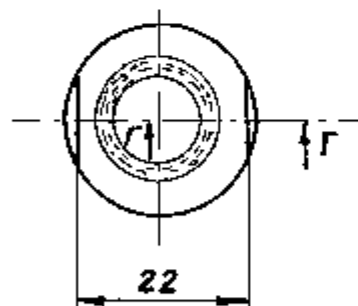
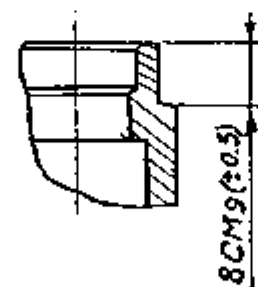
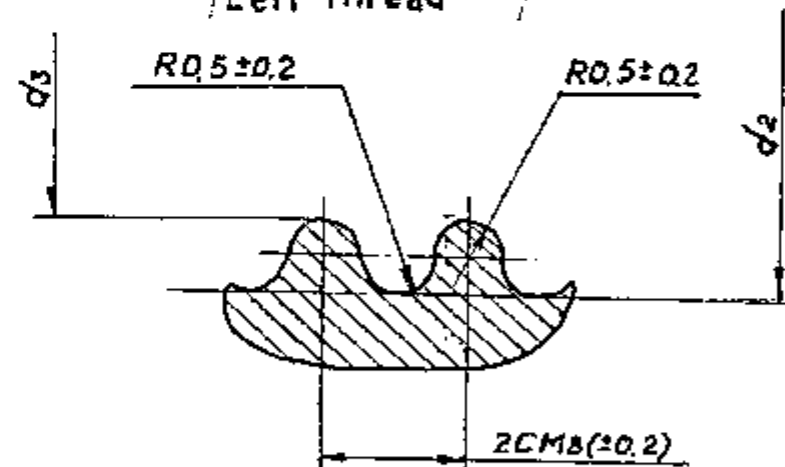


00805-ICV 31 AUG DC(1) No. DATE	Ⓐ	EQ. MATERIAL ADDED
ISSUE	AMENDMENTS	

APPROVED		700-33-119	
CHECKED		WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		0.06	1:1
		SHT 1	SHTS 1
		BAR D. 16T W60N PCT 2/48 78	

700-33-121/123

Rz80

View B
M1:1r-r
M1:1I
M10:1
Left thread

Dimensions in MM

Designation.	d	d ₁	d ₂	d ₃	Marking (element 0)	Mass. Kg
700-33-121	φ19.5	φ21	φ19	φ17A ₅ (+0.24)		0.034
700-33-122	φ21	φ22	φ20	φ18A ₅ (+0.24)		0.032
700-33-123	φ22	φ22	φ21	φ19A ₅ (+0.28)		0.028

- Unspecified limit deviations of dimensions are as follows. For holes - as per A₇, shafts - as per B₇, others - as per CM₇.
 - Radial run-out of axis of thread A with respect to the axis of surface B should not exceed 0.3mm. (Qualified tolerance).
 - Radial run-out of surface D with respect to the angle diameter of thread A should not exceed 0.06mm (qualified tolerance).
 - Grooves for marking (element 0) should be distinct.
 - Chemical stamp with a number, corresponding to the number of distinctive marks may be instead of marking the coupling by groove (element 0) on surface X.
 - Coating Anodic oxidation chromated
- Ⓐ EQ. MATERIAL: AL. ALLOY GdE 24345 To IS: 733-83
- Ⓑ EQ. MATERIAL: AL. ALLOY EXTRUDED BAR GRADE 24534 TO IS: 733-83.

00814-ICV 03 OCT 00 00752-ICV 29 DEC 99	Ⓑ	EQ. MATERIAL ADDED.
DC(1)No. & DATE	Ⓐ	EQ. MATERIAL ADDED.
ISSUE		AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-121/123

COUPLING
(TABLE DRG)

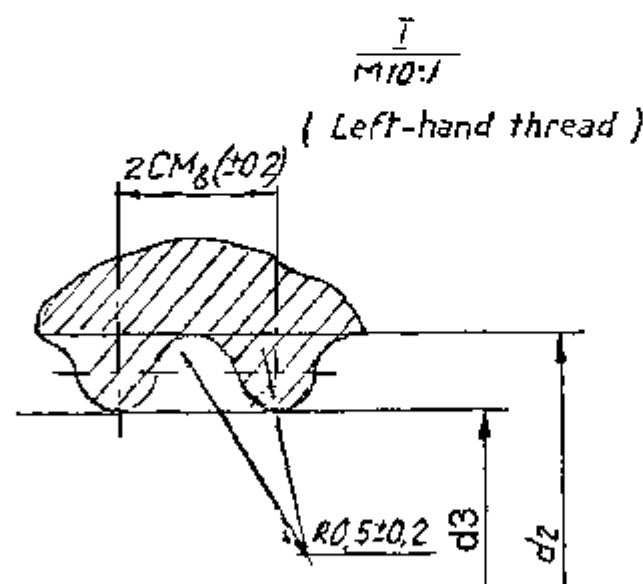
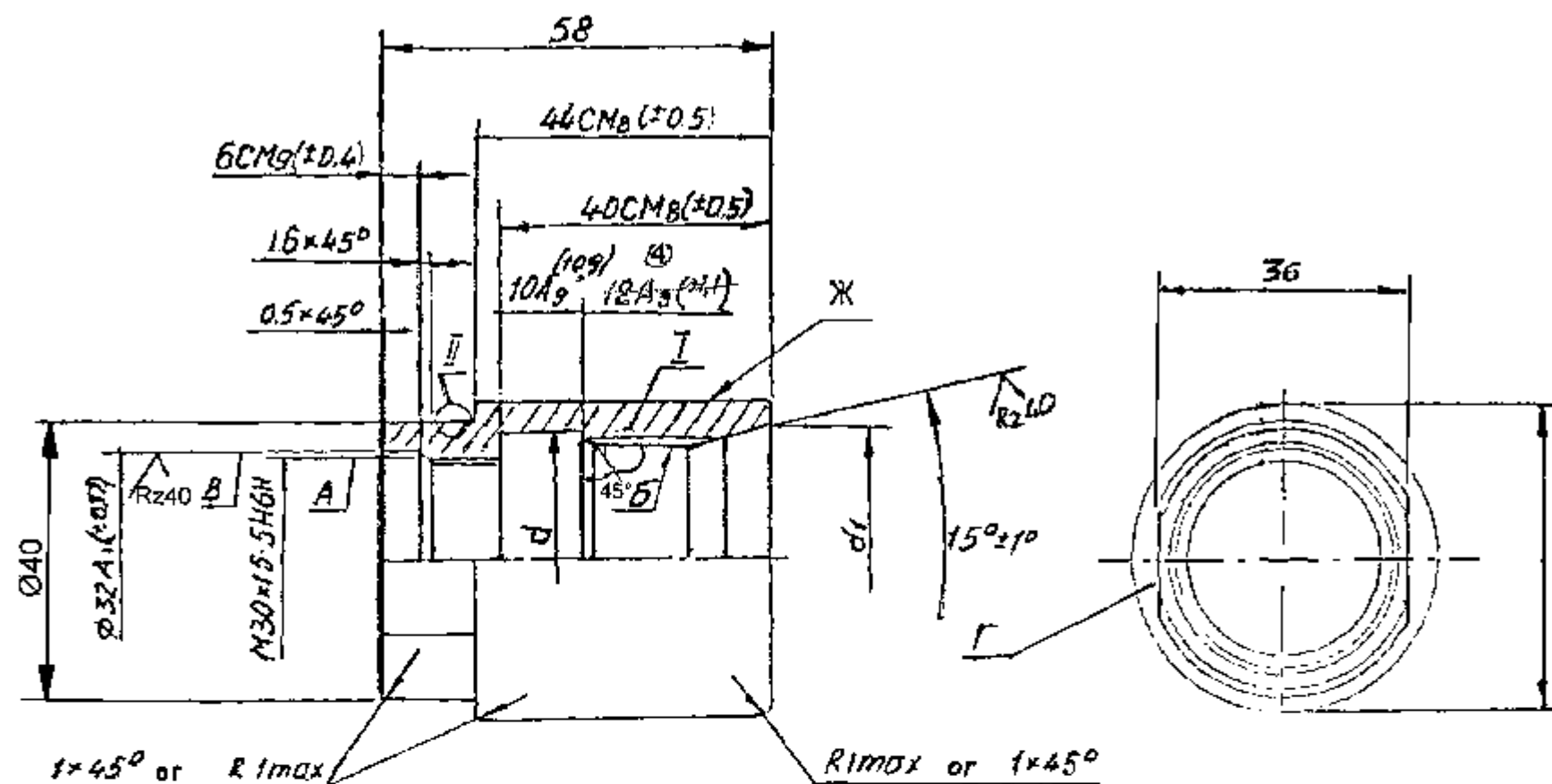
BAR A 16 T GOST 21488-76

WEIGHT SCALE

SEE TABLE 2:1

SHT 1 SHTS 1

700-33-124/126

R_z 80 (✓)

Dimensions in mm.

DESIGNATION	d	d ₁	(A) d ₃	(A) d ₂	MARKING (ELEMENT II)	CATE- GORY	Mass kg.
700-33-124	37	38	34A ₅ ^(+0.34)	36		1	0.096
700-33-125	39	40	36A ₅ ^(+0.34)	38		2	0.083
700-33-126	41	42	38A ₅ ^(+0.34)	40		3	0.070

- Coupling is made of material A16T.
- Unspecified limit deviations of dimensions are:
For holes -as per A₇
for shafts -as per B₇ and
for others -as per CM₇
- Unspecified radii should not exceed 0.5 mm
- Radial run-out of axis of thread with respect to surface B, should not exceed 0.3 mm (Qualified tolerance)
- Radial run-out of surface B with respect to angle diameter of thread A should not exceed 0.65 mm (Qualified tolerance)
- Permissible cut or step on surface Γ should not exceed 0.5 mm.
- Do not check dimensions of grooves (Element II).
- On surface X chemical stamp with the number, corresponding to the number of distinctive marks, may be applied instead of marking of the coupling by notching (Element II)
- Coating: Anodically oxidized, chromated.
- EQ.MATERIAL: - Al. ALLOY GRADE 24534 TO IS: 733-83.

00805-ICV

31-08-2000

00668-ICV

22-04-99

DC(I) No.

& DATE

ISSUE

AMENDMENTS

B

EQ. MATERIAL ADDED

A

"d3" WAS "d2" &
"d2" WAS "d3"

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-124/126

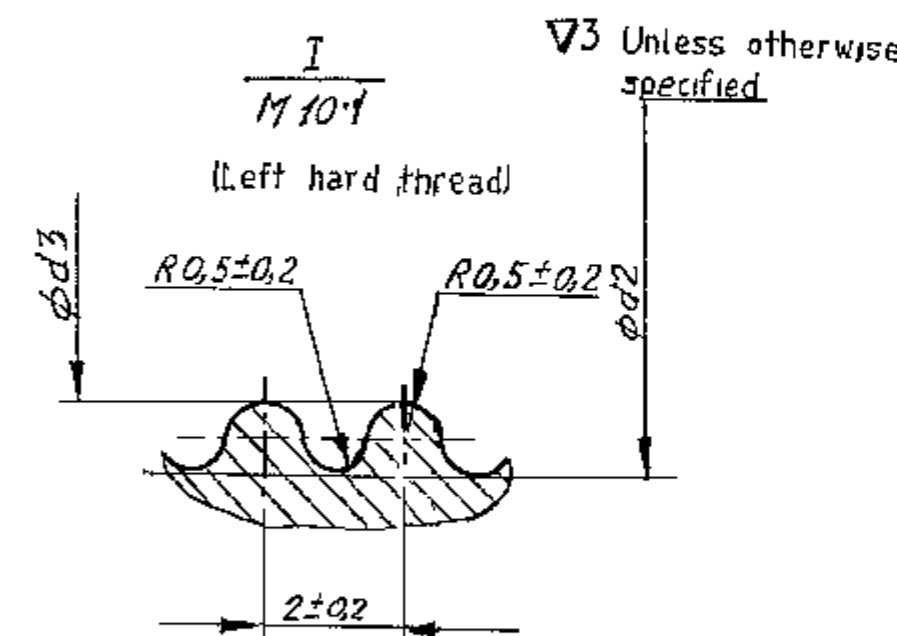
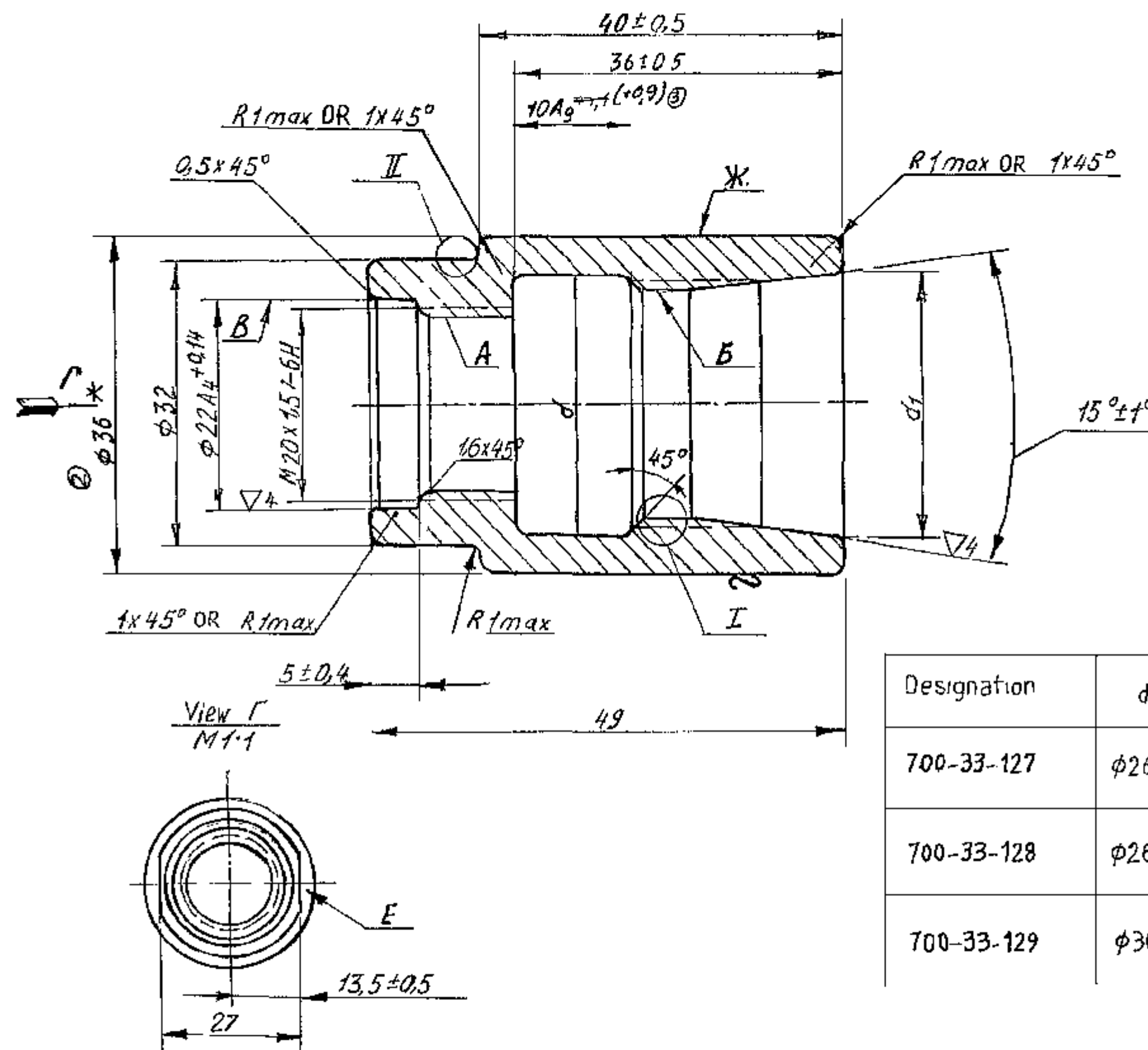
COUPLING
TABLE DRG

A 16 GOST 4784-74

WRIGHT SCALE

SEE TABLE 1:1

SHT 1 SHTS 1



- 1 B unt sharp edges
 - 2 Provide dimensions without deviations as per accuracy class 7 OST 1010
 - 3 Run-out of axis of thread A with respect to surface B should not exceed 0.3mm (qualified tolerance)
 - 4 Run-out of surface B with respect to the angle diameter of thread A should not exceed 0.05mm (qualified tolerance)
 - 5 Unspecified radii should not exceed R0.5mm
 - 6 Do not check dimensions of grooves (element II)
 - 7 Coating Anodic oxidation, chromating.
 - 8 Cut or step not exceeding 0.5mm is allowed on surface E
 - 9 Chemical stamp with number corresponding to the number of distinction marks may be applied on surface *, instead of marking couplings with grooves (element II)
 - 10 * Dimension is given for reference
- (A) EQ MATERIAL - Al ALLOY GRADE 24534 TO IS 733-83

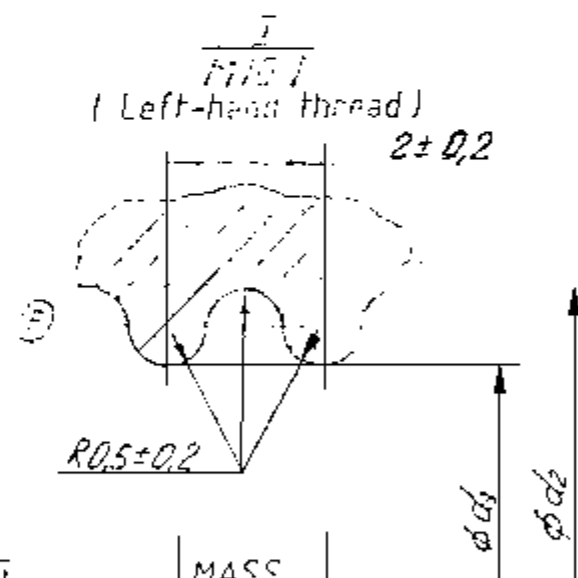
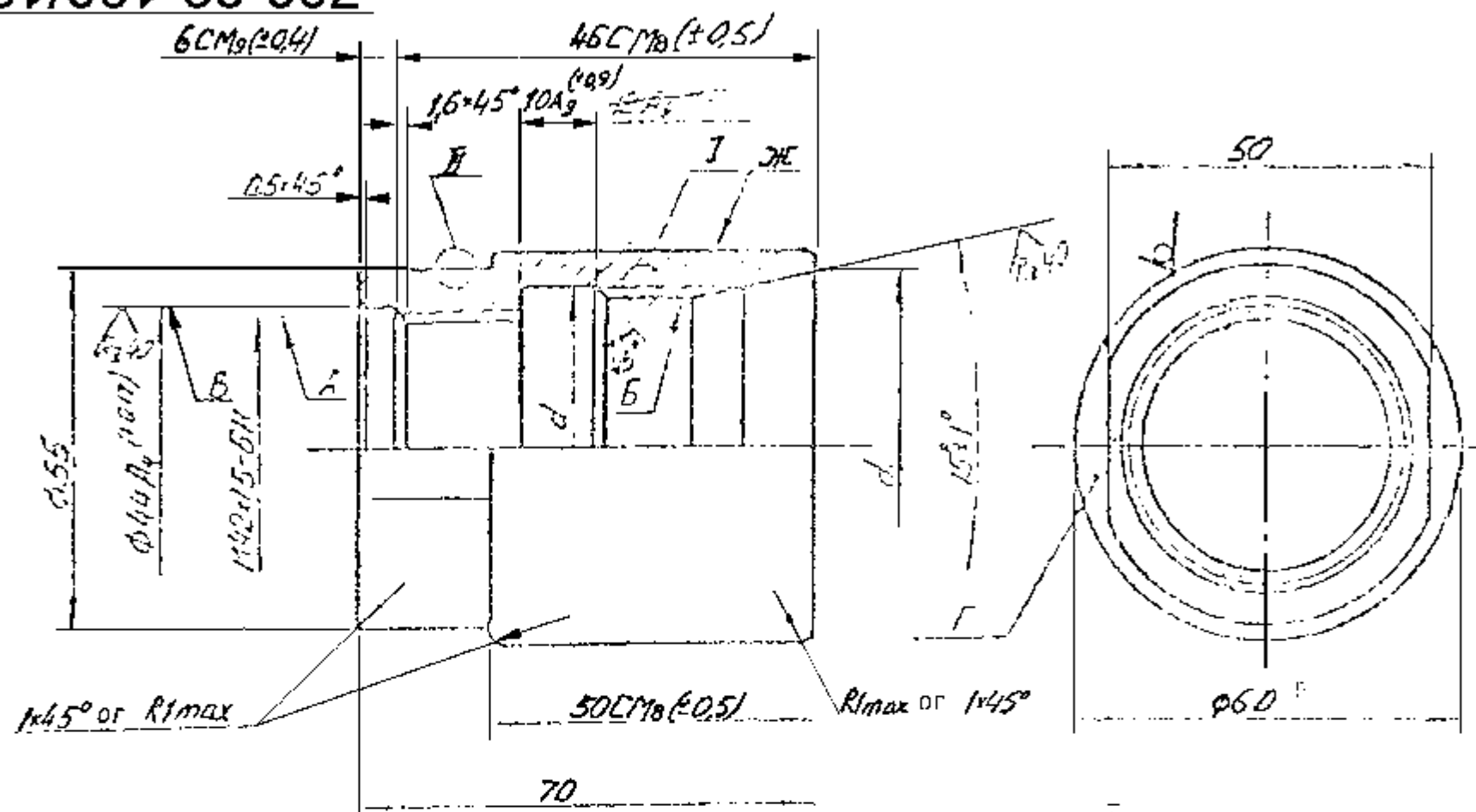
Designation	d	d1	d2	d3	Marking (element II)	Weight
700-33-127	φ26,6	φ28	φ26	φ24 _{A5} ^{+0.28}		0,073
700-33-128	φ28,5	φ30	φ28	φ26 _{A5} ^{+0.28}		0,065
700-33-129	φ30,5	φ32	φ30	φ28 _{A5} ^{+0.28}		0,056

00805 -ICV DATE	(A)	EQ MATERIAL ADDED.
DC(D) No DATE	ISSUE	NATURE OF AMENDMENT

APPROVED	700-33-127/129		
CHECKED	COUPLING (DRAWING WITH TABLE)		
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			
	BAR A 16T Kp 36n GOST 21488-76	WEIGHT SEE TABLE	SCALE 2:1
		SHT	SHTS

700-33-130/132

R289



1. Unspecified limit deviations of dimensions are as follows:
For holes - as per A7;
for shafts - as per B7; and
for others - as per CM7.
 2. Run-out of axis of thread A with respect to surface B should not exceed 0,2 mm (Qualified tolerance).
 3. Run-out of surface B with respect to angle diameter of thread A should not exceed 0,3 mm (Qualified tolerance).
 4. Unspecified radii should not exceed 0,5 mm.
 5. Dimension of distinguishing turned marks (Element II) should not be checked.
 6. Instead of marking coupling with distinguishing turned marks (Element-II) it is allowed to put a chemical stamp, with number corresponding to that of distinguishing turned marks on the surface X.
 7. Incision or step not exceeding 0,5 mm is allowed on surface F.
 8. * Dimension is given for reference.
 9. Coating: Anodically oxidized, chromated.
- Ⓐ EQ. MATERIAL: AL-ALLOY GdE 24345 To IS: 733-83.

DESIGNATION	CATEGORY	DIMENSIONS, mm				MARKING (ELEMENT II)	MASS, Kg.
		d	d ₁	d ₃	d ₂		
700-33-130	1	49	50	46A ₉ ^(+0,4)	48		0,192
700-33-131	2	51	52	48A ₉ ^(+0,4)	50		0,176
700-33-132	3	53	55	50A ₉ ^(+0,4)	52		0,156

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-130/132

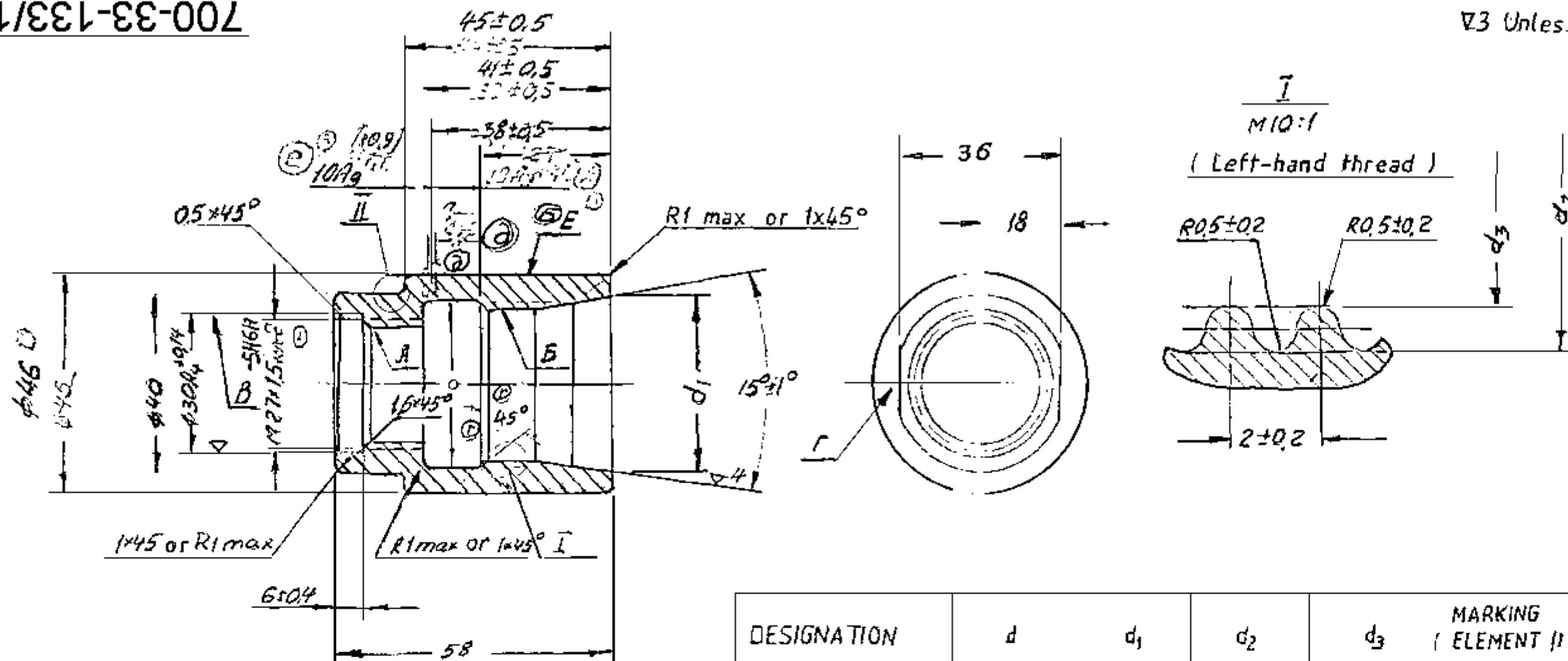
COUPLING
(TABLE DRAWING)

BAR A16T kp60n, GOST 21488-76

WEIGHT SCALE

SEE TABLE 1:1

SHT 1 SHTS 1



1. Blunt sharp edges.
2. Perform dimensions specified without deviations as per accuracy class 7, OST 1010.
3. Run-out of axis of thread A with respect to surface B should not exceed 0.3 mm (Qualified tolerance).
4. Run-out of surface B with respect to angle diameter of thread A should not exceed 0.5 mm (Qualified tolerance).
5. Unspecified radii are R0.5 mm.
6. Dimensions of grooves (Element II) may not be checked.
7. Coating Anodically oxidized, chromated.
8. Manufacturing may be from material D16T.
9. Cut or step not exceeding 0.5 mm is allowed on surface I.
10. Instead of marking the couplings by groove (Element II), it is allowed to put a chemical stamp with a figure corresponding to the number of distinctive marks on surface E.

(A) EQ. MATERIAL:- GY. 24534 TO IS: 733-83 FOR 700-33-133/135

DESIGNATION	d	d ₁	d ₂	d ₃	MARKING (ELEMENT II)	WEIGHT
700-33-133	φ34.5	φ36	φ34	φ32A ₅ ^{+0.34}		0.126
700-33-134	φ36.5	φ38	φ36	φ34A ₅ ^{+0.34}		0.114
700-33-135	φ38.5	φ40	φ38	φ36A ₅ ^{+0.34}		0.101

00875-ICV	(A)	GY. 24534 TO IS:
22-01-99		733-83 ADDED AS
DCU NO		EQ. MATERIAL FOR
DATE	ISSUE	NATURE
		AMENDMENT

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-133/135

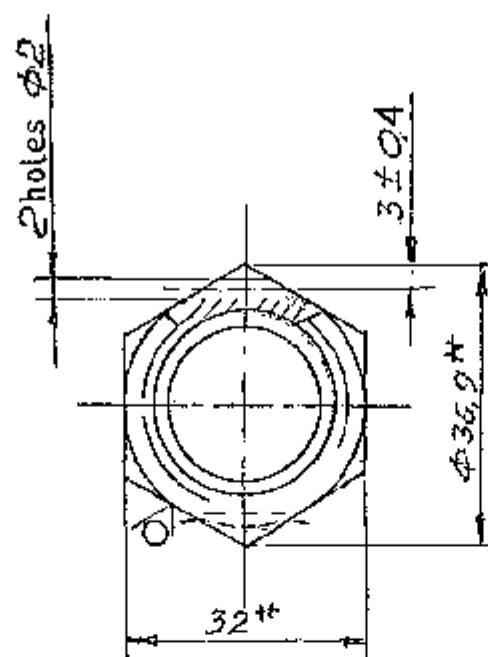
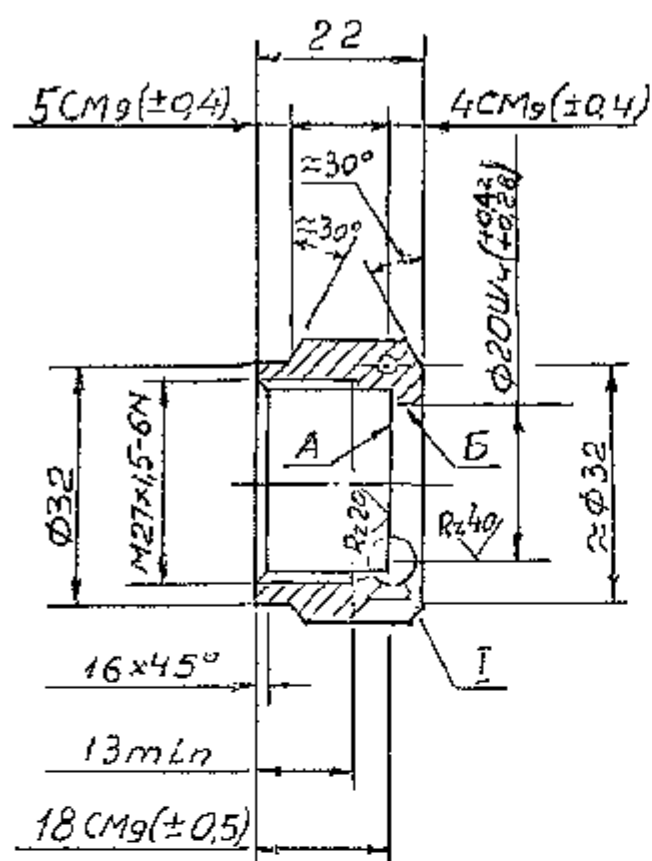
COUPLING
(TABLE DRAWING)

P. 16, GOST 4784-74

WEIGHT SCALE

SEE TABLE 1:1

SHT 1 SHTS 1



TECHNICAL CONDITIONS

1. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7, others-as per CM7.
2. End-play of surface A with respect to angle diameter should not exceed 0.1mm (qualified tolerance).
3. Radial run-out of surface B with respect to angle diameter of thread should not exceed 0.12mm (qualified tolerance).
4. Manufacture as per dash-dot line is allowed.
5. Rod of diameter not less than 1mm should pass through hole B.
6. * Dimension is given for reference.
7. Coating: Anodically oxidized, chromated.

