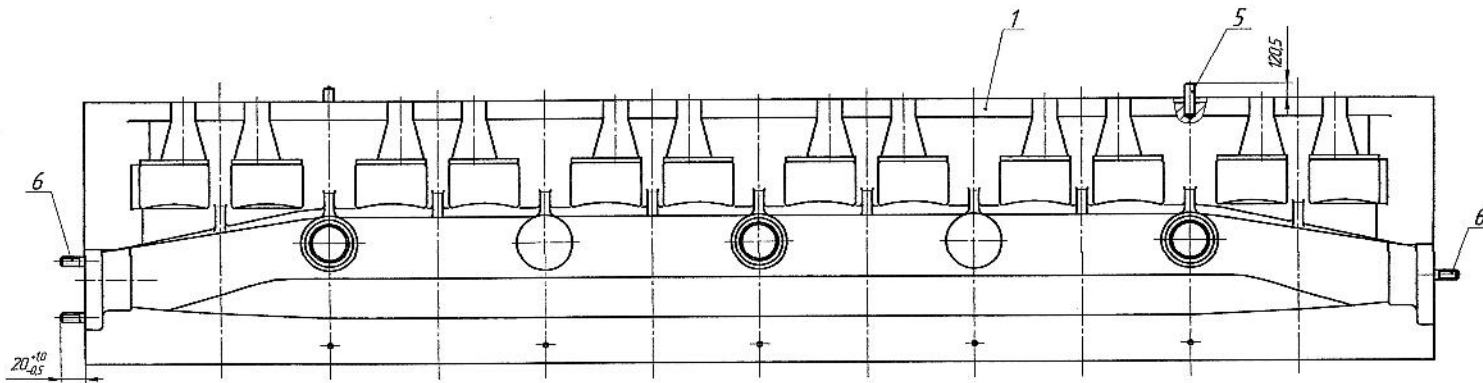
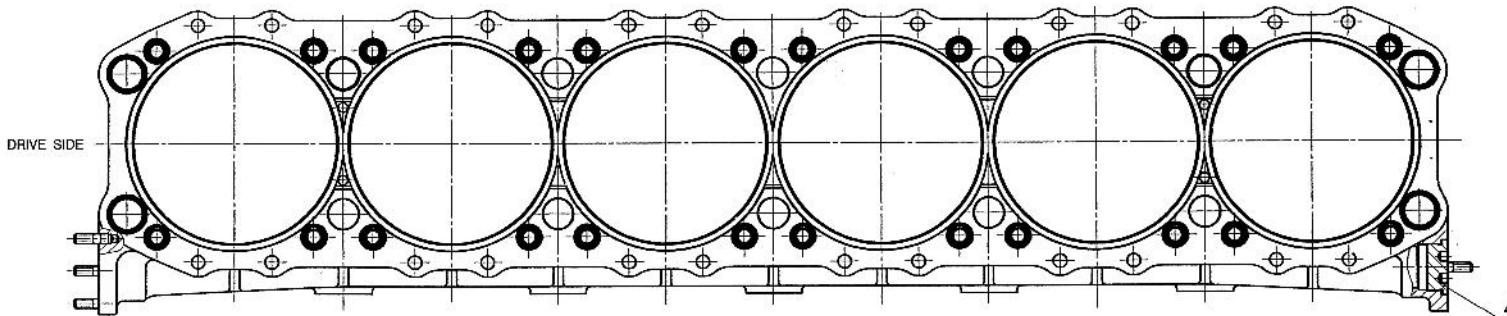


USED ON	ZONE	ITEM NO	DRAWING NUMBER	D S CAT NUMBER	DESCRIPTION	QTY	REMARKS
Cb.303-00-23 Cb.303-00-23-01 I/L CREATED BASED ON RUSSIAN ORIGINAL ISSUE - NIL I/L REPLACES ISSUE - 3 & I/L Cb 303 - 03 - 1; Vide Notn No. 196-09			Cb.303-03-16 & ITEM LIST		CYLINDER JACKET R.H ASSY.		
		1	Cb.303-06-24		CYLINDER JACKET R.H SUB ASSY	1	
		4	303-13-4		PLUG	1	
		5	352-18-1		PIN 8h8x27	4	
		6	350-123		STUD M8x32	4	
V92S2							
	ISSUE	DATE	NATURE OF AMENDMENTS		ISSUE	DATE	NATURE OF AMENDMENTS
F-164	DRN	<i>[Signature]</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.				
13	CHD	<i>[Signature]</i>	TITLE : CYLINDER JACKET R.H ASSY.				
	APPD	<i>[Signature]</i>					
	DATE	03.09.2015	SHT. NO. 1 OF 1	D S CAT NUMBER	ITEM LIST FOR Cb.303-03-16		



