



All dimensions are in mm unless otherwise stated  
 if in doubt, ask. Drawing drawn to: ..... angle projection

Nominal	Tolerance
gms	mm
62H9	0.007

Schnitt A-B  
Section A-B

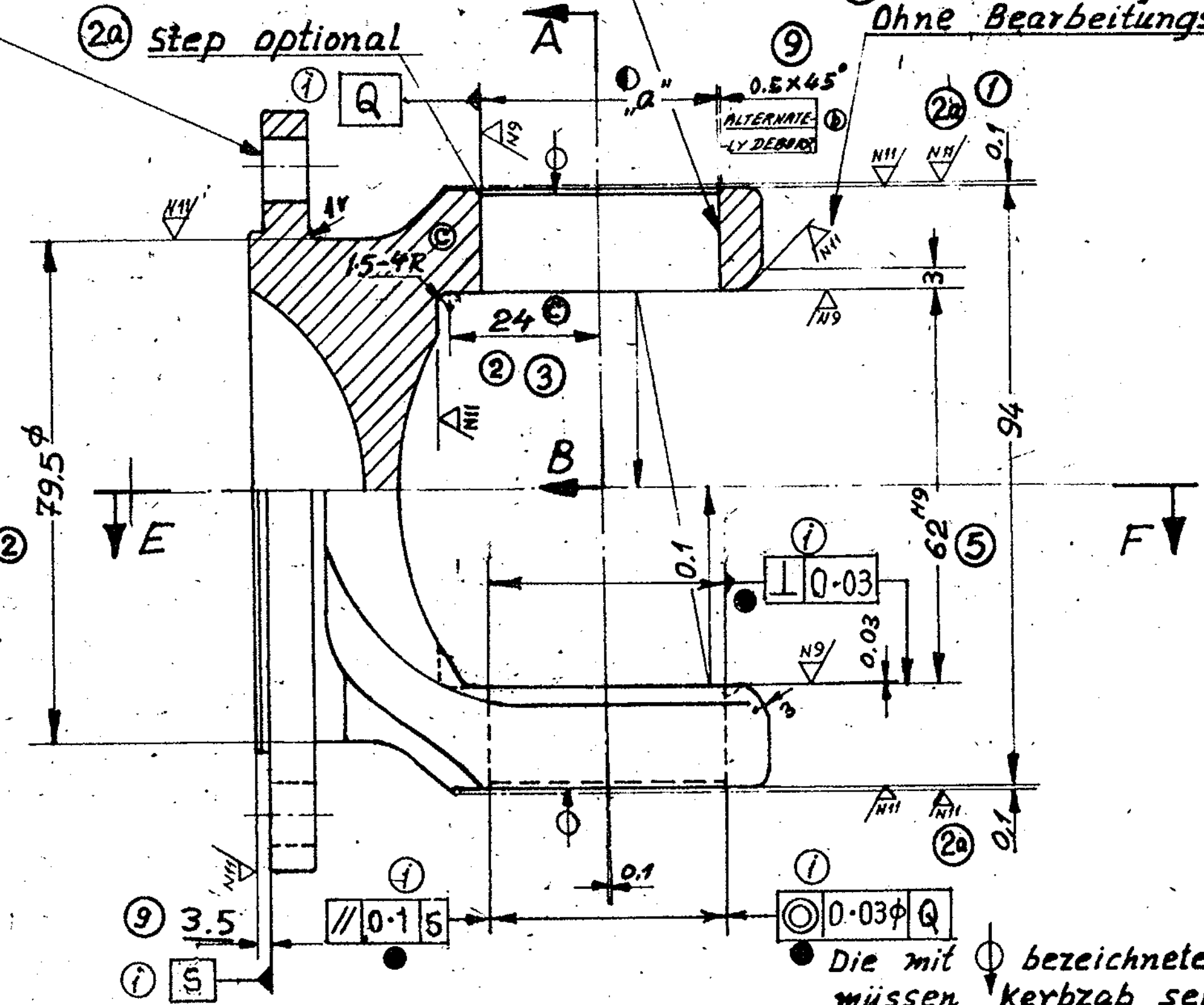
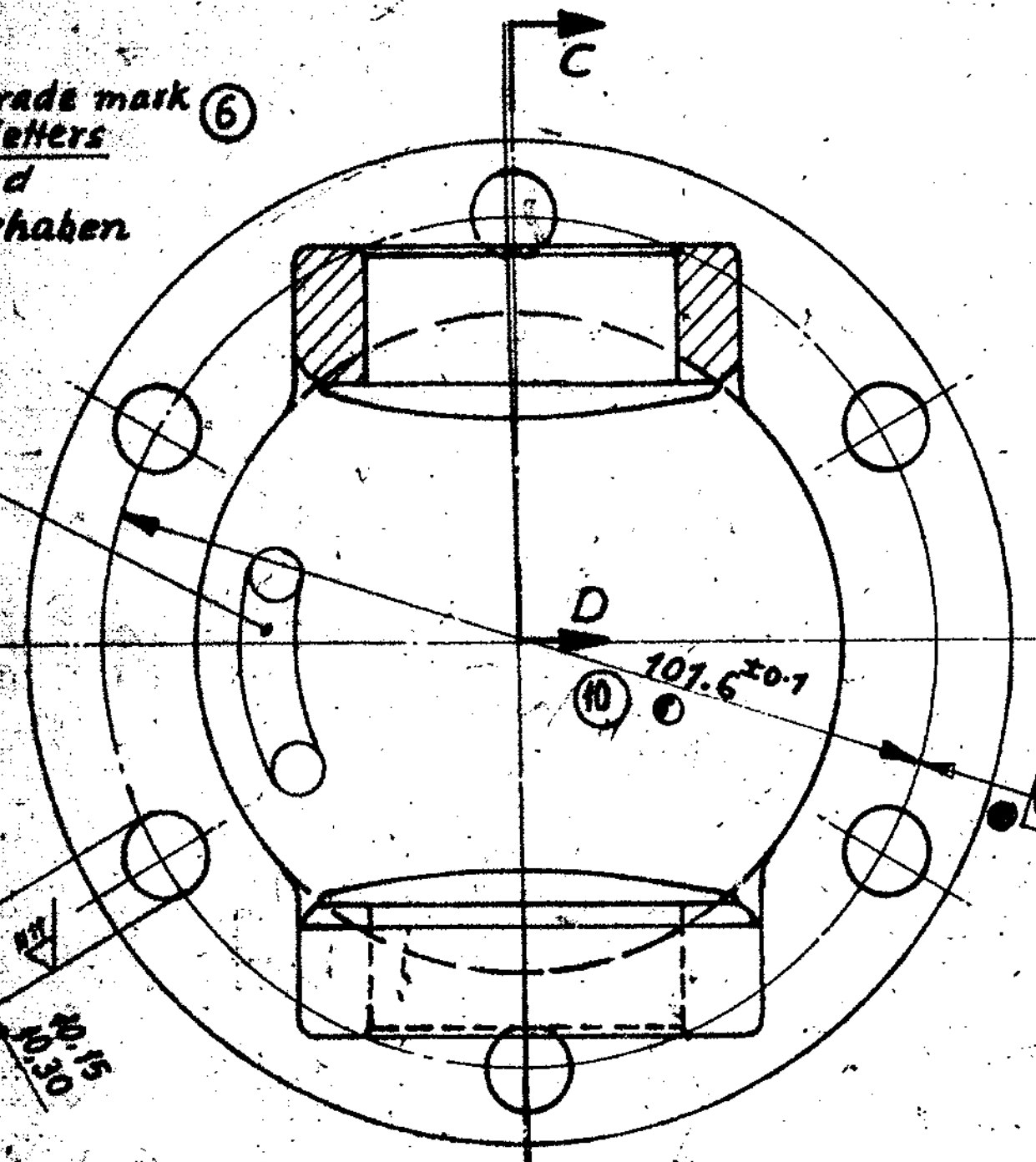
Schnitt C-D  
Section C-D

⑥ This face must be parallel to the reamed bore upto 0.1mm max.  
 Diese Fläche muß zur senkrechten Bohrung bis auf 0.1 mm max. parallel sein.

