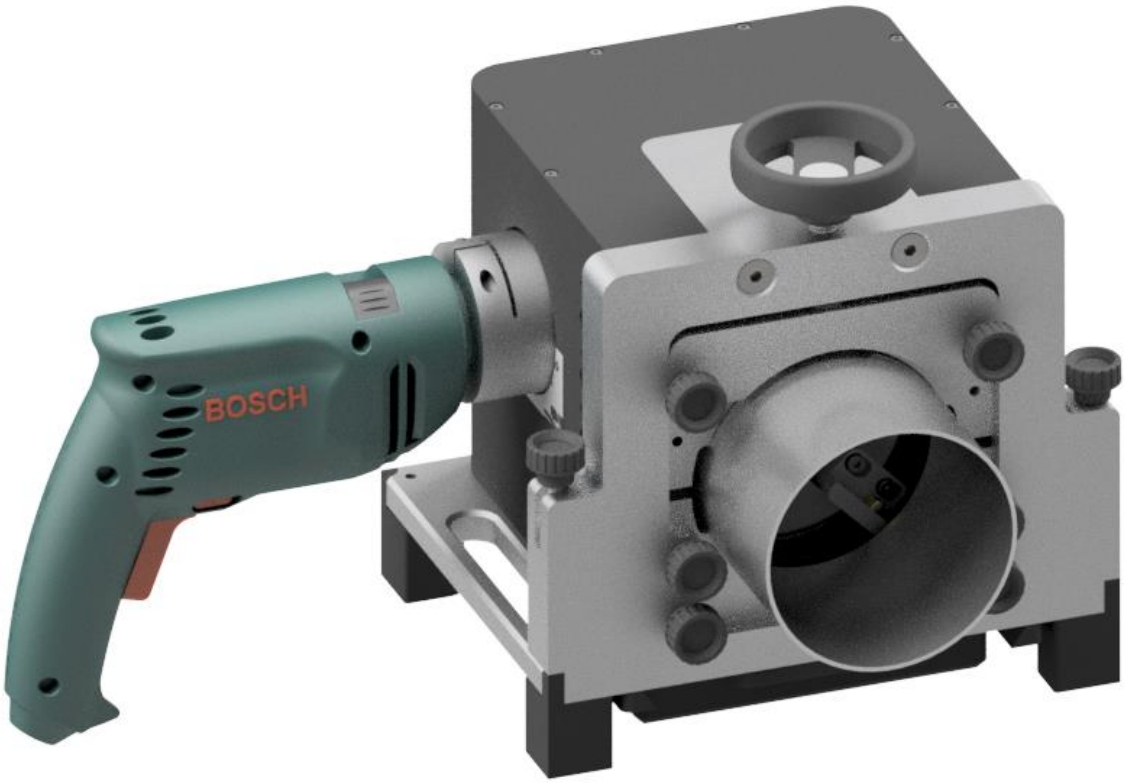
TF Low Budget



ORBITALSERVICE®
THE FUTURE OF ORBITAL WELDING

Contents

1. General information

Our liability in relation to the operation of this system is expressly limited to its proper function. Other forms of liability of any kind whatsoever are expressly excluded. The user acknowledges this exclusion of liability when putting the system into operation.

The manufacturer is not able to monitor compliance with this manual; the conditions under which the equipment is installed, operated, used and maintained; or the methods used for this purpose.

Improper installation may result in damage to property and, in turn, put people at risk. Consequently, we assume no responsibility or liability whatsoever for loss, damage or costs that result directly from – or are in any way connected with – faulty installation, improper operation, or incorrect use and maintenance.

P.O Box 196, West Burleigh 4219
Email: sales@orbitalservices.com.au
Website: ortibal-services.com.au

2. Safety instructions

Tube facing poses a risk of injury both to you and to others. When carrying out facing work, you must therefore observe the applicable safety and accident prevention regulations.

Safety summary

Read the entire chapter containing the safety instructions before using this product. Failure to comply may result in serious injury or death.

Signal words and safety warning symbols used in this manual

WARNING	Statements that indicate a hazardous situation that can result in death or serious injuries if not avoided.
CAUTION	Statements that indicate a hazardous situation that can result in slight or moderately severe injuries if not avoided.
NOTE	Statements that indicate a hazardous situation that can result in damage to the equipment or other assets if not avoided.