1. LEAK TEST IS CARRIED OUT WITH WATER UNDER PRESSURE 0.25 Mpa (2.50 Kg/cm²) ... 0.30 Mpa (3.00 Kg/cm²) AT TEMPERATURE 60°C ... 70°C FOR 3 MINUTES MINIMUM. LEAKAGE IS NOT ALLOWED.
2. LEAK PROOFNESS TEST IS ALLOWED BEFORE FIXING OF STUDS & PINS.



DGS. INCANDED BASED ON RUSSIAN ORIGINAL. ISSUE - NIL
 DGS. REPLACES ISSUE-2 & Cb303-03-11c. VIDE MEMO No. 196-09

V92-S2

17
SLOT 41

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

1ST. WT. # TO BE STAMPED ON MARKED W/HTSE (LETTERS) INDICATED THUS P ()

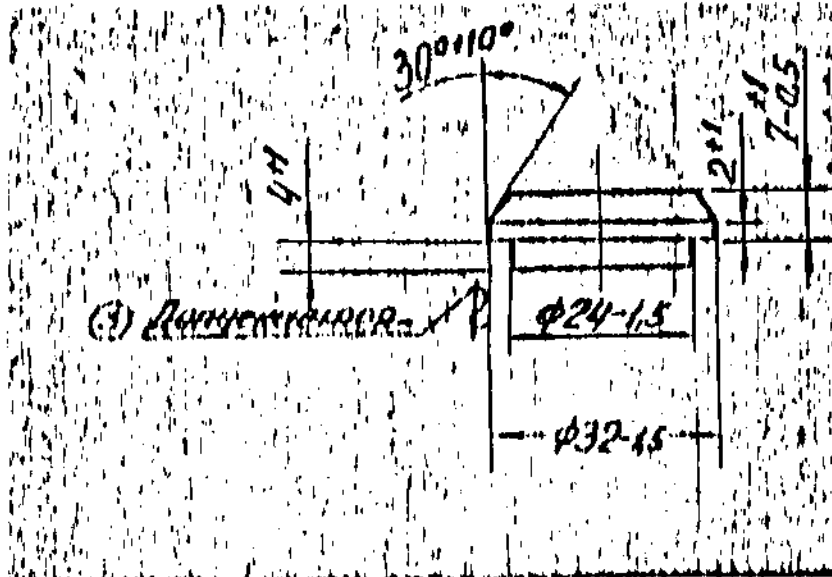
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED. MACHINED CORNERS TO HAVE R. OUTSIDE R. INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DESIGN	CHKD	APPRD	DATE	SCALE	DIMENSIONS	TOLERANCES	ALL THREADS	ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL	USED ON	CONTROL	TITLE	DRAWING NUMBER
			09 DEC 2015	1 : 2	IN mm	UNLESS OTHERWISE STATED IS: 2102-09	TO CONFORM TO IS: 4218.PART-4					Cb303-03-23 Cb303-03-25-01	AVADI	CYLINDER JACKET R.H. ASSY.	Cb303-03-16cb

USED ON	ZONE	ITEM NO	DRAWING NUMBER	D S CAT NUMBER	DESCRIPTION	QTY	REMARKS
Cb.303-03-16cb I/L CREATED BASED ON RUSSIAN ORIGINAL ISSUE - NIL I/L REPLACES ISSUE - MIL & I/L Cb 303 - 06 - 18 Vide Notfn No. 196-09			Cb.303-06-24 Cb		CYLINDER JACKET		
			& ITEM LIST		R.H SUB ASSY		
		1	303-06-24		CYLINDER JACKET R.H	1	-ND-
					AK7ч(АЛ9) GOST 1583-93		
		2	402-84		PLUG	3	
	V92S2						
	ISSUE	DATE	NATURE OF AMENDMENTS	ISSUE	DATE	NATURE OF AMENDMENTS	
F-164	DRN	<i>[Signature]</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.				
17	CHD	<i>[Signature]</i>	TITLE : CYLINDER JACKET R.H SUB ASSY				
	APPD	<i>[Signature]</i>					
	DATE	03.09.2015	SHT. NO. 1 OF 1	D S CAT NUMBER	ITEM LIST FOR Cb.303-06-24		

DRAWING NUMBER
402-84

Rz 0.0



ALTERNATE MATERIAL : ДИМЕТРИЧЕСКАЯ КР 32А, ГОСТ 21400;
UNMACHINED OVER EXTERNAL DIAMETER.