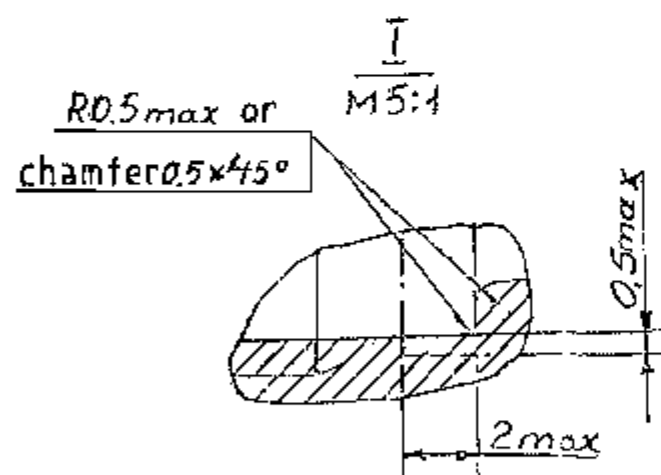
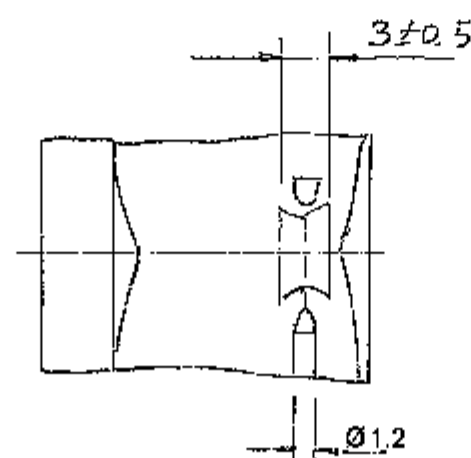
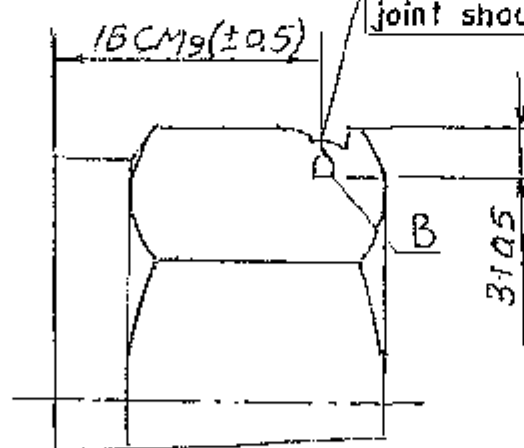
Ⓐ EQ. MATERIAL:- Gde 24534 TO IS: 733-83

Ⓑ EQ. MATERIAL:- AL. ALLOY EXTRUDED BAR GRADE 24534 TO IS: 733-83.

1 Alternate
M2:1

Lock-punch, clearance at

joint should not exceed 0.1mm



00820-ICV 17-10-2000	Ⓑ	EQ. MATERIAL ADDED.
00662-ICV 30 NOV 98	Ⓐ	Gde 24534 TO IS: 733-83 ADDED AS EQUIVALENT MATERIAL
DATE	ISSUE	NATURE AMENDMENT

APPROVED *[Signature]*

CHECKED *[Signature]*

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-136

UNION NUT

BAR 16T W32n
GOST 21488-76

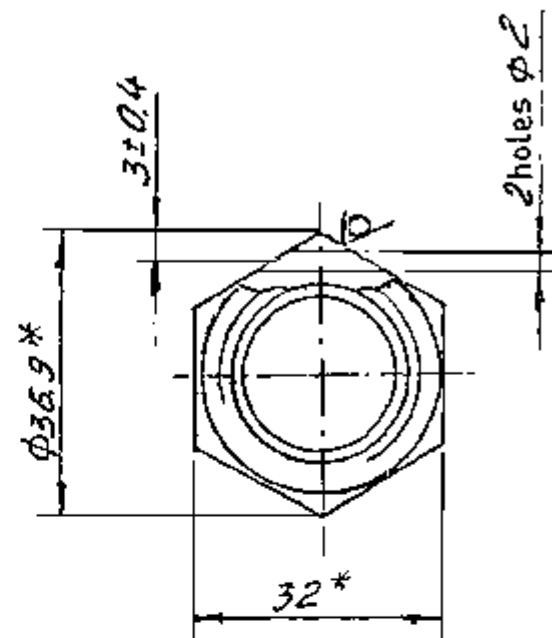
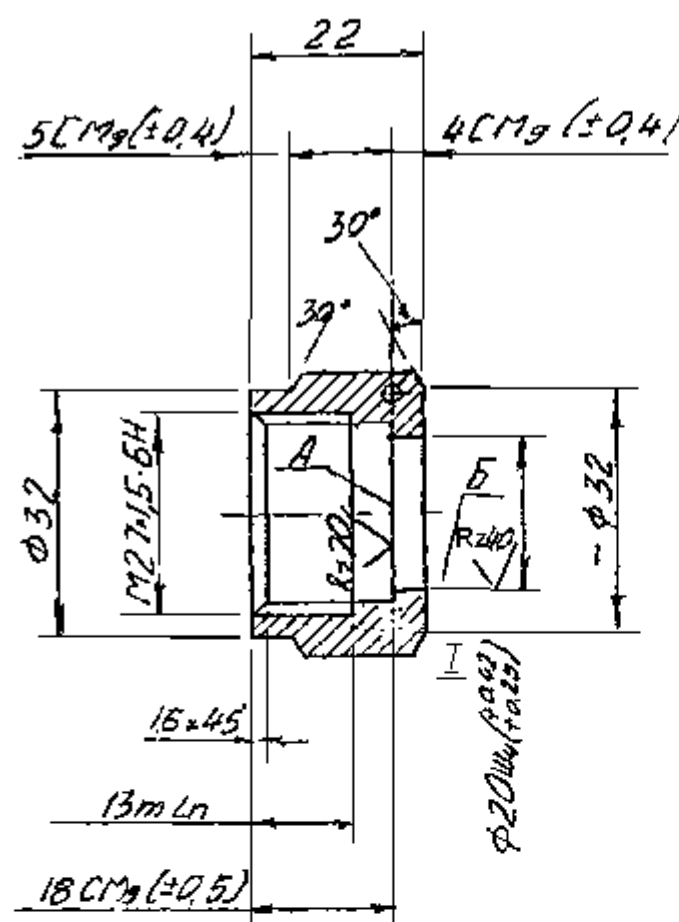
WEIGHT SCALE

0.022 1:1

SHT SHTS

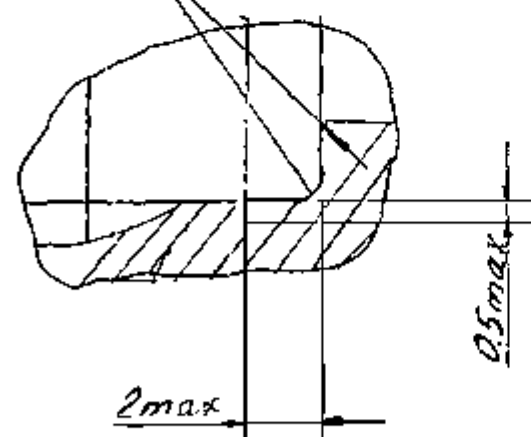
700-33-137

Rz80



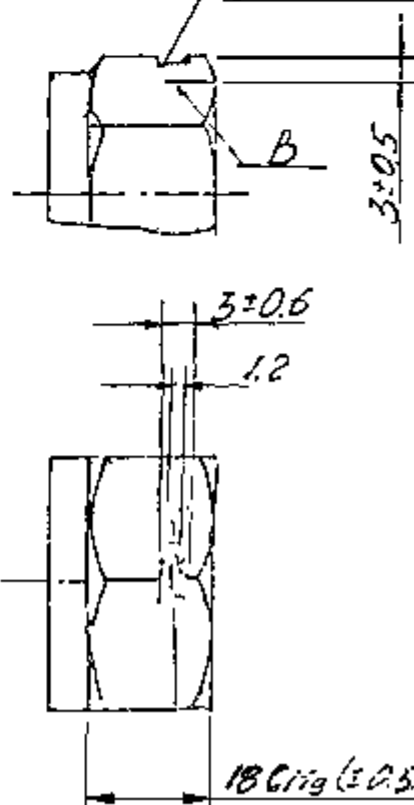
1. Alternate material is steel 35,40,50 GOST 1050-74, steel 40Г GOST 4543-71.
2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, shafts-as per B7, others-as per C17.
3. Run-out of surface A with respect to the angle diameter of the thread should not exceed 0.1mm (qualified tolerance).
4. Run-out of surface B with respect to the angle diameter of the thread should not exceed 0.12mm (qualified tolerance).
5. Rod, at least 1mm in diameter should pass through hole B.
6. Part may be made as per dash-dot line.
7. * Dimensions are given for reference.
8. Coating: Zinc-plated, 9 microns thick, chromated. Remove hydrogen embrittlement. Absence of coating is allowed on internal surfaces.

R0.5 max or
chamfer 0.5x45



Alternate

Lock-punch. Clearance in
joint should not exceed 0.1mm



(A) EQ. MATERIAL: CARBON STEEL BLACK BAR GRADE C45
TO IS: 2073-70.

00820 ICV 13-18-2000	(A)	EQ. MATERIAL ADDED.
DCQ No DATE	ISSUE	NATURE OF AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-33-137

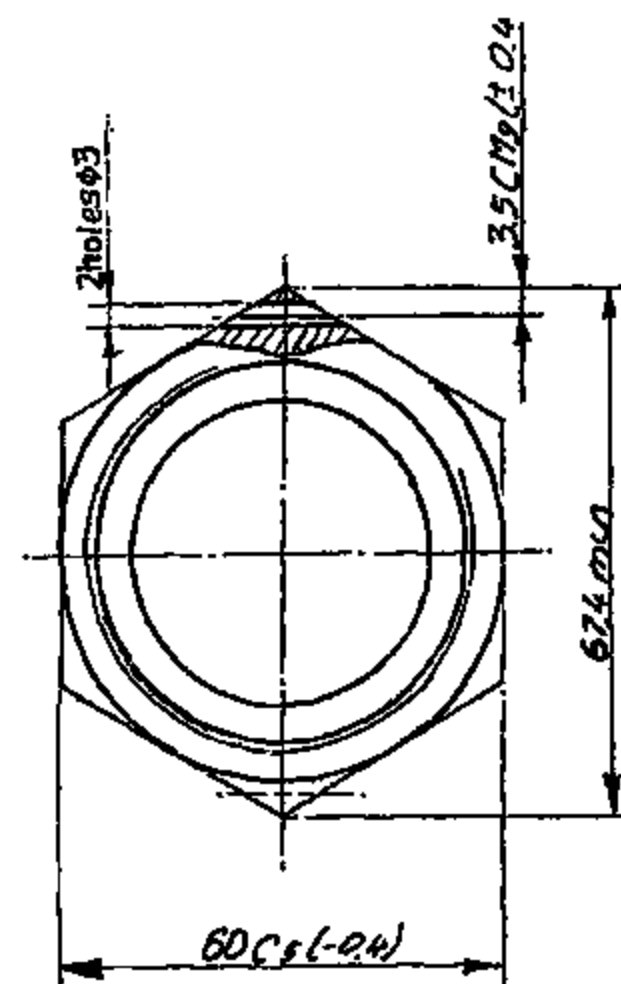
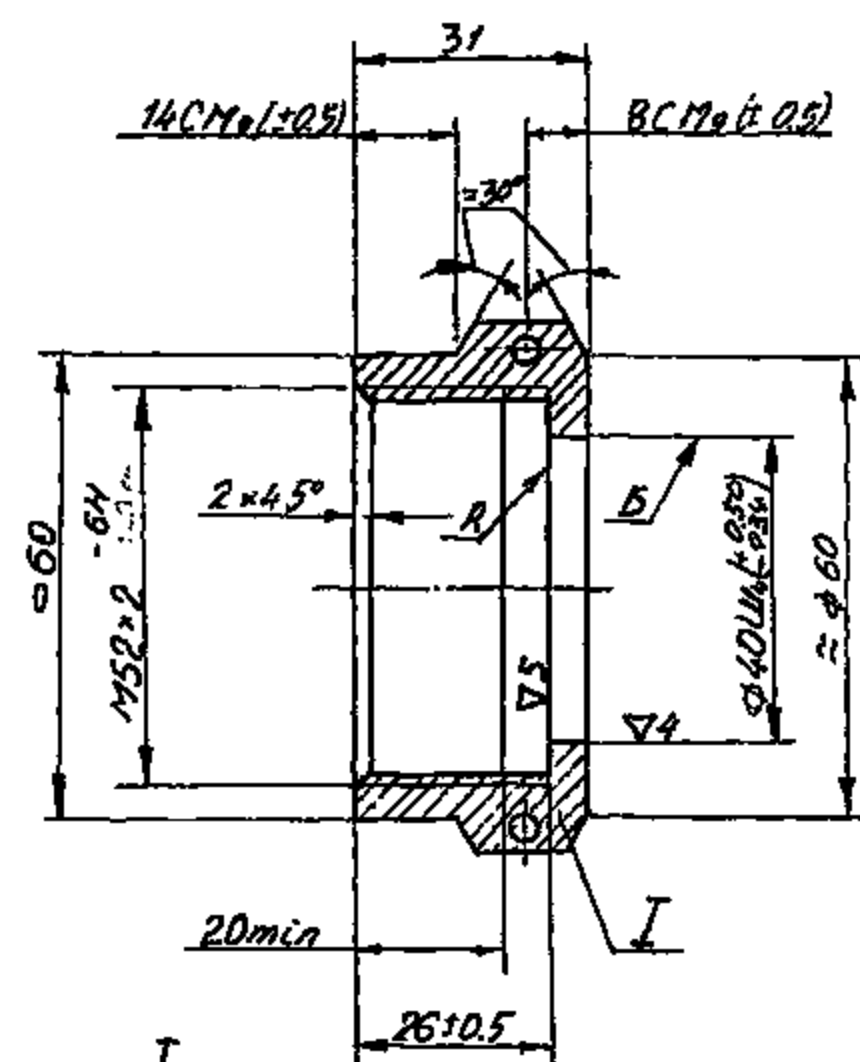
UNION NUT

Hexahedron 35-55 GOST 13560-73
45-21 GOST 1051-73

WEIGHT SCALE

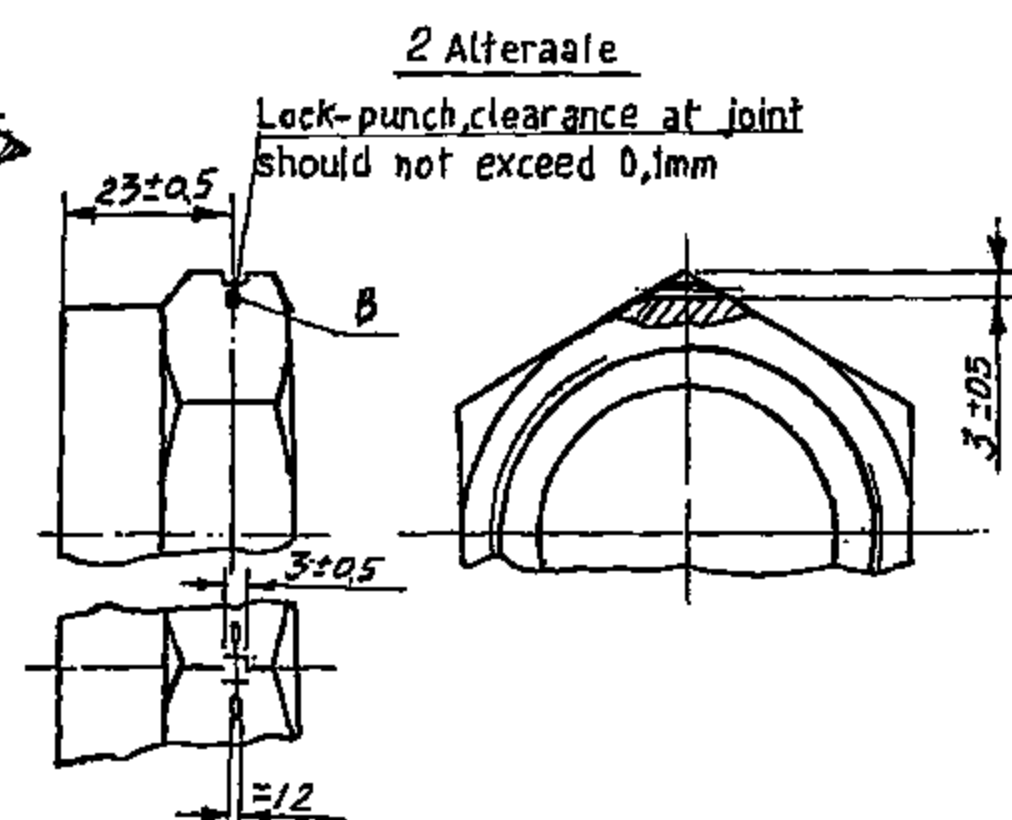
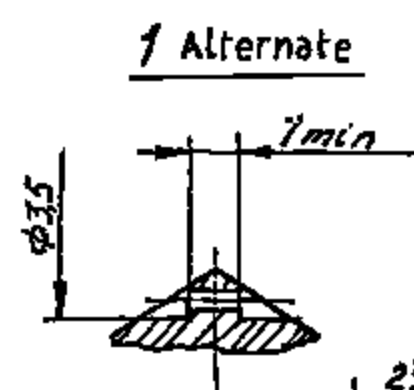
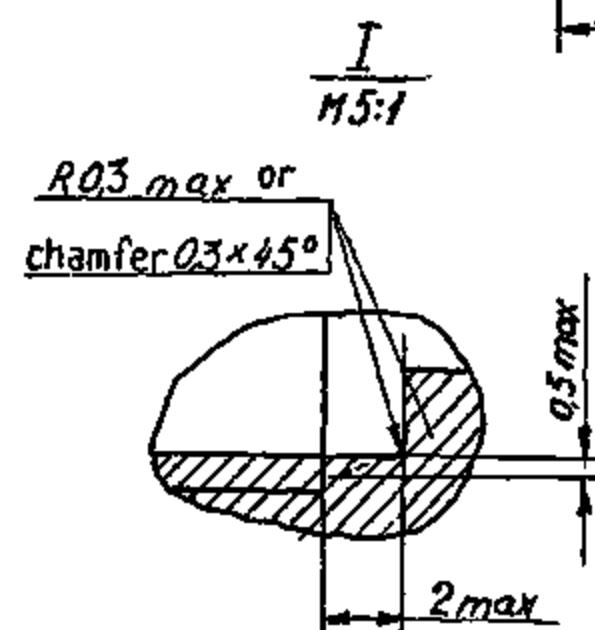
0.05 1:1

SHT 1 SHTS 1



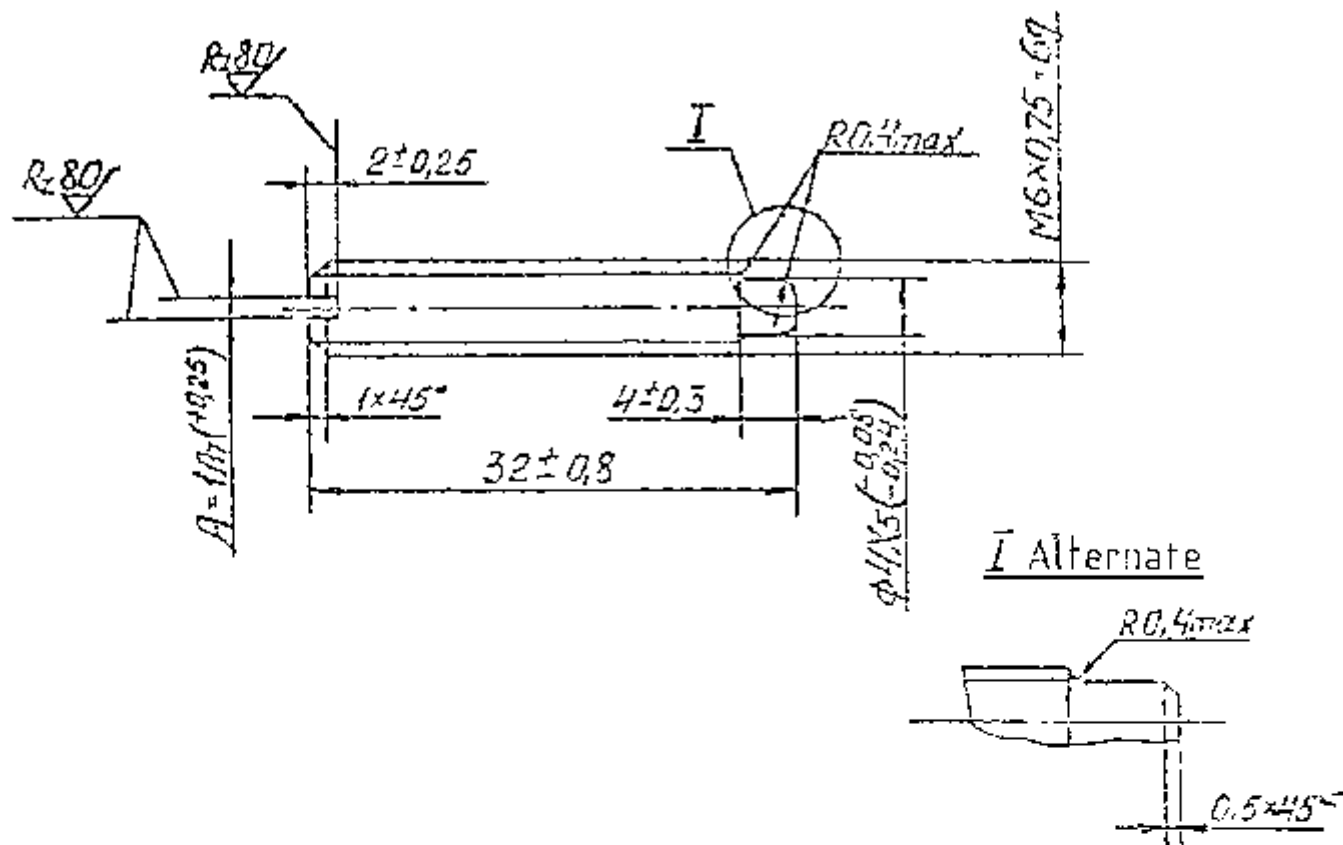
1. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts as per B7
2. End play of surface A with respect to angle diameter of thread should not exceed 0,1mm (qualified tolerance)
3. Radial run-out of surface B with respect to angle diameter should not exceed 0,12mm (qualified tolerance)
4. Manufacturing as per dotted line is allowed.
5. Turning of faces along hexahedron to dimension $\phi 68$ (5(-0,4)mm is allowed.
6. Coating Zinc-plating, 9 microns thick, chromated. Remove hydrogen embrittlement Coating on holes may not be checked.
7. Rod diameter not less than 1mm should pass through hole B.

(A) EQ.MATL: CARBON STEEL BLACK BAR GRADE C45 TO IS: 2073-70



00820 -1CV 10-10-2000 DATE	(A) EQ.MATERIAL ADDED.
ISSUE	NATURE OF AMENDMENTS

APPROVED	M. VAS	700-33-138	
CHECKED	21.5 KVAZ	WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		0.16	1:1
		SHT 1	SHTS 1
		45, GOST 1050-74	



1. Alternate material is steel cm5, GOST 380-71, steel 35,40, GOST 1050-74.
2. Coating: Zinc-plated, 6 microns thick, chromitized. Remove hydrogen embrittlement.
3. Other technical requirements are as per GOST 1759-70.
4. It is allowed to perform dimension A equal to $1^{+0,25}_{-0,08}$ mm.

④5. EQ. MATERIAL: 1 CARBON STEEL BLACK BAR GRADE C45
TO IS : 2073-70.

01007-ICV

03 NOV 05

00826-ICV

09 NOV 00

DC(I)No.

& DATE

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④

DS CAT No. ADDED.
& NOMENCLATURE
WAS 'SCREW GARD'

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

B 700-35-390

A

SCREW GARD
SCREW

STEEL 45, GOST 1050-74

DS CAT PART No.
LV2/ICVS 5305-018178

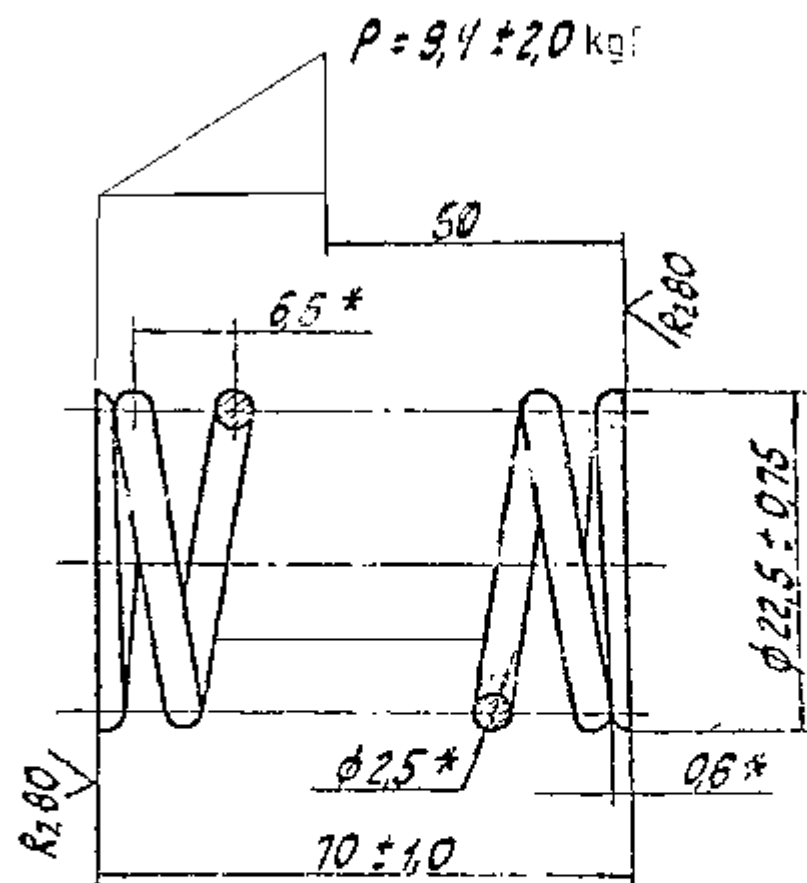
WEIGHT SCALE

0,007 2:1

SHT 1 SHTS 1

700-37-44

9/11



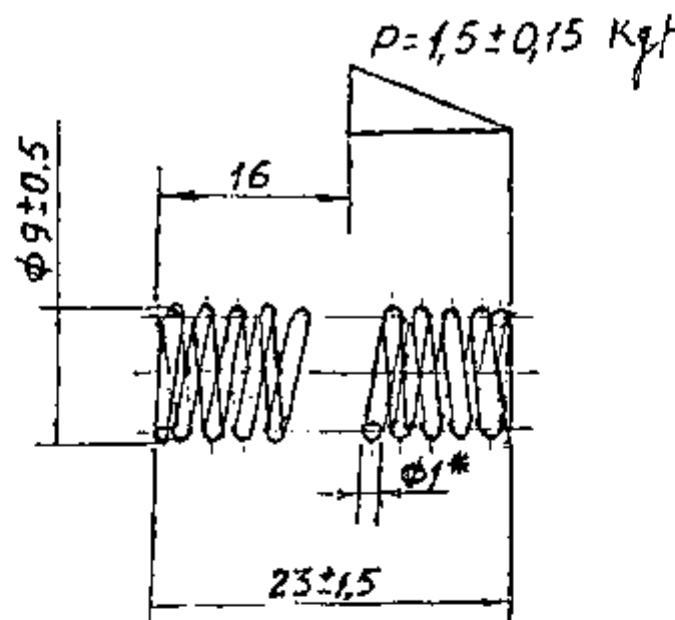
1. Shear modulus is $G^* = 8000 \text{ kgf/mm}^2$
2. Tangential twisting stress (maximum) is $\tau^* = 39,4 \text{ kgf/mm}^2$
3. Total length of spring is $L^* = 785 \text{ mm}$.
4. Number of working coils is $n = 10$.
5. Complete number of coils is $n_1 = 12 \pm 0,5$.
6. Direction of winding is right-hand.
7. Deviation of the generatrix from the line perpendicular to the butt ends should not exceed $1,5 \text{ mm}$.
8. * Dimensions are given for reference.
9. Coating: Chemically parkerized, accelerated, chromatized, oiled with preservation ^{oil} K-17 GOST 10877-76, as per instructions 053.25289.00002 or with varnish KO-815 GOST 11066-74

Ⓐ EQ. MATERIAL:- STEEL WIRE GRADE 3 TO IS: 4454 (Pt. 1) 75.

00820-ICV <i>[Signature]</i> 17 OCT 00	Ⓐ <i>[Signature]</i>	EQ. MATERIAL ADDED.
DCI No. & DATE	ISSUE	AMENDMENTS

APPROVED	<i>[Signature]</i> H VASU	700-37-44	
CHECKED	<i>[Signature]</i> K. Rathak		
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		SPRING	
		WIRE II - 2-5	GOST 9389-75
		WEIGHT	SCALE
		0.0014	2:1
		SHT 1	SHTS 1

B) ALTERNATE MATERIAL:- WIRE Gde 3 TO IS:4454-81 (PT. I)



- 1). Shear-modulus is $G^* = 8000 \text{ kgf/mm}^2$
- 2). Tangential torsional stress is $\tau_s^* = 75 \text{ kgf/mm}^2$.
- 3). Total length of spring^{wire} is $L^* = 305 \text{ mm}$.
- 4). Number of working coils is $n=9$.
- 5). Total number of coils is $n_1 = 11 \pm 0.5$.
- 6). Direction of coiling is arbitrary
- 7). Coating: Chemically parkerized, accelerated, chromated, impregnated with preservation oil K-17, GOST 10877-76 as per instructions 053.25289.00002 or with varnish K-815, GOST 11066-74.
- 8). * Dimensions are given for reference.