Safety warning symbol indicating a possible risk of injury.

Safety warning symbol indicating a possible risk of injury due to electric shock.

Safety instructions

WARNING

Mortal danger due to electric shock

- If the power cable is damaged, touching live parts directly can be lethal.
- Never allow the device to run unsupervised.
- The tool must be connected to a power source equipped with a residual-current device (RCD).
- Read the operating manual and safety instructions completely before using the battery and charger.
- Only qualified electricians are authorised to carry out work on electrical systems.
- Switch off the device, let it run until it stops rotating and unplug it or remove the battery before changing the tool, carrying out maintenance or transporting the tool.

WARNING

Risk of eye injuries from hot and sharp-edged metal chips.

Eye protection must be worn during operation or when working in the vicinity of the device.

WARNING

Keep dry. The device and its components are not waterproof.

Do not use power tools and batteries in damp or wet environments.

WARNING

Fire or explosion

Do not use in the vicinity of flammable liquids or gases.

WARNING

Risk of injury on sharp edges.

- Do not touch the cutting insert while the tool is in operation.
- Wear protective gloves.
- Do not remove chips or tubes from the work area when the facing tool is running and before the tool has come to a stop.
- Wear protective gloves to remove chips. Use long-nose pliers to remove long and bent chips.

WARNING

Risk of injury on rotating parts.

Keep hands away from rotating and moving parts. Do not wear loose clothing and tie back long hair to prevent entanglement.

WARNING

Observe the following safety measures to protect yourself from the risk of injury.

- Check the facing tool daily for visible signs of damage or defects. Have any damage or defects repaired immediately.
- Always make certain that the machine is in a faultless condition and adhere to the safety instructions.
- Check that the workpiece is correctly clamped in place.
- Do not carry the tube processing device by the power cable and do not pull on the cable to disconnect the plug. Protect the cable from heat, oil and sharp edges (chips).
- Make sure that the viewing window is closed or the guard is in place prior to and during tube facing.
- Always work with sharp cutting tools to reduce vibrations.
- Once work is complete, switch off the tool and leave it to run until it stops rotating.

3. Scope of delivery

The following parts are included in the scope of delivery:

- TF Low Budget tube facing machine
- Clamping jaws (variable sizes)
- Drill

Please check that all the listed parts and assemblies are present and correct.

