

6. Recommended spare parts (mechanical parts)

6.1 For the „A“ set (horizontal parts)

Item	Qty.	Drawing-No.	Description
7	2	C043 E Tz 3 T.7	Bending jaw
9	2	C043 E Tz 3 T.9	Push-down device
10	2	C043 E Tz 3 T.10 with T.30	Bending die Ø 1,3
10a	2	C043 E Tz 3 T.10a	Bending die Ø 0,8

6.2 For the „B“ set (vertical parts)

Item	Qty.	Drawing-No.	Description
1	1	C043 E Tz 4 T.1	Bending jaw, pitch 2.5 mm
2	1	C043 E Tz 4 T.2	Bending jaw, pitch 5 mm
3	2	C043 E Tz 4 T.3	Bending pliers

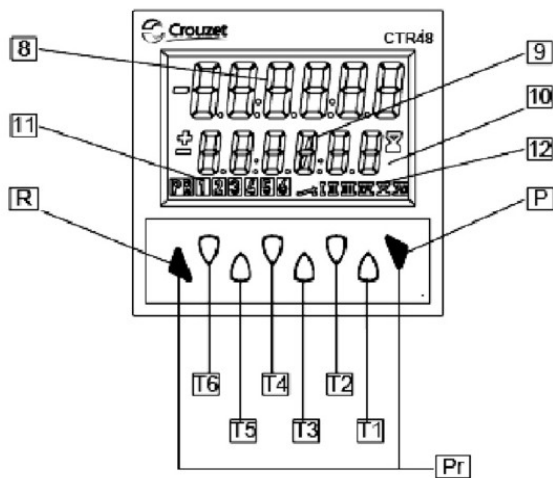
6.3 For the basic machine

Tz 2 Body and Drive			
Item	Qty.	Drawing-No.	Description
50	1		Synchr. sprocket belt T5/420 – 10 wide
51	1		Synchr. sprocket belt T5/330 – 10 wide
52	1		Synchr. sprocket belt T5/260 – 10 wide
53	1		Gas cylinder GS-15-025 AA- K9189
56	2		Tension spring Z-075 H (rocker)
57	1		Tension spring Z-077 (ejector lever)
Tz 3 Tool carrier			
Item	Qty.	Drawing-No.	Description
28	2	C043 E Tz 3 T.28	Eccentric pin
39	2	C043 E Tz 3 T.39	Screw
45	2	C043 E Tz 3 T.45	Ejector
67	2		Compression spring

Tz 5 Control lever – Bending dies			
Item	Qty.	Drawing-No.	Description
9	1	C043 E Tz 5 T.9	Adjusting screw
10	1	C043 E Tz 5 T.10	Washer
20	1		Compression spring
21	1		Compression spring
Tz 6 Control lever – Push-down device			
Item	Qty.	Drawing-No.	Description
22	2	C043 E Tz 6 T.22	Nut
23	2	C043 E Tz 6 T.23 und T.24	Adjusting screw, compl.
40	1		Tension spring
Tz 8 Camshaft			
Item	Qty.	Drawing-No.	Description
1x Camshaft, compl. consisting of:			
2	2	C043 E Tz 8 T.2	Cam (cutting and forming)
3	2	C043 E Tz 8 T.3	Cam (rocker)
4	1	C043 E Tz 8 T. 4	Cam (bending dies)
6	1	C043 E Tz 8 T.6	Cam (ejector)
7	1	C043 E Tz 8 T.7	Main shaft
Tz 9 hand wheel			
Item	Qty.	Drawing-No.	Description
15	1		Click-stock pin GN 617.1-6-A
Tz 10 Component feed			
Item	Qty.	Drwaing-No.	Description
3	2	C043 E Tz 10 T.3	Grasper
7	2	C043 E Tz 10 T.7	Blocking pawl
1x Conveyor blocking pawl, compl.			

