

FROM 1st JANUARY, 1971, BOLTS 3041A WITH DIAMETER 10 MM ARE NOT USED IN ϕ NEW DESIGNS.
 FROM 1st JANUARY, 1982 STANDARDS 3041A, 3043A, 3044A ARE NOT

SHEET 1 OF 2

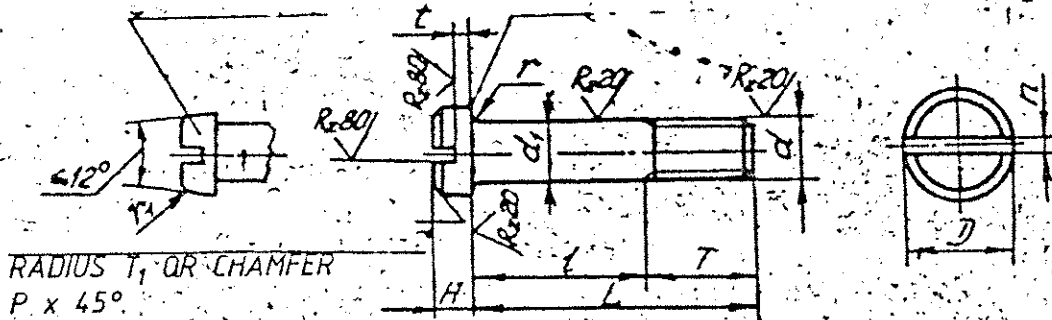
USED IN NEW DESIGNS: USE OST 1 31139-80,
 OST 1 31143-80, OST 1 31140-80, ACCORDINGLY.

OST. 1 31142-80,

R_z 40 (✓)

TO BE UPSET.

TO BE TURNED.



IT IS ALLOWED NOT TO MACHINE (✓) SURFACE 'D' WHEN USE IS MADE OF CALIBRATED BAR OF CORRESPONDING DIAMETER.

TABLE 1.

GRADE OF STEEL OR ALLOY.	DIAMETER.	EXAMPLE OF BOLT DESIGNATION WITH DIMENSIONS $d_1 = 6$ AND $L = 36$ MM
45	FROM 1 TO 10	3041A-6-36
A63 Π T OR A659-1	FROM 1 TO 6.	3043A-6-36
A63 Π T OR A659-1 ANTIMAGNETIC.		3043A-ant 6-36
30 x FCA	FROM 3 TO 10	3044A-6-36.

TABLE 2.

d_1 (PER.DEVNS.IS AS PER C5)	1	1,4	1,6	(1,7)	2	2,5	(2,6)	3	4	5	6	8	10
THREAD	M1	M1,4	M1,6	m1,7	M2	M2,5	M2,6	M3	M4	M5	M6	M8	M10
H (PER.DEVNS. IS AS PER B ₁)	0,7	1	1,2		1,4	1,7	1,8	2	2,8	3,5	4	5	6
D (PER.DEVNS. IS AS PER B ₂)	2	2,6	3		3,5	4,2	4,5	5	6	7,5	9	12	15
T ₁ REFERENCE	3	4	5		6	8			9	10	12	14	18.
Γ (PER.DEVNS. $\pm 0,2$)					0,3 ¹⁾						0,5	0,8	
$\Gamma_1 =$	0,2	0,25	0,3			0,45	0,5	0,6	0,7	0,9	1,2	1,5	
Π (PER.DEVNS.IS AS PER A ₇)	0,32	0,4			0,5	0,6	0,8	1	1,2	1,6		2	
F (PER.DEVNS.IS AS PER B ₇)	0,4	0,5	0,6		0,7	0,8	0,9	1	1,4	1,8	2	2,5	3.
P = \approx						0,2							0,3.

FROM 1-1-1964 DIAMETER OF BOLTS, GIVEN IN BRACKETS ARE CANCELLED.

RADIUS r FOR BOLTS UPTO DIAMETER $d_1 = 5$ MM INCLUSIVE SHOULD NOT EXCEED 0.3 MM.

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

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THIS #
			LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL	USED ON:-
DRN <i>d/16/80</i>	SCALE -	SEE ABOVE	AK 150C -01 C5
CHK <i>AK/16/80</i>	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TLD <i>d/16/80</i>	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE. BOLT CHEESE HEAD	
APPO <i>fn</i>	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
DATE 28/7/80			3041A : 3043A, 3044A

SHEET
2 OF 2



CHEESE-HEAD BOLTS

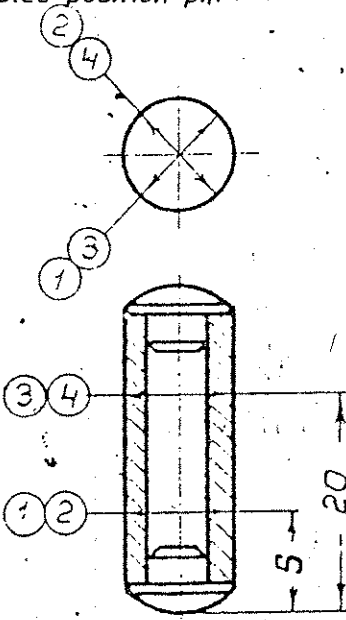
3041A, 3043A,
3044A.

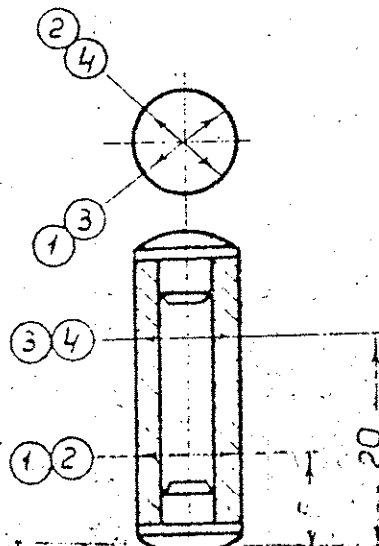
CT 2

1. MATERIAL:
STEEL OF GRADE 45 AND 30 X ГСА:
BRASS OF GRADE Л163П1 AND ЛС59-1
2. HEAT TREATMENT OF SCREWS OF STEEL GRADE 30 X ГСА - 6_B
= 120±10Kgs/MM². (WHILE WITH ISOTHERMAL HARDINING-6_B
= 120±²⁵/₁₀ Kgs/MM²).
3. THREAD - AS PER GOST 9150-59, TOLERANCE ZONE AS PER
GOST 16093-70: -6_g FOR THREADS LESS THAN M3 AND 6e FOR
THREADS M3 AND HIGHER - FOR STEEL BOLTS AND BRASS BOLTS
WITH GALVANIC COATING FOLLOWED.
-6h FOR BRASS BOLTS WITH PASSIVATION FOLLOWED.
4. COATING: FOR BOLTS FROM STEEL OF GRADE 45-ZINC PLATING.
FROM STEEL OF GRADE 30 X ГСА d₁ ≤ 8MM ZINC PLATING,
d₁ = 10MM - CADMIUM PLATING FROM BRASS - PASSIVATION
OTHER TYPES OF COATING - AS PER DESIGNER INSTRUCTIONS.
(SEE 101ATY TECHNICAL SPECIFICATIONS)
5. RATED BREAKING STRESSES OF BOLTS MADE OF STEEL OF GRADE
45 AND 30 X ГСА, ARE AS PER 2 AP.
6. RANGE OF SIZES AND WEIGHT - AS PER 5AP, TABLES 7 AND 19.
7. TECHNICAL SPECIFICATIONS ARE AS PER 101ATY.