4. Parts list and exploded drawing

4.1 TF Low Budget

Figure 1 TF Low Budget model

4.1.1 Exploded drawing

Example: Clamping jaw
DA114.3

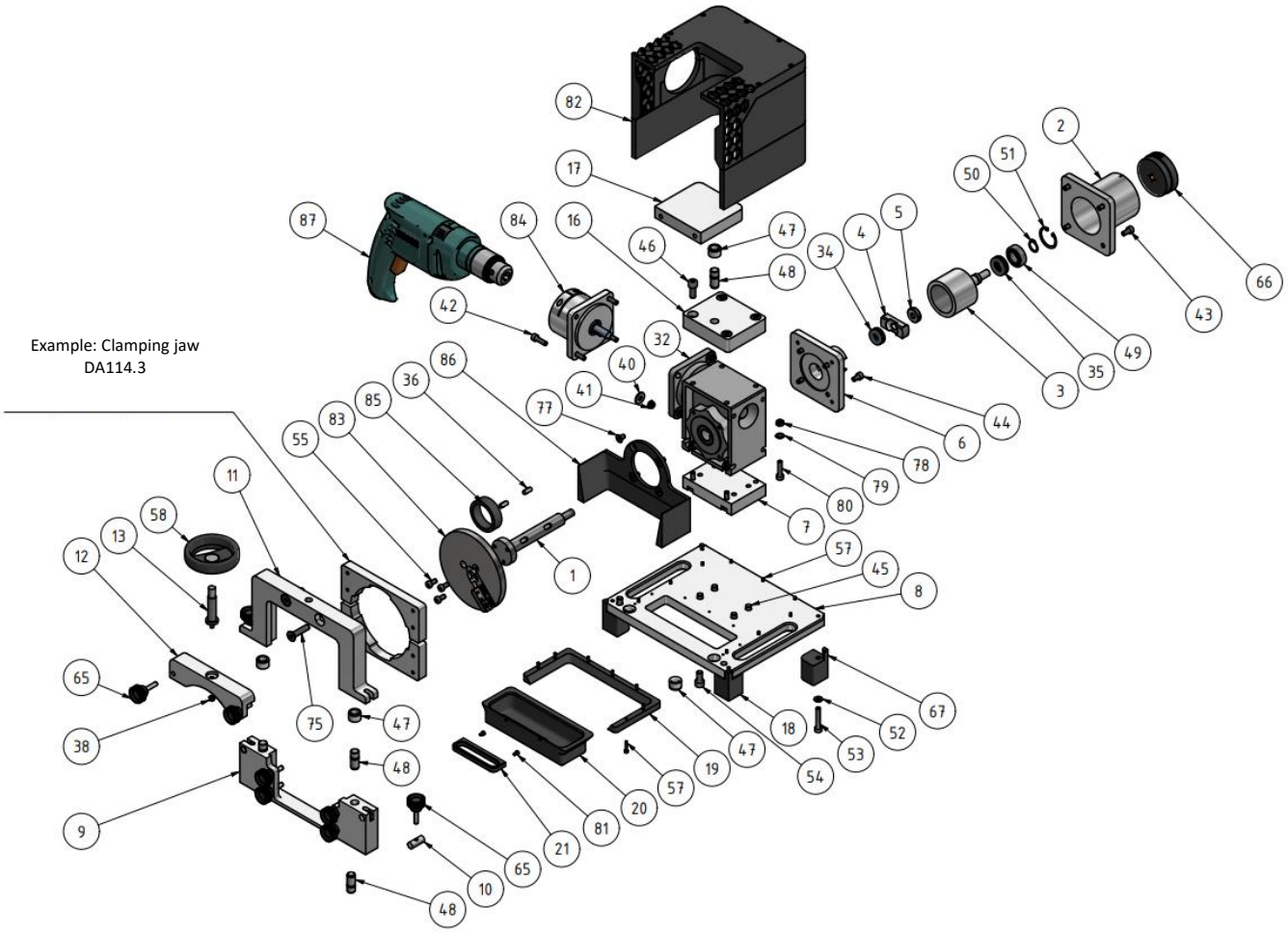
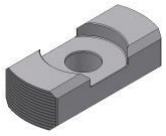
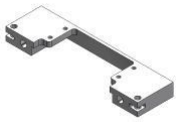


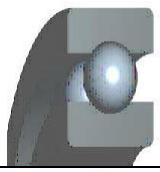
Figure 2 Exploded drawing of the TF Low Budget

4.1.2 Parts list

Item	QUANTITY	Part designation	REV.	Thumbnail	Material	Article no.
1	1	041.0015	00		Steel, high strength, low alloy	
2	1	041.0004	01		Aluminium 6061	
3	1	041.0007	01		Aluminium 6061	
4	1	040.3E.0004	01		3.4365-AlZnMgCu1.5	
5	1	040.3E.0005	00		1.4305-X8CrNiS18-9	
6	1	041.0012	01		Aluminium 6061	
7	1	041.0002	01		Aluminium 6061	
8	1	041.0001	01		Aluminium 6061	

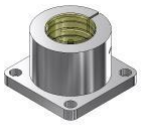
9	1	041.0010	01		Aluminium 6061	
10	2	041.0020	00		Aluminium 6061	
11	1	041.0009	01		Aluminium 6061	
12	1	041.0008	01		Aluminium 6061	
13	1	041.0011	01		Generic	
16	1	041.0013	01		Aluminium 6061	
17	1	041.0014	01		Aluminium 6061	
18	2	Base_1	00		PET plastic	
19	1	Chip collection tray	00		PET plastic	

20	1	Chip collection container	00		PET plastic	
21	1	Chip collection container handle	00		PET plastic	
32	1	NMRV40				
34	1	SKF 51100				
35	1	SKF 51102				
36	2	DIN 6885-6-6-14-A			Steel	
38	1	ISO 10511 – M5			Steel, soft	
40	4	DIN 9021 – 6.4			Steel, soft	
41	4	ISO 10511 – M6			Steel, soft	