7. Counter (optional)

Extract from original instruction of the manufacturer, Crouzet



- T1–6 Decade key T1...T6
- P Prog/Mode key
- R Reset key
- 8 Current count value/main counter
- 9 Preset value/Total count/Batch counter
- 10 Run display for Timer
- 11 Shows which preset value is being displayed
- 12 Shows which preset output is active
- PR Keys necessary for programming the parameters (highlighted in grey)

Spare parts catalogue

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Tz 1 Pedestal and protective hood

Item	Qty.	Drawing-No.	Description	Rem.
2	1	C043 E Tz 1 T.2	Front plate	
5	1	C043 E Tz 1 T.5	Delivery plate	
6	1	C043 E Tz 1 T.6	Sheet metal	
7	1	C043 E Tz 1 T.7	Chassis	
13	1	C043 E Tz 1 T.13	Side carrier left	
14	1	C043 E Tz 1 T.14	Side carrier right	
14a	1	C043 E Tz 1 T.14a	Side carrier right with counter	
15	1	C043 E Tz 1 T.15	Plate	
16	1	C043 E Tz 1 T.16	Cover plate	
17	1	C043 E Tz 1 T.17	Intermediate plate	
18	1	C043 E Tz 1 T.18	Rear plate	
20	1	C043 E Tz 1 T.20	Protective hood	
24	1	C043 E Tz 1 T.24	Bearing	
25	1	C043 E Tz 1 T.25	Bearing	
26	1	C043 E Tz 1 T.26	Angle	
35	1		Safety switch AZ 16-02 zvrk	
36	1		Actuator AZ 15/16 B1	
37	1		Shaft, hardened $\varnothing 10h6 \times 100$	
38	1		Reciculating ball bushing	
39	4		Rubber foot	
40	1		Handle	

Tz 2 Body and drive

Item	Qty.	Drawing-No.	Description	Rem.
1	1	C043 E Tz 2 T. 1	Lateral part, left	
2	1	C043 E Tz 2 T. 2	Lateral part, right	
4	2	C043 E Tz 2 T. 4	Angle	
5	1	C043 E Tz 2 T. 5	Lever	
6	1	C043 E Tz 2 T. 6	Plate	
7	2	C043 E Tz 2 T. 7	Belt tightener	
8	1	C043 E Tz 2 T. 8	Base plate	
18	3	C043 E Tz 2 T. 18	Stud bolt	
19	2	C043 E Tz 2 T. 19	Flange bolt	
20	1	C043 E Tz 2 T. 20	Stud bolt	
21	2	C043 E Tz 2 T. 21	Spring pin	
22	1	C043 E Tz 2 T. 22	Spring suspension	
23	2	C043 E Tz 2 T. 23	Stud bolt	
24	1	C043 E Tz 2 T. 24	Stud bolt	
25	1	C043 E Tz 2 T. 25	Belt tightener	
26	1	C043 E Tz 2 T. 26	Unwinding piece	
27	je2	C043 E Tz 2 T. 27	Spring suspension	
28	1	C043 E Tz 2 T. 28	Stud bolt	
29	1	C043 E Tz 2 T. 29	Stud bolt	
30	1	C043 E Tz 2 T. 30	Distance ring	
31	2	C043 E Tz 2 T. 31	Belt tightener	
34	1	C043 E Tz 2 T. 34	Cover	
35	1	C043 E Tz 2 T. 35	Cover	
36	1	C043 E Tz 2 T. 36	Chute	
37	1	C043 E Tz 2 T. 37	Plate	
40	1	C043 E Tz 2 T. 40	Shaft, hardened $\varnothing 8h6 \times 184$	
41	1	C043 E Tz 2 T. 41	Guide	
42	1	C043 E Tz 2 T. 42	Guide	
43	1	C043 E Tz 2 T. 43	Angle bracket	
50	1		Synchr. sprocket belt T5/ 420 10-wide	*)

Item	Qty.	Drawing-No.	Description	Rem.
51	1		Synchr. sprocket belt T5/ 330 10-wide	*)
52	1		Synchr. sprocket belt T5/ 260 10-wide	*)
53	1		Gas cylinder GS-15-025 AA- K9189	*)
54	2		Needle bearing NK 5/10	
55	2		Grooved ball bearing 625-2z	
56	2		Tension spring Z-075 H (rocker)	*)
57	1		Tension spring Z-077 (ejector lever)	*)