PROF SAMPLE SHOULD BE APPROVED BY A P.S.F BEFORE BULK PRODUCTION.

		EST. MASS.	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.
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL	USED ON:-
DRW <i>8/16/80</i>	SCALE:-		
CHD <i>8/16/80</i>	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD <i>8/16/80</i>	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE: BOLT CHEESE HEAD	
APPD <i>8/16/80</i>	ALL THREADS CONFORM TO		D S CAT NUMBER
DATE 25/2/80			DRAWING NUMBER 3041A: 3043A; 3044A

Designation and description of units sketch with indication of measuring places	Indication of measuring places	Designation according to drawing	Actual dimensions			
			Before test	After test	Wear out	note
③ AK150-27 собранный Assembled position pin 	1	$\phi 127(+0.006)$				
	2					
	3					
	4					

② AK150H-35 собранный. Assembled position pin 	1	0				
	2	$\phi 147(+0.005)$				
	3					
	4					

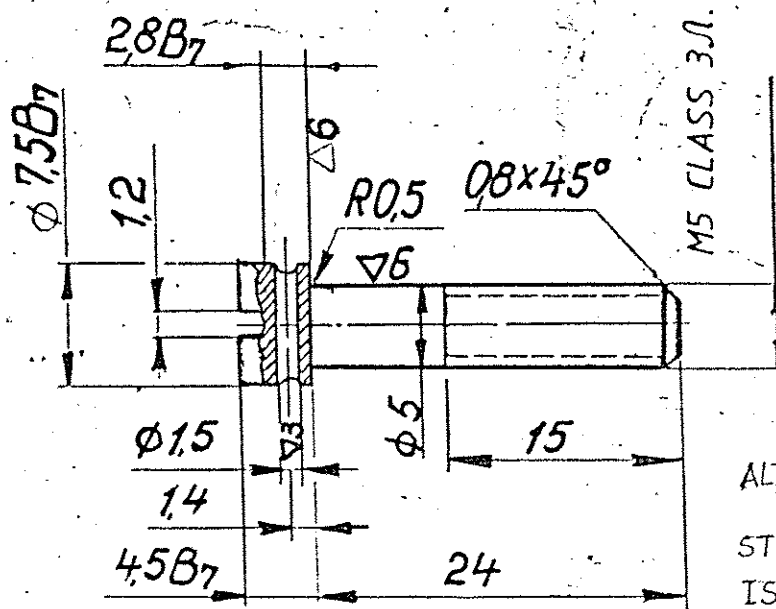
EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THIS #	
ISSUE DATE		LETTERS)	
NATURE OF AMENDMENTS		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
DRN	SCALE -	MATERIAL :-	USED ON :- AK 150C-01CB
CHD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADL	
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	TITLE:- AIR COMPRESSOR TABLE OF MICRO MEASUREMENTS.	
APRO	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
DATE 25/7/90			AK 1508 TM— AK 1508-01

DRAWING NUMBER

1028 A -129

$\nabla 4$ UNLESS SPECIFIED OTHERWISE

TOLERANCE ON FREE DIMENSIONS ARE AS PER 22 AT 52.



M5 CLASS 3.9.

ALT. MATL:-
STEEL 40Cr4Mo3 TO
IS: 5517-78 OR EN 19
TO BS: 970 - 26-32 HRC

THREAD MAY BE MADE BY ROLLING.

HARDNESS - HRC 28 TO 37.

AS
THREAD BEFORE COATING IS PER 214 AT.

COATING ZINC-PLATED 6 TO 9
MICRONS THICK CHROMATIZED

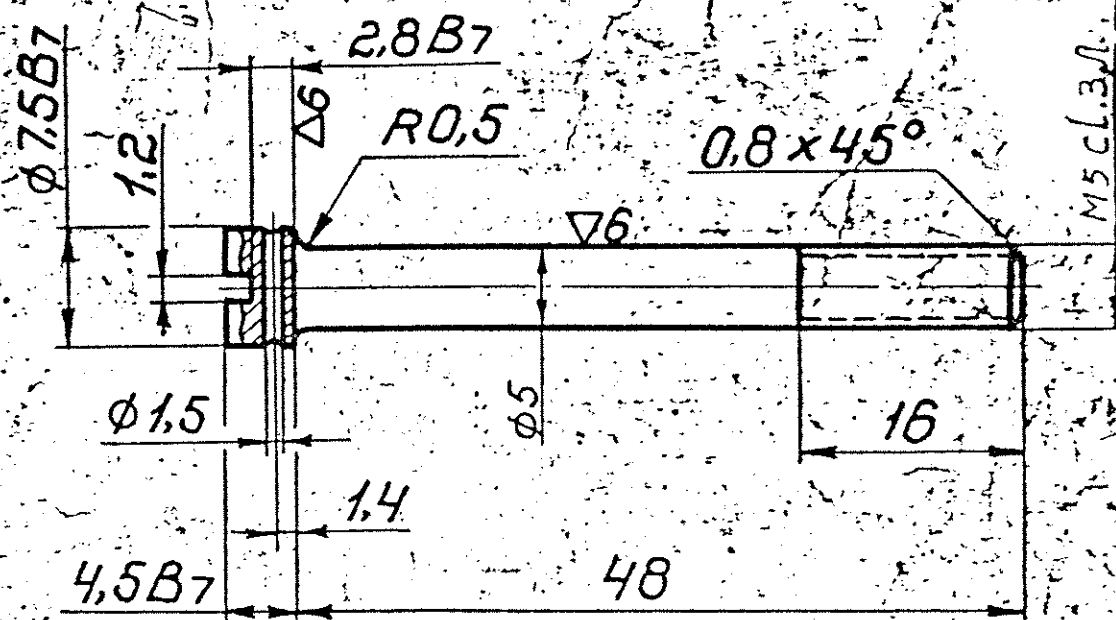
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. MASS 3	TO BE STAMPED OR MARKED WHERE INDICATED THUS \oplus (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRM [Signature]		SCALE - 2:1.	MATERIAL :- STEEL 38x A USED ON:- AK150C-01CB TY 14-1-950-74
L.S.O [Signature]		DIMENSIONS IN mm.	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVAD.
TED [Signature]		TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	TITLE:- SCREW
APPD [Signature]		ALL THREADS CONFORM TO	D S CAT NUMBER
DATE 25/7/82			DRAWING NUMBER 1028A-129

DRAWING NUMBER
1028A-131

▽4 UNLESS OTHERWISE SPECIFIED.

TOLERANCE ON FREE DIMENSIONS
ARE AS PER 22AT52.



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

COATING: CADMIUM PLATED, 9 TO 15 MICRONS THICK

THREAD MAY BE MADE BY ROLLING.

THREAD BEFORE COATING IS AS PER 214 AT.