00992-ICV <i>Sharma</i> 30 MAR 05	© <i>H.K.</i>	DS CAT PART No. ADDED. & NOMENCLATURE AMENDED AS SPRING HELICAL COMPRESSION
00561-ICV <i>Anil</i> 14 MAY 96	B <i>Sh</i>	ALTERNATE MATERIAL ADDED. (1/96 N OF A)
00530-ICV <i>Anil</i> 13 OCT 95	A <i>Sh</i>	WEIGHT WAS 0.04
DC(T) No. & DATE	ISSUE	AMENDMENTS

MATERIAL:- WIRE II - 1 GOST 9389-75

ALL SHARP EDGES & CORNERS TO BE
ROUNDED OF

DRG. NOT TO BE SCALED

SCALE: 2:1

DATE: 13 OCT 95

DRN. *Sharma* WEIGHT: (Kg.) (A)
TCD. 0.04 0.0019

ALL THREADS TO CONFORM
TO SPECIFICATION

TOLERANCE ON DIMENSIONS UNLESS
OTHERWISE SPECIFIED

STAMP OR ETCH, PART NO. MANUFACTURERS
NAME & YEAR OF MFR.

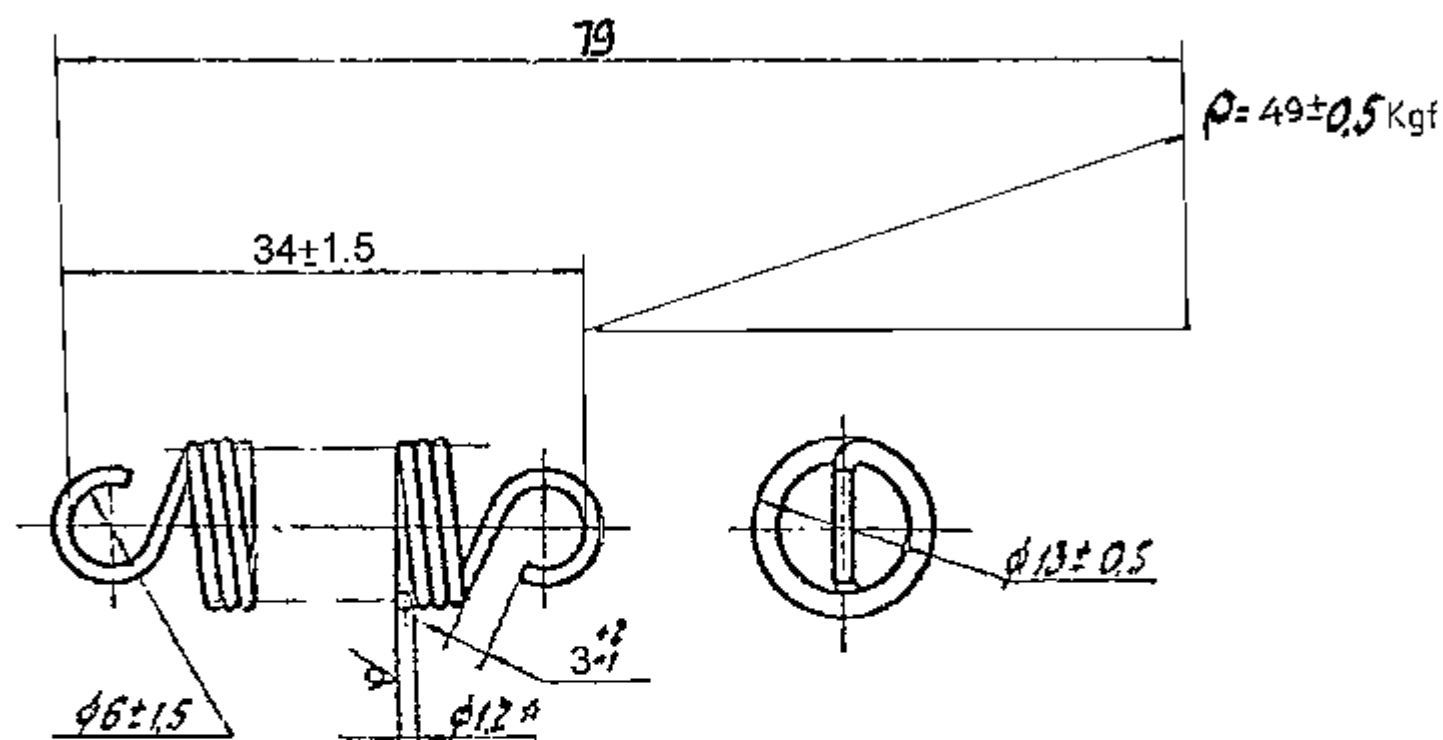
USED ON: 765-08-Sb166

DS CAT PART No.
LV2/ICV 5360-007476

CHD. *Anil*  SPRING HELICAL COMPRESSION

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

700-38-459

R₁₃₂₀ ✓

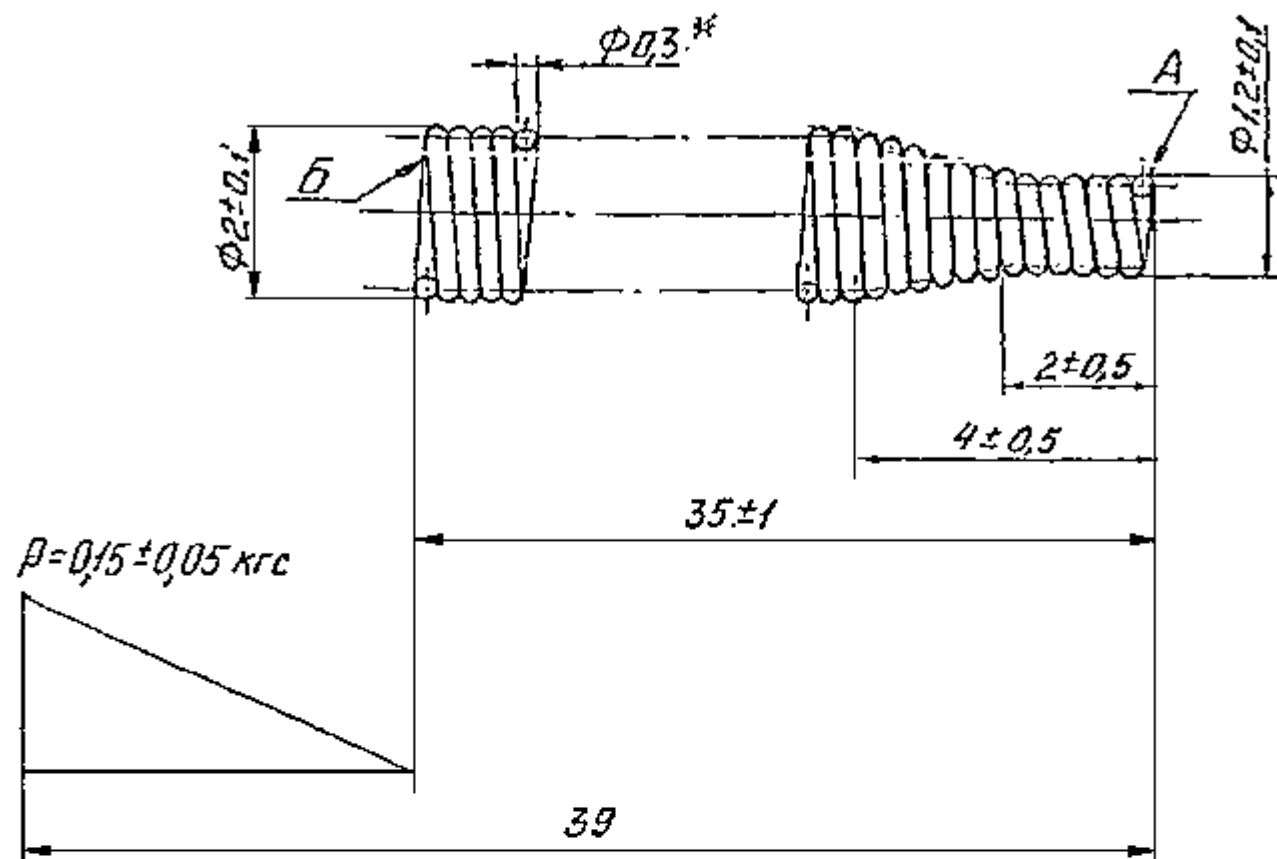
1. Shear modulus $G^* = 8000 \text{ Kgf/mm}^2$.
 2. Tangential stress while twisting $\tau^* = 91 \text{ Kgf/mm}^2$
 3. Total length of the spring $L^* = 690 \text{ mm}$.
 4. Number of working turns $n = 15 \pm 2$
 5. Winding direction is arbitrary.
 6. Displacement of planes of hooks from the spring axis should not exceed 3 mm.
 7. * Dimensions are given for reference.
 8. Coating: Chemically parkerized accelerated, chromitized oiled with preservative oil K-17 GOST 10877-76 as per Instructions 053.25289.00002 or coated with varnish KO-815 GOST 11066-74
- (A) EQ.MATERIAL:- SPRING STEEL WIRE GRADE 3 TO IS: 4454 (Pt-1)75.

00820-ICV	(A)	EQ.MATERIAL ADDED
17-10-2000	Gr	
DCI)No. & DATE	ISSUE	AMENDMENTS

APPROVED	M.VASU	700-38-459	
CHECKED	22.10.2000		
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	SPRING		WEIGHT
			0.006
	WIRE-II-1.2, GOST 9389-76		SCALE
		SHT 1	SHTS 1

700-38-1003

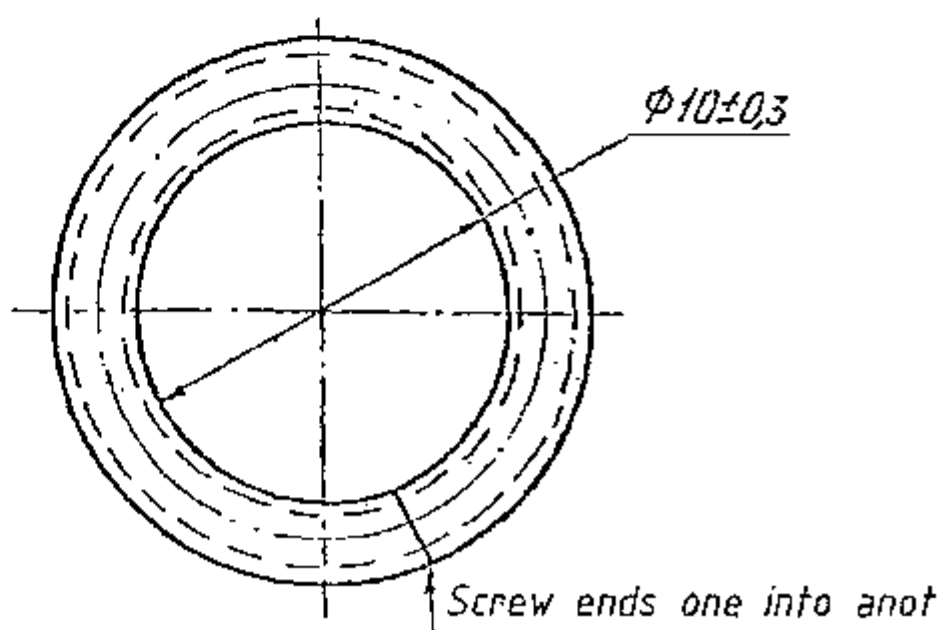
✓



1. Winding should be tight, clearance between turns are not allowed.
2. Direction of winding is right-handed.
3. Total length of the spring $L \approx 580$ mm.
4. The end A of spring should be screwed into the end B so as to form a tight connection. Check lock for its strength using mandrel $\phi 13$ mm.
5. Spring rolled to form ring should lie on flat surface. Clearance not exceeding 2 mm is allowed.
6. When the spring is tested under load no residual deformation may take place.
7. Coating: Chemically, oxidized, oiled.
8. *Dimension is given for reference.

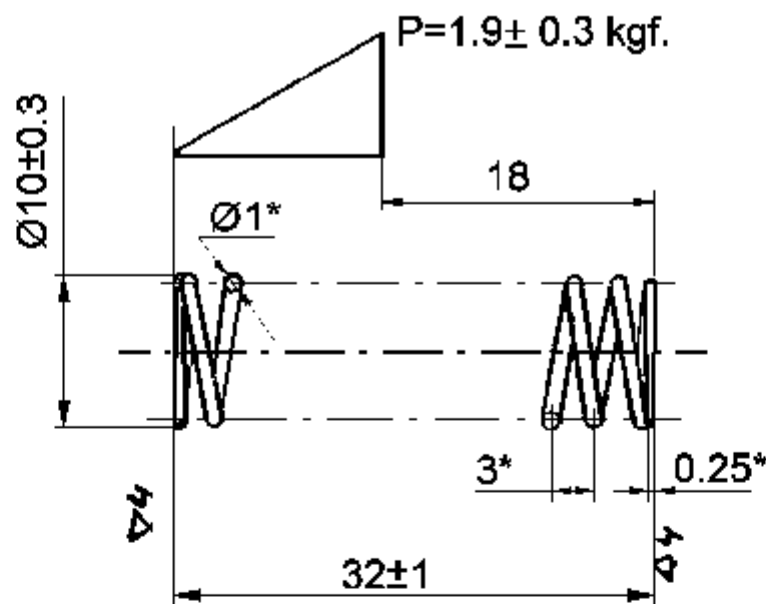
Ⓐ EQ.MATERIAL:- SPRING STEEL WIRE GRADE 3 TO IS: 4454 (Pt-1) 75.

M 5:1



00820-ICV	Ⓐ	EQ.MATERIAL ADDED.
17 OCT 00	ISSUE	AMENDMENTS

APPROVED	M.VASU	700-38-1003	
CHECKED	22 > 20/04/2	SPRING	
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		WEIGHT	SCALE
		0.0003	10:1
WIRE-II-0.3, GOST 9389-75		SHT	SHTS



1. Shear modulus is $G^* = 8000 \text{ kgf/mm}^2$.
2. Tangential twisting stress is $\tau_j^* = 50 \text{ kgf/mm}^2$.
3. Total length of spring is $L^* = 340 \text{ mm}$.
4. Number of working coils $n = 10$.
5. Total number of coils is $n_1 = 12 \pm 0.25$.
6. Direction of winding - Right hand.
7. Machined surfaces of butt-ends should not be less than $3/4$ of a coils.
8. Deviations of generatrix of spring from the line perpendicular to the butt-ends should not exceed 1 mm .
9. * Reference dimensions.
10. Coating: Chemically parkerized, accelerated, chromated oiled with preservation oil K-17 GOST 10877-76 as per instructions 053.25289.00002 or with varnish KO-815 GOST 11066-74.

Ⓐ EQ. MATERIAL: GdS 3 TO IS: 4454 (PART-I) - 81

00733-ICV

Ⓐ

22 SEP 99

DC(I)No.

& DATE

Ⓐ

22 SEP 99

DC(I)No.

& DATE

EQ. MATERIAL ADDED.

ISSUE

AMENDMENTS

APPROVED

CHECKED

700-38-1909

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

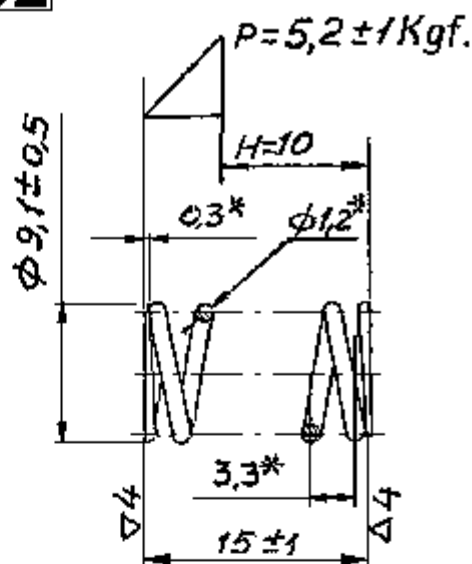
SPRING

WEIGHT SCALE

0.002 2:1

SHT SHTS

WIRE II - 1, GOST 9389-75



1. Shear modulus is $G^*=8000 \text{ Kgf/mm}^2$.
2. Tangential stress as a result of twisting is $\tau^*=80 \text{ Kgf/mm}^2$.
3. Total length of spring^{wire} is $L^*=160 \text{ mm}$.
4. Number of working coils is $n=4$.
5. Total number of coils is $n_1=6 \pm 0,5$.
6. Direction of winding is right-hand.
7. Machined surface of butt-end should not be less than $3/4$ of a coil.
8. Deviation of generatrix of spring from the line perpendicular to the butt-ends should not exceed 0.6 mm .
9. After the spring is three times compressed to dimension H , residual deformation is not allowed.
10. * Dimensions are given for reference.
11. Coating: Chemically parkerized, accelerated, chromatized, impregnated with preservation oil K-17 GOST 10877-76 as per Instructions 053.25289.00002 or with varnish KO-815 GOST 11066-74.

(A) EQ. MATERIAL: SPRING STEEL WIRE GRADE 3 TO IS: 4454 (Pt-1) 75

00820-ICV

(A)

17 OCT 00

DC(I)No.

& DATE

ISSUE

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-38-1910

SPRING

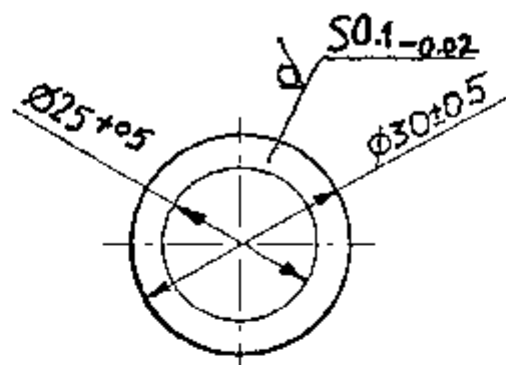
WIRE II - 1.2, GOST 9389-75

WEIGHT SCALE

0.0013 2:1

SHT SHTS

700-40-95



- 1 Alternate material is steel 08kn and 08nc, GOST 1050-74
- 2 Coating Zinc-plated 9 microns thick, chromitized
Remove hydrogen embrittlement

- (A) EQ MATERIAL:- 1 HOT ROLLED CARBON STEEL STRIP St 34-15:1079-73
2 GRADE 'D' OR 'DD' OR EDD TO IS: 1079-73

00805-ICV

(A)

31 AUG 00

DC(I)No.

& DATE

ISSUE

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

CHECKED

700-40-95

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

GASKET

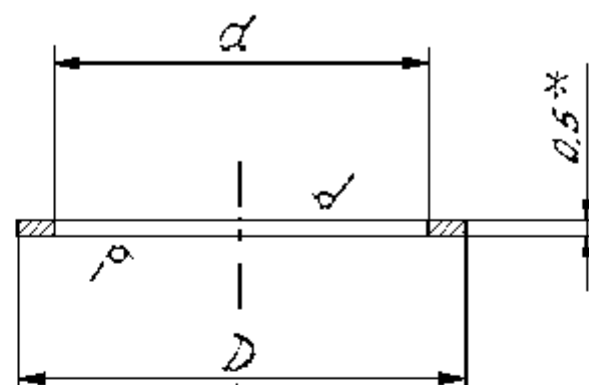
STEEL 10 GOST1050-74

WEIGHT SCALE

0.0008 1:1

SHT SHTS

86/26-07-002



Designation	d,mm	D,MM	Mass, kg.
700-40-97	21 ± 0.5	28 ± 0.5	0.001
700-40-98	25 ± 0.5	30 ± 0.5	0.0015.

1. Alternate material is steel 08, 08kn, 10, 10kn, GOST 1050-74.
2. *Dimension is given for reference.
3. Coating: zinc-plated, 9 microns thick, chromated, Remove hydrogen embrittlement

Ⓐ EQ MATERIAL: 1. COLD ROLLED CARBON STEEL STRIP GRADE 'EDD' TO IS: 4030-73
2. GRADE 'D' 'DD' TO IS: 4030-73

00805-ICV

Ⓐ

31 AUG 00

DC(I) No.

& DATE

ISSUE

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

CHECKED

DSKUNIA

700-40-97/98

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

GASKET

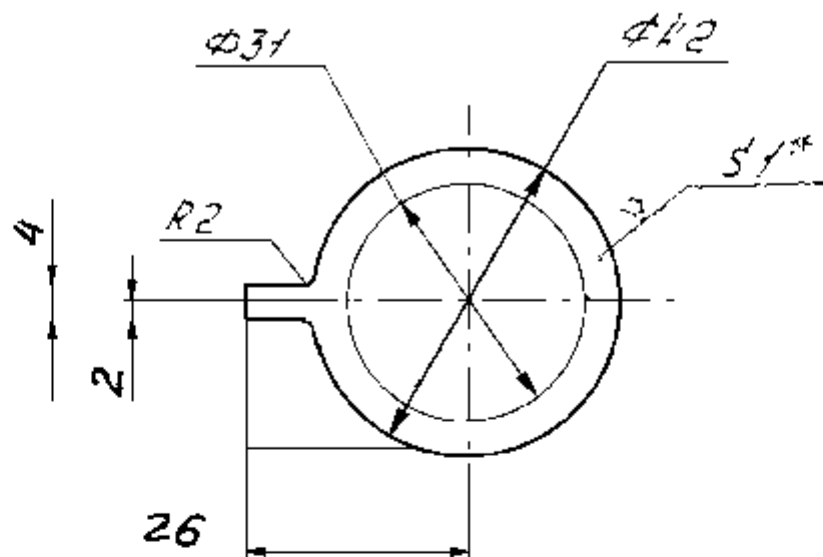
WEIGHT SCALE

SEE
TABLE

SHT SHTS

Sheet 10.5 GOST 19704-74
E.B.F. 08KN GOST 9045-80

700-40-215



1. Unspecified limit deviations of dimensions should be $\pm 0.5\text{mm}$
 2. Alternate material is steel 08nc, 08kn and 10, GOST 1050-74.
 3. * Dimension is given for reference.
 4. Coating: Zinc-plated, 9 microns thick, chromated, Remove hydrogen embrittlement.
- (A) EQ. MATERIAL:- COLD ROLLED CARBON STEEL STRIP GRADE 'D' TO IS: 4030-73.

00805-ICV

(A)

31 AUG 00

DC(I) No. & DATE

ISSUE

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

[Signature]

CHECKED

[Signature] B. MSREDDY

700-40-215

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

WASHER

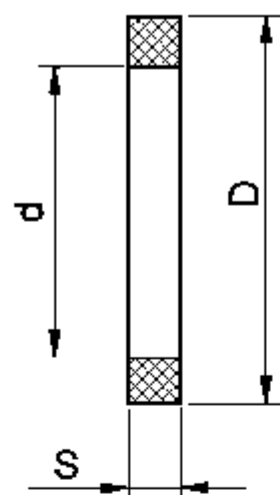
WEIGHT SCALE

0.004 1:1

SHT SHTS

sheet A 1 5 GOST 18904-74
4 - II - 10 kn GOST 16523-70

700-40-260



- 1) OTHER TECHNICAL REQUIREMENTS ARE AS PER
TECHNICAL SPECIFICATION TY 81-04-395-75.
- 2) PART SHOULD CORRESPOND TO APPROVED STANDARD.
DIMENSIONS MM.

DESIGNATION	d		D		S		MASS kg	D S CAT PART No.
	NOMINAL	DEVIATION	NOMINAL	DEVIATION	NOMINAL	DEVIATION		
700-40-260	3	+0.5	15	0.6	1.5	±0.15	0.0003	
-01	5		10	0.5			0.0002	
-02	5		12				0.0002	
-03	5		15				0.0002	
-04	6		12				0.0002	
-05	8	+0.6	14				0.0002	LV2/RCV-5330-014023
-06	10		16				0.0002	" -5330-014024
-07	12		18				0.0002	" -5330-014025
-08	13		22	-0.6			0.0004	" -5330-014026
Ⓑ -09	14		24				0.0005	" -5330-014027
Ⓑ -10	16		22				0.0003	" -5330-014028
-11	16		27				0.0007	" -5330-014029
Ⓑ -12	18		26		2.0	±0.20	0.0005	" -5330-014030
Ⓑ -13	20		25				0.0004	" -5330-014031
Ⓑ -14	20		30				0.0009	
-15	22		32				0.0010	
-16	24		32	0.7			0.0003	
Ⓑ -17	27		35				0.0009	
-18	30		36				0.0007	
-19	30		40	0.7			0.0013	
Ⓑ -20	33	+0.7	45				0.0017	
-21	37		46				0.0014	
-22	40		48				0.0013	

DESIGNATION	d		D		S		MASS kg	D S CAT PART No.
	NOMINAL	DEVIATION	NOMINAL	DEVIATION	NOMINAL	DEVIATION		
-23	42	+0.7	52		2.0	±0.20	0.0018	
-24	45		55				0.0018	
-25	45		66				0.0044	
-26	50		56				0.0012	
-27	50		60	1.0			0.0020	
-28	52	+1.0	62				0.0021	
-29	66		72				0.003	
-30	68		78				0.0027	
-31	76		85				0.0027	
-32	95		125				0.012	

- Ⓐ EQ. MATERIAL:- VULCANIZED FIBRE SHEET AS PER IS:4820-68
- Ⓑ FOR SHEET THICKNESS ABOVE 1.5 mm.
- Ⓒ IS:4819-68 FOR THICKNESS UP TO 1.4 mm

COMPRESSED ASBESTOS
FIBRE GDE. 0/1 TO IS:2712.

NEAREST EQ. MATERIAL
FIBRE BOARD GDE. KR Ø Ⓐ
GOST 14613-69.

ORGL MATERIAL:-

ALL SHARP EDGES & COR-
NERS TO BE ROUNDED OFF

DRG. NOT TO BE SCALED

SCALE: SEE TABLE

DATE: 17-4-97

DRN.

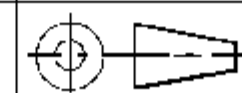
WT :- (Kg)

TCD.

SEE TABLE

CHD

APPD



GASKET

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

00867 18-2001	Ⓒ IS:4819-68 WAS IS:419-68
00829 15-10-2001	Ⓑ SHEET THICKNESS ABOVE 1.5 mm FOR IS:4820-68 & IS:419-68 FOR THICKNESS UP TO 1.4 mm
00-110- 1CV 4-4-2000	Ⓐ EQ. MATERIAL ADDED
00605 15-10-97	DRAWING REVISED AND RETRACED. (2/97 N OF A)
DC(1)No. & DATE	ISSUE AMENDMENTS

ALL THREADS TO CONFORM
TO SPECIFICATION

TOLERANCE ON DIMENSIONS
UNLESS OTHERWISE
SPECIFIED

STAMP OR ETCH, PART No.
MANUFACTURER'S
NAME & YEAR OF MFR.

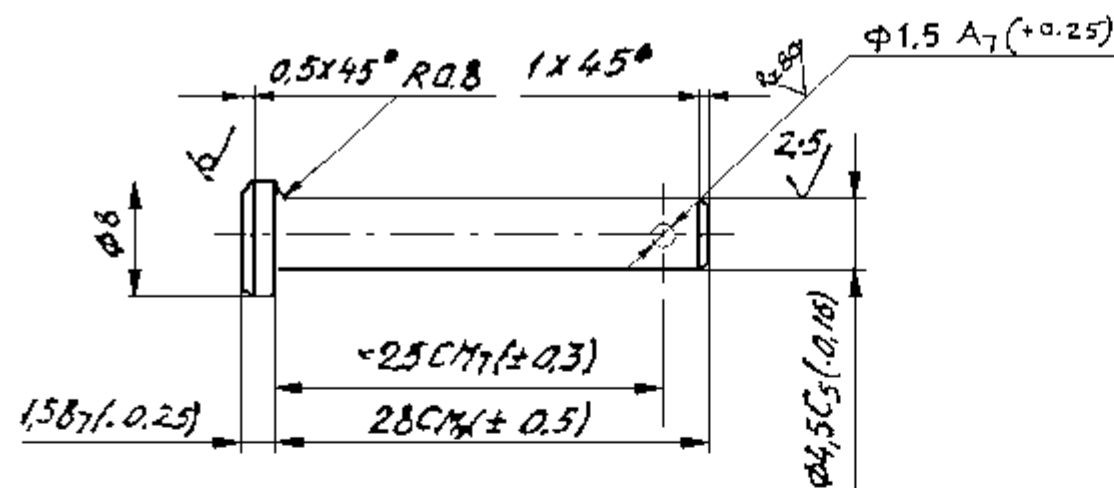
USED ON:

700-40-260

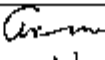
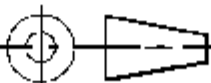
DS CAT No.

700-47-217

Rz 40 ✓ (✓)



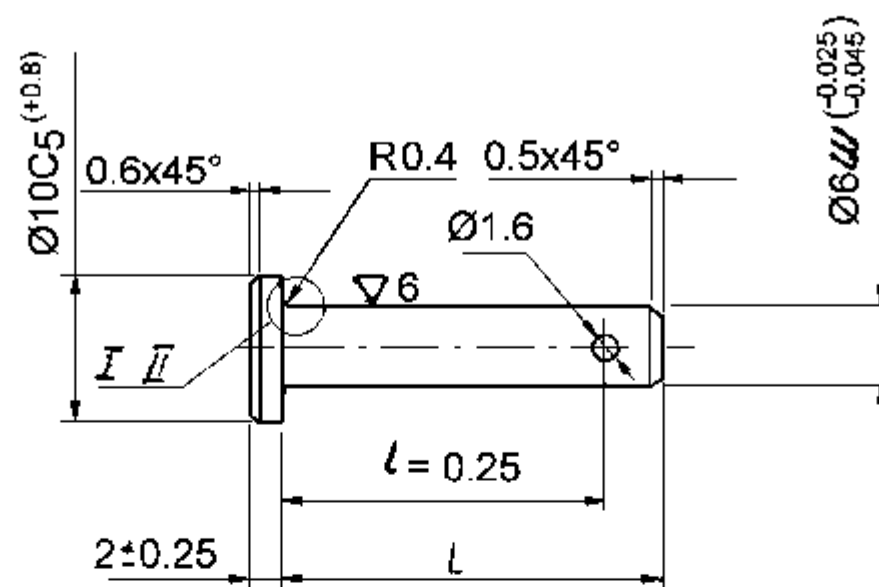
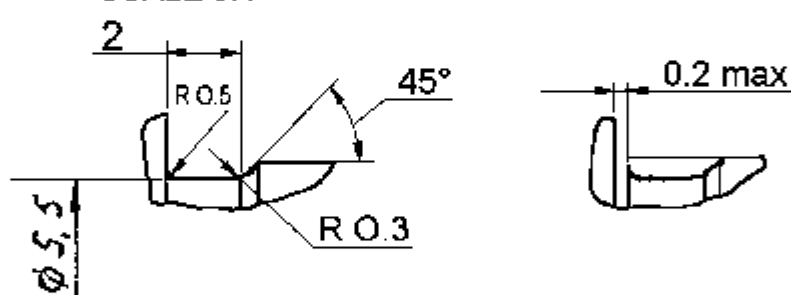
1. HB 302 to 255 (ϕ 3.5 to 3.8).
2. Alternate material is Steel 40X and 38 XC (40CX), 45X, GOST 4543 - 71.
3. * Dimension is given for reference
4. Coating : Chemically, phosphatized, Chromatized or chemically, Oxidized, oiled
Technical requirements are as per GOST 9.301 - 78.
EQUIVALENT MATERIAL : 42 Cr 4 MO2 TO IS : 5517 -93 'U' OR 'V'
CONDITION WITH ISOTHERMAL HEAT TREATMENT.
CASE HARDENED 37 TO 41 HRC.