***) = Recommended spare part**

Tz 3 Tool carrier

Item	Qty.	Drawing-No.	Description	Rem.
1	2	C043 E Tz 3 T. 1	Bearing	
2	2	C043 E Tz 3 T. 2	Bearing	
3	2	C043 E Tz 3 T. 3	Bearing	
4	2	C043 E Tz 3 T. 4	Bearing	
5	2	C043 E Tz 3 T. 5	Plate	
6	2	C043 E Tz 3 T. 6	Plate	
7	2	C043 E Tz 3 T. 7	Bending jaw	*)
8	2	C043 E Tz 3 T. 8	Holder	*)
9	2	C043 E Tz 3 T. 9	Clamping die	*)
10	2	C043 E Tz 3 T. 10	Bending die Ø 1,3 (with Tz3 T.30)	*)
10a	2	C043 E Tz 3 T. 10a	Bending die Ø 0,8	*)
11	2	C043 E Tz 3 T. 11	Plate	
12	2	C043 E Tz 3 T. 12	Cover plate	
13	2	C043 E Tz 3 T. 13	Scale	
14	2	C043 E Tz 3 T. 14	Bearing	
15	2	C043 E Tz 3 T. 15	Bearing	
16	2	C043 E Tz 3 T. 16	Scale holder	
27	1	C043 E Tz 3 T. 27	Handle	
28	2	C043 E Tz 3 T. 28	Eccentric pin	*)
29	2	C043 E Tz 3 T. 29	Handle	
30	2	C043 E Tz 3 T. 30	Roller	*)
31	1	C043 E Tz 3 T. 31	Scale holder	
32	1	C043 E Tz 3 T. 32	Scale	
33	1	C043 E Tz 3 T. 33	Scale holder	
34	2	C043 E Tz 3 T. 34	Counter nut	
35	2	C043 E Tz 3 T. 35	Cover washer	
36	2	C043 E Tz 3 T. 36	Spindle	
37	2	C043 E Tz 3 T. 37	Tapped bushing	
38	2	C043 E Tz 3 T. 38	Bushing	
39	2	C043 E Tz 3 T. 39	Screw	*)
40	2	C043 E Tz 3 T. 40	Screw	

Item	Qty.	Drawing-No.	Description	Rem.
41	2	C043 E Tz 3 T. 41	Knurled knob	
42	1	C043 E Tz 3 T. 42	Elevating spindle	
43	1	C043 E Tz 3 T. 43	Tapped bushing	
44	1	C043 E Tz 3 T. 44	Tapped bushing	
45	2	C043 E Tz 3 T. 45	Ejector	*)
46	2	C043 E Tz 3 T. 46	Indicator	
47	2	C043 E Tz 3 T. 47	Outlet plate	
48	1	C043 E Tz 3 T. 48	Cover	
49	2	C043 E Tz 3 T. 49	Tape inlet plate	
50	2	C043 E Tz 3 T. 50	Scale	
60	2		Shaft, hardened $\varnothing 10h6 \times 230$	
61	1		Shaft, hardened $\varnothing 12h6 \times 230$	
62	8		Shaft, hardened $\varnothing 8h6 \times 60$	
63	4		Steel bushing $\varnothing 20 \times \varnothing 14 \times 33$	
64	4		Ball cage $\varnothing 14 \times \varnothing 10 \times 38$	
65	4		Steel bushing $\varnothing 18 \times \varnothing 13 \times 30$	
66	4		Ball cage $\varnothing 13 \times \varnothing 8 \times 40$	
67			Compression spring	*)

***) = Recommended spare part**

Tz 4 B-Conversion set

Item	Qty.	Drawing-No.	Description	Rem.
1	1	C043 E Tz 4 T. 1	Bending die, pitch 2,5	*)
2	1	C043 E Tz 4 T. 2	Bending die, pitch 5	*)
3	2	C043 E Tz 4 T. 3	Bending iron	*)
4	1	C043 E Tz 4 T. 4	Holder,bending iron	
5	1	C043 E Tz 4 T. 5	Clamping die	
6	1	C043 E Tz 4 T. 6	Holder bending unit	
7	1	C043 E Tz 4 T. 7	Angle	
8	1	C043 E Tz 4 T. 8	Adjustment	
9	2	C043 E Tz 4 T. 9	Holding rail	
20	1	C043 E Tz 4 T. 20	Knurled screw	
21	1	C043 E Tz 4 T. 21	Bolt	
22	1	C043 E Tz 4 T. 22	Knurled nut	
30	1		Compression spring	
31	1		Compression spring	