⑥ Without machining allowance  
 Ohne Bearbeitungszugabe

Retraced by: *Lokhandh*  
 Checked by: *ndn*  
 27.6.85

Die number and trade mark located in raised letters  
 Gosennummer und Fabrikzeichen erhaben angebracht.



Selected fit for bore "a"  
 Auswahlpassung für Bohrung "a"

Selection Auswahl	Passung Fit	Colour Farbe
I	38φH7 38.025 38.000	rot
II	38φF7 38.050 38.025	gelb
III	38φE7 38.075 38.050	blau

Date	Mod. No.	S. No.	Zone	Modification
28-07-2003	94PM 370016	J	D-4	DIMENS. 55 φ, 10, 2R, 10° & MICHA BY PARTS DELETED. STEP TURNING OPERATION DELETED. CRITICAL SYMBOL ADDED FOR 37R & 5K. DIMENS.
7/9/02	94PM 307, 117	I	B-5	GEOMETRICAL DIMENSIONING ADDED. SEE -DML
5/12/00	95PM 226, 0ACh	h		SURFACE PROTECTION 'SS: 9400' ADDED.
13.9.95	91PM808 Mod. 003	9	B-4	DIMENS. 10 E, 3.5 WERE 0.5 & 1.5 TO 0.4 & 1.5 TO 0.4 IN MATERIAL SPEC. COLUMN IS 578 MODIFIED.

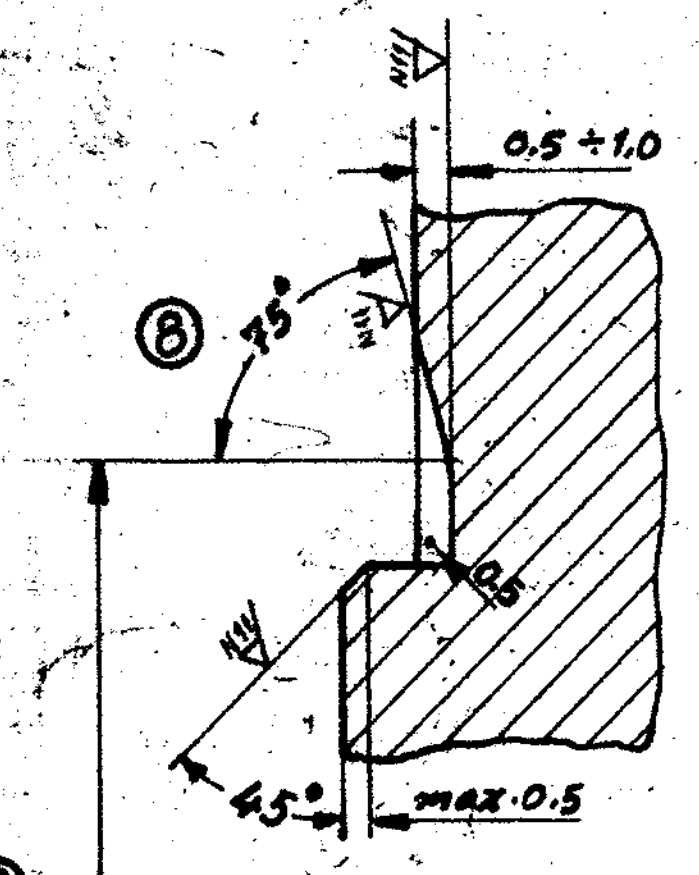
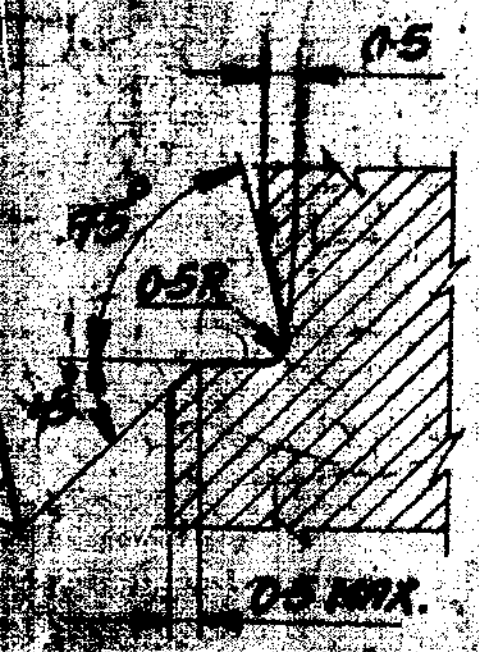
Die Löcher gleichmäßig verteilt  
 holes distributed evenly

Die mit ① bezeichneten Stellen müssen kerbzäh sein!  
 ⑥ The point marked thus ① must have notch toughness.

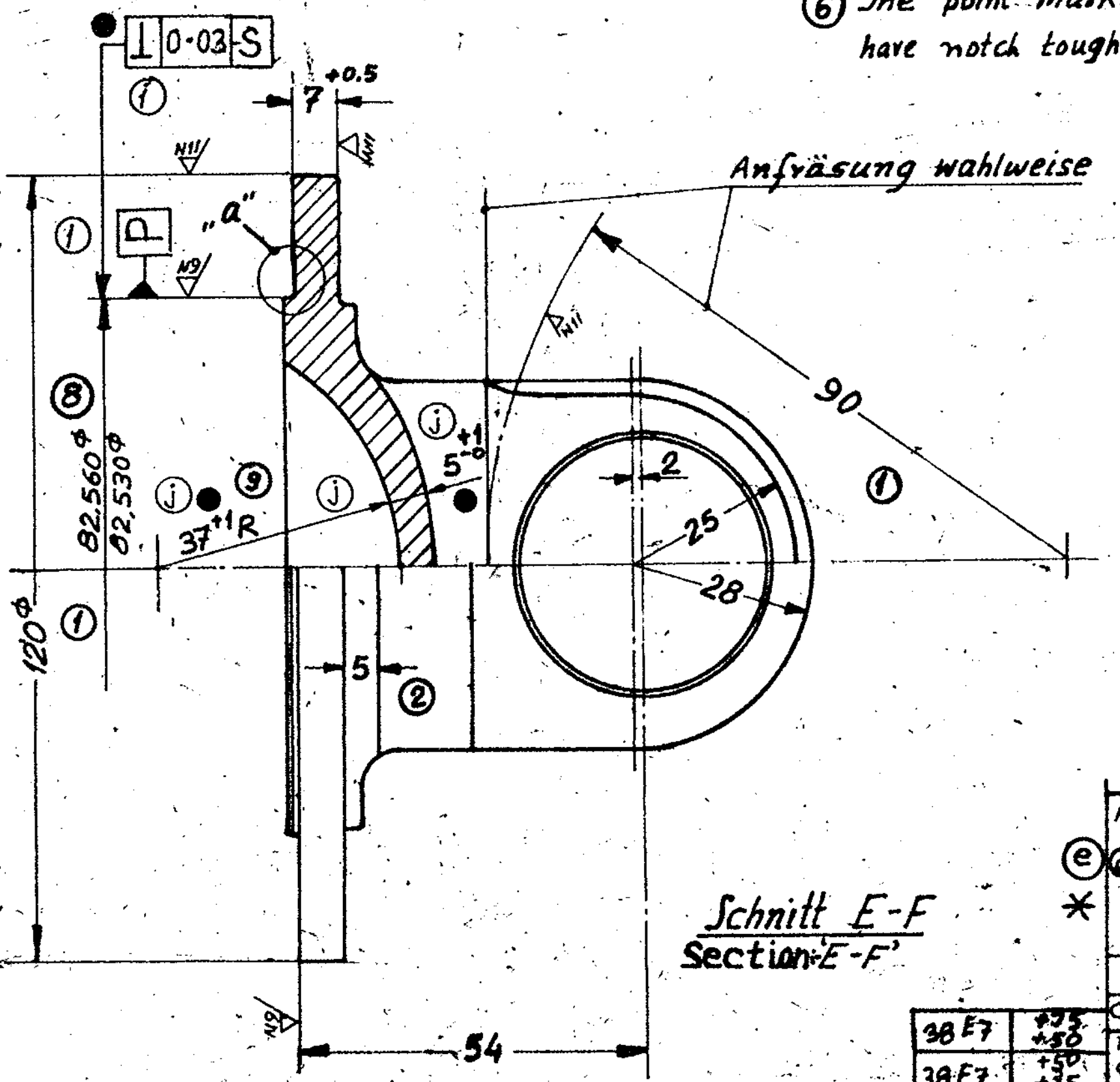
⑥ ALTERNATIVE MATERIAL:  
 \* 35 CB HARDENED & TEMPERED TO UTS 70-85 KJ/mm<sup>2</sup>.