ALT. MATL: -

STEEL 40Cr4 Mo3 TO IS: 5517-78

OR En 19 TO BS: 970. HRC 26-32

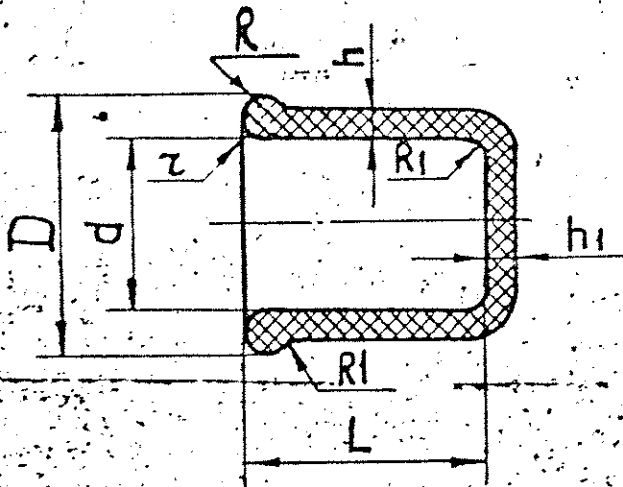
HARDNESS HRC 28 TO 37.

			EST. MASS 8	TO BE STAMPED OR MARKED WHERE INDICATED THUS \neq LETTERS)
			ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENT	MATERIAL: - STEEL 38XA TY 14-1-950-74	USED ON: - AK 150C - 01 CB
DRN 28/1/74		SCALE - 2:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHO Chatterjee		DIMENSIONS IN mm.	TITLE: - SCREW	
TCD S. Mohan		TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	D S CAT NUMBER	
APPD V. S.		ALL THREADS CONFORM TO	DRAWING NUMBER 1028A-131	
DATE 28/1/74				

175
2

DRAWING NUMBER

5HA-14



Designation	d	L	h	h ₁	D	R	r	R ₁	Bec b2
5HA-14	14-0.5	20±0.5	1+0.5	1+0.5	19	φ2.5	1	2	

1. PART 5HA-34 MAY BE MADE FROM RUBBER MIX 3109-H.
2. ALTERNATE FOR RUBBER MIXES 3825 AND 3109 - H IS RUBBER MIX 4327.
3. USE CAPS AS PER STANDARD OST1 10244-71 IN NEW DESIGNS.

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

		EST. MASS	TO BE STAMPED OR MARKED WHERE INDICATED THIS * (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE	DATE	NATURE OF AMENDMENTS	
EN Shahid		SCALE -	MATERIAL:- MIX 3825 USED ON:- AK150C-01CB Ty 38 005-1166-73
EN Shahid		DIMENSIONS IN mm.	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVADL
TD d. Mohan		TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	TITLE:- RUBBER CAP
APPD Shahid		ALL THREADS CONFORM TO	D S CAT NUMBER
DATE 25/7/8			DRAWING NUMBER 5HA-14

DRAWING NUMBER

325 1A

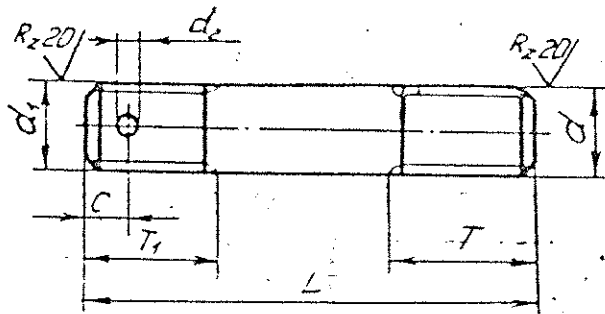


TABLE: 1

EXAMPLE OF STUD DESIGNATION WITH DIMENSIONS M10 AND L = 50mm	
WITHOUT HOLES FOR COTTER PIN	WITH HOLE FOR COTTER PIN (C = 4mm)
3251A-10-50	3251A-10-50-4

TABLE: 2

THREAD	d	YT3x0,5	YT4x0,7	YT5x0,8	YT6x1	YT8x1,25	YT10x1,5	YT12x1,5	YT14x1,5	YT16x1,5	YT18x1,5
	d1	M3	M4	M5	M6	M8	M10	M12x1,5	M14x1,5	M16x1,5	M18x1,5
T	PERMISSIBLE +1,0	6	8	10	12	16	20	24	28	32	36
T1	DEVIATION -0,5	8	9	10	12	14	18	20	22	24	26
C	(PERMISSIBLE DEVIATION) ±0,1	2, 2,5		3	4			4,5		5	
d2	(PERMISSIBLE +0,12) DEVIATION -0,06	1		1,6		2	2,5		3,2		

- MATERIAL: STEEL, GRADE 38XA.
- HEAT TREATMENT - $\sigma_B = 90$ TO 110 kgf/mm², (H R C = 27 TO 34).
- THREAD
d = AS PER 254AT.
d1 = AS PER GOST 9150-59, AFTER TOLERANCE 6 e AS PER GOST 16093-70.
- COATING: CADMIUM-PLATING. OTHER TYPES OF COATING ARE AS PER SPECIFICATION OF DESIGNER (SEE 101 ATY).
- DIAMETER AND FINISH OF SURFACE OF THE STUD SMOOTH PORTION SHOULD CORRESPOND TO THOSE ACCEPTED FOR THE WORK PIECES FOR THREAD ROLLING (CUTTING).
- ASSORTMENT AND WEIGHT ARE AS PER 3271A.
- TECHNICAL SPECIFICATIONS ARE AS PER 101ATY.

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

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
ISSUE DATE	NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
DRN <i>Cu</i>	SCALE -	MATERIAL:-	USED ON:- AK150B-04-C/B CB
CHD <i>Chattopadhyay</i>	DIMENSIONS IN mm	SEE ABOVE	
TCD <i>Sunder</i>	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
APPD <i>Vijay</i>			TITLE: STUDS FOR SCREWING TO SOFT METAL
DATE	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
22.7.86			325 1A

DRAWING NUMBER

3251A

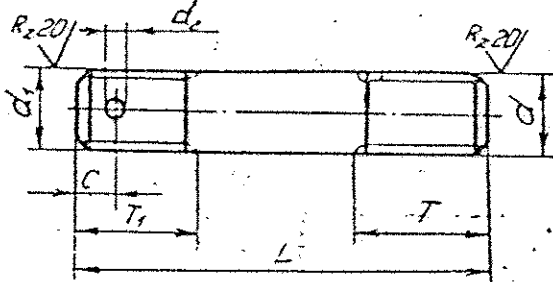


TABLE 1

EXAMPLE OF STUD DESIGNATION WITH DIMENSIONS M10 AND L = 50mm	
WITHOUT HOLES FOR COTTER PIN	WITH HOLE FOR COTTER PIN (C = 4mm)
3251A-10-50	3251A-10-50-4