A3
34

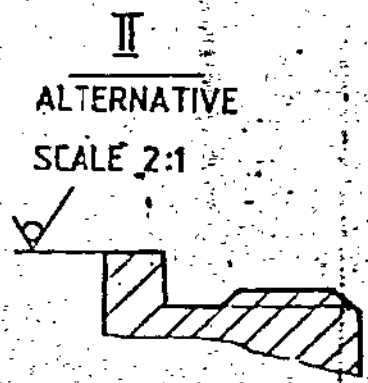
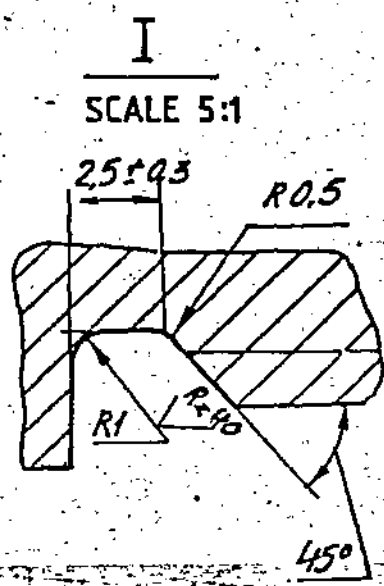
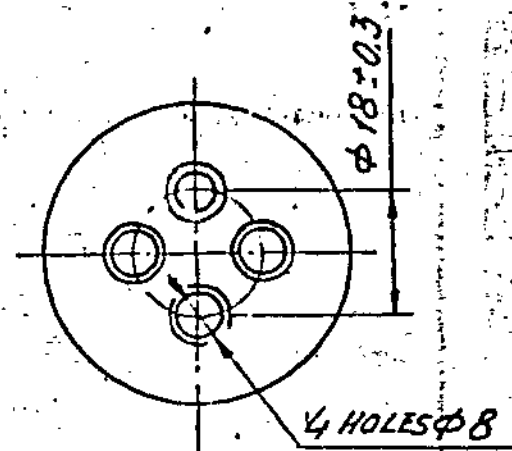
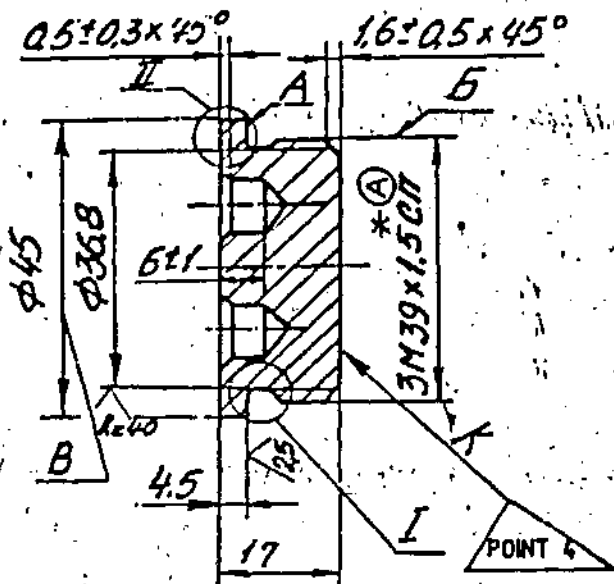
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. WT. 0.016 kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS = (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT- SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
		MATERIAL:- АЛ 9 ГОСТ 2685-75 CASTING.	USED ON СБ 303-03-7 СБ 3301-15-30 СБ 303-02-7
ISSUE DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.	
DRM <i>[Signature]</i>	SCALE:- 1:1 DIMENSIONS IN mm	TITLE END CAP	
CHD <i>[Signature]</i>	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102-69	D S CAT NUMBER	
TCD <i>[Signature]</i>	ALL THREADS CONFORM TO	DRAWING NUMBER 402-84	
APPO <i>[Signature]</i>			
DATE 24 ² / ₈₉			