FOR VALIDITY REFER  
 EPA NO: S I R 2534

Unterleiste nach IS 2102  
 Oberflächenzeichen nach IS 2013  
 ISA - Zeichnungen



Detail at "a"  
 Ausschnitt "a"  
 M 5:1  
 Scale 5:1



Schnitt E-F  
Section E-F

Raw part Drg.  
 Rohrtelzeichnung R 312 411 11 11

Machining Deviation as per..... Class to IS: 2102

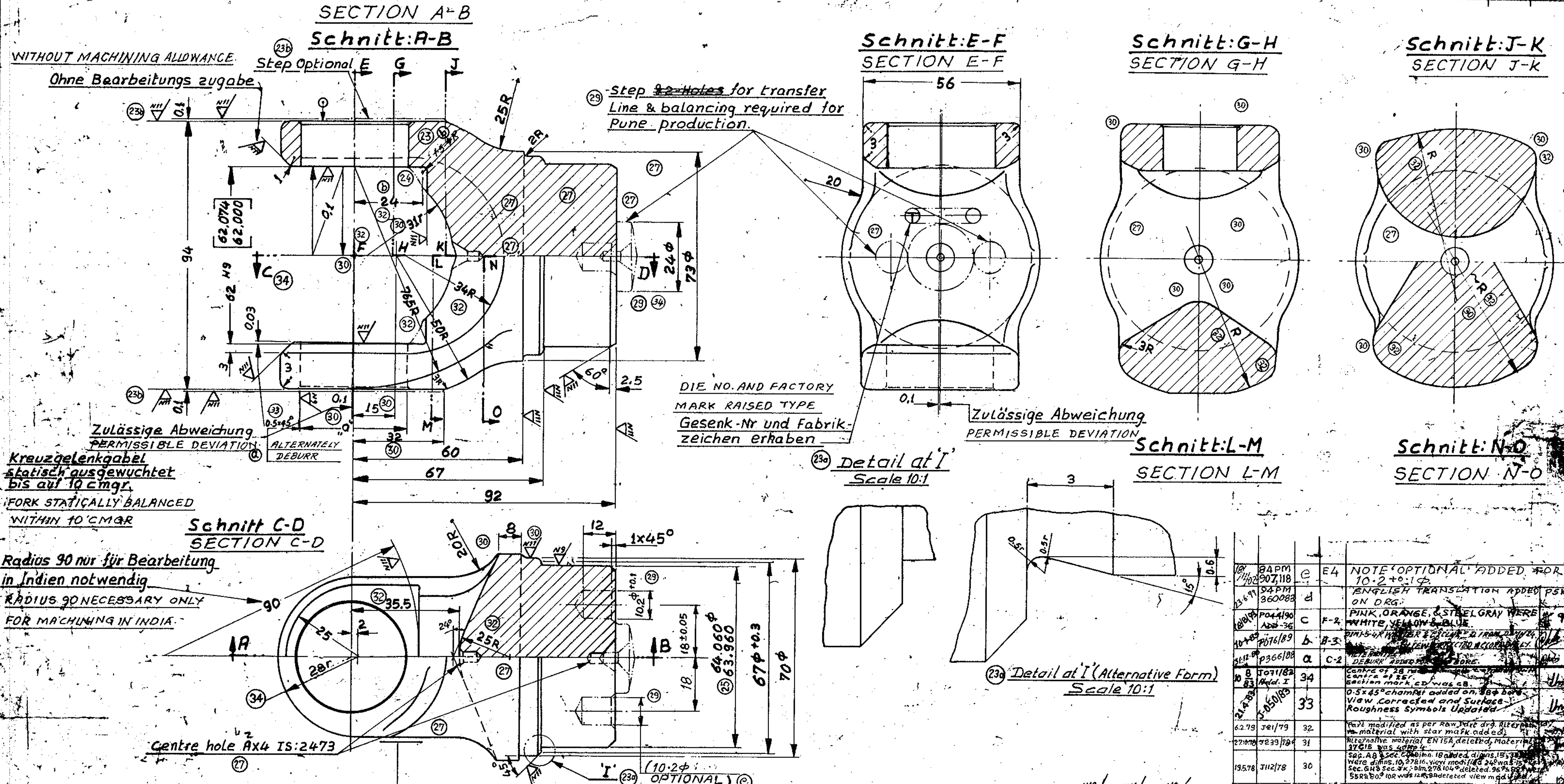
Mico Deviation for open Dimens. (Med to IS: 2102)	Surface Roughness Symbols
0.1	N12
0.2	N11
0.4	N9
0.8	N8
1.6	N7
3.2	N6
6.3	N5
12.5	N4
25	N3
50	N2
100	N1

Material Description Size, Spec. Std. No.  
 ③ 37 C 15 ④  
 13.5517 hardened and tempered to UTS 75-90Kg/cm<sup>2</sup>

38E7	+0.05	+0.02
38F7	+0.05	+0.02
38H7	+0.05	+0.02
62H9	+0.05	+0.02

Mod. No.	S. No.	Zone	Modification
04494	36	f	AB PINK ORANGE YELLOW GRAY WHITE, YELLOW, BLUE
04494	36	e	EG ALTERNATIVE MATERIAL ADDED
16.5.87	23187	a	REVISIONS
16.5.87	23187	b	REVISIONS
16.5.87	23187	c	REVISIONS
16.5.87	23187	d	REVISIONS
16.5.87	23187	e	REVISIONS
16.5.87	23187	f	REVISIONS
16.5.87	23187	g	REVISIONS
16.5.87	23187	h	REVISIONS
16.5.87	23187	i	REVISIONS
16.5.87	23187	j	REVISIONS
16.5.87	23187	k	REVISIONS
16.5.87	23187	l	REVISIONS
16.5.87	23187	m	REVISIONS
16.5.87	23187	n	REVISIONS
16.5.87	23187	o	REVISIONS
16.5.87	23187	p	REVISIONS
16.5.87	23187	q	REVISIONS
16.5.87	23187	r	REVISIONS
16.5.87	23187	s	REVISIONS
16.5.87	23187	t	REVISIONS
16.5.87	23187	u	REVISIONS
16.5.87	23187	v	REVISIONS
16.5.87	23187	w	REVISIONS
16.5.87	23187	x	REVISIONS
16.5.87	23187	y	REVISIONS
16.5.87	23187	z	REVISIONS

ORIGINAL



**SECTION A-B Schnitt: A-B**  
 WITHOUT MACHINING ALLOWANCE. Step Optional E G J  
 Ohne Bearbeitungs zugabe

**SECTION E-F Schnitt: E-F**  
 56

**SECTION G-H Schnitt: G-H**  
 SECTION G-H

**SECTION J-K Schnitt: J-K**  
 SECTION J-K

**SECTION C-D Schnitt C-D**  
 SECTION C-D  
 Radius 90 nur für Bearbeitung in Indien notwendig  
 RADIUS 90 NECESSARY ONLY FOR MACHINING IN INDIA.