42	4	ISO 4762 – M6 x 20			Stainless steel, 440C	
43	4	ISO 4762 – M6 x 12			Stainless steel, 440C	
44	4	ISO 4762 – M6 x 10			Stainless steel, 440C	
45	4	ISO 4762 – M8 x 12			Stainless steel, 440C	
46	4	ISO 4762 – M8 x 20			Stainless steel, 440C	
47	5	DIN 179-B12-12-A			Steel	
48	5	GN 771.1-12-30-12			Steel	
49	1	DIN 625 SKF – SKF 6002-2RSH			Steel, soft	
50	1	DIN 471 – 15 x 1			Steel, soft	

51	1	DIN 472 – 32 x 1.2			Steel, soft	
52	4	DIN 125 – A 6.4			Steel, soft	
53	4	ISO 4762 – M6 x 35			Stainless steel, 440C	
54	2	ISO 4762 – M8 x 16			Stainless steel, 440C	
55	3	DIN 7984 – M6 x 12			Steel, soft	
57	16	ISO 4762 – M3 x 16			Stainless steel, 440C	
58	1	GN 522-80-B10-A + GN 110-GE			Polypropylene	
65	8	GN 591-25-M6-25			Polypropylene	
66	1	GN 736.1-62-Z10-A-S			Generic	

67	2	Base_2	00		PET plastic	
75	2	ISO 10642 – M8 x 35			Steel	
77	4	ISO 10642 – M6 x 10			Steel, soft	
78	4	ISO 4032 – M6			Stainless steel, 440C	
79	4	DIN 128 – A6			Steel, soft	
80	4	ISO 4762 – M6 x 25			Stainless steel, 440C	
81	2	ISO 4762 – M3 x 5			Stainless steel, 440C	
82	1	041.0051	01			
83	1	041.0052	00			

84	1	041.0053	01			
85	1	Chip guard shaft			PET plastic	
86	1	Chip guard gear			PET plastic	
87	1	Drill				