SIZE A4

DRAWING NUMBER

303-13-4



1. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS: FOR HOLES AS PER A7, FOR SHAFTS AS PER B7. Rz80/ (✓)
2. TECHNICAL REQUIREMENTS FOR THREAD - AS PER STANDARD 82021-00.
3. END PLAY OF SURFACE 'A' RELATIVE TO SURFACE 'B' ALONG ΦB SHOULD NOT EXCEED 0.1mm.
4. TO BE MARKED BY PUNCHING.
5. DIAMETER 'B' MAY BE OBTAINED WITH TOLERANCE h 16 (-1,6), ON THE SURFACE OF DIAMETER 'B' ROUGH SPOTS ARE PERMISSIBLE.

6. EXPLANATORY NOTE:

MATERIAL QUOTED: БАРЕПАЖ 9-4 GOST 1628-78
 БАЖ 9-4 = GRADE OF MATERIAL
 CHEMICAL COMPOSITION% (AS PER GOST 18175-78)
 BASIC COMPONENT
 ALUMINIUM = 8.0-10.0; IRON = 2.0-4.0; COPPER = REST
 IMPURITIES (MAX)
 TIN = 0.1; SI = 0.1; Pb = 0.01; P = 0.01;
 Zn = 1.0; Mn = 0.5; TOTAL IMPURITIES = 1.7
 MECHANICAL PROPERTIES (AS PER GOST 1628-78)
 ULTIMATE TENSILE STRENGTH $Kgf/mm^2 = 55$ (min)
 RELATIVE ELONGATION% = 15 (min)
 BRINELL HARDNESS (HB) = 110-180

(A) T. * REPAIR SIZE DIMENSION, R1=3M42 X 1.5. ADDED BASED ON LETTER No. 82847/DH/QAD/ED. DT. 26 DEC 94.

KVD NO. 78974

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

EST. WT. 0.17 kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)

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

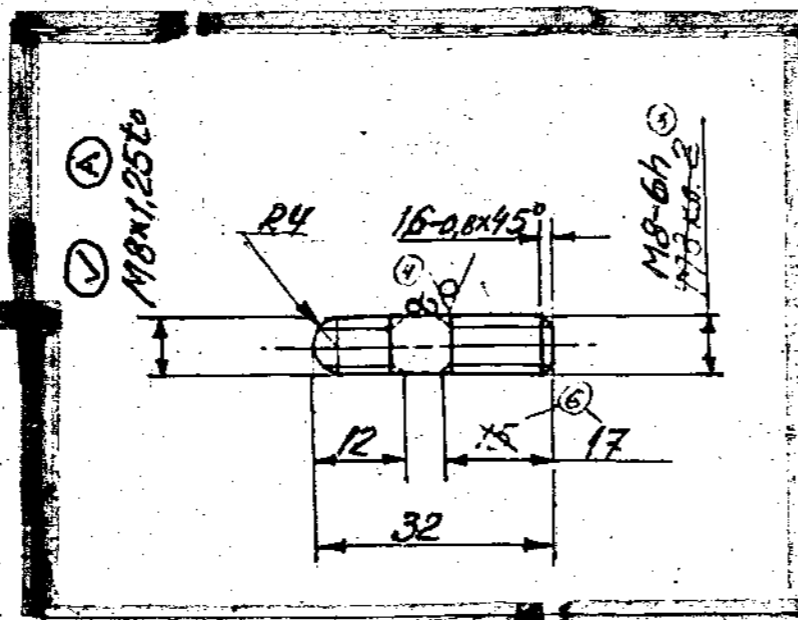
DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102-69.	ALL THREADS TO CONFORM TO IS: 2210 Pt IV	MATERIAL: BAR BP A * 9-4 GOST 1628-78	USED ON CE 303-02-710 CE 303-03-711	CONTROLLER OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADL	TITLE PLUG	D S CAT NUMBER	DRAWING NUMBER 303-13-4
				20-8-96	1:1									
A	20-1-95	REPAIR SIZES ADDED												
ISSUE	DATE	NATURE OF AMENDMENTS												

A-3
67

DRAWING NUMBER
350 123

EXPLANATORY NOTE :