**SECTION L-M Schnitt: L-M**  
 SECTION L-M

**SECTION N-O Schnitt: N-O**  
 SECTION N-O

**Detail at I' Scale 10:1**

**Detail at I' (Alternative Form) Scale 10:1**

**Centre hole Ax4 IS:2473**

**Chargenzeichen eingeschlagen**  
 SYMBOL OR MARK PUNCHED.

**SELECTION FIT FOR DIMENSION "a"**

OPTIONAL Auswahl	Passung FIT	COLOR Farbe
I	38H7 (38.025 / 38.000)	Weiß PINK
II	38F7 (38.050 / 38.025)	gelb ORANGE
III	38E7 (38.075 / 38.050)	blau STEEL GRAY

**POINTS INDICATED BY  $\nabla$  MUST BE NOTCHED IMPACT RESISTANT.**  
 ALL TAPERS 6° WHEN NOT MENTIONED OTHERWISE.  
 CHECK FORGING FOR SYMMETRY IN BOTH PRINCIPAL AXES.  
 Die mit  $\nabla$  bezeichnete stelle maß kerbzäh sein!  
 Alle Neigungswinkel 6° wenn nicht anders angegeben.  
 Rohteil auf Symmetrie in den beiden Hauptachsen Kontrollieren

**FORGING (BLANK) DRG. NO. R 312 411 12 05**  
**Hierzu gehört Rohteilzeichnung R312 411 12 05**  
**REPLACES DRG. OF SAME NO. DT. 23-6-47**  
**Ersatz für Zeichnung gleicher Nr. vom 23.6.47**

Machining Deviation as per ..... class to IS: 2102

Classification of characteristics:  
 ● Critical: Key Instruction  
 ○ Major: (None) Minor  
 ● Applies to upper limit  
 ○ Applies to lower limit

No.	Date	By	For	Description	Initials
10/1/79	10/1/79	E4	E4	NOTE 'OPTIONAL' ADDED FOR 10-2 + 0.1	RNV
23.6.79	23.6.79	d	d	ENGLISH TRANSLATION ADDED PER ON DRG.	SVK
10/1/79	10/1/79	C	F-2	PINK, ORANGE, & STEEL GRAY WERE WHITE, YELLOW & BLUE.	SVK
10/1/79	10/1/79	b	B-3	DIMS 5x45° CHAMFER & CHAMFER 2x45° CHAMFER	SVK
10/1/79	10/1/79	a	C-2	DEBURR TO BE ADDED TO ALL SURFACES	SVK
10/1/79	10/1/79	34	34	Centre of 28 mm dia hole to be section mark CD val. CB.	SVK
10/1/79	10/1/79	33	33	0.5x45° chamfer added on 28 mm dia hole. View corrected and Surface Roughness Symbols Updated.	SVK
62.79	3/21/79	32	32	Part modified as per Rev 1. All material with star mark added.	SVK
27/10/79	2/23/79	31	31	Alternative material EN15A deleted. Material 3745 was added.	SVK
19.5.78	11/2/78	30	30	Sec. AB & Sec. CD dim. 18 added. Dim. 15, 30, 30 were dim. 10, 27.6, view modified. 21 was 21. Sec. GH Sec. JK - Dim 27.8, 104 deleted. 36 was 36. 55R20. 102 was 125. 125 was 125. 125 was 125.	SVK
18.11.77	1/9/77	29	29	Step 24 & 2 Holes 10.2 with note added.	SVK
51.76	7/9/76	28	28	Dim 52.9, 52.9 was 52.9, 52.9 was 52.9. Cavity with dim. 10.5, 10.5, 150, 30, 30 deleted and centre hole Ax4 IS: 2473 added. Centre Hole Ax4 IS: 2473 was A3 DIN 332 & Dim 7.	SVK
12.11.75	3/7/75	27	27	Material was 40Mn4 V75-90. Dia. 63.960 was 63.960. Radius 15 was 4.	SVK
14.5.75	3/5/75	26	26	Material Description - Size, Spec. Std. No. 37 C15 Normalised, hardened and tempered to UTS 75-90 Kg/mm <sup>2</sup> .	SVK
14.3.75	12/4/75	25	25	Alternative Material: 40 Cr 4 Type B SS 4027 T14 80-95. OR EN 15A Normalised, Hardened and Tempered to UTS 75-90 Kg/mm <sup>2</sup> .	SVK
13.6.66	1/50/66	23b	23b	Remark Step Optional & Dim. added.	SVK
14.3.63	3/16/63	23a	23a	Details at I' added.	SVK
20.7.62	4/78/62	23	23	Rad. 4 was 1.5. Modification Serial No. 1 to be not traced as detail illegible on original.	SVK

FOR FORGE DIVISION ONLY										Surface Finish Symbols													
Customer	Die Wear (Surface)	Mis-Match	Thickness	Flash Thickness	Clip	Pierce	Re-Strike	Draft	Contraction	Min. Rad	Dim	Over	Upto & Inc.	6	30	120	315	1000	2000	4000	2000	4000	

Tolerance: +0.1, +0.2, +0.3, +0.5, +0.8, +1.2, +1.7, +2.5, +3.2, +5

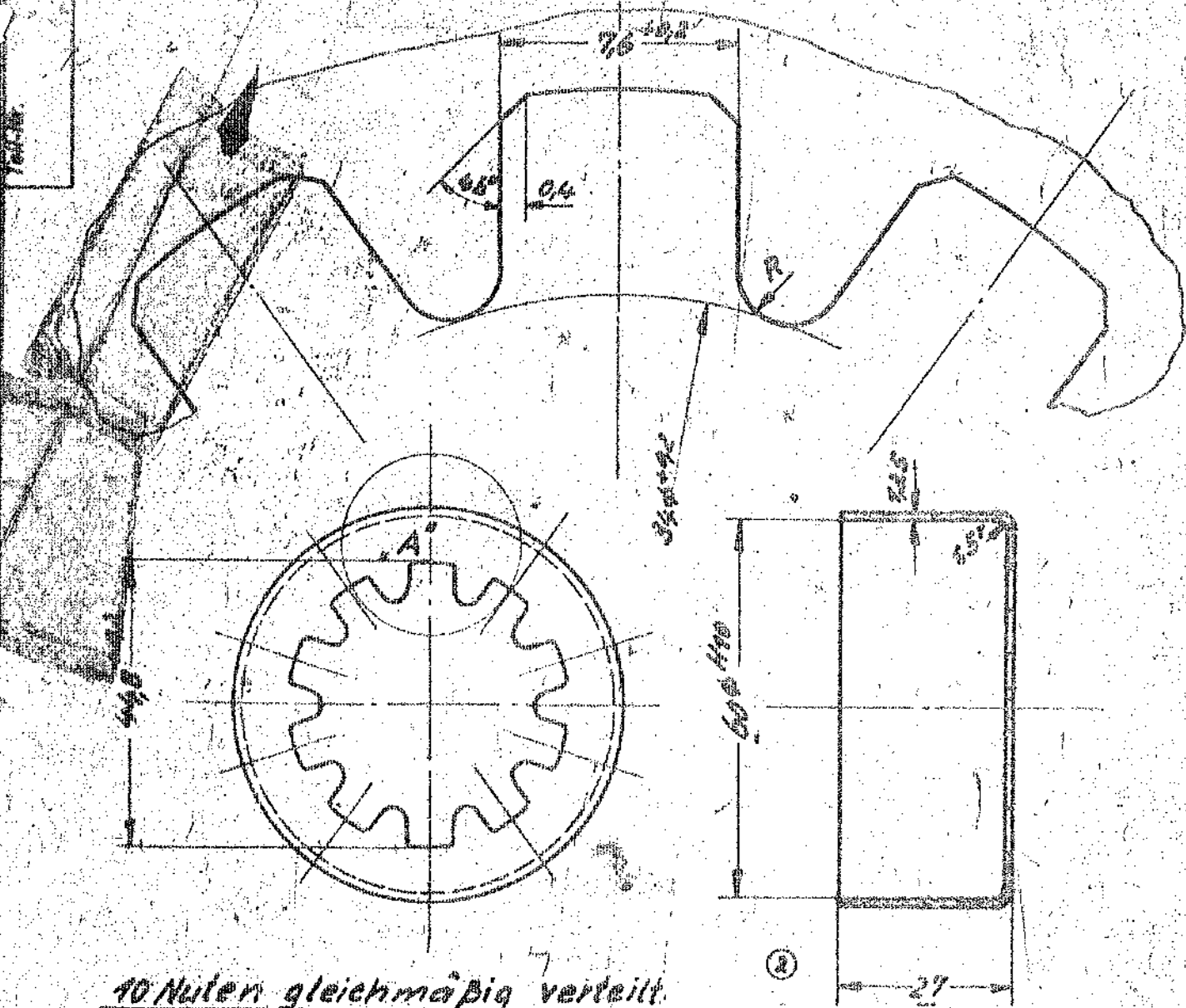
Scale: 1:1

Org. Part Designation: **Kreuzgelenkgabel**  
**Z. Gelenkwelle**

Gensenk-Nr. 312 411 12 05

JATA ENGINEERING & LOCOMOTIVE CO. LTD. JAMSHEDPUR.