NEAREST EQ. MATERIAL			00877-ICV		DRAWING REVISED. RETRACED.AND DS CAT No. ADDED.
			 11 SEP 01		
ORGL MATERIAL ROUND 8-5 GOST 7417-75 BAR 38xA-B GOST 1051-73			DC(I)No. & DATE	ISSUE	AMENDMENTS
ALL SHARP EDGES & COR- NERS TO BE ROUNDED OFF			ALL THREADS TO CONFORM TO SPECIFICATION		STAMP OR ETCH, PART No. MANUFACTURER's NAME & YEAR OF MFR.
DRG. NOT TO BE SCALED					
SCALE: 2:1			TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED		USED ON:- 675-56-Sb5 765-08-Sb6, 675-08-Sb2 765-Sb116, 675-Sb114
DATE : 11 MAY 01					
DRN.		WT :- (Kg) 0.004	700-47-217		DS CAT No. LV2/RCV - 5315-006224
TCD.					
CHD	 		PIN		
APPD					
CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)					

NOTE:-
ALL DIMENSIONS ARE IN mm.

700-47-358

▽3 (▽)

I
SCALE 5:1
ALTERNATEII
SCALE 5:1

DESIGNATION	L,MM	l,MM	MASS,Kg.
700-47-358	14±0,43	10	0,0043
-01	16±0,43	12	0,0047
-02	20±0,52	16	0,0056
-03	25±0,52	21	0,0067
-04	35±0,62	30	0,010

© DS CAT No. LV2/ICVS-5315-0252278.

TECHNICAL CONDITIONS

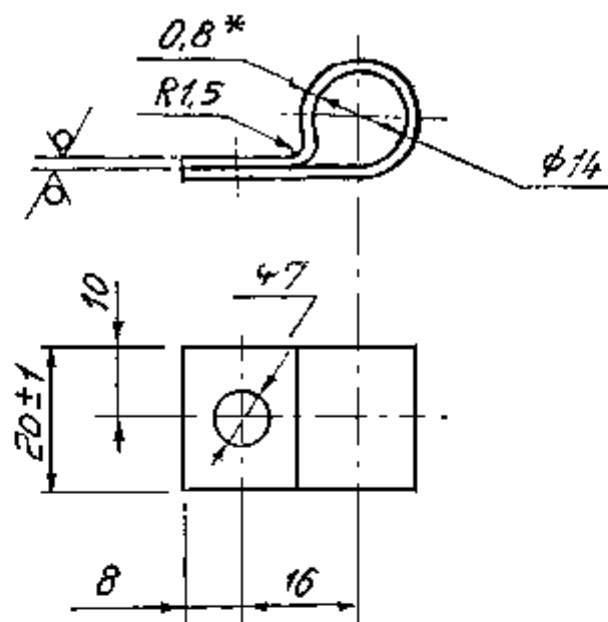
- HB 321 to 228 (Ø3.4 to 4.0).
- Alternate material is 38XC, 40X, 40XC, 45X, GOST 4543-71.
- Unspecified limit deviations of dimensions are as follows:
For holes -as per A₇ and
for shafts -as per B₇
- Displacement of holes from axis of rod should not exceed 0.3mm
- Coating: Zinc-plated, 9 microns thick, chromated
Remove hydrogen embrittlement.

Ⓐ 6. Equivalent material is 40Cr4 Mo3 to IS:5517.

Ⓑ EQ.MATERIAL:- 40 Cr 1 Mo 2B TO IS: 5517.

01065-ICV 8 OCT 09	Ⓒ	DS CAT No. LV2/ICVS 5315-0252278 ADDED & NOMENCLATURE 'AXLE' AMENDED AS PIN STRAIGHT HEADED AGAINST DRG No.700-47-358
00820-ICV 17 OCT 00	Ⓑ	EQ. MATERIAL ADDED.
00321-ICV 11 FEB 92	Ⓐ	NOTE FOR EQUIVALENT MATERIAL ADDED.
DCI No. & DATE	ISSUE	AMENDMENTS

APPROVED		700-47-358	
CHECKED			
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		AXLE	
		38xA GOST 4543-71	
		WEIGHT	SCALE
		SEE TABLE	2:1
		SHT	SHTS



1) Alternate material is steel 08, 10, 10kn, GOST 1050-74

2) Unspecified limit deviations of dimensions should be ± 0.5 mm.

3) * Dimension is given for reference.

4) Coating: Zinc-plating, 9 microns thick, chromitized
Remove hydrogen embrittlement.

① EQ MATERIAL:- COLD ROLLED CARBON STEEL STRIP GRADE 'EDD
RIMMED STEEL TO
IS:4030-73.

00805-ICV

①

31 MAR 2000

DC(I)No.
& DATE

EQ. MATERIAL ADDED.

ISSUE

AMENDMENTS

APPROVED

31.03.2000
P. S. REDDY

CHECKED

700-54-14

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

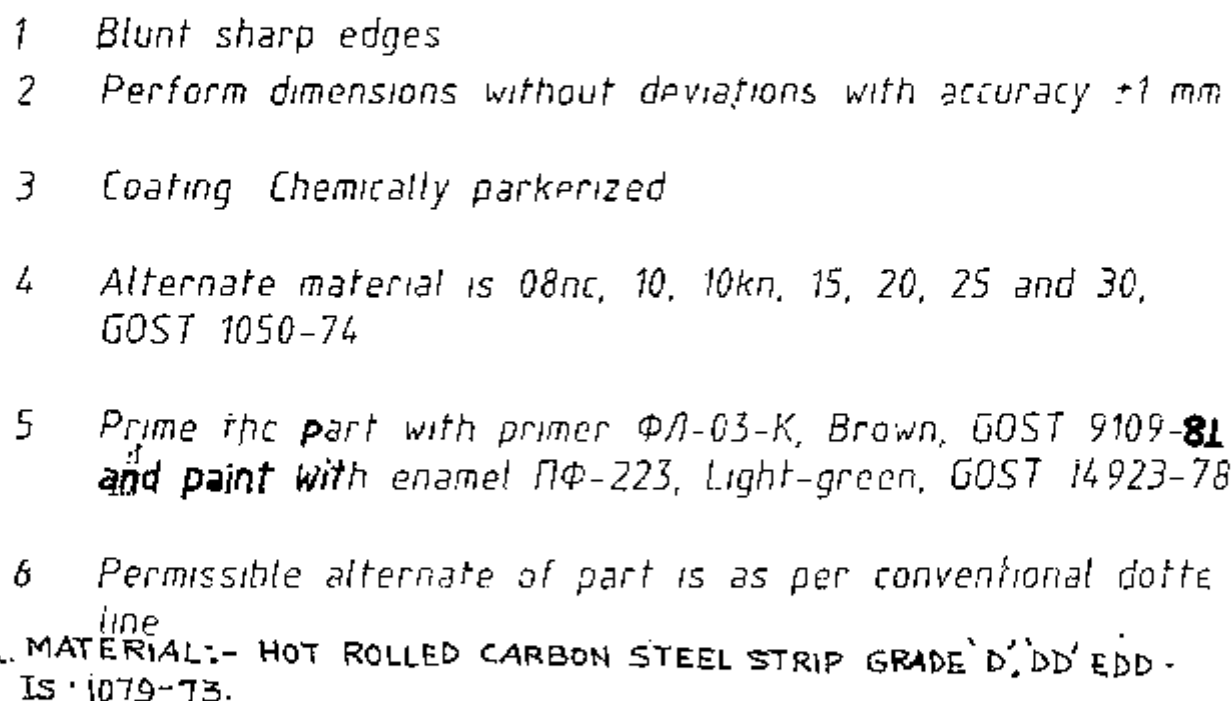
CLAMP

WEIGHT SCALE

0.013 1:1

SHT SHTS

Sheet A-0.8 GOST 19904-74
II-BF-08Kn GOST 9045-80



A

EQ. MATERIAL ADDED.

ISSUE

AMENDMENTS

14. NGC
B. INSLEY

700-54-112

CLAMP

WEIGHT SCALE

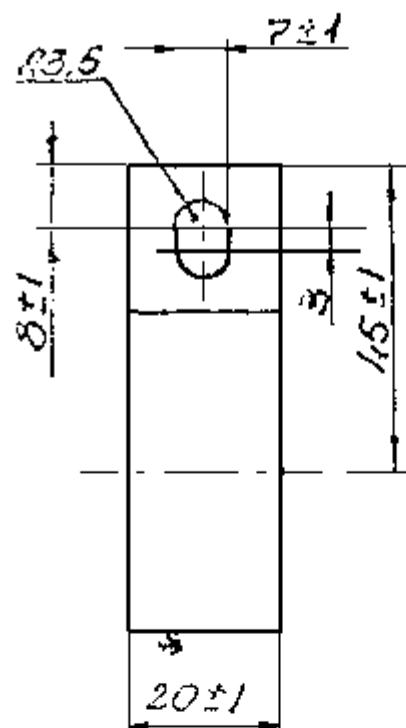
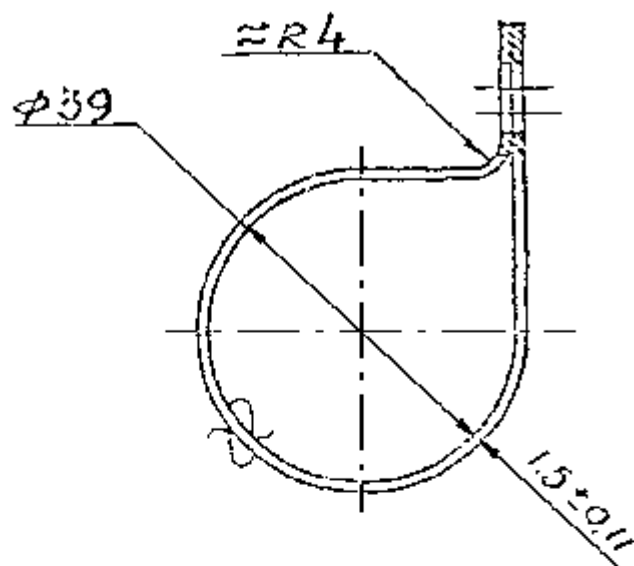
0.024 1:1

SHT SHTS

08 кл GOST 1050-74

700-54-182

A (V)



- 1 Alternate material is 15, 20, GOST 1050-74
- 2 Unspecified limit deviations of dimensions should be 0.5 mm
- 3 Coating Zinc-plating, 9 microns thick, chromated
Remove hydrogen embrittlement
- 4 Check dimensions in pressed condition, as a result of checking, ends can be spread
- 5 Places of the ends contact may be free from coating

(A) EQ MATL:- HOT ROLLED CARBON
STEEL STRIP GRADE 'D', 'DD'
OR EDD TO IS: 1079-73

01002-ICV

06 AUG 05

00805-ICV

31 AUG 2000

DC(I)No.

& DATE

B

A

ISSUE

DS CAT PART No. ADDED.

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

CHECKED

APPROVED
BY ASREDDY

700-54-182

DS CAT PART No. B
LV2/ICVS 5340-017035

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

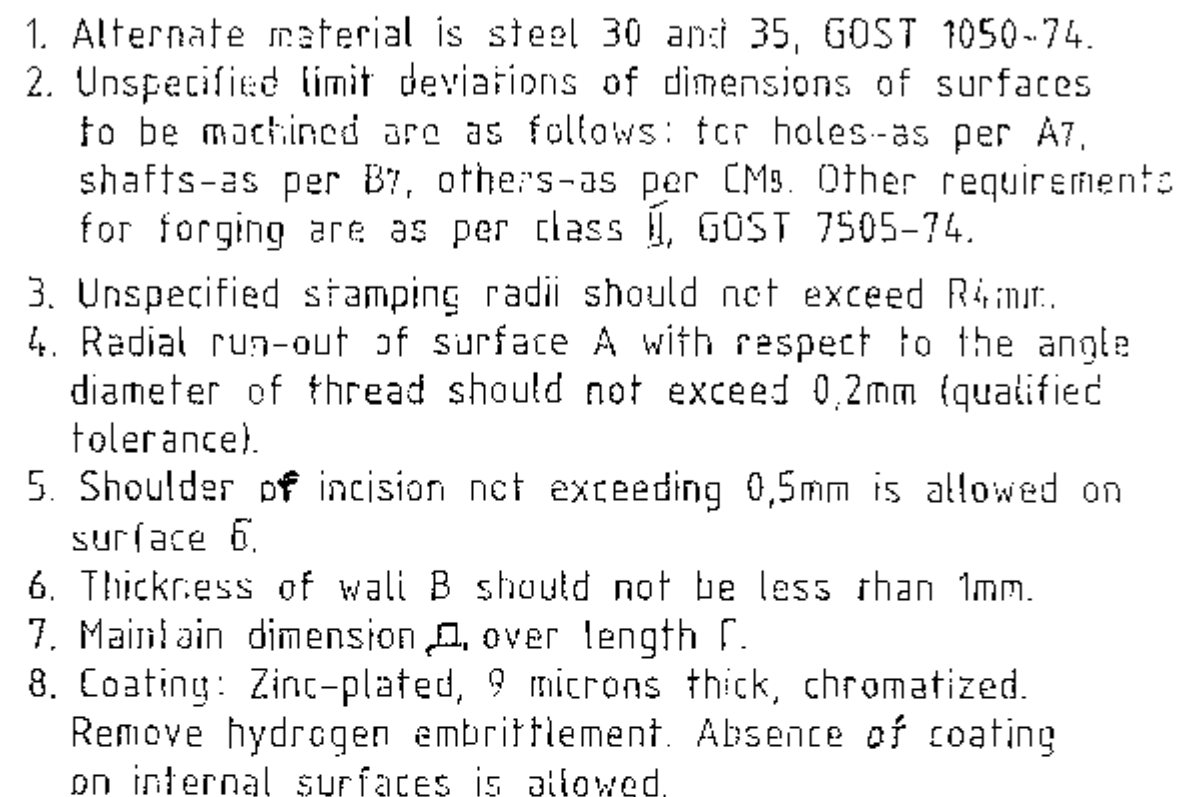
CLAMP

10 GOST 1050-74

WEIGHT SCALE

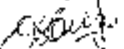
0.04 1:1

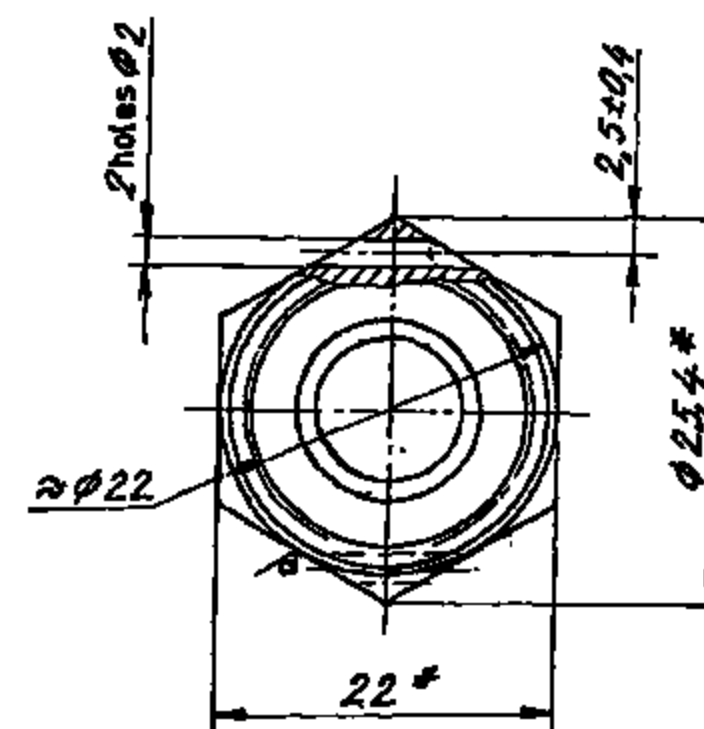
SHT SHTS



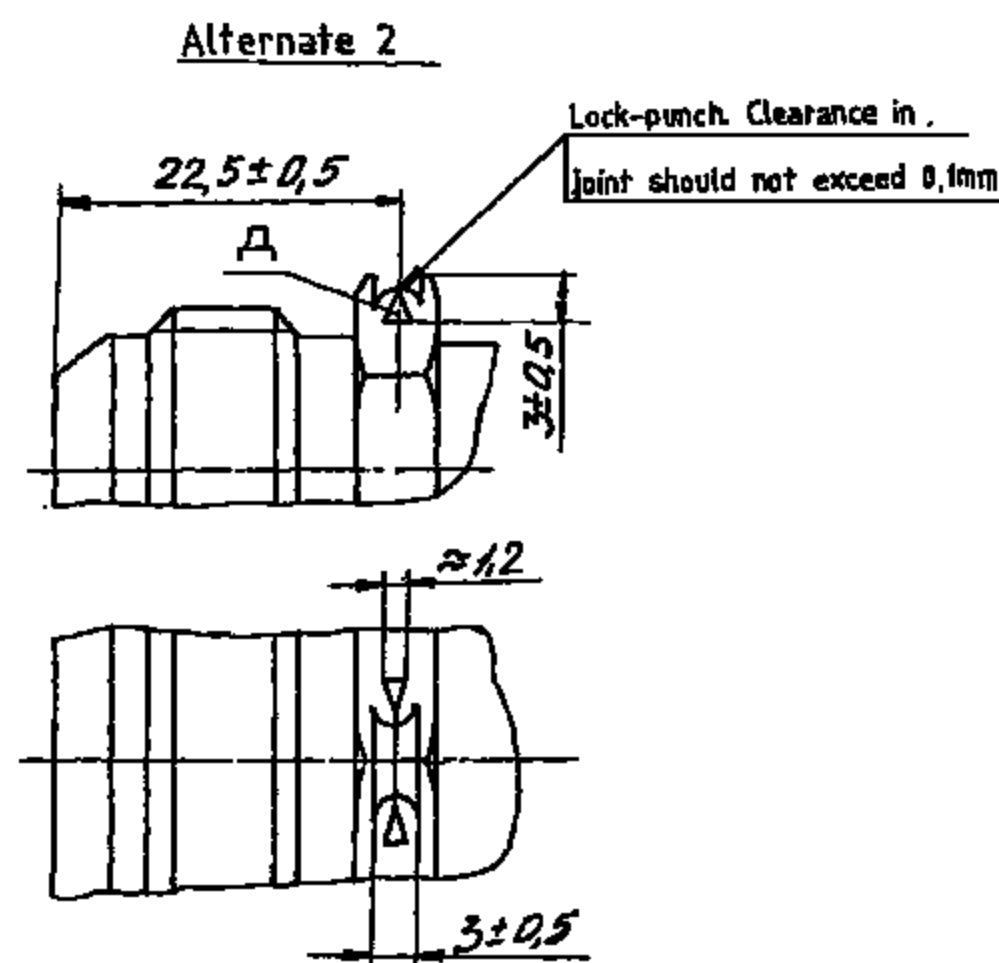
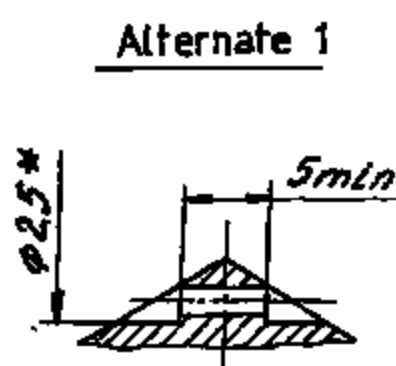
(A) EQ. MATERIAL:- WROUGH STEEL C30, C35 OR C40 TO IS: 5517 (STEEL FORGING).

008051CV  31 AUG 01	(A)	EQ. MATERIAL ADDED.
DC()No. & DATE	ISSUE	AMENDMENTS

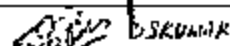
APPROVED	 M. VAS	700-56-18			
CHECKED	 S. K. VAS				
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		ELBOW		WEIGHT	SCALE
				0.11	1:1
			SHT SHTS		
		STEEL 20 GOST 1050-74			

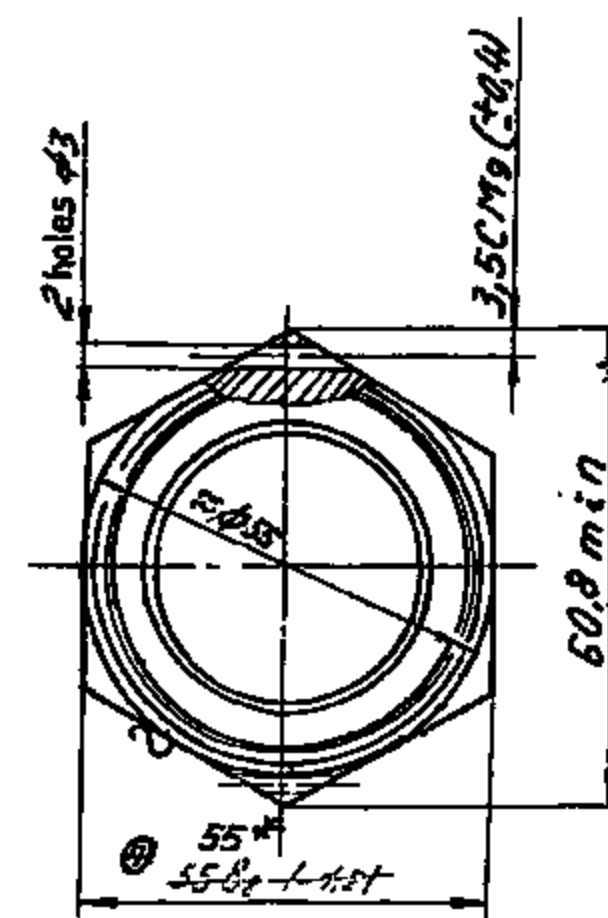


1. Unspecified limit deviations of dimensions are as follows: For holes-as per A7, for shafts-as per B7, others-as per CM7.
 2. Incompleteness of thread, should not exceed 2mm.
 3. Radial run-out of surface A with respect to the angle diameter of thread 1 should not exceed 0,06mm (qualified tolerance).
 4. Radial run-out of surface B with respect to the angle diameter of thread B should not exceed 0,06mm.
 5. Hexahedron faces may be rounded off with $\phi 25B7 (-0,52)$.
 6. Rod not less than 1mm in diameter should pass through hole A.
 7. * Dimensions are given for reference.
 8. Coating: Anodic oxidation, chromatizing Do not check the coating on internal surfaces.
- ④ EQ. MATERIAL: AL ALLOY Gdc 24345 To IS: 733-83.
- ⑤ EQ. MATERIAL: AL EXTRUDED BAR GRADE 24534 To IS: 733-83

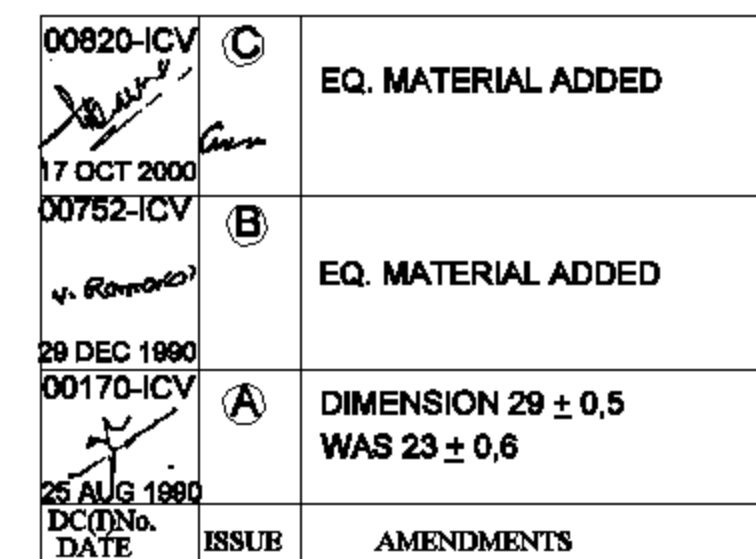


00820-ICV <i>17 OCT 2000</i>	(B)	EQ. MATERIAL ADDED
00752-ICV <i>v. 2000</i> 20 DEC 99	(A)	EQ. MATERIAL ADDED
DC(I)No. DATE	ISSUE	AMENDMENTS

APPROVED		700-57-48		
CHECKED		UNION	WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			0.029	2:1
			SHT 1 SHTS 1	
		Bar ADETU 22n FOCT 21488-76		



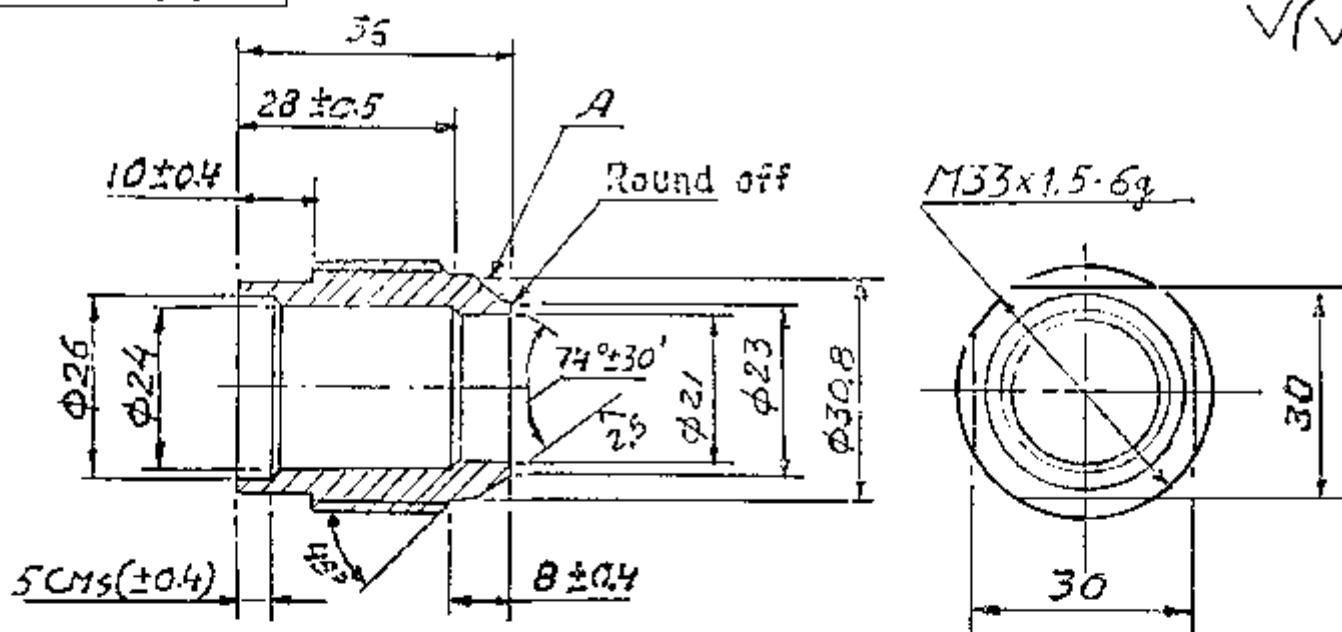
1. Unspecified limit deviations of dimensions are as follows: for holes—as per A7, for shafts—as per B7.
 2. Radial run-out of surface A, with respect to the angle diameter of thread 5, should not exceed 0,08mm (qualified tolerance).
 3. Radial run-out of surface B, with respect to the angle diameter of thread F should not exceed 0,08mm
 4. Incompleteness of thread 5 should not exceed 2,5mm.
 5. Step not exceeding 0,3mm is allowed on surface A.
 6. Coating: Anodic oxidation chromated.
 7. Rod not less than 1mm in diameter, should pass through hole E
 8. * Dimension is given for reference.
 9. Dimension^{*} may be reduced upto $\phi 34,5$.
- (B) EQ. MATERIAL: AL. ALLOY 6061 24345 TO IS: 733-83 -
- (C) EQ. MATERIAL: AL. EXTRUDED BAR GRADE 24534 TO IS: 733-83



APPROVED		700-57-51		
CHECKED		UNION	WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	BQF W55 П А 16 Т GOST 21488-76		0.15	1:1
			SHT SHTS	

700-57-52

Rz 50/√(√)



1. Alternate material is steel 20 GOST 1050-74.
2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, shafts-as per B7
3. Radial run out of surface A, with respect to angle diameter of thread should not exceed 0.05mm (qualified tolerance)
4. Coating: Zinc-plated, 9 microns thick, chromated
Remove hydrogen embrittlement Internal surfaces may not be coated

(A) EQ. MATERIAL CLASS '3A' TO IS:2004-78

(B) EQ. MATERIAL:- CARBON STEEL BLACK BAR GRADE C20 OR C40 TO IS: 2073-70.

00820-ICV

(B)

EQ. MATERIAL ADDED.

17 OCT 2000

00674-ICV

(A)

EQUIVALENT MATERIAL
ADDED IN THE DRAWING

13 JAN 99

DC(I)No.