***) = Recommended spare part**

Tz 5 Control lever – Bending dies

Item	Qty.	Drawing-No.	Description	Rem.
1	1	C043 E Tz 5 T. 1	Clevis head	
2	1	C043 E Tz 5 T. 2	Lever	
7	1	C043 E Tz 5 T. 7	Shaft	
8	2	C043 E Tz 5 T. 8	Distance bushing	
9	1	C043 E Tz 5 T. 9	Adjusting screw	*)
10	1	C043 E Tz 5 T. 10	Washer	*)
11	1	C043 E Tz 5 T. 11	Adjusting screw	
12	6	C043 E Tz 5 T. 12	Cover washer	
13	1	C043 E Tz 5 T. 13	Cap screw	
14	1	C043 E Tz 6 T. 17	Spring pin	
20	1		Compression spring	*)
21	1		Tension spring	*)
22	1		Tension spring	*)

***) = Recommended spare part**

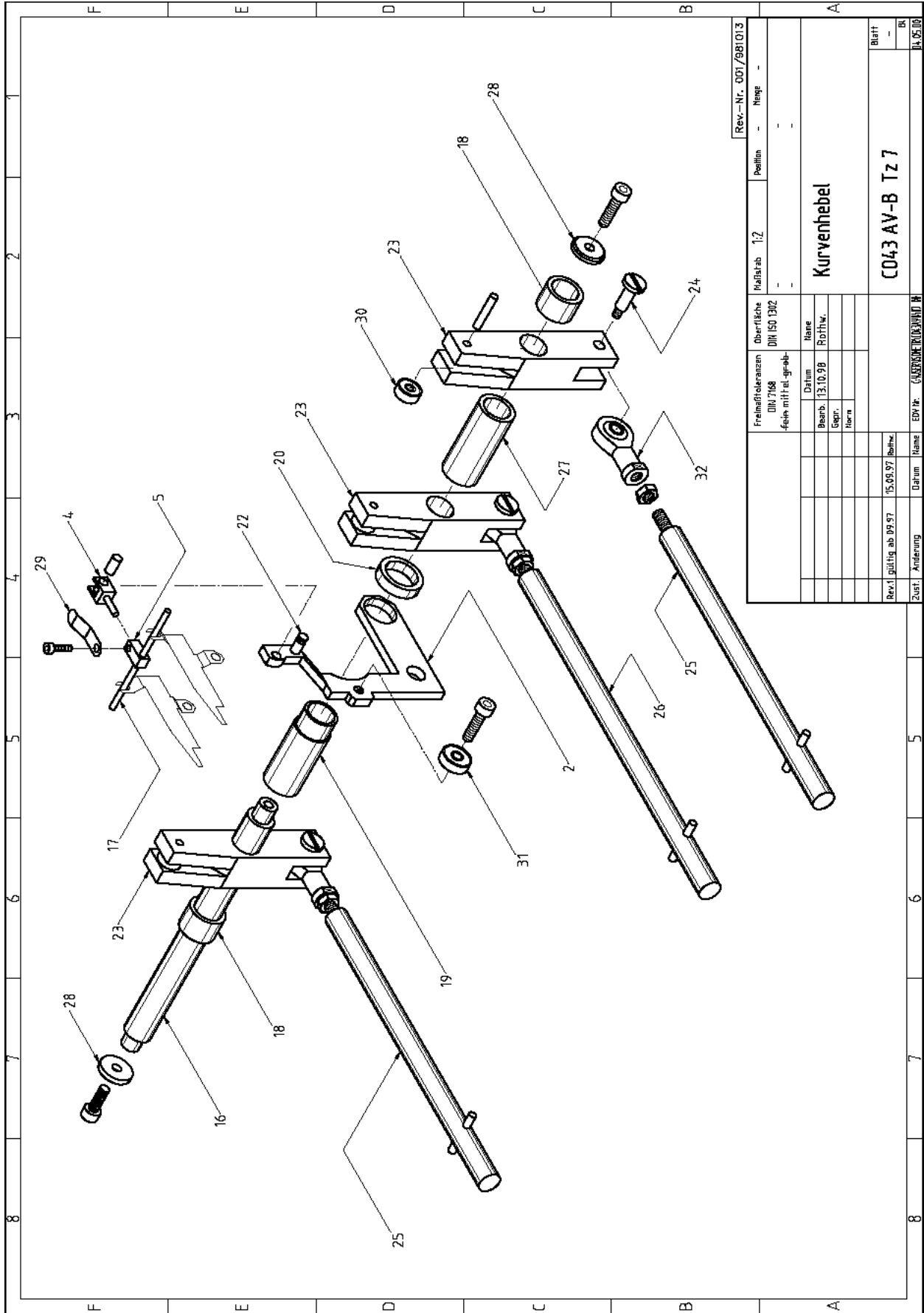
Tz 6 Control lever – Push-down device

Item	Qty.	Drawing-No.	Description	Rem.
1	2	C043 E Tz 6 T. 1	Lever	
2	1	C043 E Tz 6 T. 2	Lever	
3	1	C043 E Tz 6 T. 3	Adjusting piece	
4	2	C043 E Tz 6 T. 4	Press-on plate	
5	2	C043 E Tz 6 T. 5	Return angle	
6	1	C043 E Tz 6 T. 6	Press-on plate	
17	2	C043 E Tz 6 T. 17	Spring pin	
18	1	C043 E Tz 6 T. 18	Fitting screw	
19	2	C043 E Tz 6 T. 19	Distance bushing	