Einzelheit bei A  
1:1

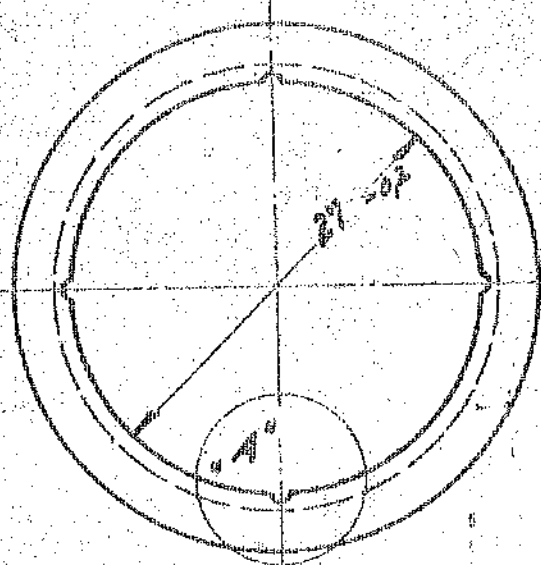
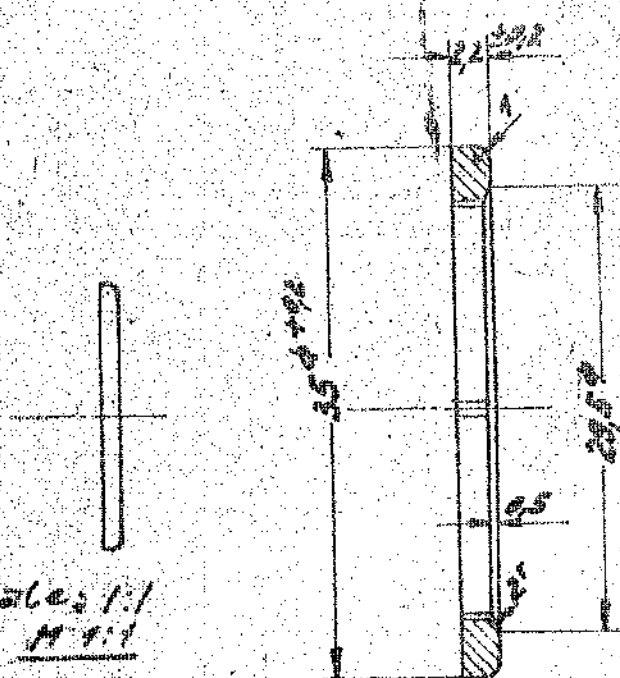


10 Nuten gleichmäßig verteilt.

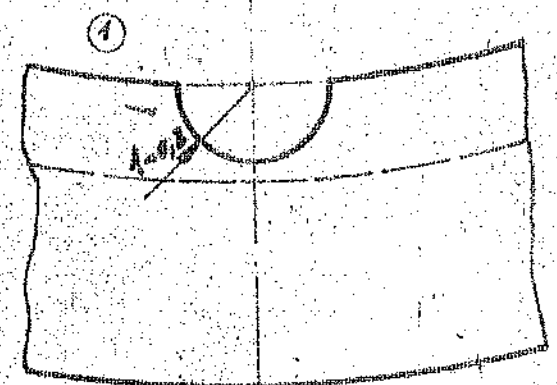
N12

312 413 12 50

Oberflächenschutz	nach DBL						
Ausführung und Lieferung	nach DBL						
Unterlegte Maße	nach DB	N 463					
Oberflächenzeichen	nach DIN	140	21.9.82	J104/82	4	MAT. SPEC. EDD 513, SS: 4011 WÄR RSE 1405	506
ISA-Fassungen	nach DIN	T160161	6.11.70	J386/70	3	Mat- RR-St 1405 was St. VII.25	506
Maße werden bei Abnahme besonders geprüft			24.2.61	L1880/61	2	Bearbeitungszeichen V anfertigt	506
Bemerkungen und Vorschriften			26.2.60	L374/60	1	Maß 27 war 28	
Maßstab:	1:1, 5:1	1:1, 5:1	1:1, 5:1	1:1, 5:1	1:1, 5:1	1:1, 5:1	1:1, 5:1
Ger.	3.5.	3.5.					
Gepr.							
Werkstoff	(Endzustand)	EDD 513 SS:4011					
Modell-Nr.		312 413 12 50					
Gezeichnet							
Schnitt-Nr.							
Rückfragen: Abl.							
Teil-Bezeichnung:	Dichtungskörper		Gelenkwelle hinten		Spiegelbild		
Teil-Nr.:	312 413 12 50				Teil-Nr.		
Daimler-Benz A.G.		Stuttgart - Ulmerstr. 14					



② Scale: 1:1  
M 1:1



③ NOTE: Grease Ageing  
as per SS: 5560

② Detail at "A" Scale: 1:1  
Stelle "A" M 10:1

Oberflächenbesch.	nach DBI				
Ausführung und Lieferung	nach SS: 5563 (3)				
Einzelserie in Maße	nach IS: 2102m				
Oberflächenzeichen	nach IS: 3073	2611-88 P326188	2	MATL RUBBER 60 <sup>±5</sup> SHORE A WAS GUMMY 63 <sup>±5</sup> SHORE A	
SS-Änderungen	nach IS: 949	24.8.90 T193/80	3	SS: 5563 "was SS: 5538". Note added.	
		24.3.77 G14/75	2	English Translation Added	
		18.6.1978	1	And. f. e. 2 war 0,5	