& DATE

ISSUE

AMENDMENT'S

APPROVED

CHECKED

700-57-52

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

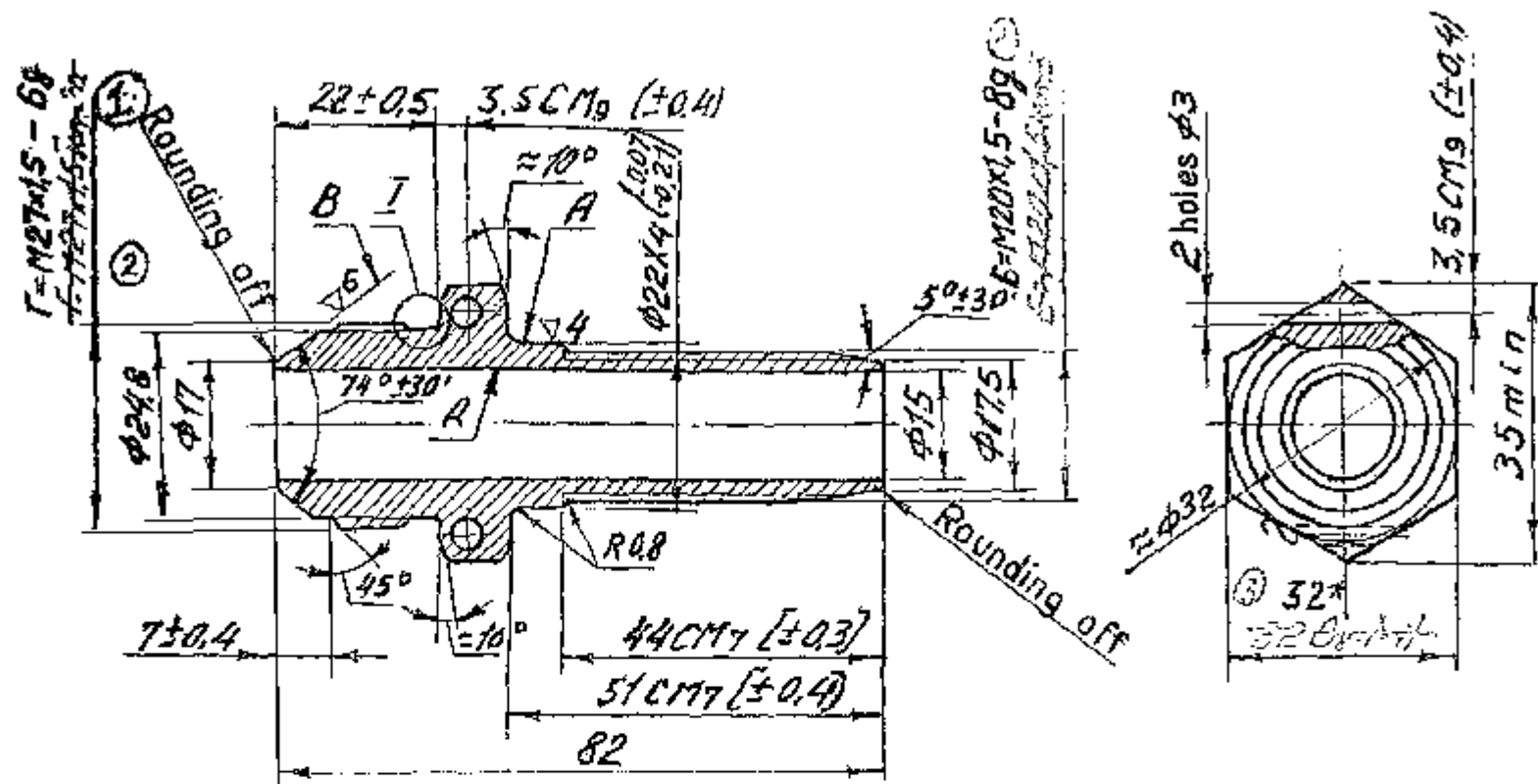
UNION

STEEL 35 GOST 1050-74

WEIGHT SCALE

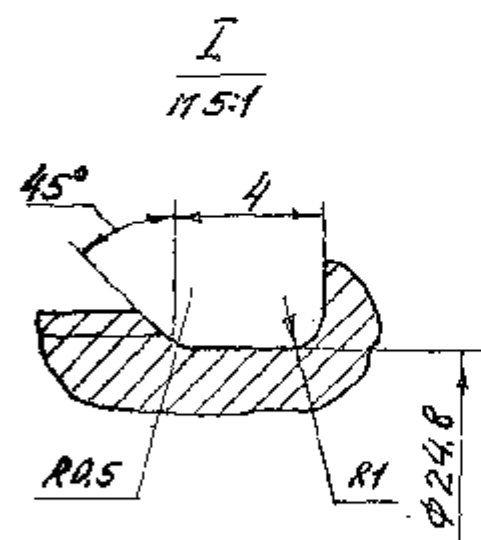
0.035 1:1

SHT SHTS

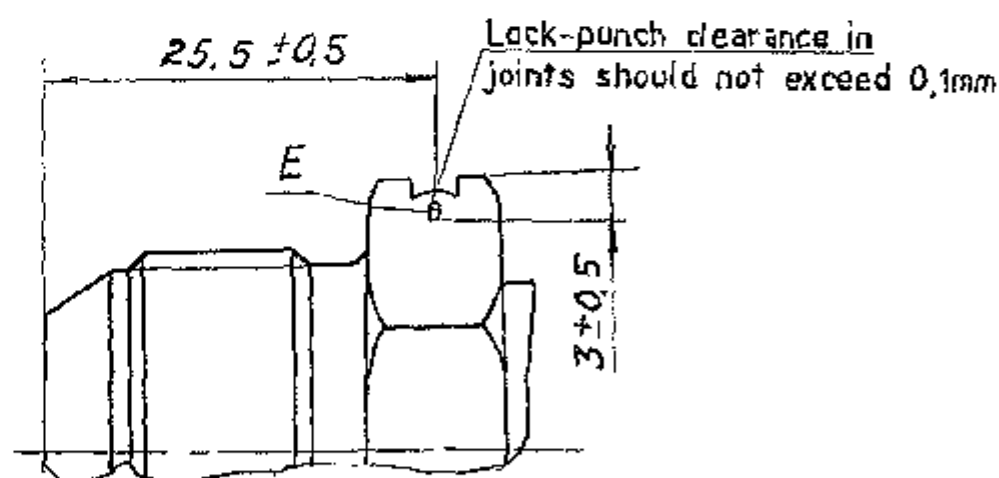


1. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7.
2. Radial run out of surface A, with respect to the angle diameter of thread B should not exceed 0,08mm (qualified tolerance).
3. Radial run out of surface B, with respect to the angle diameter of thread F should not exceed 0,08mm.
4. Incompleteness of thread B should not exceed 2,5mm.
5. Step not exceeding 0,3mm is allowed on surface A.
6. Coating: Anodic oxidation, chromated. Do not check the coating in holes.
7. Rod, diameter not less than 1mm, should pass through hole E.
8. * Dimension is given for reference.

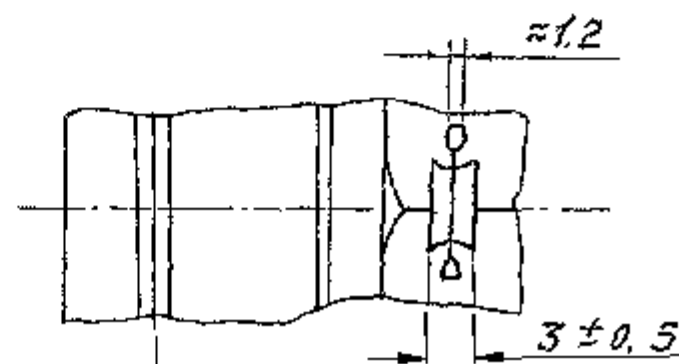
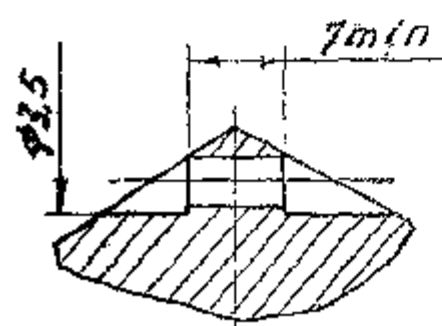
Ⓐ EQ. MATERIAL:- AL. ALLOY EXTRUDED BAR GRADE 24534
TO IS: 733-83.



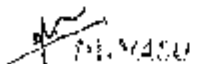
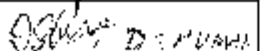
2 Alternate
M2:1

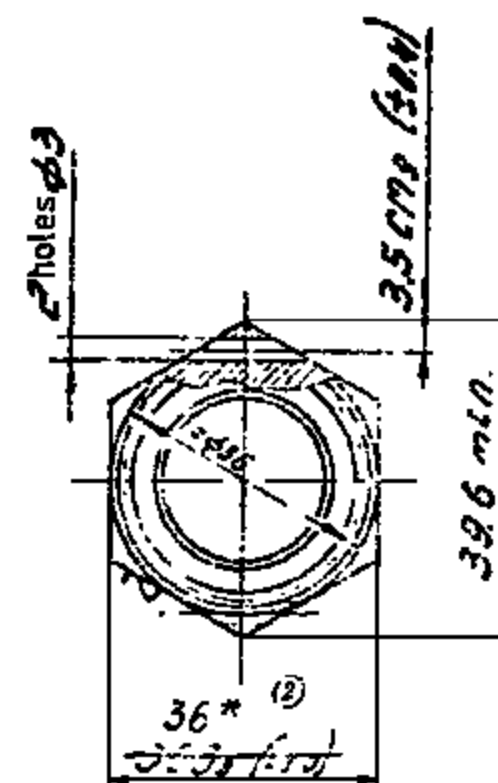
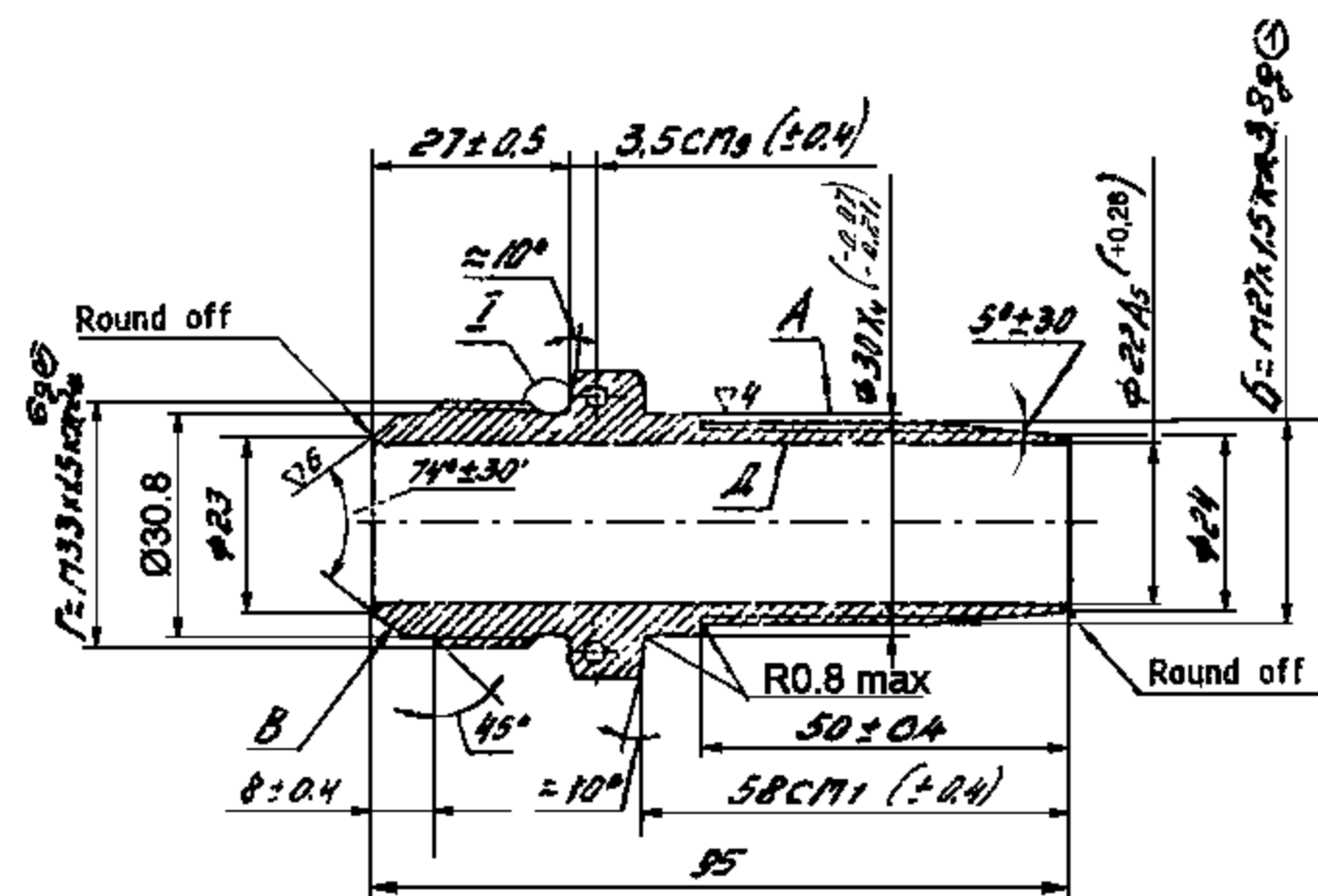


Alternate
ME:1



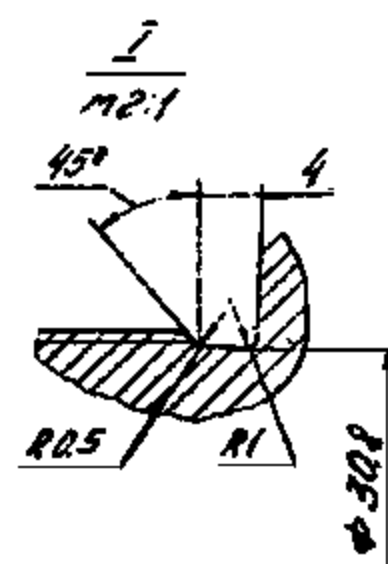
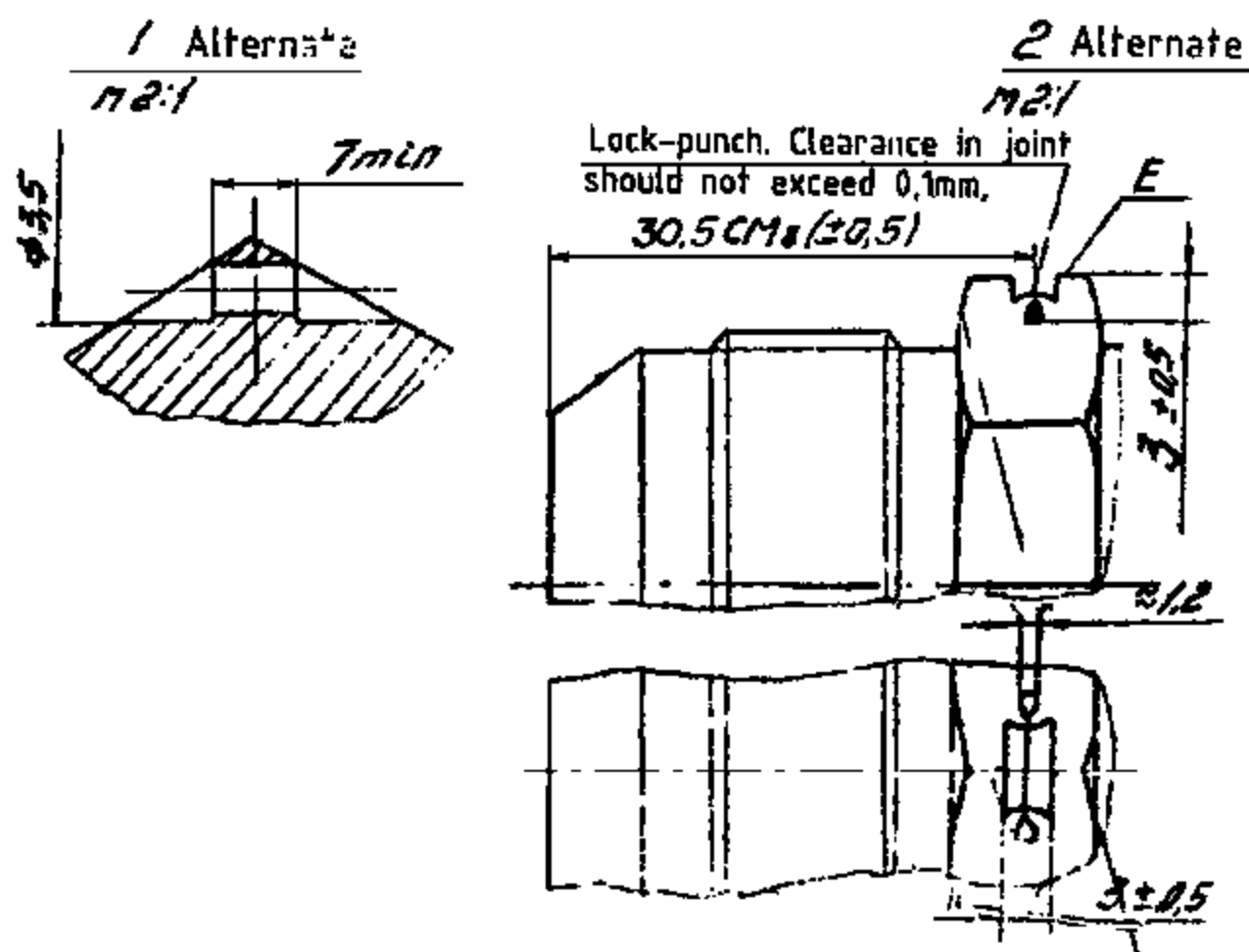
00820-ICV <i>[Signature]</i> 17 OCT 2000	 <i>[Signature]</i>	EQ. MATERIAL ADDED
DC()No. & DATE	ISSUE	AMENDMENTS

APPROVED		700-57-53		
CHECKED		UNION	WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			0.035	1:1
			SHT	SHTS
		BAR 16T 32 n GOST 21488-76		

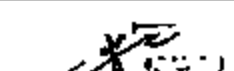


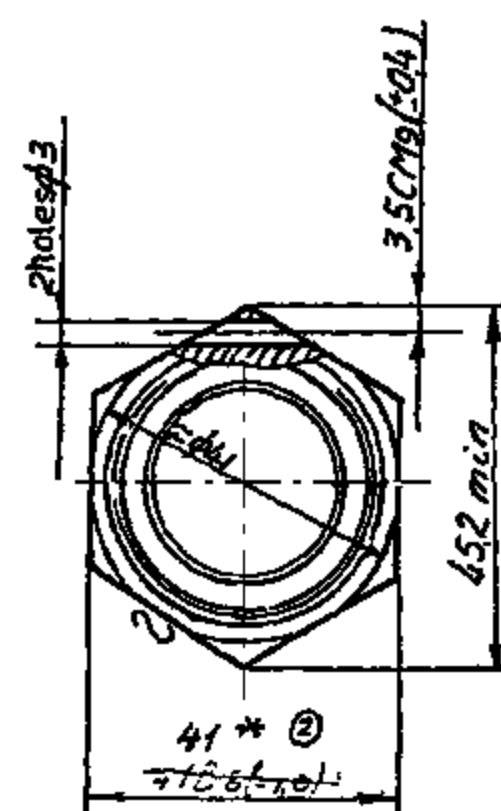
1. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7.
2. Radial run out of surface A, with respect to the angle diameter of thread B should not exceed 0,08mm (qualified tolerance).
3. Radial run out of surface B, with respect to angle diameter of thread A, should not exceed 0,08mm.
4. Incompleteness of thread B should not exceed 2,5mm.
5. Step not exceeding 0,3mm is allowed on surface A.
6. Coating: Anodic oxidation, chromated. Do not check coating in holes.
7. Rod, diameter not less than 1mm should pass through hole E.
8. * Dimension is given for reference.

Ⓐ EQ. MATERIAL:- Gde 24534 TO IS: 733-83



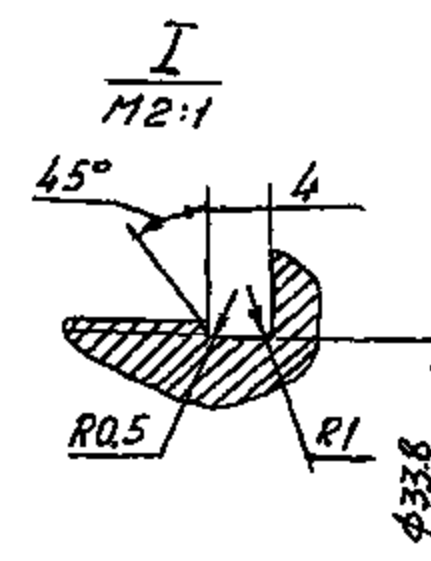
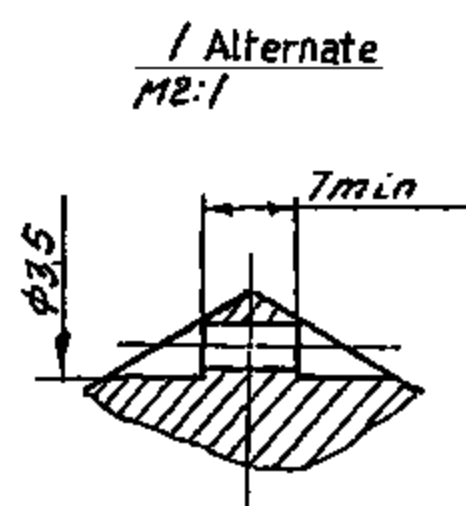
00682-ICV	Ⓐ	Gde 24534 TO IS: 733-83
30 NOV 88	ISSUE	AMENDMENTS
DC(1)No.		
DATE		

APPROVED		700 57-54		
CHECKED		UNION		WEIGHT
CONTROLLERATE OF QUALITY ASSURANCE (ICV)			0.07	1:1
	SHT		SHTS	
	Bar A 16 T U 36 n GOST 21488-76			

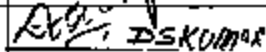


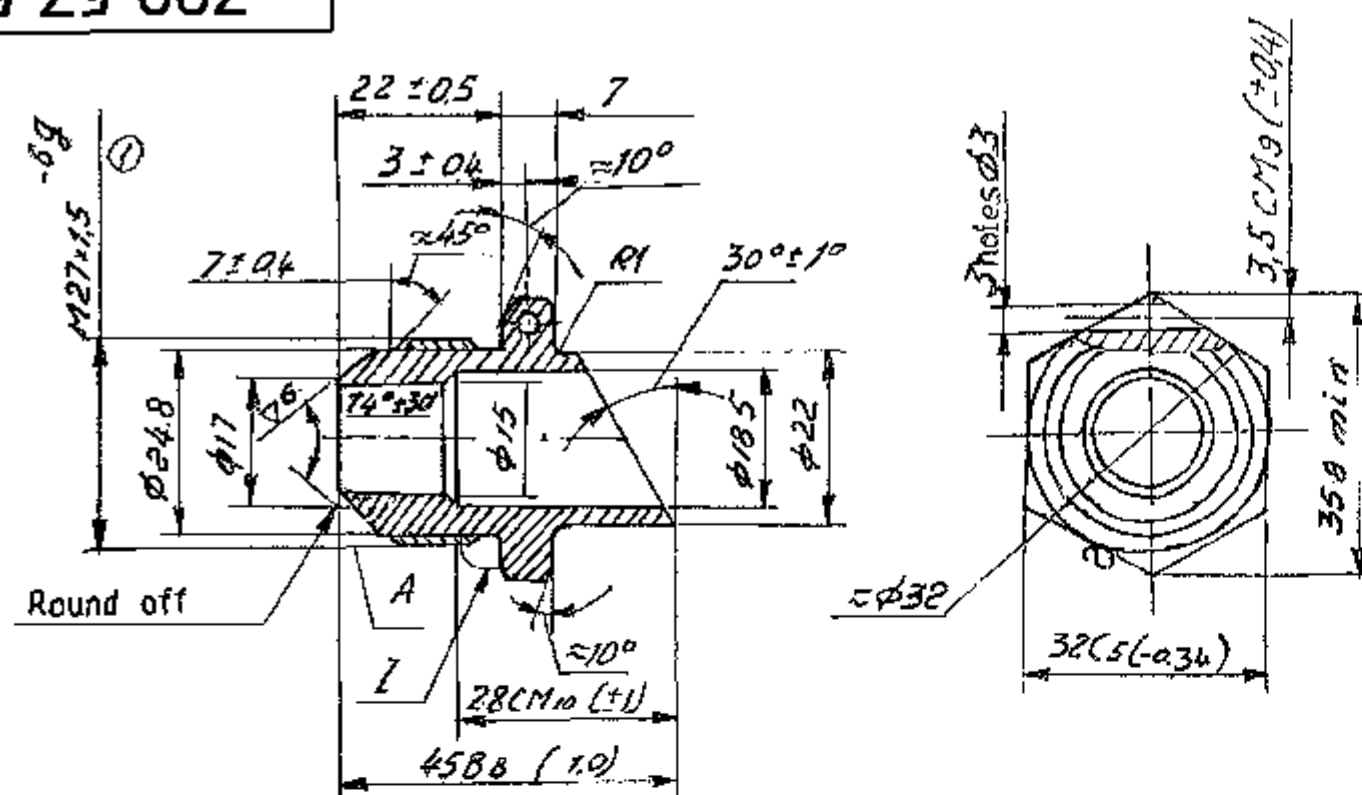
1. Unspecified limit deviations of dimensions are as follows: for holes—as per A7, for shafts—as per B7.
2. Radial run out of surface A, with respect to the angle diameter of thread B should not exceed 0,08mm (qualified tolerance).
3. Radial run-out of surface B with respect to the angle diameter of thread C should not exceed 0,08mm.
4. Incompleteness of thread B should not exceed 2,5mm
5. Thread traces are allowed on surface A.
6. Step not exceeding 0,3mm is allowed on surface E.
7. Coating: Anodic oxidation, chromated.
8. Rod, diameter not less than 1mm, should pass through hole X.
9. * Dimension is given for reference.

(A) EQ. MATERIAL:- AL ALLOY EXTRUDED BAR GRADE 24534 TO IS:733-83.



00820-ICV	(A)	EQ. MATERIAL ADDED
17 OCT 2000		
DC(1)No.	ISSUE	AMENDMENTS
DATE		

APPROVED		700-57-55		
CHECKED		UNION	WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)				0.098 1:1
			SHT	SHTS
		Bar Water Dist FOCT 21488-76		



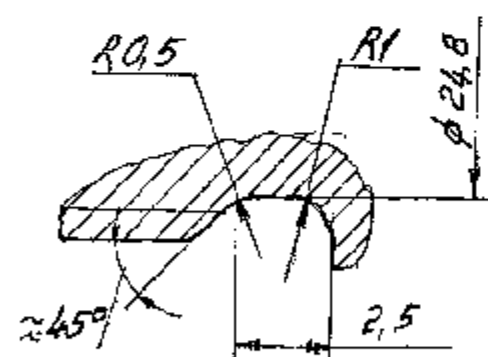
1. Alternate material is 20,45 GOST 1050-74.
2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts B7.
3. Radial run-out of surface A with respect to angle diameter of thread should not exceed 0,05mm (qualified tolerance).
4. Bevel position with respect to the hexahedron is arbitrary.
5. Coating: Zinc plated, 9 microns thick, chromated. Remove hydrogen embrittlement. Do not check coating in holes.
6. Rod, diameter not less than 1mm, should pass through hole 5.

(A) 7. INDIAN EQUIVALENT MATERIAL:- BRIGHT BAR GRADE 3 TYPE 'O' (35 C4) TO IS: 9550-80. OR Q70 M40 TO BS: 970.

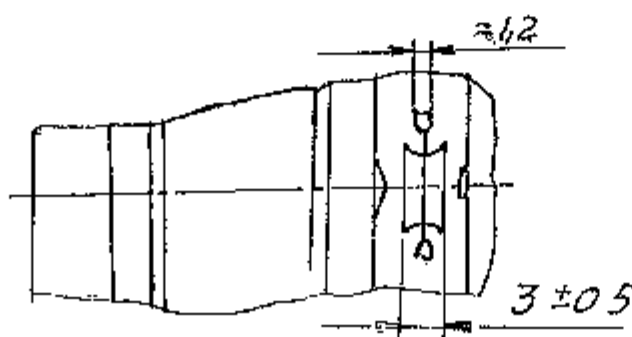
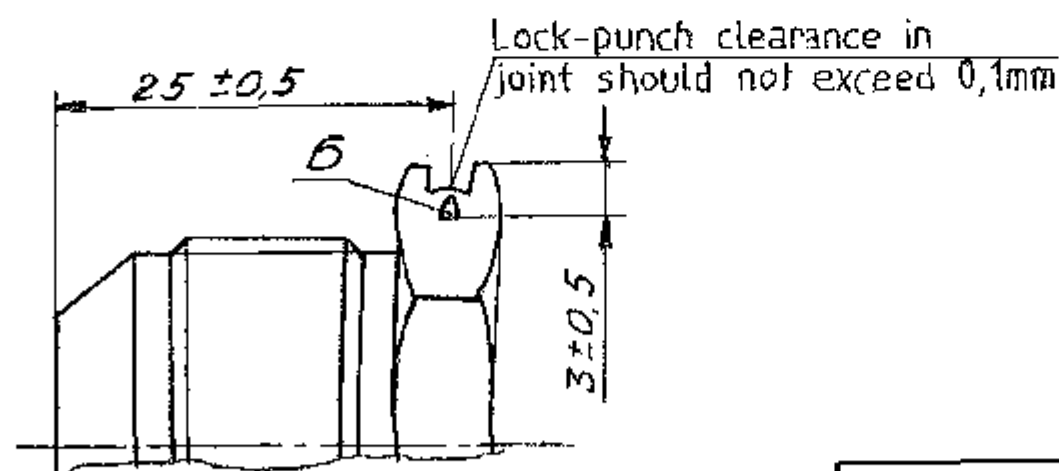
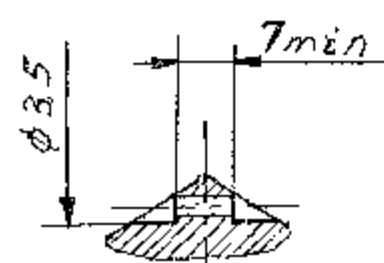
(B) EQ. MATERIAL:- CARBON STEEL BLACK HEXAGONAL BAR GRADE C20 OR C40 TO IS: 2073-70.