20	4	C043 E Tz 6 T. 20	Bushing	
21	2	C043 E Tz 6 T. 21	Distance bushing	
22	2	C043 E Tz 6 T. 22	Nut	*)
23	2	C043 E Tz 6 T. 23	Adjusting screw	*)
24	2	C043 E Tz 6 T. 24	Cap	*)
30	2	C043 E Tz 5 T. 12	Cover washer	
31	1	C043 E Tz 7 T. 16	Shaft	
40	1		Tension spring	*)

***) = Recommended spare part**

Tz 7 Cam lever

Item	Qty.	Drawing-No.	Description	Rem.
2	1	C043 E Tz 7 T. 2	Lever	
4	1	C043 E Tz 7 T. 4	Clevis	
5	1	C043 E Tz 7 T. 5	Joint	
16	2	C043 E Tz 7 T. 16	Shaft	
17	2	C043 E Tz 7 T. 17	Shaft	
18	2	C043 E Tz 7 T. 18	Distance bushing	
19	1	C043 E Tz 7 T. 19	Distance sleeve	
20	2	C043 E Tz 7 T. 20	Adjusting ring	
22	2	C043 E Tz 7 T. 22	Spring pin	
23	3	C043 E Tz 7 T. 23	Lever	
24	3	C043 E Tz 7 T. 24	Stud bolt	
25	2	C043 E Tz 7 T. 25	Push rod	
26	1	C043 E Tz 7 T. 26	Push rod	
27	1	C043 E Tz 7 T. 27	Distance sleeve	
28	2	C043 E Tz 5 T. 12	Cover washer	
29	1	C043 E Tz 7 T. 29	Push-on spring	
30	3		Grooved ball bearing 624 -2z	
31	1		Grooved ball bearing 625 -2z	
32	3		Swivel head SGS - M6	