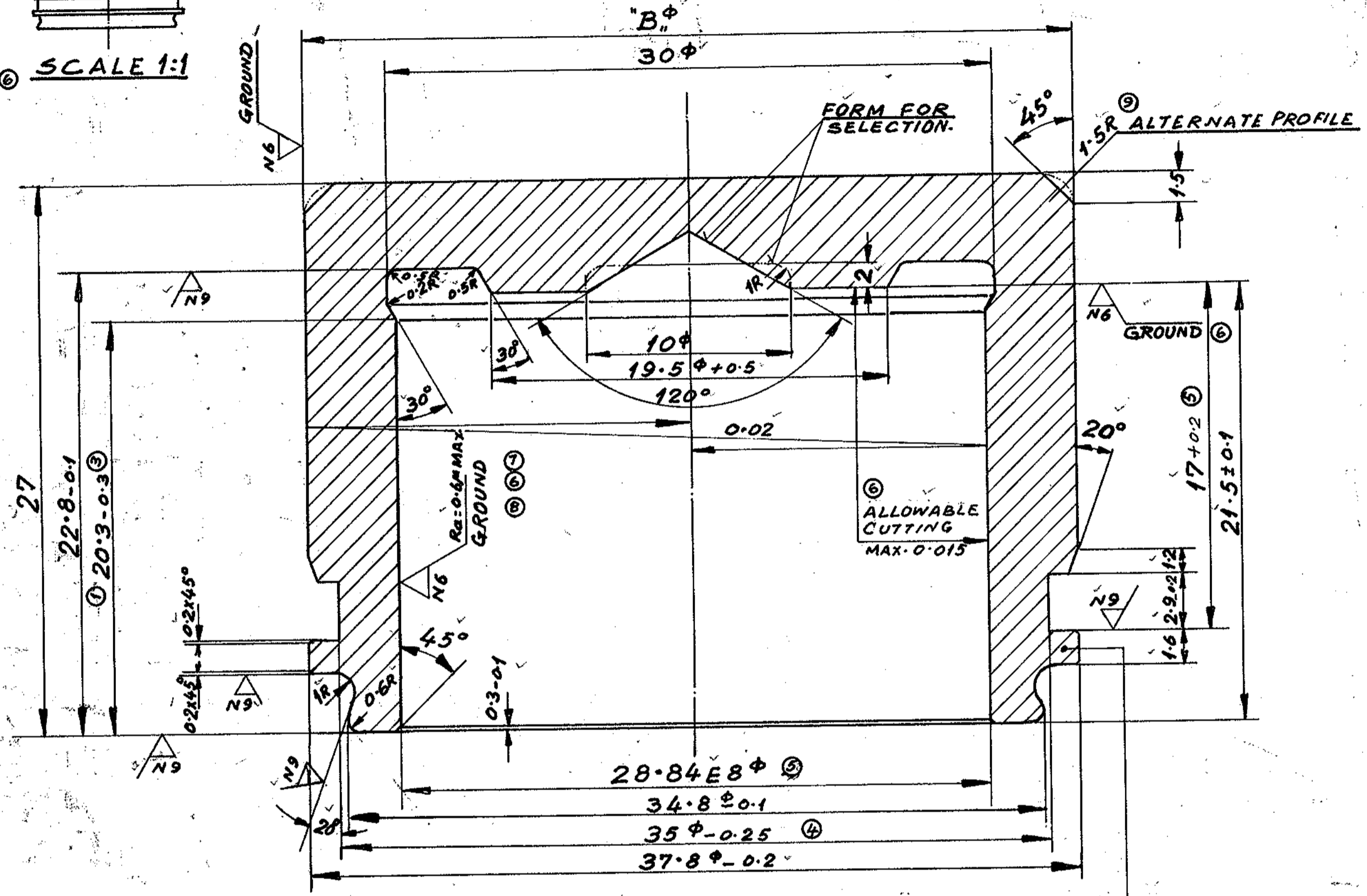
Merkmale / Scale:		1:1	1:1	10:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	
Material:		Tag		Name		Tag		Auftrag Nr.		Anmerkung		Anmerkung		Anmerkung		Anmerkung		Anmerkung	
Werkstoff (Engineering Material):		RUBBER 60		±5		Shore A													
Modell Nr. / Zeichn. Nr. / Schnitt Nr.																			
Teil-Benennung:		Paculum Ring		Dichtring		②													
Teil-Nr.:		322		411		0100													

All dimensions are in mm unless otherwise stated  
 If in doubt, Ask. Drawing drawn to..... Angle projection

Nominal dim.	Tolerance in IT7	Tool/Gauge No.
28.84	+73	
E8	+40	

Drq. retraced by RSN on 3.9.83.  
 (Without original German notes)  
 CHECKED by Jmm on 5.9.83.

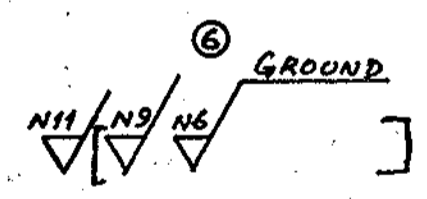
SCALE 1:1



MUST BEAR MIN. 2500K9  
 WITHOUT BREAKING

⑥ CARBURISED AND HARDENED. ROCKWELL HARDNESS HRC 60±2  
 ⑦ CASE DEPTH 0.7 - 0.9 mm IN FINISHED CONDITION.  
 ⑧ THE INNER SIDE MUST BE FILE HARD, THE CORE TOUGH, OUTER SURFACE WITHOUT ANY CASE.  
BLANK DESCRIPTION  
VALID RAW PART DRG. NO. R322 411 00 42.  
MADE FROM BAR STOCK AS SELECTION FOR ARGENTINIAN PRODUCTION

SELECTION	FIT B	COLOUR
I	38φ 38.055 38.035	WHITE
II	38φ 38.080 38.055	YELLOW
III	38φ 38.100 38.080	BLUE



Material Description	Size, Spec. Std. No.	Modification	D.O.	STOZ
1.5R as an alternate profile for high wear on added surface roughness symbols updated	21.6837.104/83	9		sd/
Surface finish Ra=0.6μm max was RL=3.0 max	4.4.81 J043/81	8		sd/
Surface finish RE=3.0 max was RL=1.6 max	162.78 J52/78	7		sd/
English Translation added	24.3.77 J144/77	6		sd/
Dim. 28.84E8 & 17 <sup>+0.2</sup> were 28.8E6	25.11.74 J393/74	5		sd/
Dim 35φ-0.25 was 35φ	3.12.71 J339/71	4		sd/
Dim. 20.3-0.3 was 20.3-0.1	29.4.68 J176/68	3		sd/
Rockwell hard HRC 60±2 was 60±2	15.4.64 J 84/64	2a		sd/
Hartefiefe was 0.8-0.9	13.7.64 J208/64	2		sd/
Make 0.2°, 30° nea	10.10.62 J1462/62	1		sd/
Wayen 19.5-0.1; 20φ±0.1				sd/

Material Description Size, Spec. Std. No. **15Cr.3E**

Tolerances as per Std.

Measurements to be specially checked. Date Mod No SI No Zone

This drg. is the sole property of Telco. It should not be copied or communicated, to any person without the written approval of the proprietors.

DRN.	SIGN	DATE	Fin Wt. in kg.	Surface protection as per Std.
CHD.	Sd/			
STDZ				
APPD.	Sd/			

Product/Group No. Replaces Drg. Reference Drg. No. Opp Hand Drg I/Pt No.

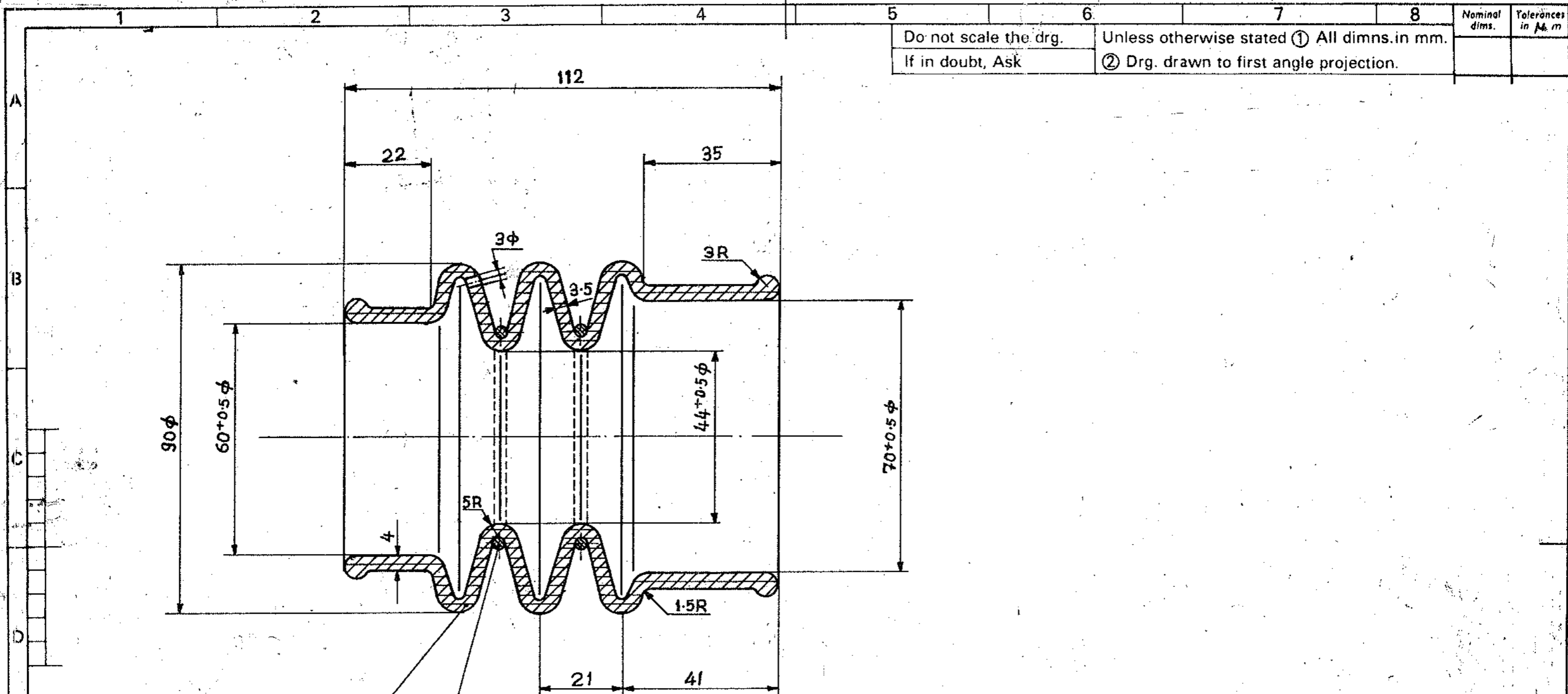
Scale: 5:1:1 Drg./Part Designation **BEARING CUP** Drg./Part No. **322 411 02 42**

TATA ENGINEERING & LOCOMOTIVE CO. LTD. Jamshedpur.