TABLE: 2

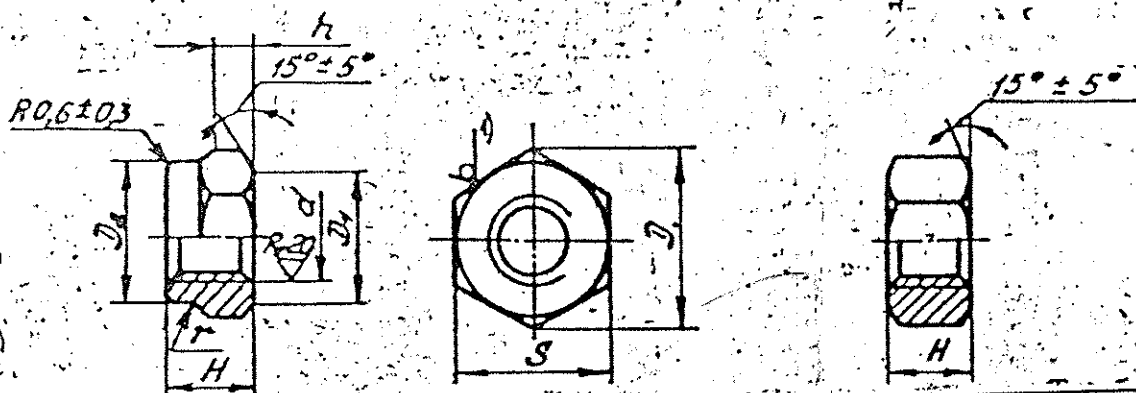
THREAD	d	YT3x0,5	YT4x0,7	YT5x0,8	YT6x1	YT8x1,25	YT10x1,5	YT12x1,5	YT14x1,5	YT16x1,5	YT18x1,5
	d1	M3	M4	M5	M6	M8	M10	M12x1,5	M14x1,5	M16x1,5	M18x1,5
T PERMISSIBLE	+1,0	6	8	10	12	16	20	24	28	32	36
T1 DEVIATION	-0,5	8	9	10	12	14	18	20	22	24	26
C (PERMISSIBLE DEVIATION)	±0,1	2, 2,5		3		4		4,5		5	
d2 (PERMISSIBLE DEVIATION)	+0,12 / -0,06	1		1,6		2		2,5		3,2	

- MATERIAL: STEEL, GRADE 38XA.
- HEAT TREATMENT - $\sigma_b = 90$ TO 110 kgf/mm², (H R C = 27 TO 34).
- THREAD
d = AS PER 254AT.
d1 = AS PER GOST 9150-59, AFTER TOLERANCE 6 e AS PER GOST 16093-70.
- COATING: CADMIUM-PLATING. OTHER TYPES OF COATING ARE AS PER SPECIFICATION OF DESIGNER (SEE 101 ATY).
- DIAMETER AND FINISH OF SURFACE OF THE STUD SMOOTH PORTION SHOULD CORRESPOND TO THOSE ACCEPTED FOR THE WORK PIECES FOR THREAD ROLLING (CUTTING).
- ASSORTMENT AND WEIGHT ARE AS PER 3271A.
- TECHNICAL SPECIFICATIONS ARE AS PER 101ATY.

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

EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS #
—	(LETTERS)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS
DRN <i>Cy</i>	SCALE -
CHD <i>Chattaraj</i>	DIMENSIONS IN mm
TCD <i>Chattaraj</i>	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.
APPD <i>Chattaraj</i>	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
DATE	TITLE:
22.7.86	STUDS FOR SCREWING TO SOFT METAL
ALL THREADS CONFORM TO	D S CAT NUMBER
	DRAWING NUMBER
	3251A

FOR NUTS WITH THREAD R_{z40} ✓ (M)
M14x1,5 AND LESS.



Op.p. 8265	GRADE OF STEEL OR ALLOY	THREAD DIAMETERS	EXAMPLE OF DESIGNATION OF NUT WITH THREAD M6.
12 8261	A12	FROM 3 TO 18	3301A-6
11 7812	✓ 30XГСА	FROM 4 TO 24	3302A-6
	A.1T	FROM 3 TO 12	3305A-6
	ЦС9-1		3306A-6
	ЦС9-1 ANTI MAGNETIC		3306A aHT-6

TABLE: 2

THREAD d	M3	M4	M5	M6	M8	M10	M12x1,5	M14x1,5	M16x1,5	M18x1,5	M20x1,5	M22x1,5	M24x1,5	
S (permissible deviation as per C 5)	5,5	7	8	10	12	14	17	19	24	27	30	32	36	
D, MIN	6,0	7,8	8,8	11	13,2	15,5	18,8	21,1	26,8	30,2	33,6	35,8	40,3	
D1 MIN	4,8	6,3	7,3	9,2	11	13	16	18	23	26	29	31	35	
H (permissible deviation as per B 7)	2,5	4	4,5	5,5	7	8,5	10	11,5	13	14,5	16,5	18	20	
h (permissible deviation as per B 7)									6,5	7,4	8,9	9,4	10,8	
D2 (permissible deviation as per C 5)									22	25	28	30	34	
f (permissible deviation ±0,5)											4			
WEIGHT OF 100 PIECES	STEEL	0,034	0,100	0,120	0,249	0,410	0,615	1,22	1,63	2,73	3,36	5,52	7,57	9,24
	ALUMINIUM ALLOY	0,012	0,040	0,040	0,087	0,146	0,218	0,43						
	BRASS	0,037	0,110	0,132	0,269	0,451	0,676	1,36						

FOR NUTS TO BE MADE BY TURNING

SHEET 1 OF 2

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

EST. MASS. SEE TABLE 2	TO BE STAMPED OR MARKED WHERE INDICATED THUS: (LETTERS)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE DATE	NATURE OF AMENDMENTS
DRN: <i>Chomov</i>	SCALE: -
CHD: <i>Chalacko</i>	DIMENSIONS IN mm
TCD: <i>Sivada</i>	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.
APPD: <i>Yz</i>	CONTROLLER RATE OF INSPECTION (HEAVY VEHICLES) AVADI
DATE: 22.7.80	ALL THREADS CONFORM TO
	TITLE: THICK HEXAGON NUTS
	D S CAT NUMBER
	DRAWING NUMBER 3301A-3302A 3305A, 3306A.

SHEET 1

TOTAL SHEETS 5 SHEET NO.1

FROM 1st NOVEMBER, 1982, STANDARDS 3401A, 3402A, 3403A, 3404A, 3405A, 3406A, 3407A, 3408A, QHT IN NEW DESIGNS SHOULD NOT BE USED.

USE OST 1 34509-80,
OST1 34505-80, OST1 34510-80, OST1 34506-80,
OST1 34507-80, OST1 34508,
OST1 34511-80,
OST1 34512-80, OST 134513-80
RESPECTIVELY.

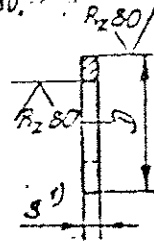


TABLE 1

WASHERS BRANCH STANDARD.	S	EXAMPLE OF WASHER MARK WITH DIMENSIONS S = 2, d = 10, AND D = 20MM.
A16AT	FROM 0.5 TO 8	3401A-2-10-20.
10	FROM 0.1 TO 0.3	3402A-2-10-20.
20 OR 10Γ 2A	FROM 0.5 TO 8	3403A-2-10-20
AMuM	FROM 0.5 TO 8	3404A-2-10-20
30xΓCA	FROM 0.5 TO 8	3405A-2-10-20 ²⁾
12x18H10T-M AND 12x18H9T-M	FROM 0.1 TO 3	3406A-2-10-20
M3 (MILD)	FROM 0.5 TO 5	3407A-2-10-20
ЛС59-1 HARD OF Л63-ПТ	FROM 0.5 TO 5	3408A-2-10-20
ЛС59-1 HARD OR Л63-ПТ ANTIMAGNETIC.	FROM 0.1 TO 5	3408A QHT -2-10-20.

RANGE OF SIZE.

TABLE 2.