Tz 8 Cam shaft

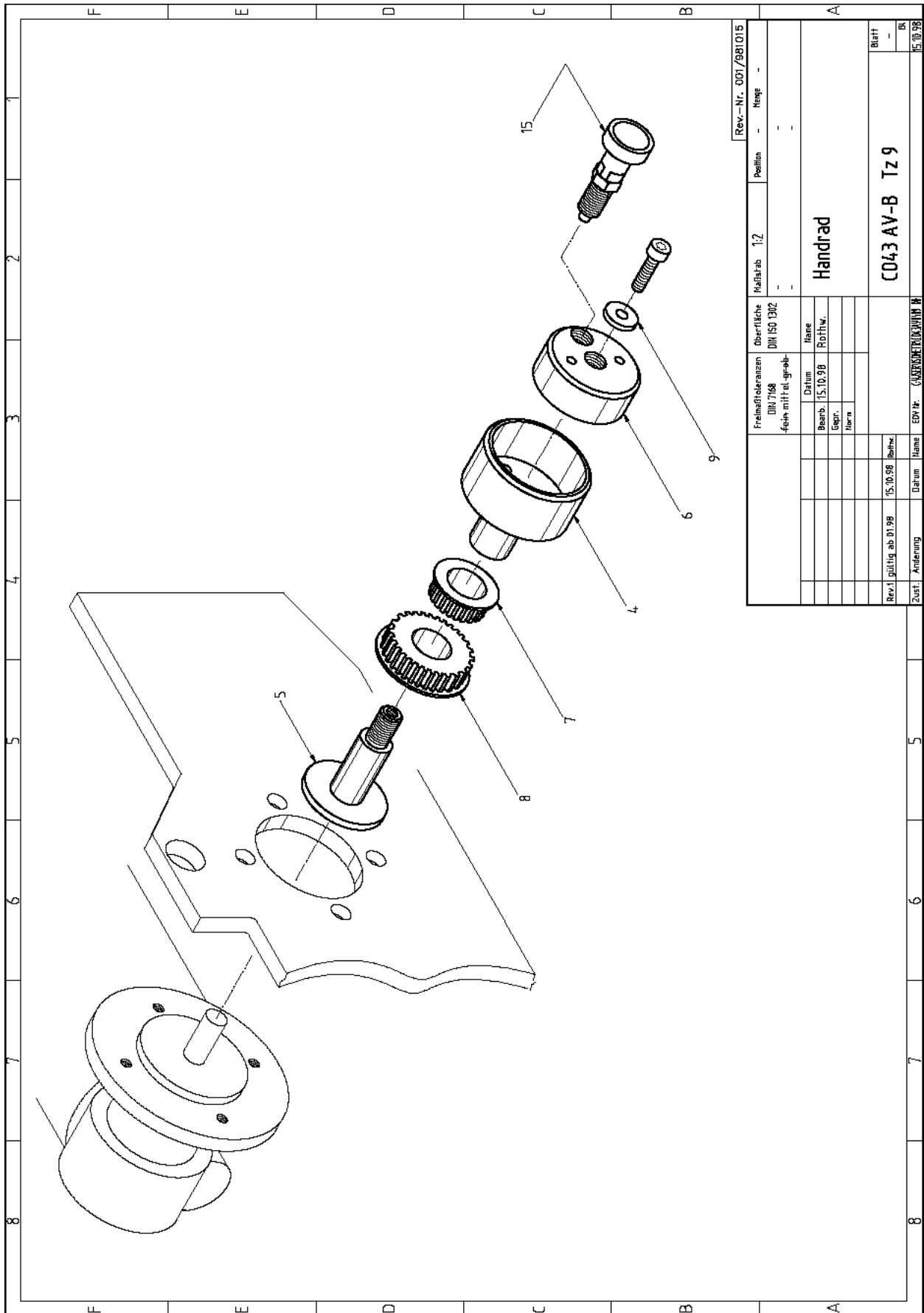
Item	Qty.	Drawing-No.	Description	Rem.
1	1	C043 E Tz 8 T. 1	Fitting key	
2	2	C043 E Tz 8 T. 2	Cam (cutting and forming)	*)
3	2	C043 E Tz 8 T. 3	Cam (rocker)	*)
4	1	C043 E Tz 8 T. 4	Cam (bending jaws)	*)
6	1	C043 E Tz 8 T. 6	Cam (ejector)	*)
7	1	C043 E Tz 8 T. 7	Main shaft	*)
8	1	C043 E Tz 8 T. 8	Bearing bushing	
9	1	C043 E Tz 8 T. 9	Bearing bushing	
10	1	C043 E Tz 8 T. 10	Cover washer	
11	1	C043 E Tz 8 T. 11	Sprocket belt wheel	
20	2		Grooved ball bearing 6003-2z	

***) = Recommended spare part**

Tz 9 Hand wheel

Item	Qty.	Drawing-No.	Description	Rem.
4	1	C043 E Tz 9 T. 4	Hand wheel	
5	1	C043 E Tz 9 T. 5	Shaft	
6	1	C043 E Tz 9 T. 6	Tapped nut	
7	1	C043 E Tz 9 T. 7	Sprocket belt wheel	
8	1	C043 E Tz 9 T. 8	Sprocket belt wheel	
9	1	C043 E Tz 9 T. 9	Cover washer	
15			Click-stop pin GN 617.1-6-A	*)