FOR FORGE DIVISION ONLY										M/cg Deviation for open Dimns. (Med to IS : 2102)							Surface Finish Symbols										
Customer	Die Wear (Surface)	Mis-Match	Thickness	Flash Thickness	Clip	Pierce	Re-Strike	Draft	Contraction	Min. Rad	Dim	Over	6	30	120	315	1000	2000	4000	>4000	Raw (Smooth, unpol)	Roughing	Smoothing	Finishing	Fine Finishing	Ground	Hard & Ground
												±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3								

Folding mark for storing prints

5-31



Do not scale the drg. Unless otherwise stated ① All dimns. in mm.  
 If in doubt, Ask ② Drg. drawn to first angle projection.

328 411 00 97KZ.

328 411 00 51.

Material Description Size, Spec. Std.No.									
28/1/2000	B4 PM 907, 109	C	F-3 F-4	MATT:- NITRILE + PVC ADDED, NOTE GREASE AGEING AS PER CLAUSE 14 OF SS: 5511, ASH CONTENT 5% MAX DELETED.				RMW	
27-8-93	F088/93	b	F-3A	DRAWING REDRAWN. SS 5564 WAS SS 5563. ASH CONTENT ADDED.				SPD	
Tolerances as per Std.		Date	Mod No	S.No	Zone	Modification		D.O	SPD
<input type="checkbox"/> Measurements to be specially checked.									
This drg. is the sole property of Telco. It should not be copied or communicated to any person without the written approval of the proprietors.		61	SIGN	DATE	Product/Group No.		Replaces Drg.		
		DRN	Sdl-	26.4			Fin Wt. in kg. Surface protection as per Std.		
		CHD		25-8-93			Reference Drg. No.		
		STDZ		27-8-93			Opp. Hand Arg./Pt.No.		
		APPD		27/4/93			Drg./Part No.		
		Scale 1:1.					Drg./Part No.		
		Drg./Part Designation					Drg./Part No.		
		TATA ENGINEERING & LOCOMOTIVE CO. LTD. PUNE			ASSY. PROTECTIVE CAP.		328 410 00 80.		
							Sheet No. 1 of 1 Sheets		

328 411 00 97KZ.	PROTECTIVE CAP.	NITRILE + PVC RUBBER 50±5 SHORE A, REST ALL OTHER PROPERTIES AS PER SS: 5564 ©
PART NO.	DESCRIPTION	MATERIAL SPECIFICATION

Machining Deviation as per ..... class to IS : 2102

M/cg Deviation for open Dimns. (Med to IS : 2102)									Surface Roughness Symbols									
Dim.	Over	±	0	30	120	315	1000	2000	4000	New	N12	N11	N9	N6	N3	N6	HR0 & GR0	N6
	Upto & Inc.	6	30	120	315	1000	2000	4000	>4000	Old	▽	▽	▽	▽	▽	▽	▽	▽
Tolerance		± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3									

For other Roughness Symbols & Values See IS: 3073 (TS: 11507)

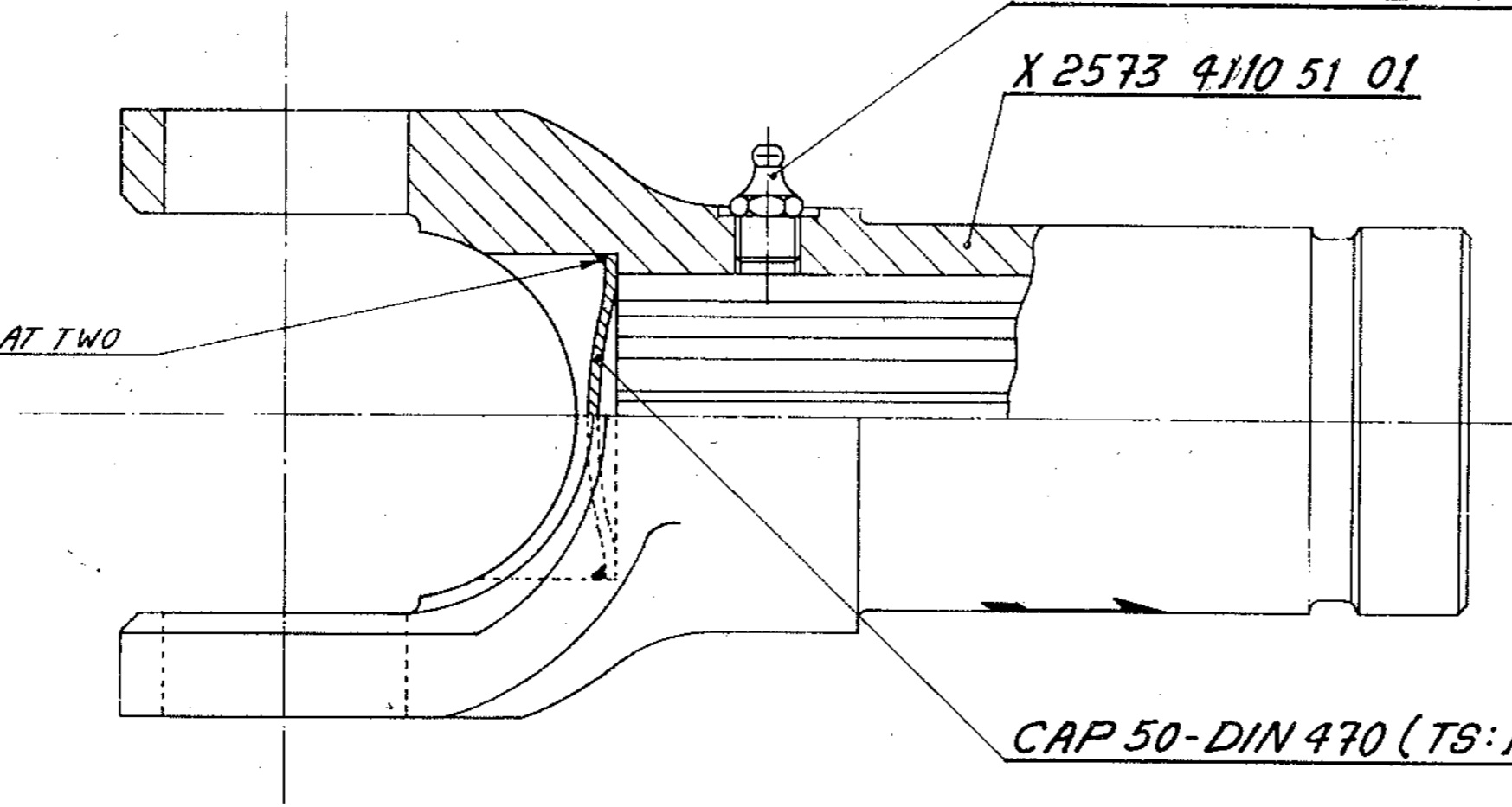
Nominal dims	Tolerance in $\mu$	Tool/Geage No.