STANDARD DIAMETER OF THREAD OF FASTENING PART d.	1	1,4	1,6	(1,7) ³⁾	2	2,5	(2,6) ³⁾	3	3,5	4	5
d ₁ ALLOWABLE DEVIATION AS PER A ₅	1,2	1,6	1,8	1,9	2,2	2,7	2,8	3,2	3,7	4,2	5,5
D ₁ ALLOWABLE DEVIATION AS PER B ₇	0,3	0,3	0,5	0,5	0,5	0,5	0,5	0,8	0,8	1,0	1,5
MAXIMUM THICKNESS OF WASHER, S											
2,5	0,3										
3		0,3									
3,5			0,5	0,5							
4	0,3										
4,5		0,3									
5			0,5	0,5	0,5						
5,5						0,5	0,5				
6					1	1	1	0,8	0,5		
7						1	1	1	0,8	0,5	
8								1,5	1	1	0,8
10										1,5	1,5
12											2.

DATE OF INTRODUCTION 1st FEBRUARY 1958.

1. DIMENSIONS ARE GIVEN FOR REFERENCE.

2. WASHER 3405A ARE HEAT TREATED $\sigma_B = 120 \pm 10 \text{ kgf/mm}^2$.

3. DIAMETER, INCLUDED IN BRACKETS FROM 1-1-1964 ARE CANCELLED.

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

EST. MASS SEE TABLE 5 ON SHEET 4	TO BE STAMPED OR MARKED WHERE INDICATED THIS * LETTERS)
ISSUE DATE NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.
DRN SCALE -	MATERIAL:- USED ON:- AK150B-02-C/B CB AK150C-01CB
CRD DIMENSIONS IN mm	SEE TABLE 4
TCD TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD	TITLE: WASHERS BRANCH STANDARD AVIATION ENGINEERING
DATE ALL THREADS CONFORM TO	DRG. No: 3401A 3402A 3403A, 3404A, 3405A, 3406A, 3407A, 3408A

TABLE 4.

NOMINAL DIAMETERS OF THREAD OF FASTENING PORT d	1	1,4	1,6	(1,7)	2	2,5	(2,6)	3	4	5	6	7
D	2,5	3	3,5		5	6		8	10		12	
S			0,3			0,5		0,8		1	1,5	

CONTINUATION OF TABLE-4

NOMINAL DIAMETERS OF THREAD OF FASTENING PORT d	8	9	10	12	14	15	16	18	20	22	24
D	14	18		20	25	30		32	35	40	
S		1,5			2			2,5			

1. MATERIAL :-

- STEEL, GRADES 10, 20, 10F2A, 30XFCA, 12X18H10T-M AND 12X18H9T-M;
- ALUMINIUM ALLOY, GRADES A16 AT, AM U M;
- COPPER, GRADE M3 (SOFT);
- BRASS, GRADES Ω C59-1 HARD OR Ω 63-HT.

2 MISALIGNMENT OF SURFACE d_4 WITH RESPECT TO SURFACE D SHOULD NOT BE MORE THAN HALF OF SUM OF TOLERANCE ZONES FOR SPECIFIED DIMENSIONS.

3 COATING :-

- FOR WASHERS OF STEEL, GRADE 10-OXIDATION OF STEEL GRADES 20 AND 10F2A-GALVANIZING OF STEEL, GRADE 30XFCA: FOR WASHERS 3405A-GALVANIZING, WASHERS 3404A-WITHOUT COATING.
- OF STEEL, GRADES 12X18H10T-M AND 12X18H9T-M- PASSIVATING:
- OF ALUMINIUM ALLOYS - ANODIC OXIDATION:
- OF BRASS - PASSIVATING TREATMENT.
- OTHER TYPES OF COATINGS SHOULD BE SPECIFIED BY DESIGNER (SEE ITEM 6 103ATY)


4. TECHNICAL SPECIFICATIONS ARE AS PER 103ATY.

THE FOLLOWING DIMENSIONS OF WASHERS 3402A OR 3405A ARE RECOMMENDED FOR SET OF ALLOYS WITH $b_g=30 \text{ kgf/mm}^2$, NOMINAL DIAMETER OF ROD $d = 10$ AND 14 mm, IF THEY WORK FOR BREAKAGE.

NOMINAL DIAMETER OF THREAD OF FASTENING PORT d	10	14
D	20	25
S	2	3

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

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL:-	USED ON:-	
DRN <i>Cij</i>	SCALE:-			
CHP <i>Chattaraj</i>	DIMENSIONS IN mm			
TCD <i>Chattaraj</i>	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI		
APPD <i>Chattaraj</i>	ALL THREADS CONFORM TO		TITLE: WASHERS	
DATE 22.7.82		D S CAT NUMBER	DRG. No: 3401A, 3402A, 3403A, 3404A, 3405A, 3406A, 3407A, 3408A	

WEIGHT

TABLE 5

d	1	1.4	1.6 (1.7)	2	2.5 (2.8)	3	3.5	4	5	6	7	8	9	10	12
WEIGHT OF 100 PIECES OF STEEL WASHERS, 1mm THICK, kg															
2.5	0.003														
3		0.004													
3.5			0.008												
4	0.009														
4.5		0.011													
5			0.014	0.013											
5.5					0.014										
6				0.02	0.02	0.02	0.02								
7					0.02	0.02	0.02	0.02							
8						0.03	0.03	0.03	0.03						
10								0.05	0.04	0.04					
12									0.07	0.06	0.05				
14										0.08	0.08	0.08	0.07		
16												0.12	0.10		
18												0.18	0.15	0.13	
20														0.18	0.14
22														0.28	0.18
25															0.28

TABLE 5 CONTINUED

d	14	15	16	18	20	22	24	27	30	33	36	39	42	45	48
WEIGHT OF 100 PIECES OF STEEL WASHERS, 1MM THICK, kg															
25	0.25	0.23													
28	0.34	0.33	0.31												
30			0.38	0.33											
32			0.45	0.41	0.37										
35				0.53	0.48	0.42									
38					0.61	0.58									
40						0.65	0.60								
45							0.88	0.76							
50								1.06	0.85						
55									1.27						
60										1.50					
65											1.89	1.78			
70												2.18	2.09		
75													2.48	2.32	
80														2.76	2.64
85															3.14
90															3.50

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

EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THIS #	
		LETTERS!	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.			
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL:-	USED ON:-
DRN <i>W.</i>	SCALE -		
CHD <i>Chitach</i>	DIMENSIONS IN mm.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD <i>ll</i>	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE - WASHERS	
APPD <i>ll</i>	ALL THREADS CONFORM TO	D S CAT NUMBER	
DATE 22.7.86.		DRG.No:3401A,3402A,3403A, 3404A,3405A,3406A,3407A,3408A.	

NOMINAL DIAMETER OF THREAD OF FASTENING PART d	6	7	8	9	10	12	14	15	16	18	20
	d , PERMISSIBLE DEVIATION AS PER A5	6,5	7,5	8,5	9,5	10,5	12,5	14,5	15,5	16,5	19
PERMISSIBLE DEVIATION AS PER B7	MAXIMUM WASHER THICKNESS, S										
	10	1									
12	1,5	1,5									
14	2,5	2	1,5	1,5							
18			2,5	2							
18			3	2,5	2,5						
20					3	2					
22					3	3					
25						4	3	3			
28							4	4	3		
30									4	3	
32									5	4	8
35										6	4
38											5

WASHERS OF SMALLER THICKNESS ARE TAKEN IN COMPLIANCE WITH TABLE "ASSORTMENT OF WASHER AS PER THICKNESS S".