***) = Recommended spare part**



Rev.-Nr. 001/98/015		Position - Menge -	
Freimaßtoleranzen DIN 7168 Fein- mittel- grob-		Oberfläche DIN ISO 1302	
Datum		Name	
Bearb. 15.10.98		Rothw.	
Gepr. Horn			
Rev.1 gültig ab 01.98		15.10.98 Rothw.	
Zust. Änderung		Datum Name	
		15.10.98	
		EDV-Nr. 00000000000000000000	
		Handrad	
		C043 AV-B Tz 9	
		Blatt - BK	
		15.10.98	

Tz 10 Component feed

Item	Qty.	Drawing-No.	Description	Rem.
1	2	C043 E Tz 10 T. 1	Guide plate	
2	2	C043 E Tz 10 T. 2	Feed, lateral part	
3	2	C043 E Tz 10 T. 3	Grasper	*)
4	2	C043 E Tz 10 T. 4	Adjusting plate	
5	2	C043 E Tz 10 T. 5	Pitch plate	
6	2	C043 E Tz 10 T. 6	Skid	
7	2	C043 E Tz 10 T. 7	Backstop	*)
8	2	C043 E Tz 10 T. 8	Plate	
9	2	C043 E Tz 10 T. 9	Grasper guide	
10	2	C043 E Tz 10 T. 10	Guide rail	
11	2	C043 E Tz 10 T. 11	Centering angle	
12	2	C043 E Tz 10 T. 12	Plate	
13	2	C043 E Tz 10 T. 13	Distance plate	
14	2	C043 E Tz 10 T. 14	Equiangular washer	
25	1	C043 E Tz 10 T. 25	Hand wheel	
26	1	C043 E Tz 10 T. 26	Shaft	
27	2	C043 E Tz 10 T. 27	Shaft	
28	1	C043 E Tz 10 T. 28	Elevating spindle	
29	1	C043 E Tz 10 T. 29	Spindle	
30	2	C043 E Tz 10 T. 30	Distance spindle	
31	1	C043 E Tz 10 T. 31	Guide spindle	
32	2	C043 E Tz 10 T. 32	Driving wheel	
33	1	C043 E Tz 10 T. 33	Sprocket belt wheel	
34	1	C043 E Tz 10 T. 34	Sprocket belt wheel	
35	1	C043 E Tz 10 T. 35	Sprocket belt wheel	
36	1	C043 E Tz 10 T. 36	Flanged wheel	
37	2	C043 E Tz 10 T. 37	Distance washer	
38	1	C043 E Tz 10 T. 38	Distance washer	
39	1	C043 E Tz 10 T. 39	Washer	
40	1	C043 E Tz 10 T. 40	Washer	
41	1	C043 E Tz 10 T. 41	Washer	

Item	Qty.	Drawing-No.	Description	Rem.
42	1	C043 E Tz 10 T. 42	Washer	
43	2	C043 E Tz 10 T. 43	Washer	
44	2	C043 E Tz 10 T. 44	Bushing	
45	1	C043 E Tz 10 T. 45	Bushing	
46	2	C043 E Tz 10 T. 46	Bushing	
47	2	C043 E Tz 10 T. 47	Bushing	
48	2	C043 E Tz 10 T. 48	Bushing	
49	1	C043 E Tz 10 T. 49	Pin	
50	2	C043 E Tz 10 T. 50	Pin	
51	2	C043 E Tz 10 T. 51	Spring pin	
52	2	C043 E Tz 10 T. 52	Stud bolt	
53	1	C043 E Tz 10 T. 53	Cover	
54	4	C043 E Tz 10 T. 54	Cover washer	
55	1	C043 E Tz 10 T. 55	Stop	
60	1		Shaft, hardened $\varnothing 10h6 \times 230$	
61	2		Steel bushing $\varnothing 20 \times \varnothing 14 \times 33$ Ball cage $\varnothing 14 \times \varnothing 10 \times 38$	
62	1		Needle bearing NKI – 10/20	
63	2		Grooved ball bearing 6001-2z	
64	1		Compression spring D- 189	
65	2		Compression spring D- 030 B	
66	2		Compression spring D- 103	
67	2		Tension spring	

***) = Recommended spare part**