I
M5:1

2 Alternate
M2:1



(3) 1 Alternate



00820-1CV 17-10/2000 00450-1CV BA 23 AUG 94 DC (17ND & DATE	(B) Cur	EQ. MATERIAL ADDED.
	(A) BA	IS EQUIVALENT MATERIAL ADDED IN TECH. CONDITION NO.7.
ISSUE		NATURE OF AMENDMENTS
		AMENDMENTS

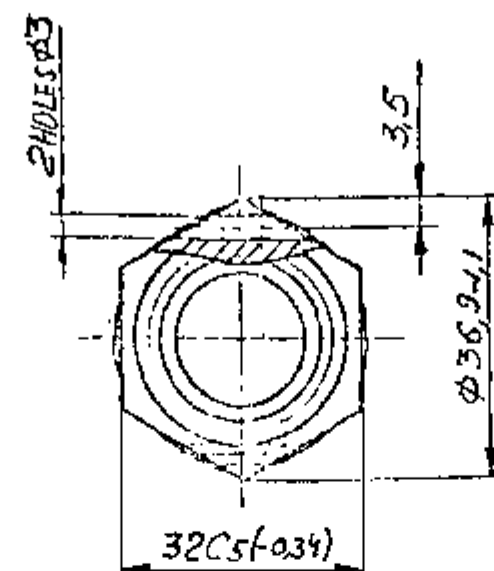
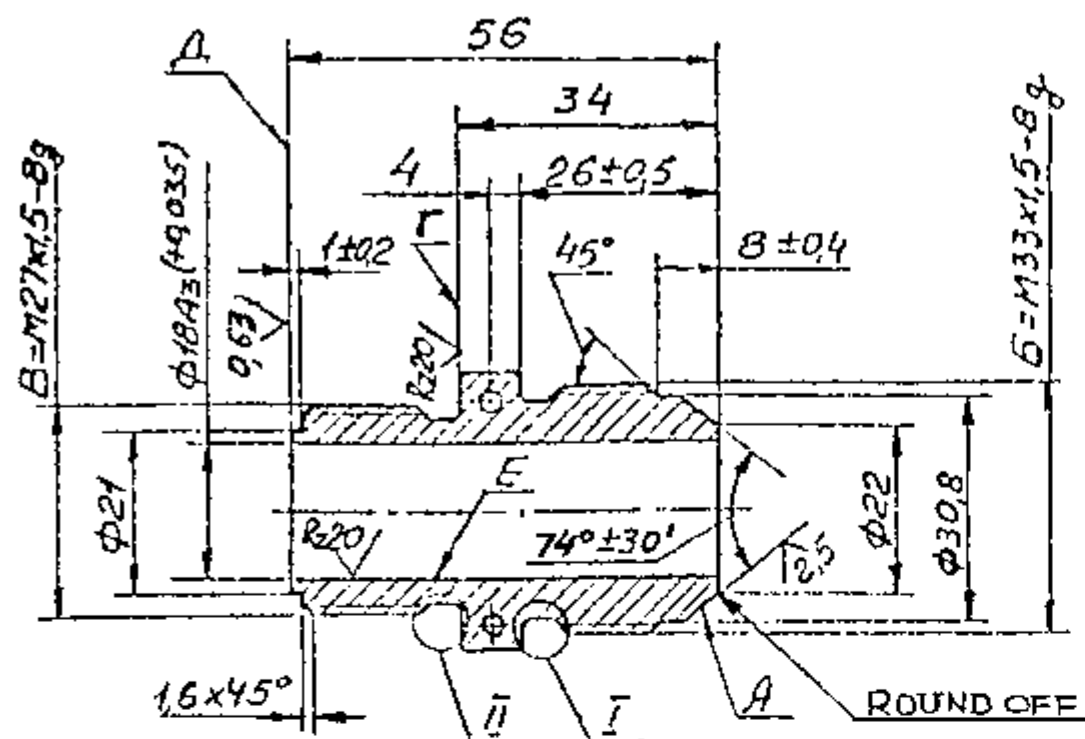
APPROVED *[Signature]*
CHECKED *[Signature]* B. MSREDDY
CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-57-56

UNION

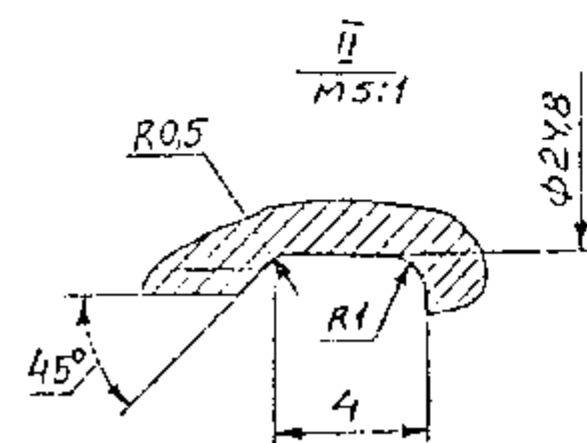
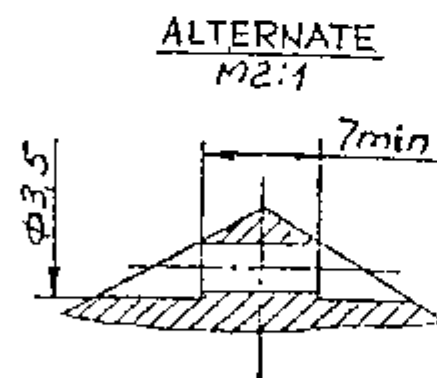
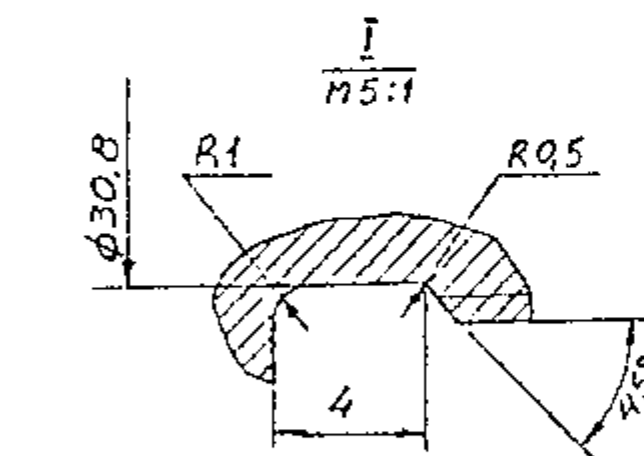
35 GOST 1050-74

WEIGHT	SCALE
0.05	1:1
SHT	SHTS



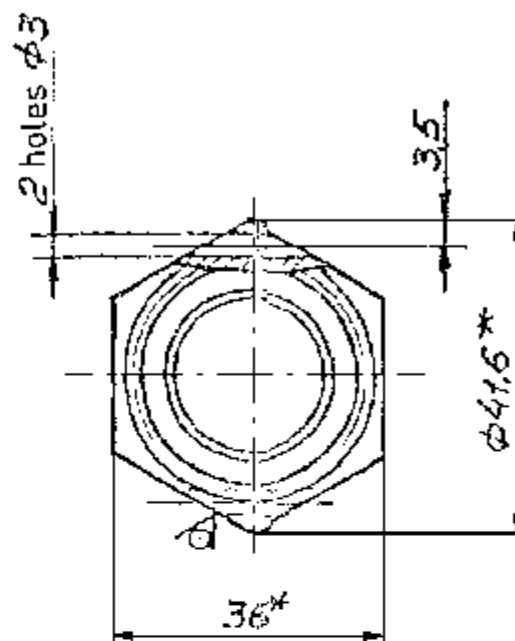
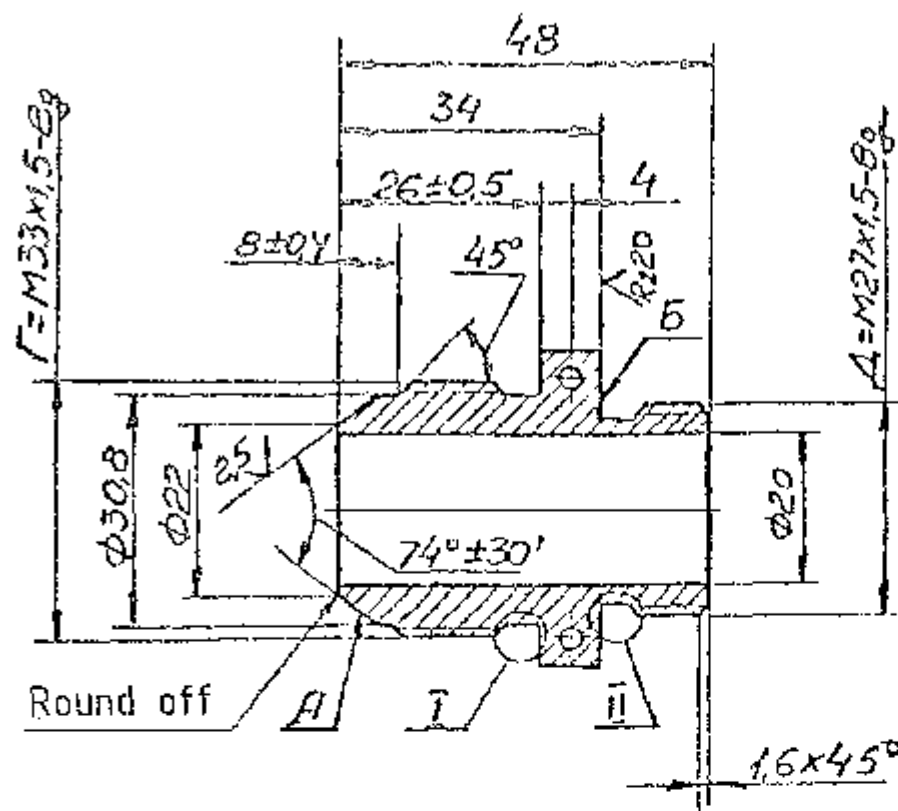
1. HRC 30 to 31.
2. Unspecified limit deviations of dimensions are as follows:- for holes-as per A7, for shafts-as per B7, others-as per CMa.
3. Radial runout of surface A, with respect to angle diameter of thread B should not exceed 0,05mm (qualified tolerance).
4. End-play of surface F with respect to angle diameter of thread B should not exceed 0,06mm (qualified tolerance).
5. Radial run-out of surface E with respect to angle diameter of thread B should not exceed 0,12mm (qualified tolerance).
6. Lap surface A, check non-flatness with prussian blue, in this case, a continuous fitting belt should be present

Ⓐ EQ. MATERIAL:- STAINLESS STEEL BAR GRADE 20 C813 To IS:1570 (Pt.V) 72.



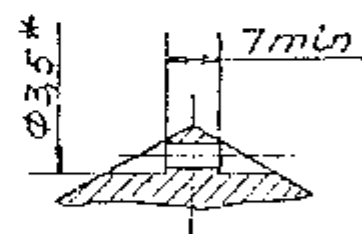
STEEL 20 X 13, GOST 5632-72		01019-ICV 24 APR 06 00820-ICV 17 OCT 2000	Ⓑ	DS CAT PART NO. ADDED AND DESCRIPTION WAS THROUGH CONNECTOR.
ORGL MATERIAL:		DC(I)No. & DATE	Ⓑ	EQ. MATERIAL ADDED.
MATERIAL:-		ISSUE		AMENDMENTS
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF		ALL THREADS TO CONFORM TO SPECIFICATION		STAMP OR ETCH, PART No. MANUFACTURER'S NAME & YEAR OF MFR.
DRG. NOT TO BE SCALED		TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED		USED ON:
SCALE: 1:1		DATE:		
DRN.	WT :- (Kg)	700-57-57		DS CAT PART No: Ⓑ
TCD.	0.213			LV2/ICVS 4730-007417
CHD		THROUGH CONNECTOR		UNION PIPE Ⓑ
APPD		CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)		

89-29-002

Rz80
V(V)

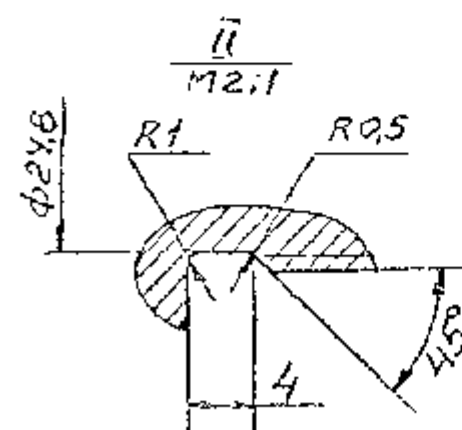
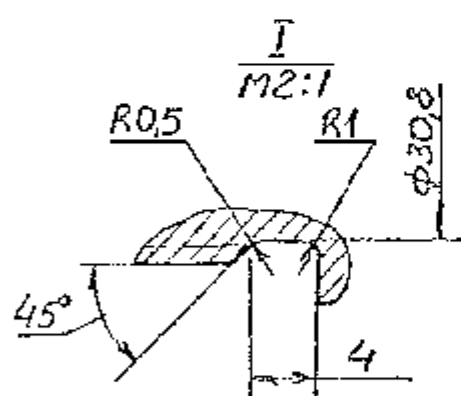
1. Alternate material is cm6 GOST 380-71, steel 35,40, 50 GOST 1050-74 and steel 40F GOST 4543-71.
2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7, others-as per CM9.
3. Radial run-out of surface A, with respect to angle diameter of thread F should not exceed 0,05mm (qualified tolerance).
4. End play of surface B, with respect to angle diameter of thread A should not exceed 0,06mm (qualified tolerance).
5. * Dimensions are given for reference.
6. Coating: Zinc-plated, 9 microns thick, chromitized, Remove hydrogen embrittlement. Internal surfaces may not be coated.

Alternate

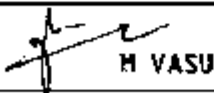


Material: Hexahedral bar 36-5 GOST 8650-78
45-B GOST 1051-73

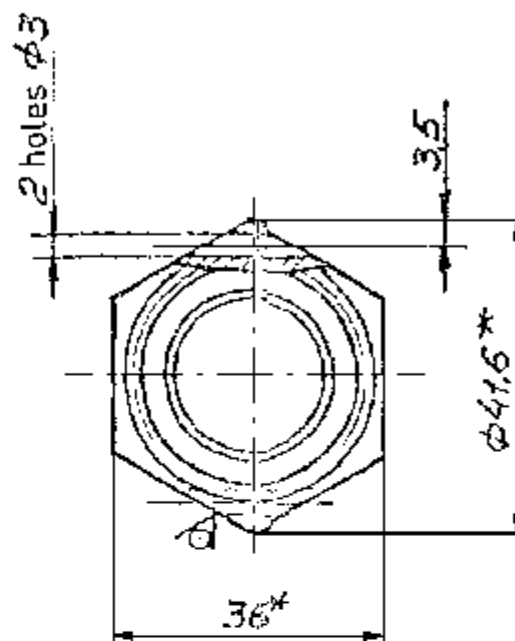
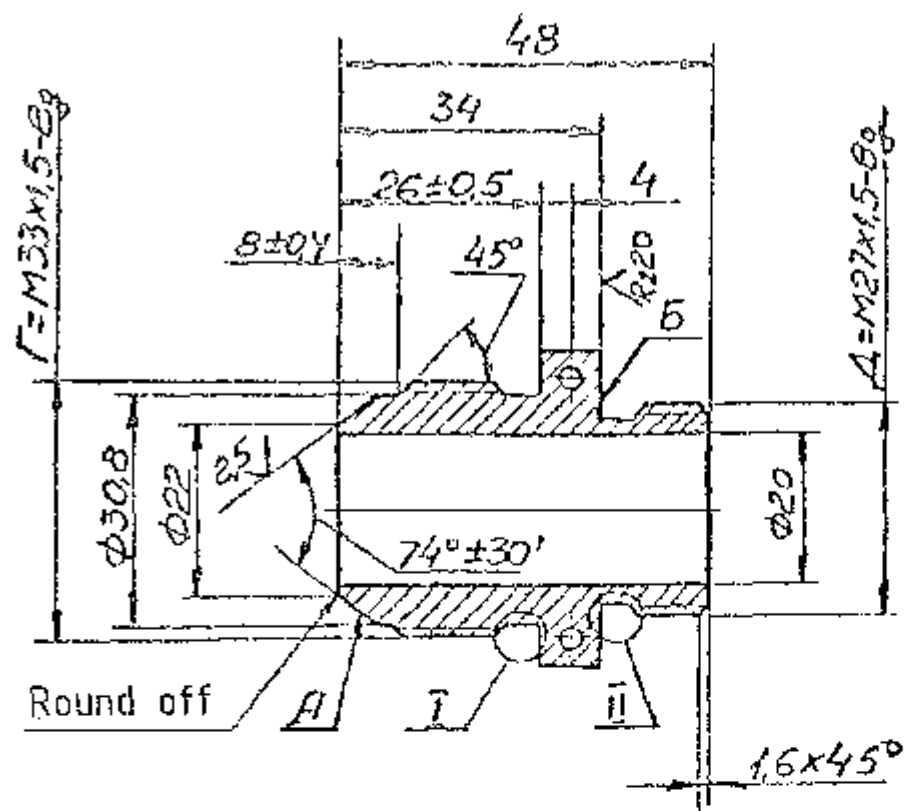
Ⓐ EQ. MATERIAL:- CARBON STEEL BLACK BAR, HEXAGONAL C45
TO IS: 2013-70 OR
ALLOY STEEL C45, C50 OR 40 C8 TO IS: 5517-69.



01019ICV 24 APR 06	Ⓑ	DS CAT PART No. ADDED AND DESCRIPTION WAS THROUGH CONNECTOR
00820-ICV 17 OCT 2000	Ⓐ	EQ. MATERIAL ADDED
DCI No. & DATE	ISSUE	AMENDMENTS

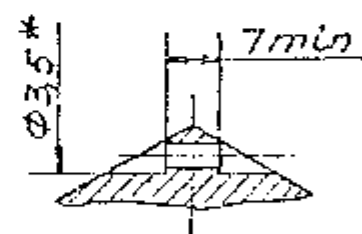
APPROVED	 H VASU	700-57-58 UNION PIPE —THROUGH— CONNECTOR	(B)	DS CAT PART No. 4730 - 007418 (B)		
CHECKED					WEIGHT	SCALE
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		SEE TABLE	(B)		0.17	1:1
				SHT SHTS		

89-29-002

Rz80
V(V)

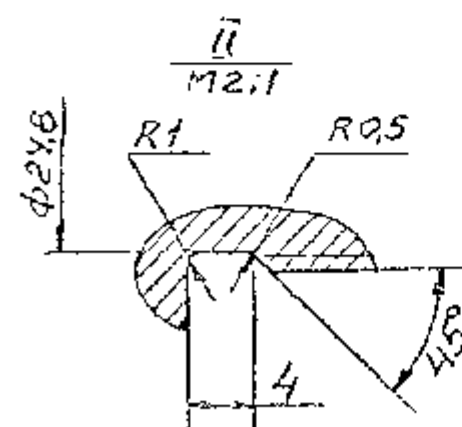
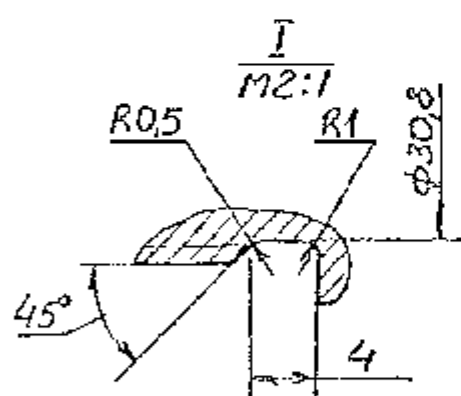
1. Alternate material is cm6 GOST 380-71, steel 35,40, 50 GOST 1050-74 and steel 40F GOST 4543-71.
2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7, others-as per CM9.
3. Radial run-out of surface A, with respect to angle diameter of thread Γ should not exceed 0,05mm (qualified tolerance).
4. End play of surface B, with respect to angle diameter of thread Γ should not exceed 0,06mm (qualified tolerance).
5. * Dimensions are given for reference.
6. Coating: Zinc-plated, 9 microns thick, chromitized, Remove hydrogen embrittlement. Internal surfaces may not be coated.

Alternate



Material: Hexahedral bar 36-5 GOST 8650-78
45-B GOST 1051-73

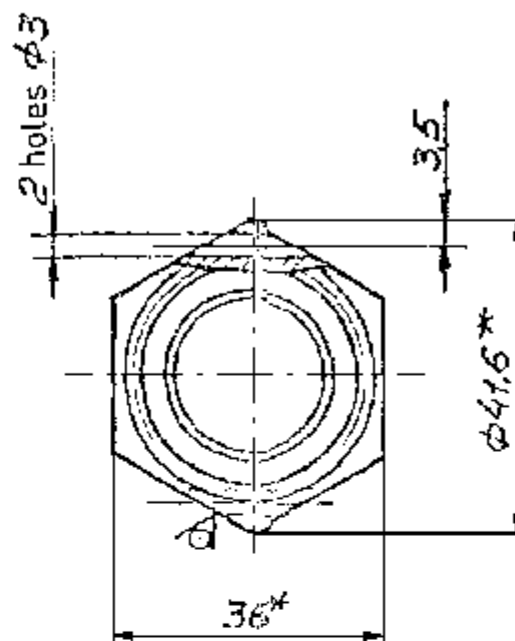
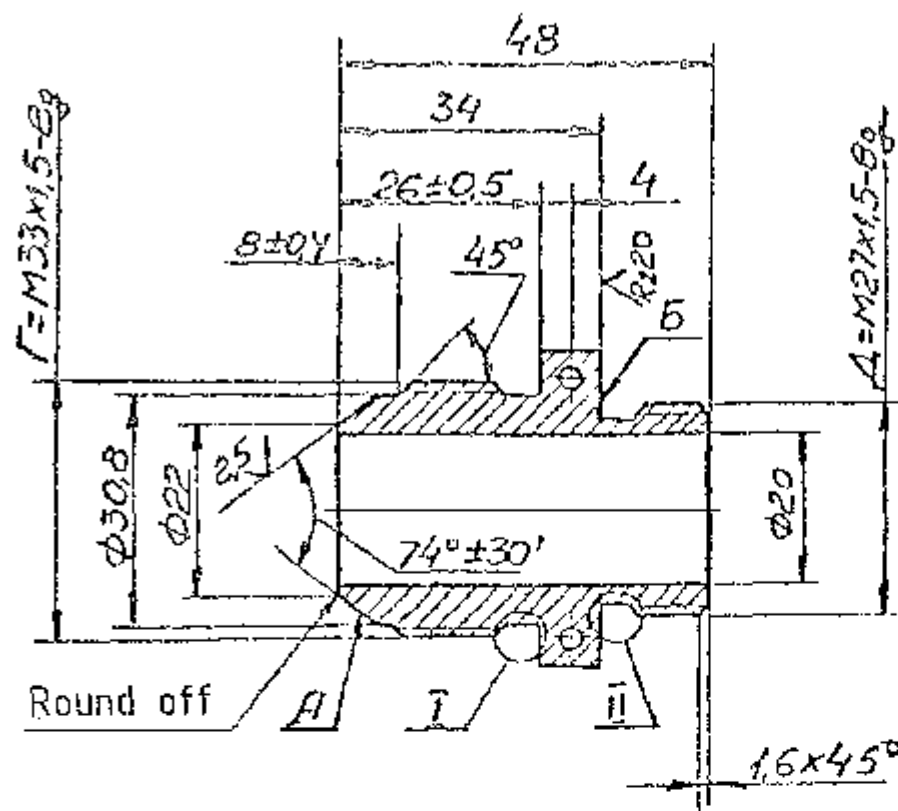
Ⓐ EQ. MATERIAL:- CARBON STEEL BLACK BAR, HEXAGONAL C45
TO IS: 2013-70 OR
ALLOY STEEL C45, C50 OR 40 C8 TO IS: 5517-69.



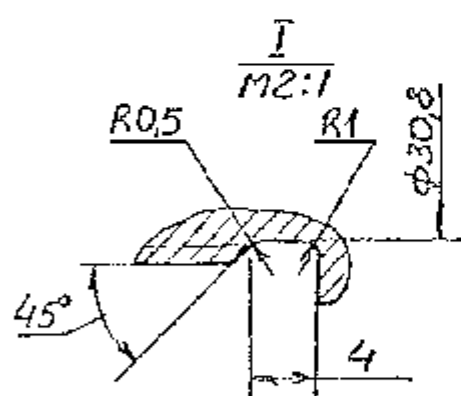
010191CV 24 APR 06	Ⓑ	DS CAT PART No. ADDED AND DESCRIPTION WAS THROUGH CONNECTOR
00820-ICV 17 OCT 2000	Ⓐ	EQ. MATERIAL ADDED
DCI No. & DATE	ISSUE	AMENDMENTS

APPROVED	H VASU	700-57-58	DS CAT PART No.
CHECKED		UNION PIPE	4730 - 007418 Ⓑ
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		THROUGH CONNECTOR	WEIGHT SCALE
		SEE TABLE	0.17 1:1
			SHT SHTS

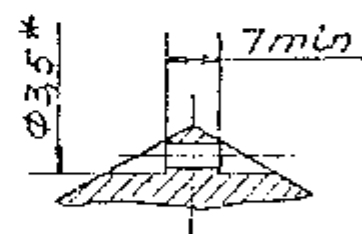
89-29-002

Rz80
V(V)

1. Alternate material is cm6 GOST 380-71, steel 35,40, 50 GOST 1050-74 and steel 40F GOST 4543-71.
2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7, others-as per CM9.
3. Radial run-out of surface A, with respect to angle diameter of thread Γ should not exceed 0,05mm (qualified tolerance).
4. End play of surface B, with respect to angle diameter of thread Γ should not exceed 0,06mm (qualified tolerance).
5. * Dimensions are given for reference.
6. Coating: Zinc-plated, 9 microns thick, chromitized, Remove hydrogen embrittlement. Internal surfaces may not be coated.

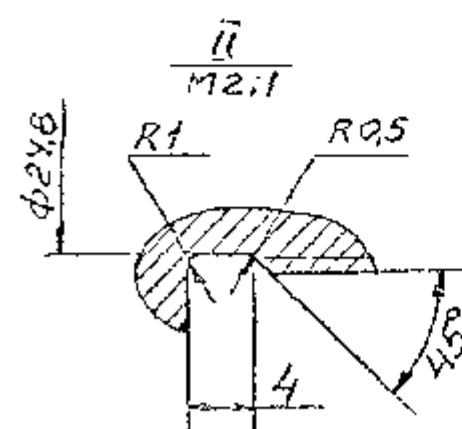


Alternate



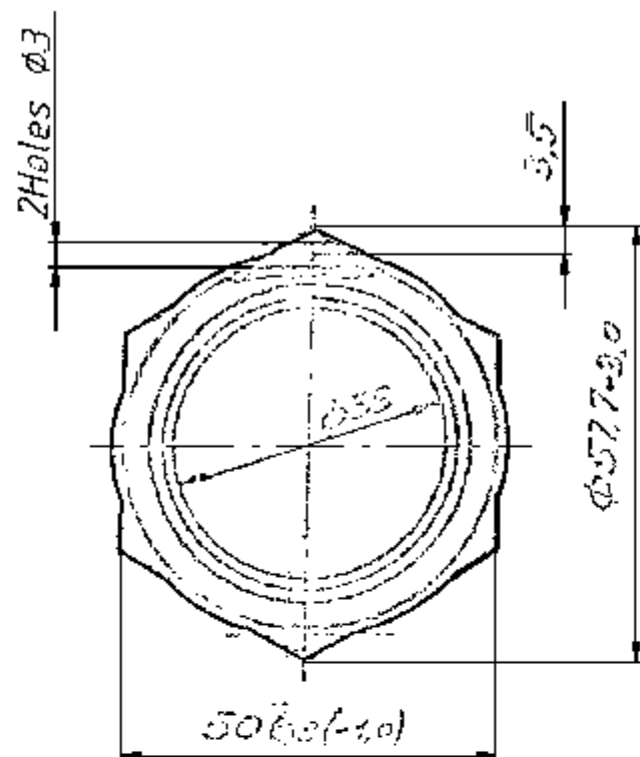
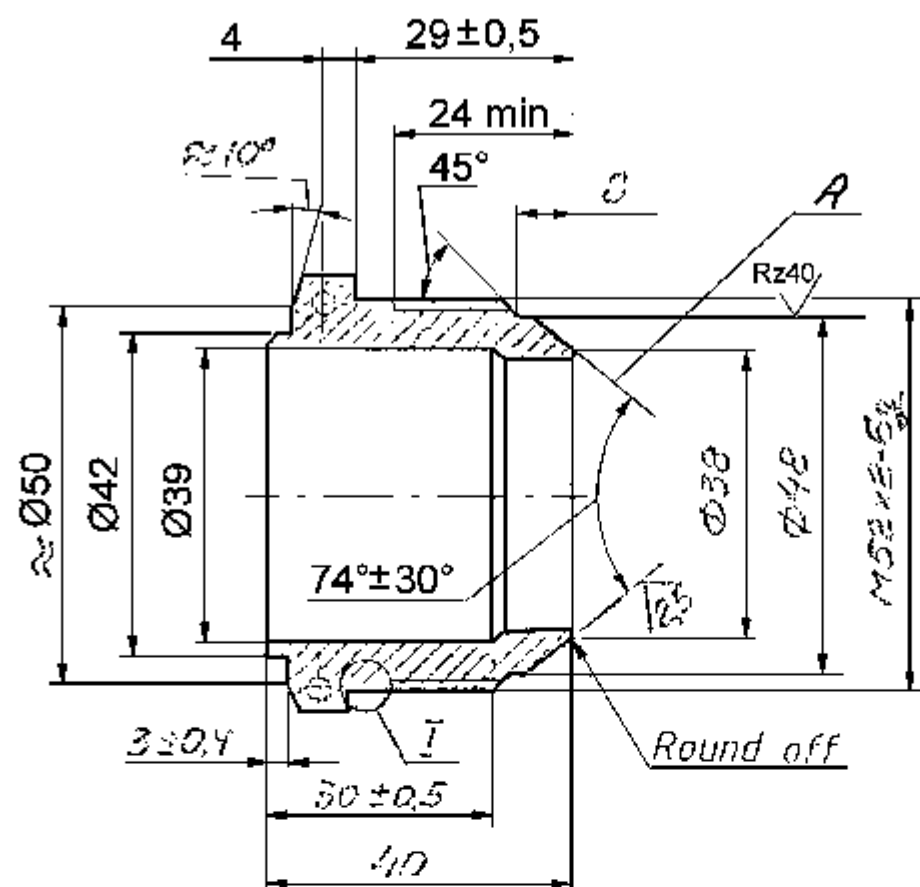
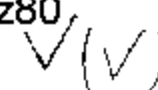
Material: Hexahedral bar 36-5 GOST 8650-78
45-B GOST 1051-73

Ⓐ EQ. MATERIAL:- CARBON STEEL BLACK BAR, HEXAGONAL C45
TO IS: 2013-70 OR
ALLOY STEEL C45, C50 OR 40 C8 TO IS: 5517-69.