TABLE 2, CONTINUED.

NOMINAL DIAMETER OF THREAD OF FASTENING PART d	22	24	27	30	33	38	38	42	45	48
	d , PERMISSIBLE DEVIATION AS PER B5	23	25	28	31	34	38	41	44	47
PERMISSIBLE DEVIATION AS PER B7	MAXIMUM WASHER THICKNESS, S									
	35	4								
38	5									
40	5	5								
45		5	5							
50			5	5						
55				5						
60					5					
65					5	9				
70						8	6			
75							6	6		
80								6	6	8
85									6	8
90										8

WASHERS OF SMALLER THICKNESS ARE TAKEN IN COMPLIANCE WITH TABLE "ASSORTMENT OF WASHER AS PER THICKNESS S".

IF NECESSARY, IT IS ALLOWED TO USE WASHER DIMENSIONS GIVEN BEYOND HEAVY LINES (BY AGREEMENT BETWEEN THE PARTIES).

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ASSORTMENT OF WASHER AS PER THICKNESS, S

TABLE 3

0,1	0,15	0,2	0,3	0,5	0,8	1	1,5	2	2,5	3	4	5	6	8
-----	------	-----	-----	-----	-----	---	-----	---	-----	---	---	---	---	---

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

EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THIS Φ	
		LETTERS!	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED FACED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE DATE	NATURE OF AMENDMENTS	NATURAL	USED
DRG	SCALE -		
CHD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAIL	
TCD	TOLERANCE ON GRINDS UNLESS OTHERWISE STATED	TITLE - WASHERS	
APPD	ALL THREADS CONFORM TO	S & CAT NUMBER	
DATE		DRG No: 3401A, 3402A, 3403A, 3404A, 3405A, 3406A, 3407A, 3408A	

WEIGHT

TABLE 5

d	1	1.4	1.6 (1.7)	2	2.5 (2.8)	3	3.5	4	5	6	7	8	9	10	12
WEIGHT OF 100 PIECES OF STEEL WASHERS, 1mm THICK, kg.															
2.5	0.003														
3		0.004													
3.5			0.008												
4	0.009														
4.5		0.011													
5			0.014	0.013											
5.5					0.014										
6				0.02	0.02	0.02	0.02								
7					0.02	0.02	0.02	0.02							
8						0.03	0.03	0.03	0.03						
10								0.05	0.04	0.04					
12									0.07	0.06	0.05				
14										0.09	0.08	0.08	0.07		
16												0.12	0.10		
18													0.18	0.15	0.13
20														0.18	0.14
22														0.23	0.18
25															0.28

TABLE 5 CONTINUED

d	14	15	16	18	20	22	24	27	30	33	36	39	42	45	48
WEIGHT OF 100 PIECES OF STEEL WASHERS, 1MM THICK, kg															
25	0.25	0.23													
28	0.34	0.33	0.31												
30			0.38	0.33											
32			0.45	0.41	0.37										
35				0.53	0.48	0.42									
38					0.61	0.56									
40						0.65	0.60								
45							0.88	0.78							
50								1.06	0.85						
55									1.27						
60										1.50					
65										1.89	1.78				
70											2.18	2.03			
75												2.48	2.32		
80													2.76	2.64	
85														3.14	2.88
90															3.50

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

EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THIS #	
		LETTERS)	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.			
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON :-
DRN	SCALE -		
CHD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE - WASHERS	
APPO	ALL THREADS CONFORM TO	D S CAT NUMBER	
DATE		DRG.No:3401A,3402A,3403A,3404A,3405A,3406A,3407A,3408A.	
22.7.86.			

TABLE OF CORRECTION FACTORS FOR CALCULATING WEIGHT OF WASHERS OF VARIOUS THICKNESS: 5

TABLE-6

WASHER THICKNESS, S	CORRECTION FACTORS				
	ALUM	AL6AT	STEEL	BRASS	COPPER
0,1	-	-	0,10	0,11	-
0,15	-	-	0,15	0,17	-
0,2	-	-	0,20	0,22	-
0,3	-	-	0,30	0,33	-
0,5	0,174	0,178	0,50	0,55	0,57
0,8	0,278	0,285	0,80	0,88	0,912
1	0,348	0,356	1,00	1,10	1,14
1,5	0,528	0,535	1,50	1,65	1,71
2	0,898	0,713	2,00	2,20	2,28
2,5	0,87	0,89	2,50	2,75	2,85
3	1,04	1,07	3,00	3,30	3,42
4	1,38	1,42	4,00	4,40	4,58
5	1,74	1,78	5,00	5,50	5,70
8	2,08	2,14	8,00	-	-
8	2,78	2,85	8,00	-	-

EXAMPLE: SUPPOSE IT IS REQUIRED TO CALCULATE THE WEIGHT OF 100 WASHERS MADE OF ALLOY AL6AT, HAVING DIMENSIONS $d = 20, D = 32$ AND $S = 3mm$. WE FIND WEIGHT OF STEEL WASHERS HAVING ABOVE-MENTIONED DIMENSIONS FOR THICKNESS $S = 1mm$, IN THE TABLE: IT IS EQUAL TO 0.37 Kg. THEN WE FIND FACTOR 1.07 CORRESPONDING TO WASHER THICKNESS $S = 3mm$ IN TABLE OF CORRECTION FACTORS FOR WASHERS MADE OF ALLOY AL6AT. THIS DONE, WE MULTIPLY 0.37 BY 1.07 AND OBTAIN WEIGHT OF 100 WASHERS MADE OF ALLOY AL6AT: IT IS EQUAL TO 0.396 Kg.

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

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL:-	USED ON:-
DRN	22.7.86	SCALE -		
CHD		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: WASHERS	
APPD		ALL THREADS CONFORM TO	D S CAT NUMBER	DRG No: 3401A, 3402A, 3403A, 3404A, 3405A, 3406A, 3407A, 3408A.

TABLE 4.

NOMINAL DIAMETERS OF THREAD OF FASTENING PORT d	1	1,4	1,6	(1,7)	2	2,5	(2,6)	3	4	5	6	7
D	2,5	3	3,5		5	6		8	10	12		
S		0,3				0,5		0,8	1	1,5		

CONTINUATION OF TABLE-4

NOMINAL DIAMETERS OF THREAD OF FASTENING PORT (d)	8	9	10	12	14	15	16	18	20	22	24
D	14	18		20	25	30		32	35	40	
S	1,5			2				2,5			

1. MATERIAL :-
 STEEL, GRADES 10, 20, 10F2A, 30XFCA, 12X18H10T-M AND 12X18H9T-M;
 ALUMINIUM ALLOY, GRADES A16 AT, AM U, M;
 COPPER, GRADE M3 (SOFT);
 BRASS, GRADES Ω C59-1 HARD OR Ω 63-HT.
- 2 MISALIGNMENT OF SURFACE d_4 WITH RESPECT TO SURFACE D SHOULD NOT BE MORE THAN HALF OF SUM OF TOLERANCE ZONES FOR SPECIFIED DIMENSIONS.
- 3 COATING :-
 FOR WASHERS OF STEEL, GRADE 10-OXIDATION OF STEEL, GRADES 20 AND 10F2A-GALVANIZING OF STEEL, GRADE 30XFCA: FOR WASHERS 3405A-GALVANIZING, WASHERS 3404A-WITHOUT COATING.
 OF STEEL, GRADES 12X18H10T-M AND 12X18H9T-M- PASSIVATING:
 OF ALUMINIUM ALLOYS - ANODIC OXIDATION:
 OF BRASS - PASSIVATING TREATMENT.
 OTHER TYPES OF COATINGS SHOULD BE SPECIFIED BY DESIGNER (SEE ITEM 6 103ATY).
4. TECHNICAL SPECIFICATIONS ARE AS PER 103ATY.