Rz80



1. TECHNICAL REQUIREMENTS FOR THREADS AS PER STANDARD 82021-00.
2. DIMENSIONS WITH UNSPECIFIED TOLERANCES AND THE REST OF THE TECHNICAL REQUIREMENTS AS PER STANDARD 82052-00.
3. COATING: CADMIUM 3, CHROMATIZING AS PER U L S -104 WITH SUBSEQUENT ELIMINATION OF HYDROGEN EMBRITTLEMENT.
4. THE THREAD MAY BE MADE BY ROLLING WITH THE DIAMETER OF UN-THREADED PORTION WITHIN THE PITCH DIAMETER OF THREAD.
5. ALTERNATE MATERIAL: STEEL 40, 50, GOST 1050-74.
7. REPAIR SIZE DIMENSIONS ARE ADDED WHERE
 (A) INDICATED THUS (✓), BASED ON OVERHAUL SPECIFICATIONS PART III REPAIR DRAWINGS. **
 (B) B. HARDNESS - 27--32 HRC.

6. REFERENCE MATERIAL QUOTED:

COLD DRAWN SIZED STEEL ROUND BAR ϕ 8mm TO GOST 7417-75 STEEL OF GRADE 45 TO 1051-73 AND MANUFACTURED IN ACCORDANCE WITH QUALITY CARBON STRUCTURAL STEEL GRADE 45 AND REFERENCE NOTE 5, ON ALTERNATE MATERIAL STEEL GRADES 40 & 50 TO GOST 1050-74.

a) CHEMICAL COMPOSITION AS PER GRADES 45, 40 & 50 TO GOST 1050-74.

GRADE OF STEEL	CONTENT OF ELEMENTS %					REMARKS	
	C	Si	Mn	Cr	S		P
45	0.42-0.50	0.17-0.37	0.50-0.80	0.25	0.040	0.035	Ref,Matl
40	0.37-0.45	0.17-0.37	0.50-0.80	0.25	0.040	0.035	Alt,Matl
50	0.47-0.55	0.17-0.37	0.50-0.80	0.25	0.040	0.035	Alt,Matl

RESIDUAL CONTENT OF COPPER AND NICKEL SHOULD NOT EXCEED 0.25% EACH.

b) MECHANICAL PROPERTIES UNDER NORMALISED CONDITION:

GRADE OF STEEL	ULTIMATE TENSILE STRENGTH Kgf/mm ²	YIELD POINT Kgf/mm ²	ELONGATION %	REDUCTION IN AREA %	IMPACT STRENGTH Kgm/cm ²	HARDNESS B H N M A X	RE-MAR-KS
45	61	36	16	40	5	279	Ref,Matl
40	58	34	19	45	6	217	Alt,Matl
50	64	38	14	40	4	241	Alt,Matl

(B) * MATERIAL:-
STEEL 709 M40 (EN-19) TO BS-970 Pt.-1-1983.

SL. NO	REMARKS
1	M10 X 1.5 to
2	PCD 9.026 + 0.152 + 0.082

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

EST WT TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
0.0117 Kg

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

DRN: [Signature]
 CHD: [Signature]
 TCO: [Signature]
 APPD: [Signature]
 DATE: 25-3-'86
 SCALE: 1 : 1
 DIMENSIONS IN mm
 TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102-69
 MATERIAL: ROUND-BAR (C) GOST 7417-75 * USED ON: 3311-20-10
 45 GOST 1051-73 * 3311-20-6
 CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI