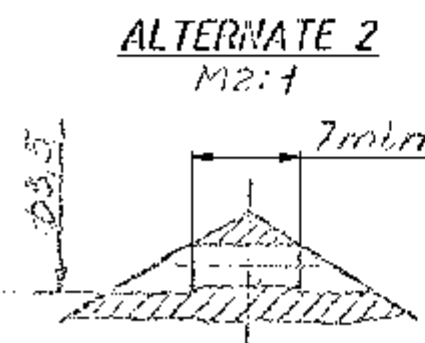
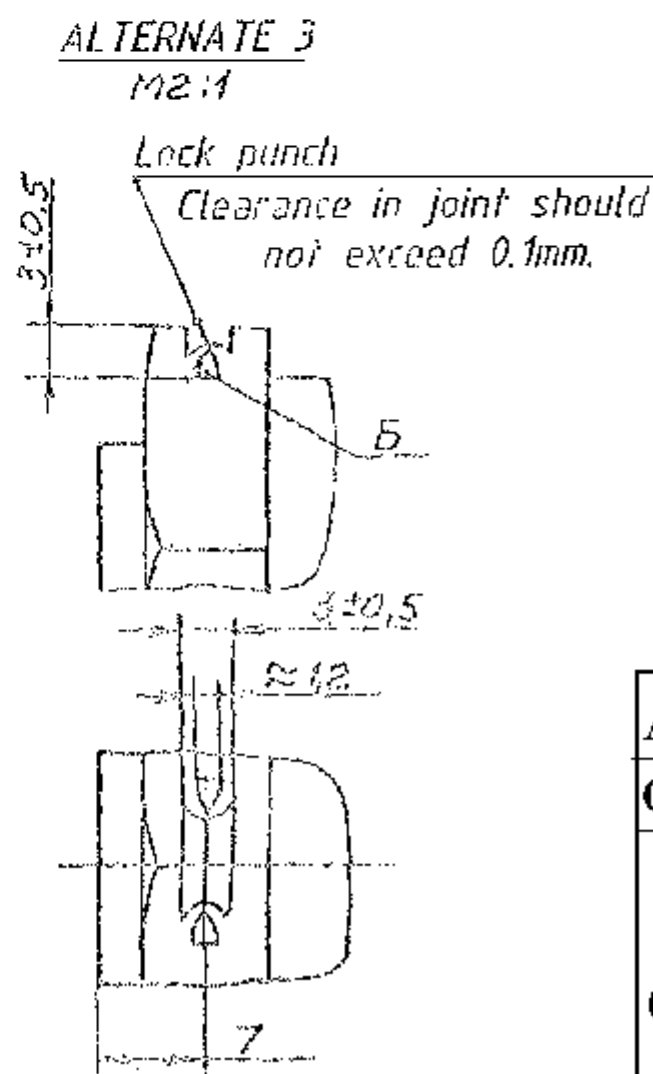
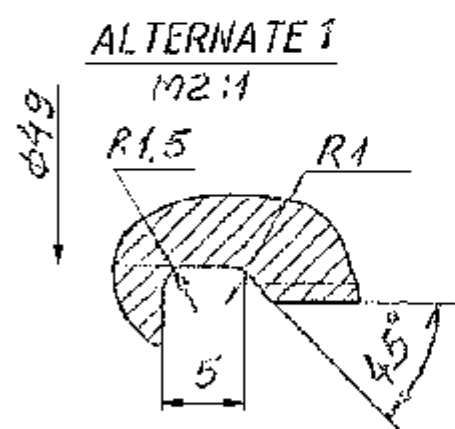
010191CV 24 APR 06	Ⓑ	DS CAT PART No. ADDED AND DESCRIPTION WAS THROUGH CONNECTOR
00820-ICV 17 OCT 2000	Ⓐ	EQ. MATERIAL ADDED
DCI No. & DATE	ISSUE	AMENDMENTS

APPROVED CHECKED	H VASU	700-57-58 UNION PIPE THROUGH CONNECTOR	DS CAT PART No. 4730 - 007418 Ⓑ
CONTROLLERATE OF QUALITY ASSURANCE (ICV)	SEE TABLE	WEIGHT 0.17	SCALE 1:1
		SHT	SHTS

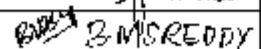


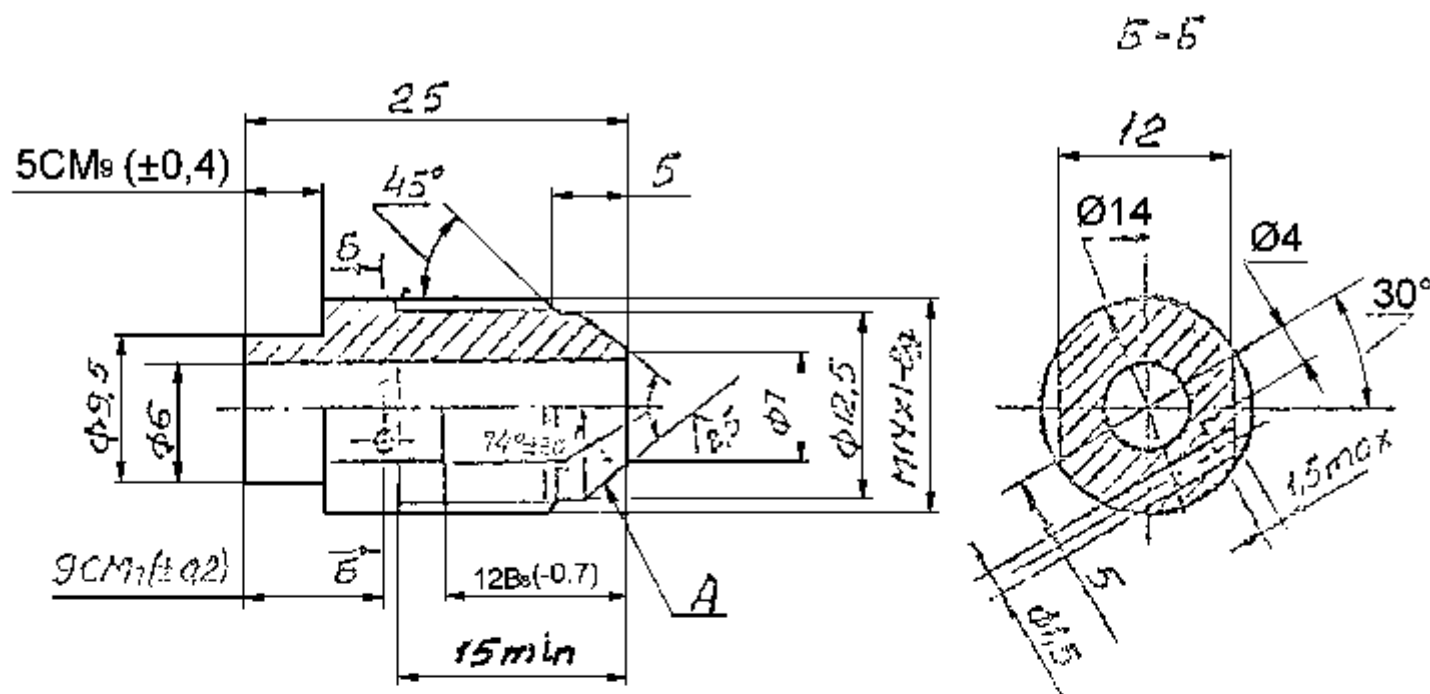
- 1). Alternate material is steel 25, 30, 35 GOST 1050-74.
- 2). Unspecified limit deviations of dimensions are as follows: for holes - as per A₇, for shafts - as per B₇, others - as per CM₇.
- 3). Radial run-out of surface A with respect to angle diameter of thread should not ^{exceed} 0.06mm (qualified tolerance).
- 4). Rod, diameter not less than 1mm, should pass through hole 6.
- 5). Coating: Zinc-plated, 9 microns thick, chromotized. Remove hydrogen embrittlement.

④ EQ. MATERIAL :- CARBON STEEL BLACK ROUND BAR C20
OR C25 Mn75 TO IS: 2073-70
OR
C30, C40 TO IS: 2073-70.



00820-ICV <i>[Signature]</i> 17 OCT 2000	 <i>[Signature]</i>	EQ. MATERIAL ADDED
DC()No. & DATE	ISSUE	AMENDMENTS

APPROVED		700-57-59		
CHECKED		UNION		
CONTROLLERATE OF QUALITY ASSURANCE (ICV)				
			0.19	1:1
		STEEL 20 GOST 1050-74		



1. Alternate material is steel cm5 GOST 380-71.
 2. Unspecified limit deviations of dimensions are as follows: for holes-as per A7, for shafts-as per B7, others-as per CM9.
 3. Union may be made as per dash-dotted line.
 4. Radial runout of surface A with respect to the thread angle diameter should not exceed 0,08mm.
- (A) EQ. MATERIAL: CARBON STEEL BLACK ROUND BAR C20
OR C25 MNTS TO IS: 2073-70

00820-ICV

17 OCT 2000

DC(I)No.

& DATE

(A)

Am

ISSUE

AMENDMENTS

EQ. MATERIAL ADDED.

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

700-57-68

UNION

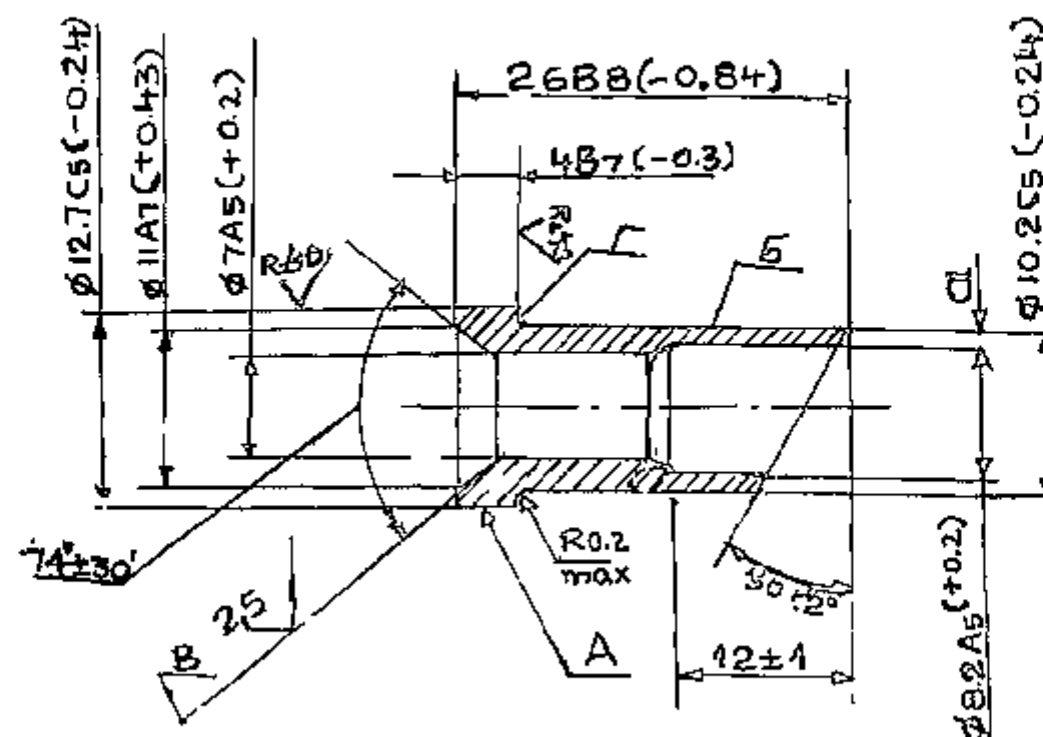
STEEL 20 GOST 1050-74

WEIGHT SCALE

0.015 2:1

SHT SHTS

700-57-403

R280
✓(✓)

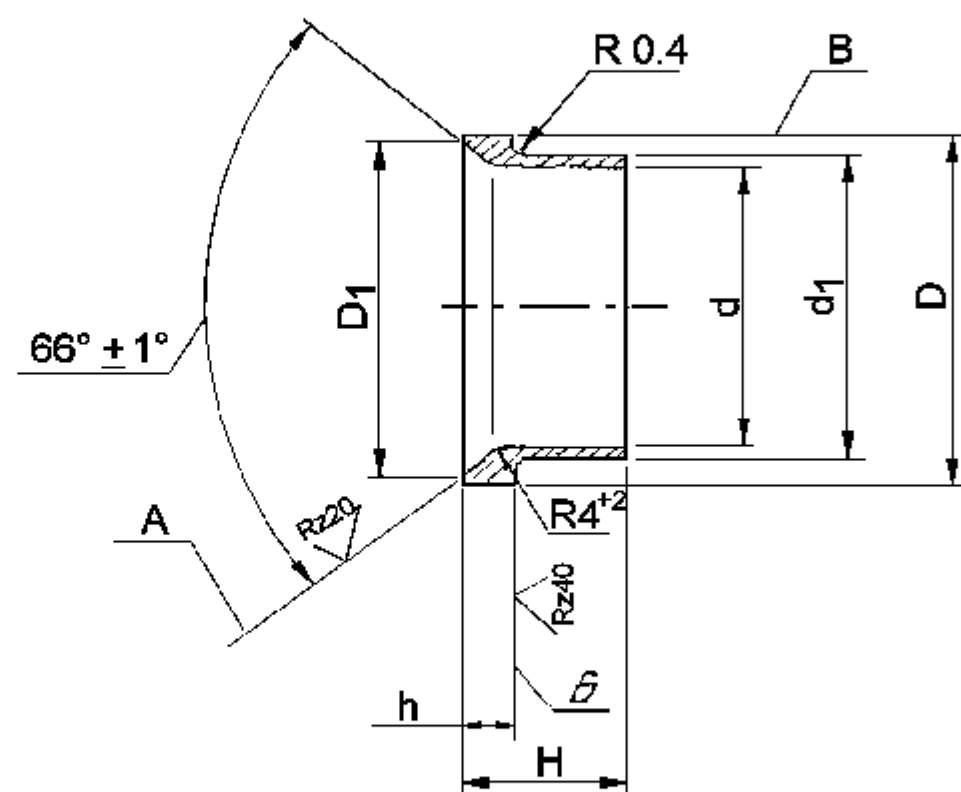
1. ALTERNATE MATERIAL IS STEEL 15, 20, 25 GOST 1050-74 AND 15Г, 20Г GOST 4543-71.
2. THE FOLLOWING ARE ALLOWED WITH RESPECT TO SURFACES A AND B MACHINED FROM ONE SETTING.
 - a). RADIAL RUN-OUT OF SURFACE B SHOULD NOT EXCEED 0.15 mm. (QUALIFIED TOLERANCE)
 - b). END-PLAY OF SURFACE T SHOULD NOT EXCEED 0.06 mm
3. DIFFERENCE IN MEASUREMENTS OF DIMENSIONS SHOULD NOT EXCEED 0.2 mm.

EQ. MATERIAL :-

- i) STEEL TO IS: 7283-74 (MATERIAL AS PER IS: 226-75)
- ii) MATERIAL 10 C4 TO IS: 9550-80 Gr I OR
- iii) CLASS I A GRADE 15 C8 TO IS: 2004-78 OR
- iv) STEEL BAR C10 OR C14 OR C15 Mn 75 OR C20 OR C25 Mn 75 OR C30 TO IS: 2073-70. OR
- v) STEEL BAR C14 TO IS: 2073-70. OR
- vi) STEEL BAR C15 Mn 75, C20 TO IS: 2073-70. OR
- vii) STEEL BAR C25 Mn 75, C30 TO IS: 2073-70

00883-ICV R. 9. 2001 01-06-2001		DRAWING REVISED AND RETRACED	
ORGL MATERIAL:- STEEL 10 GOST 1050-74		DC(I) No. & DATE	AMENDMENTS
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF	ALL THREADS TO CONFORM TO SPECIFICATION	STAMP OR ETCH, PART No. MANUFACTURER'S NAME & YEAR OF MFR.	
DRG. NOT TO BE SCALED	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED	USED ON: 765-78-Sb312, 765-10-Sb565, 765-08-Sb422, 765-05-Sb427, 675-04-Sb103, 675-05-Sb136, 675-10-Sb106	
SCALE: 2:1	DATE: 01-06-2001		
DRN. N. B. Ramana	WT :- (Kg) 0.007	NIPPLE	
TCD. N. B. Ramana			
CHD. C. S. S.		700-57-403	DS CAT No.
APPD. N. B. Ramana			
CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)			

NOTE: ALL DIMENSIONS ARE IN mm



TECHNICAL CONDITIONS

- 1) Alternate material is CT5, GOST 380-71, Steel 35, 40, 50, GOST 1050-74, 45 Г - GOST 4543-71.
- 2) End-play of surface 'A' with respect to surface 'B' should not exceed 0.06 mm
- 3) * Dimensions are given for reference.
- 4) Coating : Chemically Parkerised, Chromatised, Oiled with preservation oil K-17 Gost 10877-75 as per instructions 053.25289 00002 or with varnish KO-815, GOST 11066-76 or Zinc plated, 9 microns thick Chromatised. Remove hydrogen embrittlement.
- 5) Equivalent material: 1 Class 4, 45C₀ to IS: 2004-78 for Drawing No 700-57-417
2 Class 4, to IS: 2004-78 for Drawing No 700-57-416

DESIGNATION	d	d ₁	D	D ₁	H	h	Material	FINISH of Surface B	Max
700-57-415	12 H ₄ (+0.36 / +0.24)	14 C ₅ (-0.24)	18 ±	16 A ₇ (+0.43)	14 B ₇ (-0.43)	5 B ₇ (-0.2)	ROUND BAR 18-B GOST 7417-75 / 45-B GOST 1051-73	✓	0.008
700-57-416	18 H ₄ (+0.36 / +0.24)	20 C ₅ (-0.28)	25 *	23 A ₇ (+0.52)	17 B ₇ (-0.43)	6 B ₇ (-0.3)	ROUND BAR 25-S GOST 7417-75 / 45-B GOST 1051-73	✓	0.015
700-57-417	25 H ₄ (+0.42 / +0.28)	27 C ₅ (-0.28)	31 C ₅ (-0.34)	29 A ₇ (+0.52)	22 B ₇ (-0.52)	7 B ₇ (-0.26)	STEEL 45 GOST 1050-74	✓	0.02
700-57-418	28.5 A ₅ (+0.28)	30 C ₅ (-0.28)	34 *	32 A ₇ (+0.62)	22 B ₇ (-0.52)	7 B ₇ (-0.36)	ROUND BAR 31-S GOST 7417-75 / 45-B GOST 1051-73	✓	0.028
700-57-419	38.5 A ₅ (+0.34)	40 C ₅ (-0.34)	46 *	44 A ₇ (+0.62)	22 B ₇ (-0.52)	7 B ₇ (-0.36)	ROUND BAR 46-S GOST 7417-75 / 45-B GOST 1051-73	✓	0.035

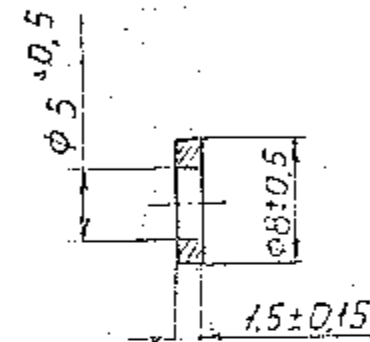
NOTE:

1. ALL DIMENSIONS ARE IN MM.

01032-101 15-11-2000 00832 15-11-2000 DC(11) No A DATE		②	DRAWING No: 700-57-415/ 419 WAS 700-57-415/420
NEAREST EQVT MATERIAL		②	DRAWING REVISED AND RETRACED
ORGL MATERIAL		②	AMENDMENTS
ALL SHARP EDGES & COR- NERS TO BE ROUNDED OFF.		ALL THREADS TO CONFORM TO SPECIFICATION.	
DRG. NOT TO BE SCALED		STAMP OR ETCH, PART NO. MANUFACTURER'S NAME & YEAR OF MFR.	
SCALE:- 1:1		TOLERANCE ON DIMENSIO- NS UNLESS OTHERWISE SPECIFIED	
DATE :- 15-11-2000		USED ON:- 765-08-Sb385	
DRN. 15-11-2000	WT: (Kg)	NIPPLE	
TCD. 15-11-2000	SEE TABLE	PART NO	
CHD. 15-11-2000		DRAWING NO 700-57-415/420 ②	
APD. 15-11-2000		700-57-415/419	
CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)			

700-96-T61

191-96-004



1. Blunt sharp edges.
2. Alternate material is Steel cm2, cm3, cm5, GOST 380-71 and Steel 10, 15, 20, 25, 30, GOST 1050-74.

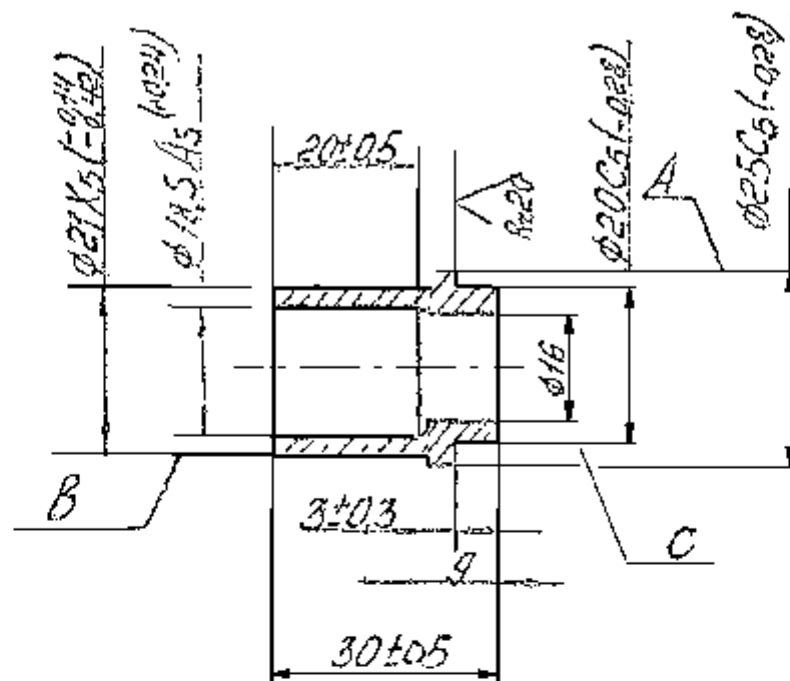
④ EQ. MATERIAL:- COLD STEEL STRIP GRADE 'D' OR 'D' TO IS. 403073.

Designation.	Coating.
700-31-388	Chemically parkerized, accelerated chromitized oiled, with preservation oil GOST 10877-76 as per Instructions 053.25289.00002 or with varnish KO-815, GOST 11066-74.
	Permissible coating: Zinc-plated 9 microns thick, chromitized. Remove hydrogen embrittlement.
700-31-757.	09

09005	EQ. MATERIAL ADDED:	ISSUE	NATURE OF AMENDMENT
18/8/2008	④	DATE	

APPROVED	700-96-T61	167 of 374
CHECKED	WASHER	WEIGHT SCALE
CONTROLLERATE OF INSPECTION (ICV)	STEEL CT3KN GUST 380-71	0.001 2:1
		SHT SHTS
		03

701-13-27

R_z 80/ (✓)

1. Alternate material is steel cm2cn, cm5cn, GOST 380-71 and 15,25,30 GOST 1050-74.
2. Unspecified limit deviations of dimensions are for holes-as per A7, for shafts-as per B7.
3. Run-out of surfaces A and B with respect to the axis of surface C should not exceed 0,2mm.
4. Variation in wall thickness along surface B should not exceed 0.5mm.

Ⓐ EQ. MATERIAL:- CARBON STEEL BLACK
 BAR C40, C15 Mn75, C20 OR
 C25 Mn75, C30 OR
 C40 TO IS: 2073.

00820-ICV

12 OCT 2000

DC(I)No.

& DATE

Ⓐ

Gm

ISSUE

AMENDMENT'S

EQ. MATERIAL ADDED.

APPROVED

CHECKED

CONTROLLERATE
 OF
 QUALITY ASSURANCE
 (ICV)

701-13-27

END PIECE

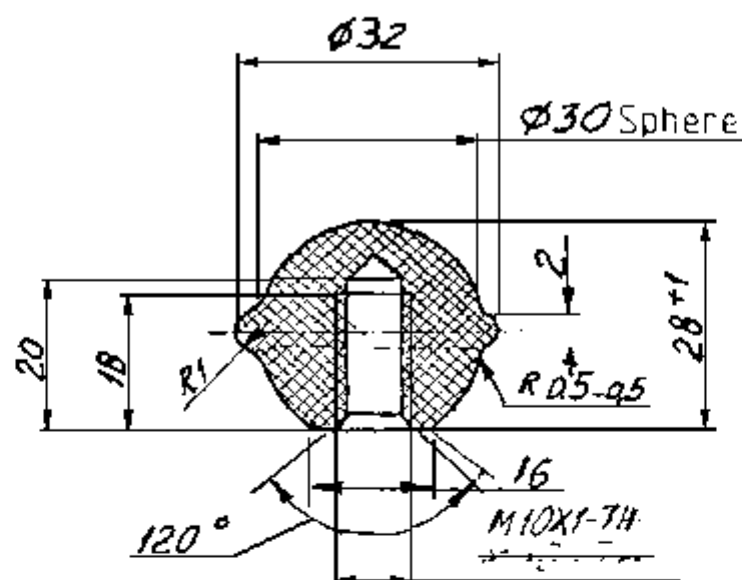
STEEL 20 GOST 1050-74

WEIGHT SCALE

0.024 1:1

SHT SHTS

11-611-102



1. Alternate material is phenoplast 04-010-12, black, GOST 5689-79, and ebonite GOST 2748-77.
2. Unspecified limit deviations of dimensions are as follows for holes-as per A7, shafts as per B7, others-as per CM7.
3. Band corners may be rounded off with R0.5mm instead of R1mm.

00992-ICV

④

DS CAT PART NO ADDED.
& NOMENCLATURE
AMENDED AS 'KNOB'

04 MAR 05

DC(I)No.
& DATE

ISSUE

AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

701-119-11

④ DS CAT PART NO: LV2/ICVS 5355-001939

④ KNOB
~~LEVER HEAD~~

Phenoplast 03-010-02
Black GOST 5689-79

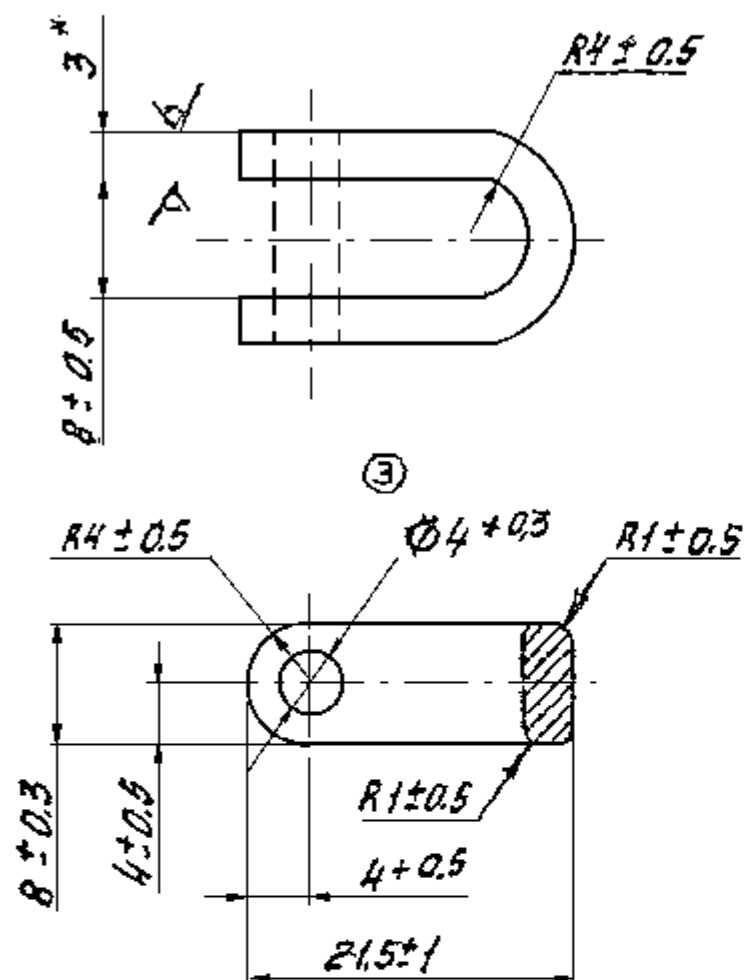
WEIGHT SCALE

0.017 1:1

SHT SHTS

703-08-63

Rz 3.25 (✓)



1. Alternate material is steel 2,3,5 GOST 380-71 and steel 10,15,20,25,30 GOST 1050-74.

2. Coating:- Chemically parkerized chromatized. Prime all over by primer $\phi 7-03-K$ GOST 9109-76 and paint with dark-grey enamel $n\phi-223$ GOST 14923-78.

3. * Dimension is given for reference.

4. EQ. MATERIAL:- 1. HOT ROLLED STEEL STRIP

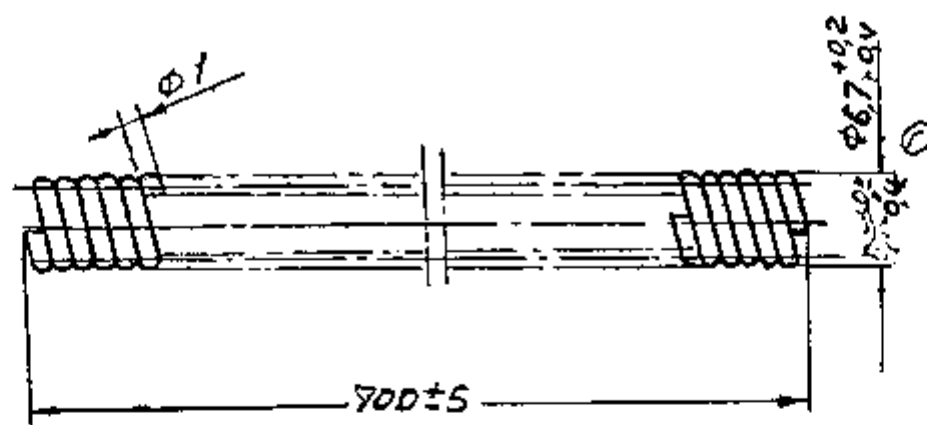
GRADE SL-42 TO IS: 1079-73. OR

2. COLD ROLLED STEEL STRIP GRADE 'Q'

$\frac{1}{4}$ H TO IS: 4030-73.

NEAREST EQ. MATERIAL		00832-ICV		DRAWING REVISED AND RETRACED.
PLATE 3.0 GOST 19903-74 3-III CT3 KII GOST 16523-70		11 NOV 2000		
MATERIAL:-		DC(I)No. & DATE	ISSUE	AMENDMENTS
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF		ALL THREADS TO CONFORM TO SPECIFICATION		STAMP OR ETCH, PART No. MANUFACTURER'S NAME & YEAR OF MFR.
DRG. NOT TO BE SCALED		TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED		USED ON: 765-08-Sb6
SCALE: 2:1		DATE: 14 NOV 2000		
DRN.	WT :- (Kg)	703-08-63		
TCD.	0.009			
CHD		FORK		
APPD		DS CAT No.		
CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)				

NOTE:-
ALL DIMENSIONS ARE IN mm.



- 1). Winding should be tight without gaps.
- 2). Displacement of turns and breaks are not allowed.
- 3). Direction of winding of braiding is arbitrary.
- 4). End of braiding of wire rope should be at a distance of $10^{+2.0}_{-1.5}$.