4.2 Casing

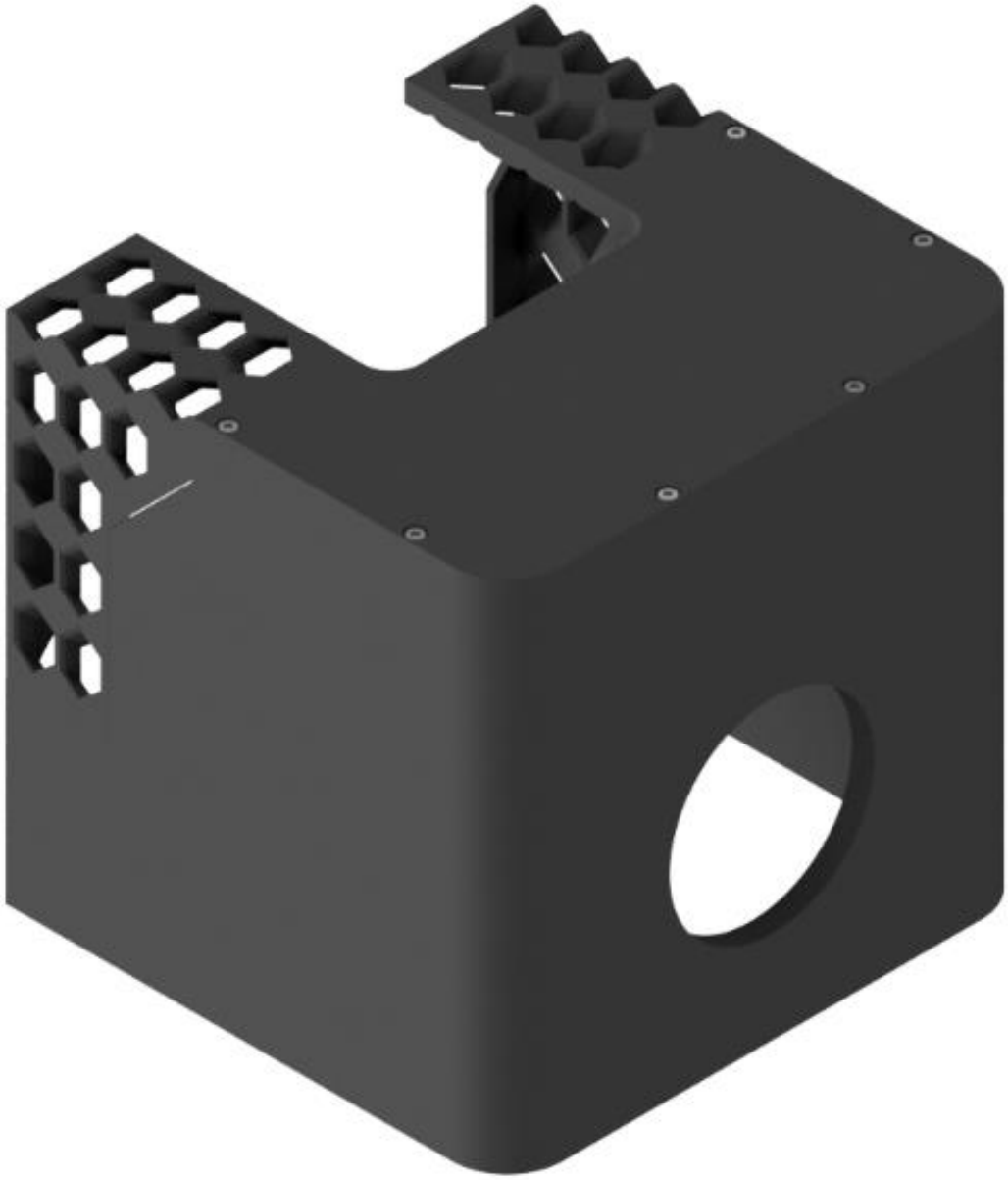


Figure 3 Casing model

4.2.1 Exploded drawing of the casing

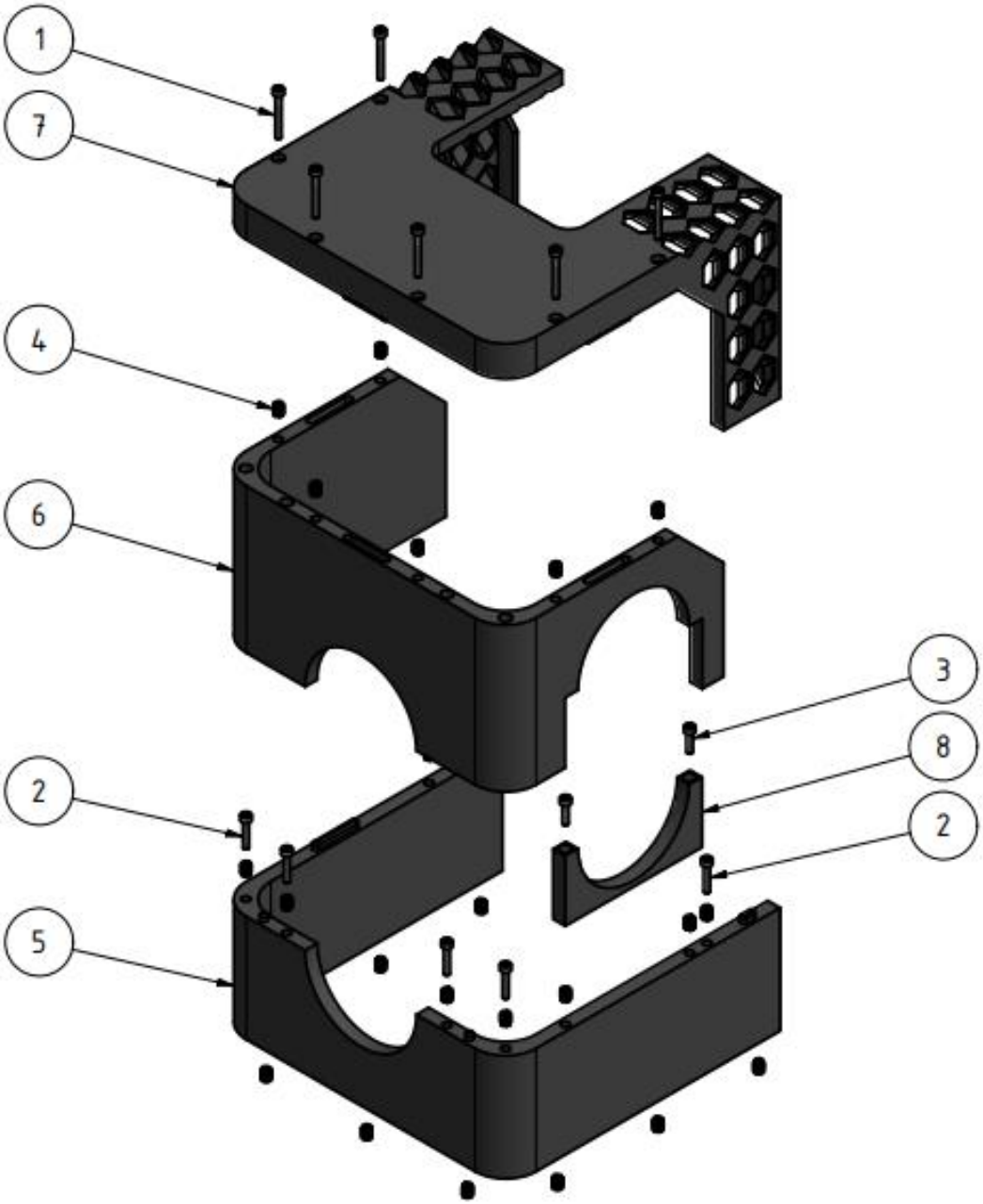


Figure 4 Exploded drawing of the casing

4.2.2 Casing parts list

Item	QUANTITY	Part designation	REV.	Thumbnail	Material	Article no.
1	6	ISO 4762 – M3 x 25			Stainless steel, 440C	
2	6	ISO 4762 – M3 x 16			Stainless steel, 440C	
3	2	ISO 4762 – M3 x 12			Stainless steel, 440C	
4	23	Thread insert M3			Steel	
5	1	Casing – lower part	01		PET plastic	
6	1	Casing – centre part	01		PET plastic	
7	1	Casing – upper part	01		PET plastic	
8	1	Casing – drill flange cover	01		PET plastic	