All Dimensions are in mm unless otherwise stated  
 If in doubt, Ask Drawing drawn to 1/85Z Angle projection

**GREASE NIPPLE - AM 10x1 IS: 9009**

X 2573 4110 51 01

TO BE TACK WELDED AT TWO  
PLACES



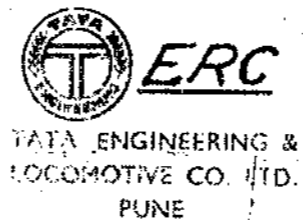
CAP 50-DIN 470 (TS:16273)

Machining Deviation as per class to IS: 2102.

Over	5	30	120	215	1000	2000
Up to 3 FAC	6	30	120	215	1000	2000
Tolerance	$\pm 0.1$	$\pm 0.2$	$\pm 0.3$	$\pm 0.5$	$\pm 0.8$	$\pm 1.2$

Surface Finish Symbols	
	Roughing
	Smoothing
	Finishing
	Polishing

Material Description, Size, Spec. Std. No.		NEW RELEASE	
Tolerances as per Std.		14-4-78 P198/78	NEW RELEASE
Measurements to be specially checked		Date	Mod. No
This drg is the sole property of Telco. It should not be copied or communicated to any person without the written approval of the proprietors		1978	SIGN
Date		11-4	DATE
DRN.		N Man	14A
CHD.		16-4	Product/Group No.
STDZ.		16-4	1210
APPD.		16-4	Replaces Drg.
Scale: 1:1		Reference Drg. No.	
Drg/Part Designation		Opp Hand Drg/Pt. No.	
ASSY UNIVERSAL		Drg/Part No.	
JOINT LONG FORK.		X 2573 4110 0104	
Sheet No. .... of .....		Sheet No. .... of .....	





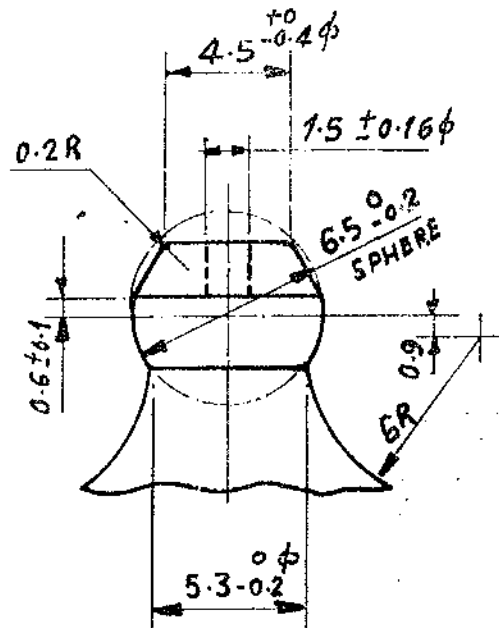
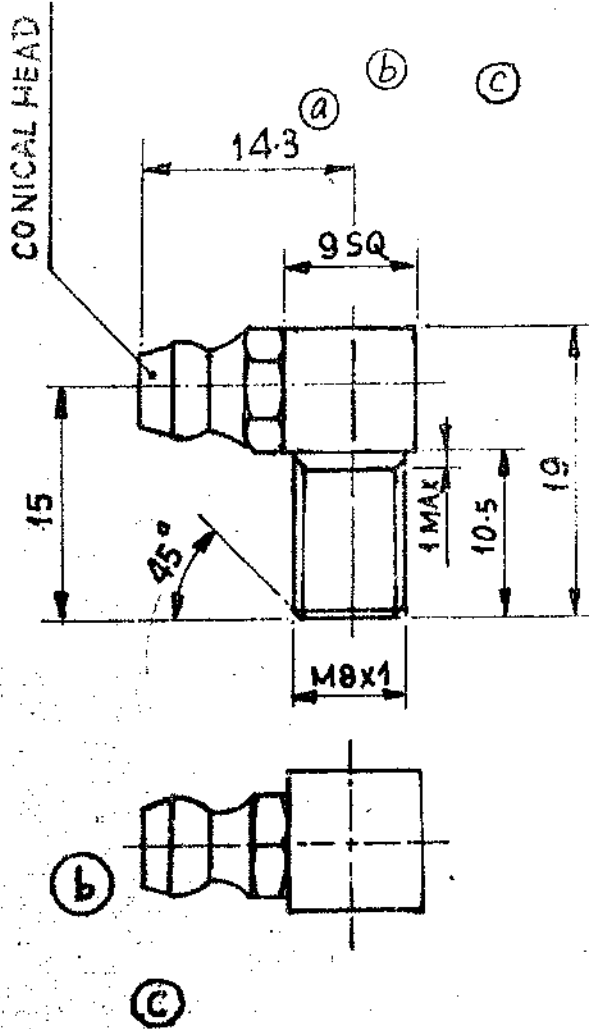
Machining Deviation as per class to IS : 2102

Surface Finish Symbols

Surface Finish Symbols	▽	▽▽	▽▽▽	▽▽▽▽	▽▽▽▽▽	▽▽▽▽▽▽	▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽
Raw (Smooth up mic)	▽	▽▽	▽▽▽	▽▽▽▽	▽▽▽▽▽	▽▽▽▽▽▽	▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽
Roughing	▽▽	▽▽▽	▽▽▽▽	▽▽▽▽▽	▽▽▽▽▽▽	▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽
Smoothing	▽▽▽	▽▽▽▽	▽▽▽▽▽	▽▽▽▽▽▽	▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽
Finishing	▽▽▽▽	▽▽▽▽▽	▽▽▽▽▽▽	▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽▽
Polishing	▽▽▽▽▽	▽▽▽▽▽▽	▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽▽▽
Grinding	▽▽▽▽▽▽	▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽▽▽	▽▽▽▽▽▽▽▽▽▽▽▽▽▽
For Roughness Values See IS: 11303									

M/cg Deviation for open Dimns. (Med to IS : 2102)

Dim.	Over	Upto & Inc.	Tolerance
0-1	0-6	0-30	±0.1
1-3	6-30	30-100	±0.2
3-6	30-100	100-200	±0.3
6-10	100-200	200-400	±0.4
10-30	200-400	400-1000	±0.5
30-100	400-1000	1000-2000	±0.6
100-200	2000-4000	4000-10000	±0.8
200-400	10000-20000	20000-40000	±1.0
400-1000	20000-40000	40000-100000	±1.2
1000-2000	40000-100000	100000-200000	±1.5
2000-4000	100000-200000	200000-400000	±2.0
4000-10000	200000-400000	400000-1000000	±2.5
10000-20000	400000-1000000	1000000-2000000	±3.0



DETAIL

CONICAL HEAD

NOTES:- SURFACE TO BE PROTECTED BY ZINC OR CADMIUM PLATING SS: 8451. HEAD TO BE HARDENED TO 500 HV. MINIMUM. ALL DETAILS ARE SAME AS PER GREASE NIPPLE CM8 X1. IS: 4974-1968 EXCEPT DIMENSIONS 10.5, 19 & 15.

Material Description	Size	Spec. Std. No.	23-91 P486/78 C ADD. 21 11-39 P486/78 b ADD. 22 20-10 P486/78 a ADD. 16	NOTE: ALTERNATIVELY 9 AIF BAR CAN BE USED & DELETED VIEWS CORRECTED ACCORDINGLY. NOTE: ALTERNATIVELY 9 AIF HEX BAR CAN BE USED. ADDED. VIEW 'A' ADDED. Dimension 14.3 was given from end of the 9 square.			
Tolerances as per Std.	31-8-79	P486/78 ADD. 21		NEW RELEASE			
Measurements to be specially checked	Date	Mod No	SI No	Zone	Modification	D.O.	STGZ

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ERC

1979	SIGN	DATE
DRN.	DRK	21/8
CHD.		24/8
STGE.		25/8
APPD.	cfu	27/8
Scale:	2:1	(4:1)

Product/Group No.  
1210-S

Fin. Wt. in kg.	Surface protection as per Std.
Replaces Dwg.	2001 4110 99 01.
Reference Dwg. No.	
Opp. Hand. Dwg. Pt. No.	
Dwg./Part Designation	Dwg./Part No.
GREASE NIPPLE	X2574 4110 99 02