THE FOLLOWING DIMENSIONS OF WASHERS 3402A OR 3405A ARE RECOMMENDED FOR SET OF ALLOYS WITH $\sigma_b \leq 30 \text{ kgf/cm}^2$, NOMINAL DIAMETER OF ROD $d = 10$ AND 14 mm , IF THEY WORK FOR BREAKAGE.

NOMINAL DIAMETER OF THREAD OF FASTENING PORT d	10	14
D	20	25
S	2	3

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

EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		
ISSUE DATE	NATURE OF AMENDMENTS	
DRN <i>CW</i>	SCALE:-	MATERIAL:- USED ON:-
CHK <i>Chattaraj</i>	DIMENSIONS IN mm	
TEC <i>Sharma</i>	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD <i>W</i>	ALL THREADS CONFORM TO	TITLE: WASHERS
DATE 22-7-80		D S CAT NUMBER DRG. No: 3401A, 3402A, 3403A, 3404A, 3405A, 3406A, 3407A, 3408A

TABLE OF CORRECTION FACTORS FOR CALCULATING WEIGHT OF WASHERS OF VARIOUS THICKNESS: SHEET 5

TABLE-6

WASHER THICKNESS	CORRECTION FACTORS				
	AMUM	116AT	STEEL	BRASS	COPPER
0,1	-	-	0,10	0,11	-
0,15	-	-	0,15	0,17	-
0,2	-	-	0,20	0,22	-
0,3	-	-	0,30	0,33	-
0,5	0,174	0,178	0,50	0,55	0,57
0,8	0,278	0,285	0,80	0,88	0,912
1	0,348	0,356	1,00	1,10	1,14
1,5	0,528	0,535	1,50	1,85	1,71
2	0,896	0,713	2,00	2,20	2,28
2,5	0,87	0,89	2,50	2,75	2,85
3	1,04	1,07	3,00	3,30	3,42
4	1,38	1,42	4,00	4,40	4,58
5	1,74	1,78	5,00	5,50	5,70
6	2,08	2,14	6,00	-	-
8	2,78	2,85	8,00	-	-

EXAMPLE: SUPPOSE IT IS REQUIRED TO CALCULATE THE WEIGHT OF 100 WASHERS MADE OF ALLOY A16AT, HAVING DIMENSIONS $d = 20$, $D = 32$ AND $S = 3$ mm. WE FIND WEIGHT OF STEEL WASHERS HAVING ABOVE-MENTIONED DIMENSIONS FOR THICKNESS $S = 1$ mm, IN THE TABLE: IT IS EQUAL TO 0.37 Kg. THEN WE FIND FACTOR 1.07 CORRESPONDING TO WASHER THICKNESS $S = 3$ mm IN TABLE OF CORRECTION FACTORS FOR WASHERS MADE OF ALLOY A16AT. THIS DONE, WE MULTIPLY 0.37 BY 1.07 AND OBTAIN WEIGHT OF 100 WASHERS MADE OF ALLOY A16AT: IT IS EQUAL TO 0.396 Kg.

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

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED. THUS # (LETTERS)	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL:-	USED ON:-
DRN		SCALE -		
CHD		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD		TOLERANCE ON DIM'S UNLESS OTHERWISE STATED	TITLE: WASHERS	
APPD		ALL THREADS CONFORM TO	D S CAT NUMBER	DRG No: 3401A, 3402A, 3403A, 3404A, 3405A, 3406A, 3407A, 3408A.
DATE	22.7.86			

SHEET: 2

TABLE: 2, CONTINUED

NOMINAL DIAMETER OF THREAD OF FASTENING PART d	6	7	8	9	10	12	14	15	18	18	20
d , PERMISSIBLE DEVIATION AS PER A5	6,5	7,5	8,5	9,5	10,5	12,5	14,5	15,5	18,5	19	21
PERMISSIBLE DEVIATION AS PER B7	MAXIMUM WASHER THICKNESS, S.										
10	1										
12	1,5	1,5									
14	2,5	2	1,5	1,5							
18			2,5	2							
18			3	2,5	2,5						
20					3	2					
22					3	3					
25						4	3	3			
28							4	4	3		
30									4	3	
32									5	4	3
35										5	4
38											5

WASHERS OF SMALLER THICKNESS ARE TAKEN IN COMPLIANCE WITH TABLE "ASSORTMENT OF WASHER AS PER THICKNESS S."

TABLE 2, CONTINUED.

NOMINAL DIAMETER OF THREAD OF FASTENING PART d	22	24	27	30	33	38	38	42	45	48
d , PERMISSIBLE DEVIATION AS PER B5	23	25	28	31	34	38	41	44	47	50
PERMISSIBLE DEVIATION AS PER B7	MAXIMUM WASHER THICKNESS, S.									
35	4									
38	5									
40	5	5								
45		5	5							
50			5	5						
55				5						
60					5					
65					5	9				
70						8	8			
75							6	6		
80								6	6	
85									8	8
90										8

WASHERS OF SMALLER THICKNESS ARE TAKEN IN COMPLIANCE WITH TABLE "ASSORTMENT OF WASHER AS PER THICKNESS S."

№ 824, № 818, № 819, № 820, № 821, № 822, № 823, № 824, № 825, № 826, № 827, № 828, № 829, № 830, № 831, № 832, № 833, № 834, № 835, № 836, № 837, № 838, № 839, № 840, № 841, № 842, № 843, № 844, № 845, № 846, № 847, № 848, № 849, № 850, № 851, № 852, № 853, № 854, № 855, № 856, № 857, № 858, № 859, № 860, № 861, № 862, № 863, № 864, № 865, № 866, № 867, № 868, № 869, № 870, № 871, № 872, № 873, № 874, № 875, № 876, № 877, № 878, № 879, № 880, № 881, № 882, № 883, № 884, № 885, № 886, № 887, № 888, № 889, № 890, № 891, № 892, № 893, № 894, № 895, № 896, № 897, № 898, № 899, № 900, № 901, № 902, № 903, № 904, № 905, № 906, № 907, № 908, № 909, № 910, № 911, № 912, № 913, № 914, № 915, № 916, № 917, № 918, № 919, № 920, № 921, № 922, № 923, № 924, № 925, № 926, № 927, № 928, № 929, № 930, № 931, № 932, № 933, № 934, № 935, № 936, № 937, № 938, № 939, № 940, № 941, № 942, № 943, № 944, № 945, № 946, № 947, № 948, № 949, № 950, № 951, № 952, № 953, № 954, № 955, № 956, № 957, № 958, № 959, № 960, № 961, № 962, № 963, № 964, № 965, № 966, № 967, № 968, № 969, № 970, № 971, № 972, № 973, № 974, № 975, № 976, № 977, № 978, № 979, № 980, № 981, № 982, № 983, № 984, № 985, № 986, № 987, № 988, № 989, № 990, № 991, № 992, № 993, № 994, № 995, № 996, № 997, № 998, № 999, № 1000

IF NECESSARY, IT IS ALLOWED TO USE WASHER DIMENSIONS GIVEN BEYOND HEAVY LINES (BY AGREEMENT BETWEEN THE PARTIES).