4.3 Tool holder

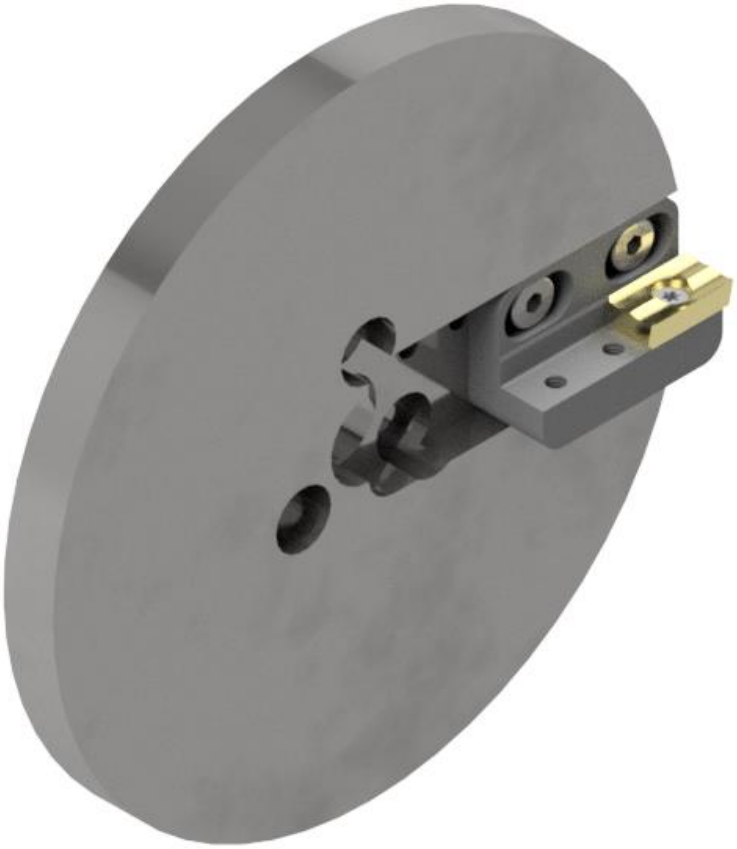


Figure 5 Tool holder model

4.3.1 Exploded drawing

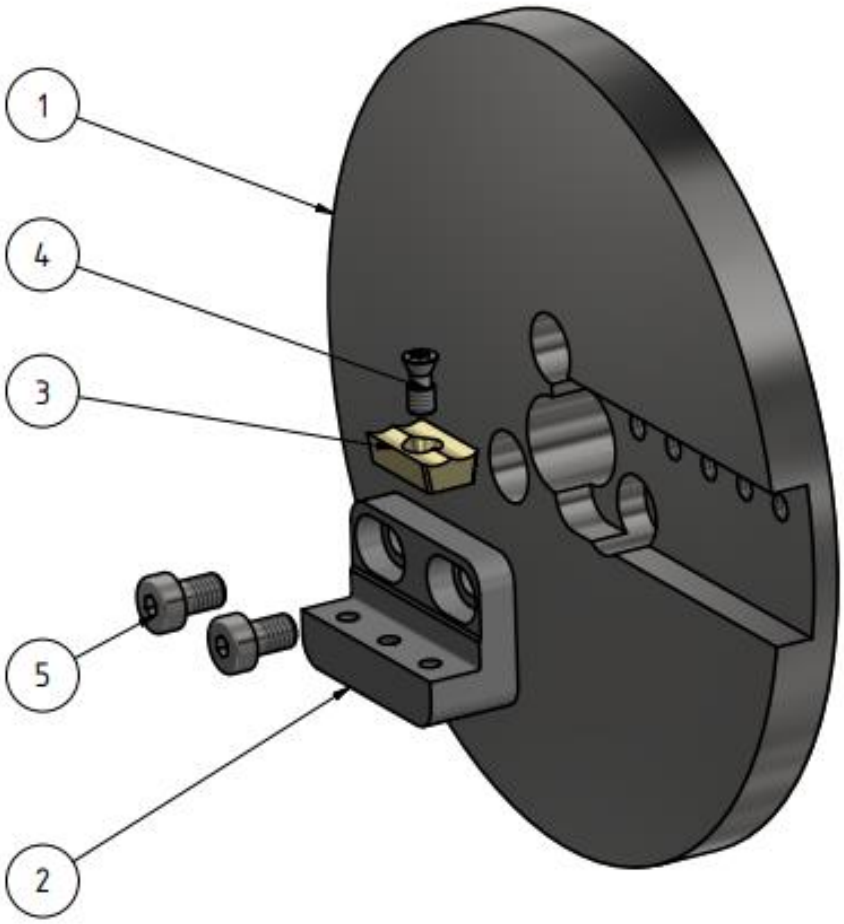


Figure 6 Exploded drawing of the tool holder

4.3.2 Parts list

Item	QUANTITY	Part designation	REV.	Thumbnail	Material	Article no.
1	1	041.0006	00		Steel, high strength, low alloy	
2	1	041.0016	00		Steel	
3	1	HSS indexable insert			Generic	
4	1	M4x10			Steel	
5	2	DIN 7984 – M5 x 8			Steel, soft	