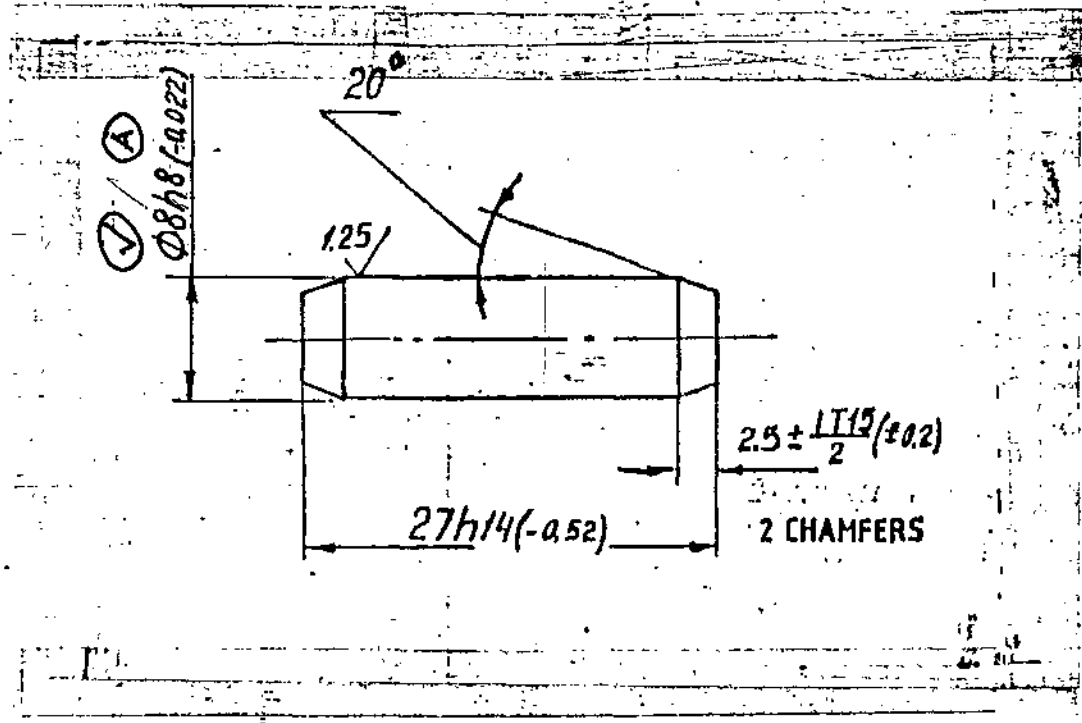
TITLE: STUD M8x32

ISSUE	DATE	NATURE OF AMENDMENTS
C	20-5-09	Authy: Third Alt. Comm. Minutes Point 5 Dated 27-02-2009.
B	13-01-08	AUTHY-MIN. OF ALT. COM. MEET. POINT No.-2.12 Dt.- 07-02-07
A	10-11-95	REPAIR SIZE DIMNS ADDED

D S CAT NUMBER
DRAWING NUMBER
350 123

DRAWING NUMBER
352-18-1

READ ✓ (✓)



EXPLANATORY NOTE :-

MATERIAL QUOTED:- ROUND GOST 7417-75
45GOST 1051-74

45 = GRADE OF STEEL

CHEMICAL COMPOSITION % (AS PER GOST 1050-74)

- CARBON = 0.42-0.50
 - SILICON = 0.17-0.37
 - MANGANESE = 0.50-0.80
 - CHROMIUM = 0.25
 - PHOSPHORUS = 0.035
 - SULPHUR = 0.040
 - COPPER = 0.25
 - NICKEL = 0.25
- } MAXIMUM

MECHANICAL PROPERTIES (AS PER GOST/1050-74)

- TENSILE STRENGTH kgf/mm^2 (min) = 61
- YIELD POINT kgf/mm^2 (min) = 36
- RELATIVE ELONGATION % (min) = 16
- REDUCTION IN AREA % (min) = 40
- IMPACT STRENGTH kgf/cm^2 (min) = 5

1. ALTERNATE MATERIAL: STEEL OF GRADES 40 AND 50
GOST 1050-74

2. COATING: CHEMICAL OXIDATION AND OIL-FINISHING.

3. REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED

(A) THUS (✓) BASED ON OVERHAUL SPECIFICATION PART III
REPAIR DRAWINGS. **

(B) EQUIVALENT MATERIAL
STEEL O80M40 (EN8) TO BS 970 OR
45 CB TO IS 1570

S.No	R ₁	R ₂	REMARKS
1	∅8.5 - 0.022	∅9 - 0.022	ALL OTHER CONDITIONS AS PER STD DRG.

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

EST. WT. 0.0105kg TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)

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

DRN	CHD	TCD	APPO	DATE	SCALE	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102-69.	MATERIAL:- ROUND GOST 7417-75 45GOST 1051-74	USED ON CB 303-03-11
				30-09-88	2:1			CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.	
								TITLE PIN 8 x 27	
								D S CAT NUMBER	DRAWING NUMBER 352-18-1
ISSUE	DATE	NATURE OF AMENDMENTS							

EXPLANATORY NOTE ADDED ON 18-9-91

Issue 1 - BK 83-683

SIZE A3