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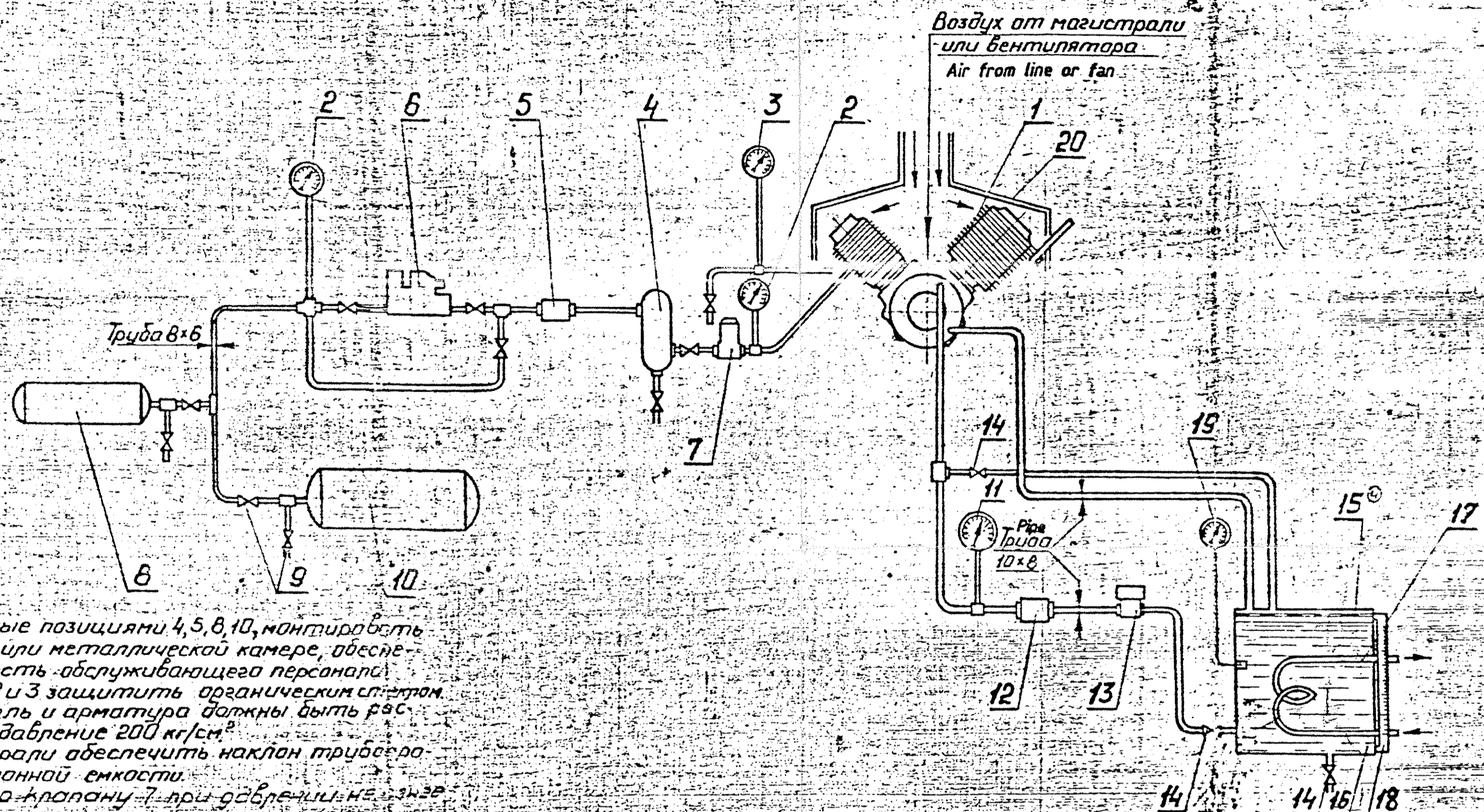
ASSORTMENT OF WASHER AS PER THICKNESS, S.

TABLE 3

0,1	0,15	0,2	0,3	0,5	0,8	1	1,5	2	2,5	3	4	5	6	8
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PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THIS #	
ISSUE DATE		LETTERS)	
NATURE OF AGREEMENTS		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED FACED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
SCALE -	MATERIAL -	USED ON -	
DIMENSIONS IN INCH	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAILABLE		
TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE - WASHERS		
ALL THREADS CONFORM TO	S & CAT NUMBER		DRG. No: 3401A, 3402A, 3403A, 3404A, 3405A, 3406A, 3407A, 3408A



Агрегаты, обозначенные позициями 4, 5, 8, 10, монтировать в специальном боксе или металлической камере, обеспечивающих безопасность обслуживающего персонала. Шкалы манометров 2 и 3 защитить органическим стеклом. Воздушная магистраль и арматура должны быть рассчитаны на рабочее давление 200 кг/см². В воздушной магистрали обеспечить наклон трубопровода в сторону баллонной емкости. Трещины воздуха по клапану 7 при давлении не менее 165 кг/см² не допускается.

Units, designated with figures 4, 5, 8, 10, should be mounted in special box or in metal chamber which provide safety of the attending personal. Scales of pressure gauges 2 and 3 should be protected with organic glass. Airline and fittings should be designed for working pressure of 200/Cm² air line should be inclined towards cylinder. air loss through valve 7 at a pressure at least 165 Kg/Cm² is not allowed.

20	Housing for blowing over of compressor
21	Aerothermometer or potentiometer
18	Gauge glass
17	Steam super heater or electric heater
16	Oil tank of 5-l capacity
15	Screen filter (Number of meshes 500-600 per one Cm ²)
14	Cock
13	Oil pump with pressure-reducing valve
12	Screen filter (Screen 0.1 GOST 6813-33)
11	Pressure gauge for working pressure 10Kg/Cm ² (Accuracy class 1.5-2.5) or for p=16 Kg/Cm ² (Accuracy class 1.6)
10	30-l cylinder for working pressure of 150 at.
9	Air cock
8	8-l cylinder for working pressure 150 at.
7	Safety valve
6	Automatic pressure regulator for working pressure 150 at.
5	Filter
4	Oil sump
3	Pressure gauge for working pressure 16Kg/Cm ² accuracy class 1.5-2.5 or p=25Kg/Cm ² accuracy class 1.5
2	Pressure gauge for working pressure of 250Kg/Cm ² accuracy class 2.5
1	Compressor AK 150 CB
Ref. No.	Nomenclature Qty.

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

EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS # LETTERS)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	

DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	ALL THREADS CONFORM TO
				25/7/86				
MATERIAL -					USED ON: AK 150C -01CB			
CONTROLLERATE OF INSPECTION(HEAVY VEHICLES) AVADI					TITLE: AIR COMPRESSOR SET UP FOR TESTING COMPRESSOR			
D S CAT NUMBER					DRAWING NUMBER AK150C CX (AK150C CTY)			
ISSUE	DATE	NATURE OF AMENDMENTS						