Coating TOP, nocy 30-2 preliminary to be dressed.
Coating of other surfaces Chemically parkerized,
accelerated chrome-plating, impregnated with slushing
K-17, GOST 10877-76, as per Instruction 053.25289.002
or with varnish K0815, GOST 10877-76.

Ⓐ EQ. MATERIAL: SPRING STEEL WIRE GRADE 3 TO IS: 4454 (Pt-V75).
(TIN COATING)

00820-ICV
17 OCT 2000
IX(I) No.
& DATE

EQ. MATERIAL ADDED.

ISSUE

AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

730-08-251

BRAIDING OF
WIRE ROPE

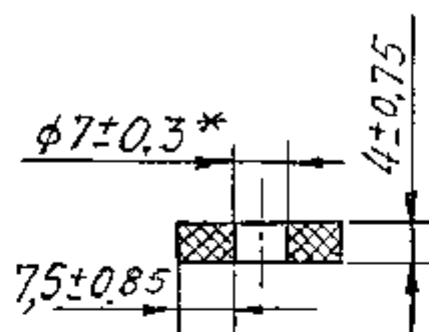
WEIGHT SCALE

0.027 2:1

SHT 1 SHTS 1

WIRE II - 1 GOST 9389-75

673-80-032



- 1). * Dimension is provided by tool.
 - 2). Gasket may be made from heat resistant soft rubber GOST 7338-77 or 4-68, 316, 64.9, 1064.3 Technical Specifications TY005216-75.
 - 3). To be marked on the tag.
 - 4). Blank may be supplied of length 500 ± 50 mm.
 - 5). Other requirements are to be as per Technical Specifications TY005216-75 for articles, code 254120.
- Ⓐ EQ. MATERIAL: NITRIL RUBBER GRADE BA 40 TO BS 2751-82.

00820-ICV

12 OCT 2000

IXC(I)No.

& DATE

A

Am

ISSUE

EQ. MATERIAL ADDED.

AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

730-08-329

GASKET

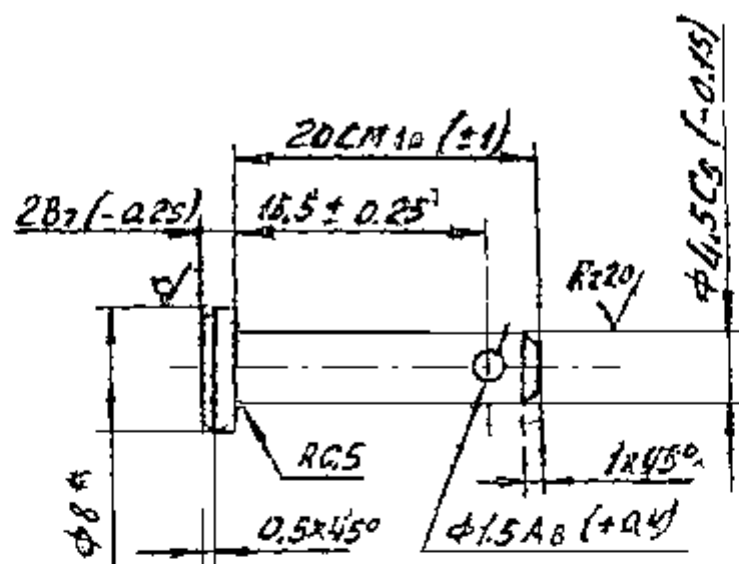
WEIGHT SCALE

0.007 1:1

SHT

SHTS

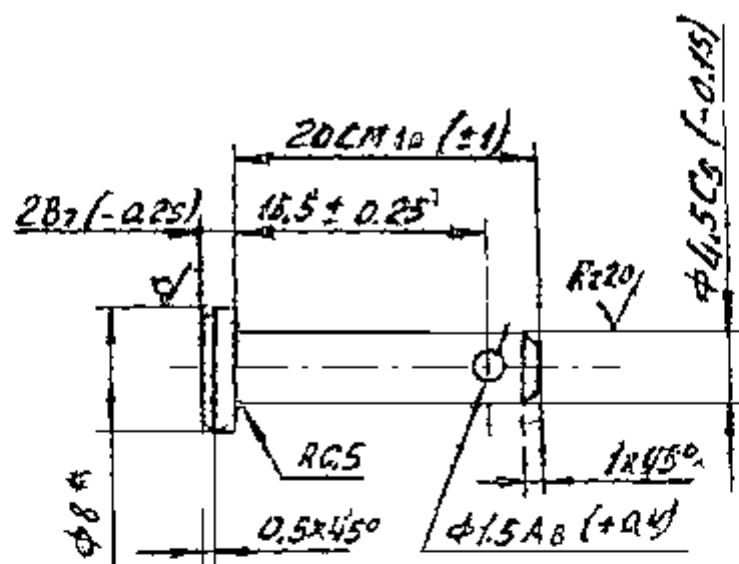
RUBBER 310 TECH. SPECS.
TY 005216-75



1. Alternate material is steel cm6 GOST 380-71, steel 35, 40,50, GOST 1050-74 and steel 40Г GOST 4543-71.
2. Coating: hard chrome plated, 18 to 42 micron thick, oiled with preservative oil K-17 GOST 10877-76 or with varnish KO-815 GOST 11066-74 as per instruction 053.25289.00002.
3. *Dimension is given for reference.
- (A) 4. Equivalent material is 45C8 Gr.4 to Is: 9550.
- (B) 5. POLISHED ALLOY STEEL ROUND BAR C45, C50 OR 40 Cr1 TO Is: 5517-69
OR
C35 MnT5 OR C40
To Is: 5517-69.

00820-ICV <i>Heath</i> 17 OCT 2000	(B)	EQ. MATERIAL ADDED.
00306-ICV <i>Long</i> 16 JAN 92	(A)	NOTE FOR EQUIVALENT MATERIAL ADDED.
IXC(I) No. & DATE	ISSUE	AMENDMENTS

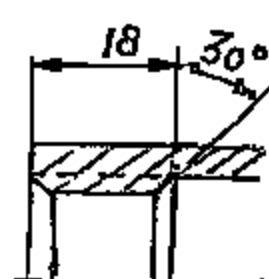
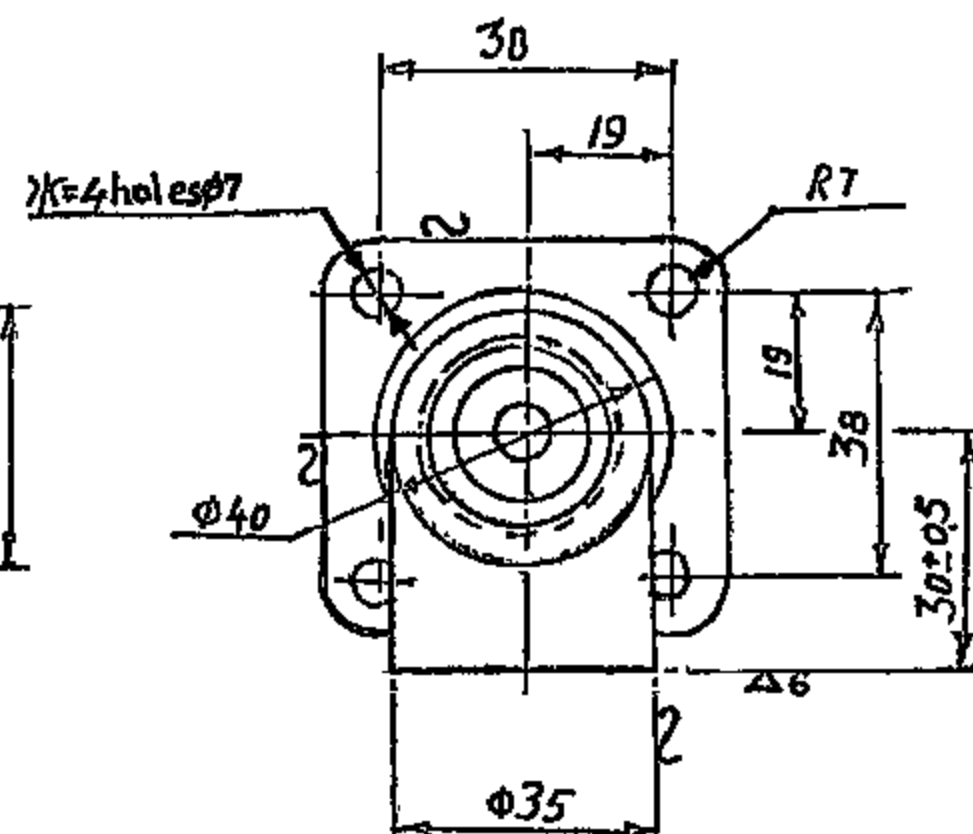
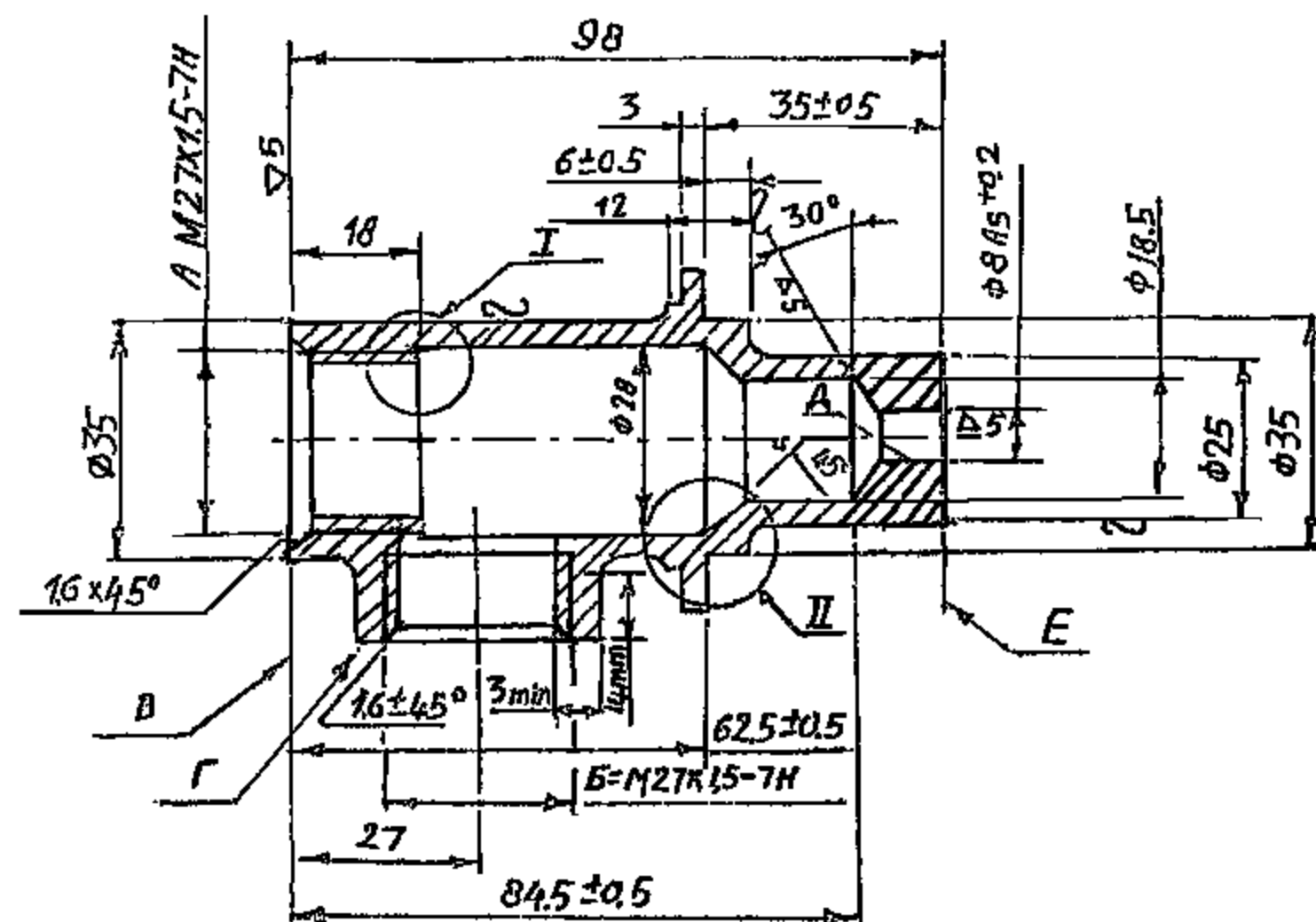
APPROVED				730-26-469	
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		SHAFT			WEIGHT SCALE
					0.004 2:1
				SHT 1	SHTS 1
		ROUND 8-5 GOST 7417-75 BAR 45-B GOST 1051-73			



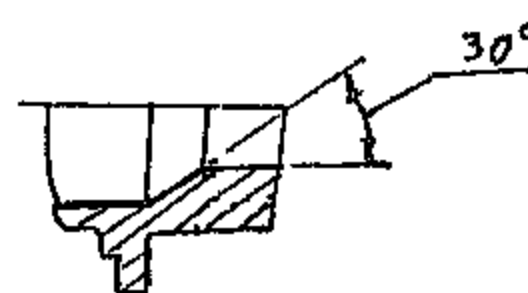
1. Alternate material is steel cm6 GOST 380-71, steel 35, 40,50, GOST 1050-74 and steel 40Г GOST 4543-71.
2. Coating: hard chrome plated, 18 to 42 micron thick, oiled with preservative oil K-17 GOST 10877-76 or with varnish KO-815 GOST 11066-74 as per instruction 053.25289.00002.
3. *Dimension is given for reference.
- (A) 4. Equivalent material is 45C8 Gr.4 to Is: 9550.
- (B) 5. POLISHED ALLOY STEEL ROUND BAR C45, C50 OR 40 Cr TO Is: 5517-69
OR
C35 MnT5 OR C40
To Is: 5517-69.

00820-ICV <i>Heath</i> 17 OCT 2000	(B)	EQ. MATERIAL ADDED.
00306-ICV <i>Long</i> 16 JAN 92	(A)	NOTE FOR EQUIVALENT MATERIAL ADDED.
IXC(I) No. & DATE	ISSUE	AMENDMENTS

APPROVED				730-26-469	
CHECKED					
CONTROLLERATE OF QUALITY ASSURANCE (ICV)		SHAFT			WEIGHT SCALE
					0.004 2:1
				SHT 1	SHTS 1
		ROUND 8-5 GOST 7417-75 BAR 45-B GOST 1051-73			



I ALTERNATE



II ALTERNATE

TECHNICAL CONDITIONS

1. Blunt Sharp Edges
2. Make dimensions without deviations of machined surfaces as per accuracy class 7, GOST 1010.
3. Requirements for forging are as per class II GOST 7505-74
4. Run out of surface B with respect to axis of thread A and surface C with respect to axis of thread 5 should not exceed 0.06mm (qualified tolerance)
5. Run out of surface A with respect to axis of thread A should not exceed 0.1mm (qualified tolerance)
6. Run out of surface E with respect to axis of surface A, should not exceed 0.1mm
7. Coating chemically parkerized, chromated with preservation oil, K-17, GOST 10877-76 as per instructions 053.25283-000.02 or with varnish K0-815, GOST 11066-74
8. Deviation of centres of holes 2 from their true position should not exceed 0.3 mm

(A) EQ. MATERIAL:- 45 C 8 GOST 1050-74 TO IS: 5550-80

(B) EQ. MATERIAL:- ALLOY STEEL BAR C45, C50 OR 40 Cr1 TO IS: 5517-69.

DS CAT NO. LV2/ICVS 2910-003355-015688-ADDED IN PLACE OF LV2/ICVS 2910-003355 AND NOMENCLATURE TUBE (PIPE BODY) CHANGED TO VALVE BODY

DS CAT No. ADDED AND NOMENCLATURE WAS 'BODY'

EQ. MATERIAL ADDED

EQ. MATERIAL ADDED

NEAREST EQ. MATERIAL

MATL 45 GOST 1050-74

ORGL MATERIAL:-

ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF

DRG. NOT TO BE SCALED

SCALE: 1:1

DATE: 22-02-91

DRN. 1/10/91

TCD. 1/10/91

CHD. 1/10/91

APPD. 1/10/91

ALL THREADS TO CONFORM TO SPECIFICATION

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED

STAMP OR ETCH, PART No. MANUFACTURER'S NAME & YEAR OF MFR.

USED ON: 765-05-Sb223

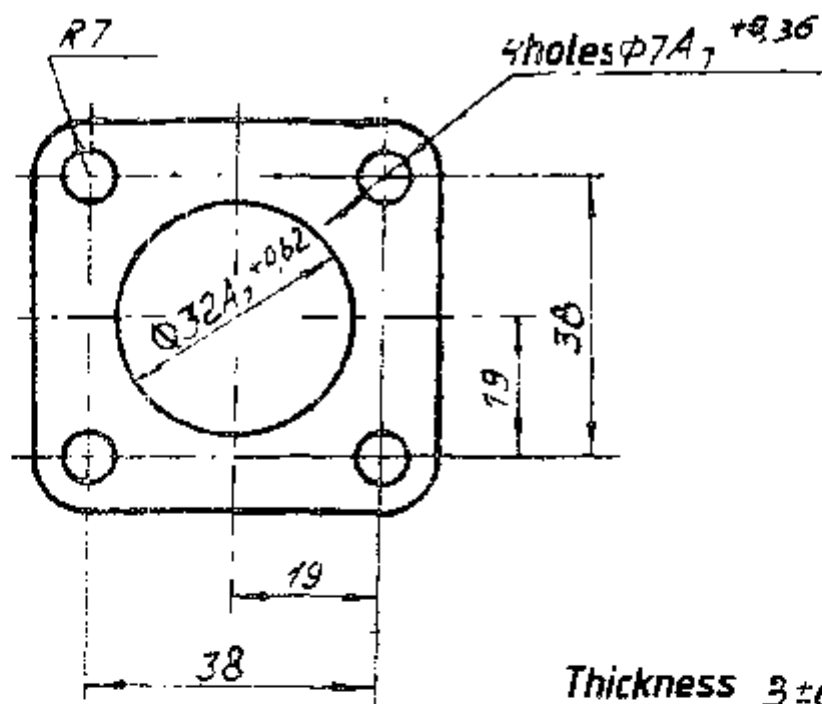
765-05-378

VALVE BODY DS CAT No. LV2/ICVS 2910-003355

CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)

THE ABBRIVATIONS AND SYMBOLS ARE BASED ON RUSSIAN SPECIFICATIONS.

ALL DIMENSIONS ARE IN mm.



1. Blunt sharp edges

2. Deviations of centers of holes from their true position should not exceed 0.3 mm.

(A) EQ. MATERIAL:- Fe330 TO IS: 1079-88.

(B) EQ. MATERIAL:- COLD ROLLED STEEL STRIP GRADE 'D' TO IS: 4030-73

00820-ICV H-10-2000 23.6.99	(B)	EQ. MATERIAL ADDED.
00703-ICV 23.6.99	(A)	EQ. MATERIAL ADDED IN THE DRAWING
IX(I) No. & DATE	ISSUE	AMENDMENTS

APPROVED

CHECKED

[Signature]
B. MSREDDY

765-05-380

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

FLANGE

WEIGHT SCALE

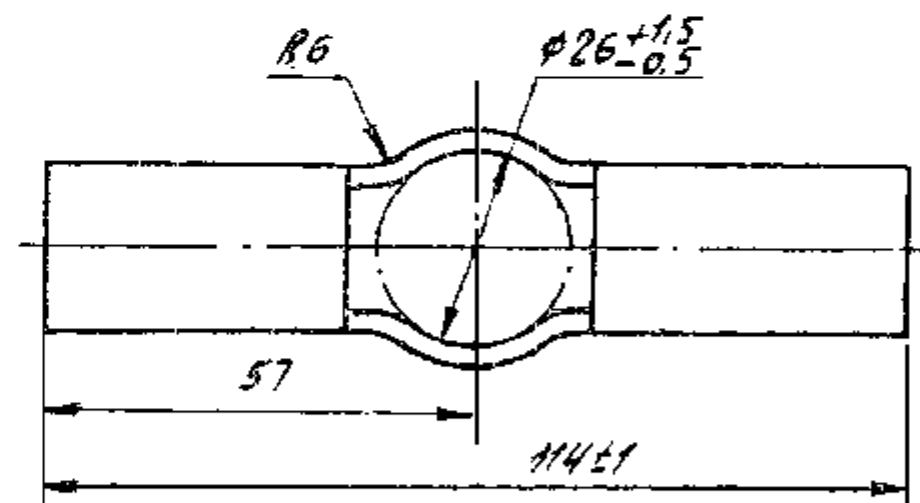
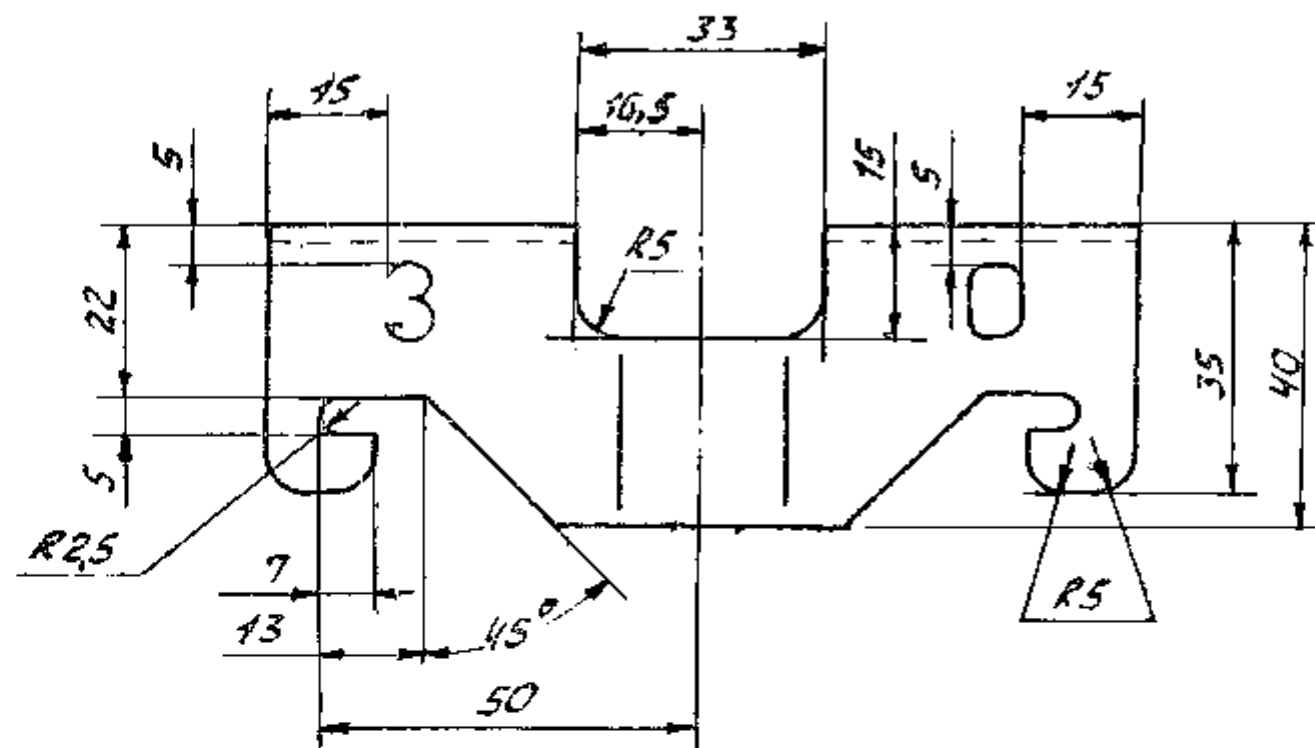
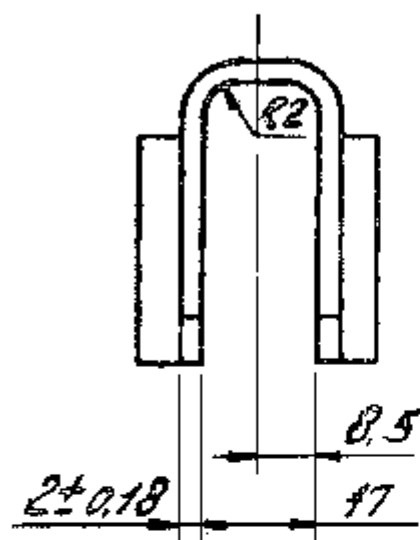
0.04 1:1

SHT 1 SHTS 1

10 GOST 1050-74

183-50-997

All Over



1. Blunt sharp edges.
2. Make dimensions without deviations with accuracy of ± 1 mm.
3. Impress letters to a depth of at least 0.5mm use type 10.

(A) EQ. MATERIAL:- GY Fe 330 OR Fe 410 OR DD TO IS: 1079-88

(B) EQ. MATERIAL:- COLD ROLLED STEEL STRIP
GRADE 'D' TO IS: 4030-73.

00820-10V <i>De wj</i> 17-10-2000 <i>Green</i>	(B)	EQ. MATERIAL ADDED.
00893-10V <i>for</i> <i>from 5-99</i> <i>Green</i>	(A)	GY Fe 330 OR Fe 410 OR DD TO IS: 1079-88 ADDED AS EQ. MATERIAL
DC(I) No. & DATE	ISSUE	AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

RETAINER

10 GOST 1050-74

765-05-381

WEIGHT SCALE

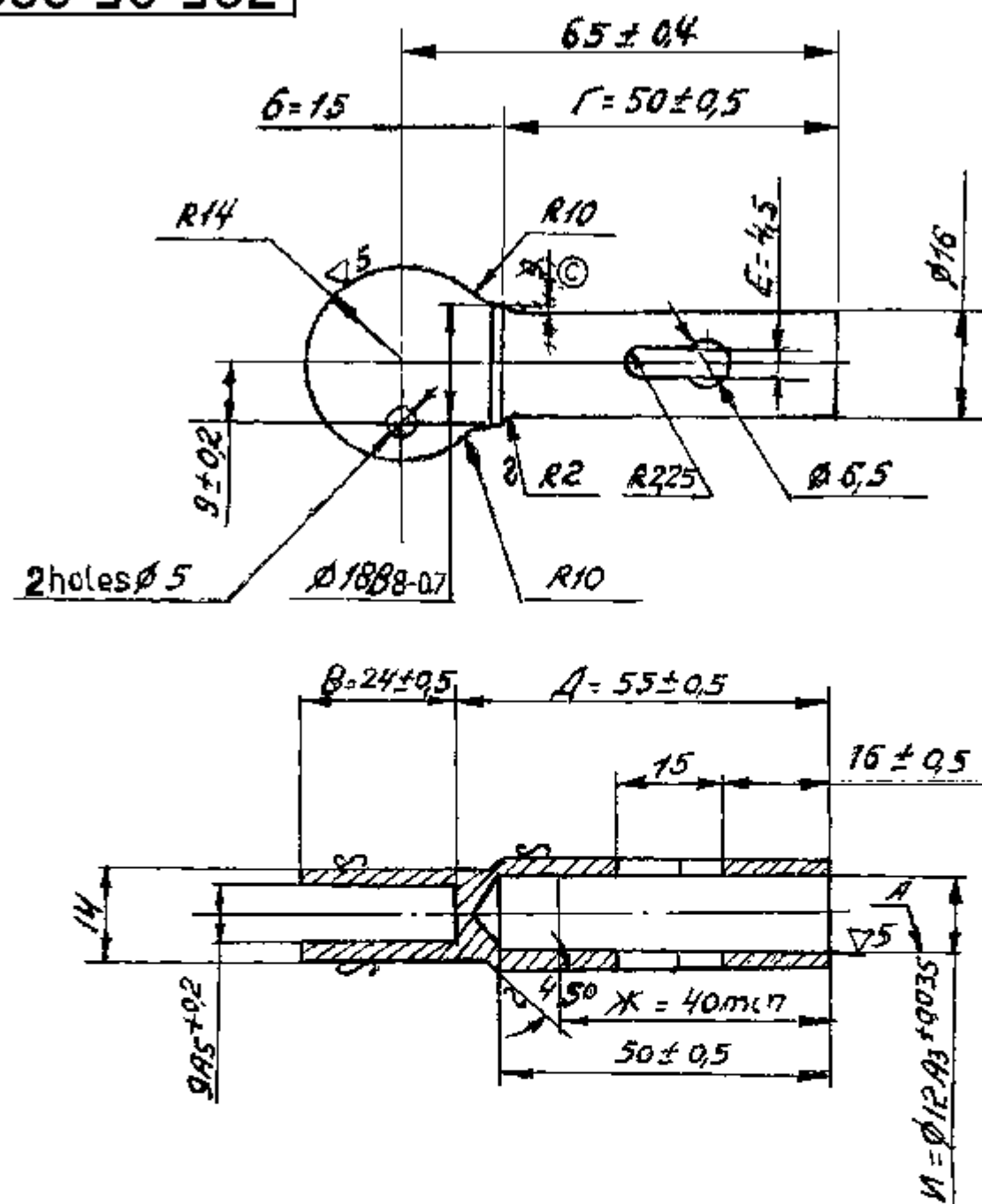
0.135 1:1

SHT SHTS 1

USED ON: 765-05-Sb221

765-05-382

▽3 unless otherwise specified.



1. Blunt sharp edges.
2. Make dimensions without deviations of surfaces to be machined as per accuracy class 7, OST 1010.
4. Displacement of slots E to axis of surface A should not exceed 0.15mm (qualified tolerance).
6. Machining is permitted as per dimensions F and A instead of B and 6
7. Alternate material is steel CT5cn, CT6cn, GOST 380-71 and steel 25,30,35,40,45 GOST, 1050-74.
8. Absence of zinc is allowed on inner surfaces.
9. Local recesses not exceeding 0.7mm are allowed on unmachined surfaces
5. Coating: Zinc-plated, 9 microns thick, ~~chromatized~~ Remove hydrogen embrittlement.
10. Make dimension V over length X. For other length step not exceeding 0.7mm is allowed.
3. Other requirements for forging are as per class II GOST 7505-74
- Ⓐ EQ MATERIAL:- 20 C8 Gde.1 To IS: 9550-80
- Ⓑ EQ. MATERIAL:- CARBON STEEL BLACK BAR GRADE C20, C25, Mn75, C30, C40, C45 TO IS: 2073-70.

00913-ICV 31-10-2001	Ⓒ	DIMENSION 9 IS DELETED
00820-ICV 17-10-2000	Ⓑ	EQUIVALENT MATERIAL ADDED
00718-ICV 12-08-99	Ⓐ	EQUIVALENT MATERIAL ADDED
DCO) No. & DATE	ISSUE	AMENDMENTS

APPROVED

CHECKED

CONTROLLERATE
OF
QUALITY ASSURANCE
(ICV)

20, GOST 1050-74

765-05-382

LEVER

WEIGHT SCALE

0.04 1:1

SHT 1 SHTS 1