4.4 Drill holder

Figure 7 Drill holder model

4.4.1 Exploded drawing

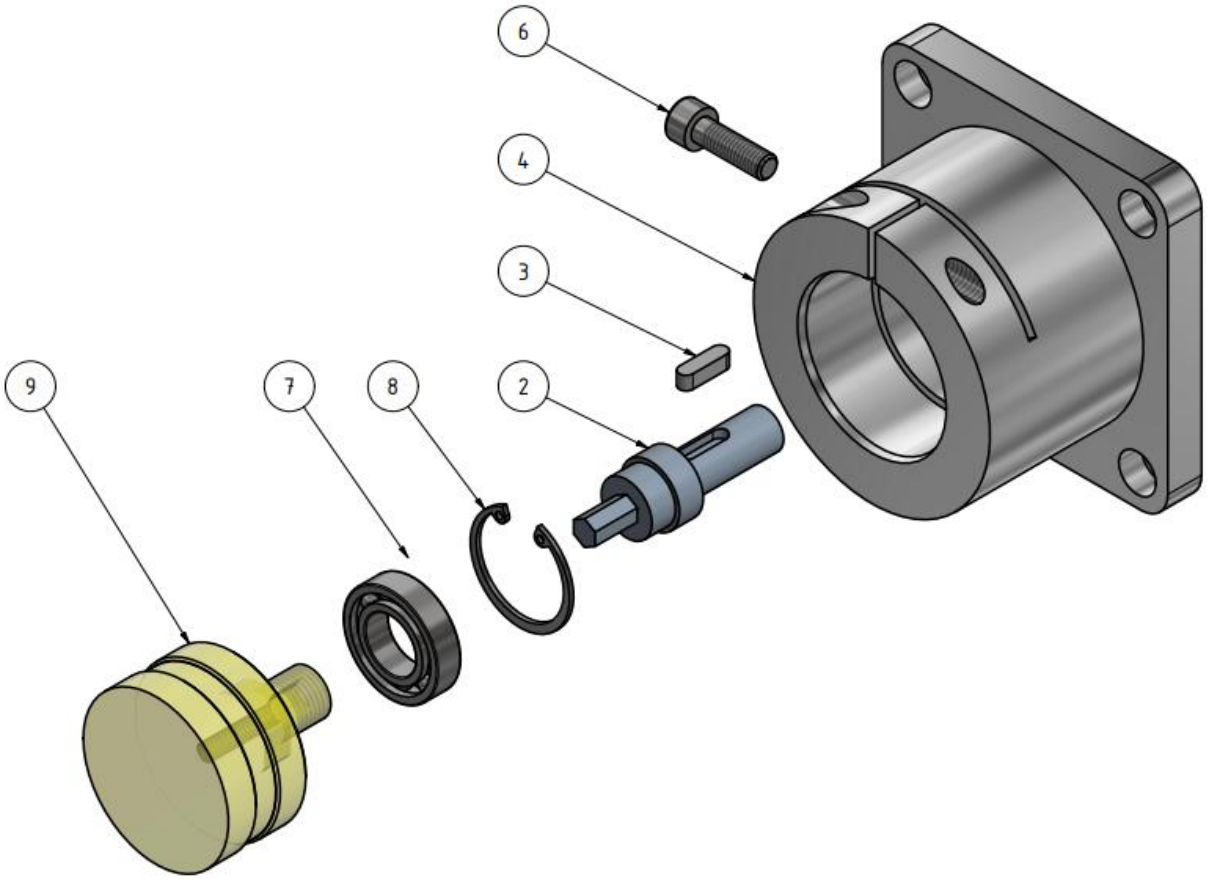
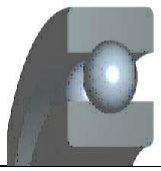


Figure 8 Exploded drawing of the drill holder

4.4.2 Parts list

Item	QUANTITY	Part designation	REV.	Thumbnail	Material	Article no.
1	1	041.0003	00		Steel	
2	1	DIN 6885-4-4-14-A			Steel	
3	1	041.0005	01		Aluminium 6061	
4	1	ISO 4762 – M6 x 20			Stainless steel, 440C	
5	1	DIN 472 – 28 x 1.2			Steel, soft	
6	1	DIN 625 SKF – SKF 61902-2RS1			Steel, soft	
7	1	European holder for Metabo drill SBEV 1000-2-2021				

5. Accessories and extensions

5.1 Clamping jaws (available in variable sizes)

Figure 10 Clamping jaw DA25 model

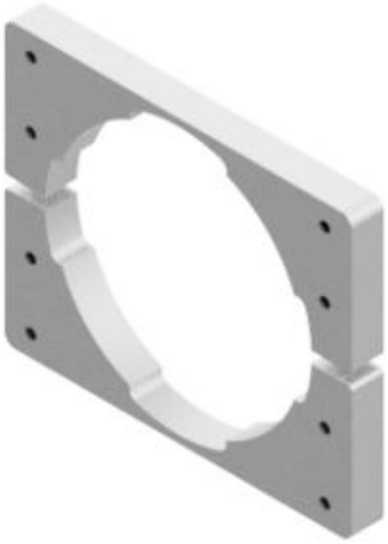


Figure 9 Clamping jaw DA114.3 model

5.1.1 Parts list

Item	QUANTITY	Part designation	REV.	Thumbnail	Material	Article no.
1	2	041.0017	01		Aluminium 6061	
2	2	041.0018	01		Aluminium 6061	

6. Care and maintenance

The TF Low Budget tube facing device requires very little maintenance. Operators must only make sure to empty the collection container, maintain the worm gear (according to the manufacturer's specifications) and check the HSS indexable insert. Apart from that, no particular maintenance work is required.

7. Customer service and after-sales support

To order spare parts, please see the separate spare parts list.

Minor defects can be rectified by qualified personnel who have been trained by Orbitalservice GmbH. Major damage to turning devices must be repaired at our facilities.

To have any faults/malfunctions corrected, please contact us directly.

Orbital Services Australia
P.O Box 196, West Burleigh 4219
Email: sales@orbitalservices.com.au
Website: ortibal-services.com.au

Please remember to include the following information:

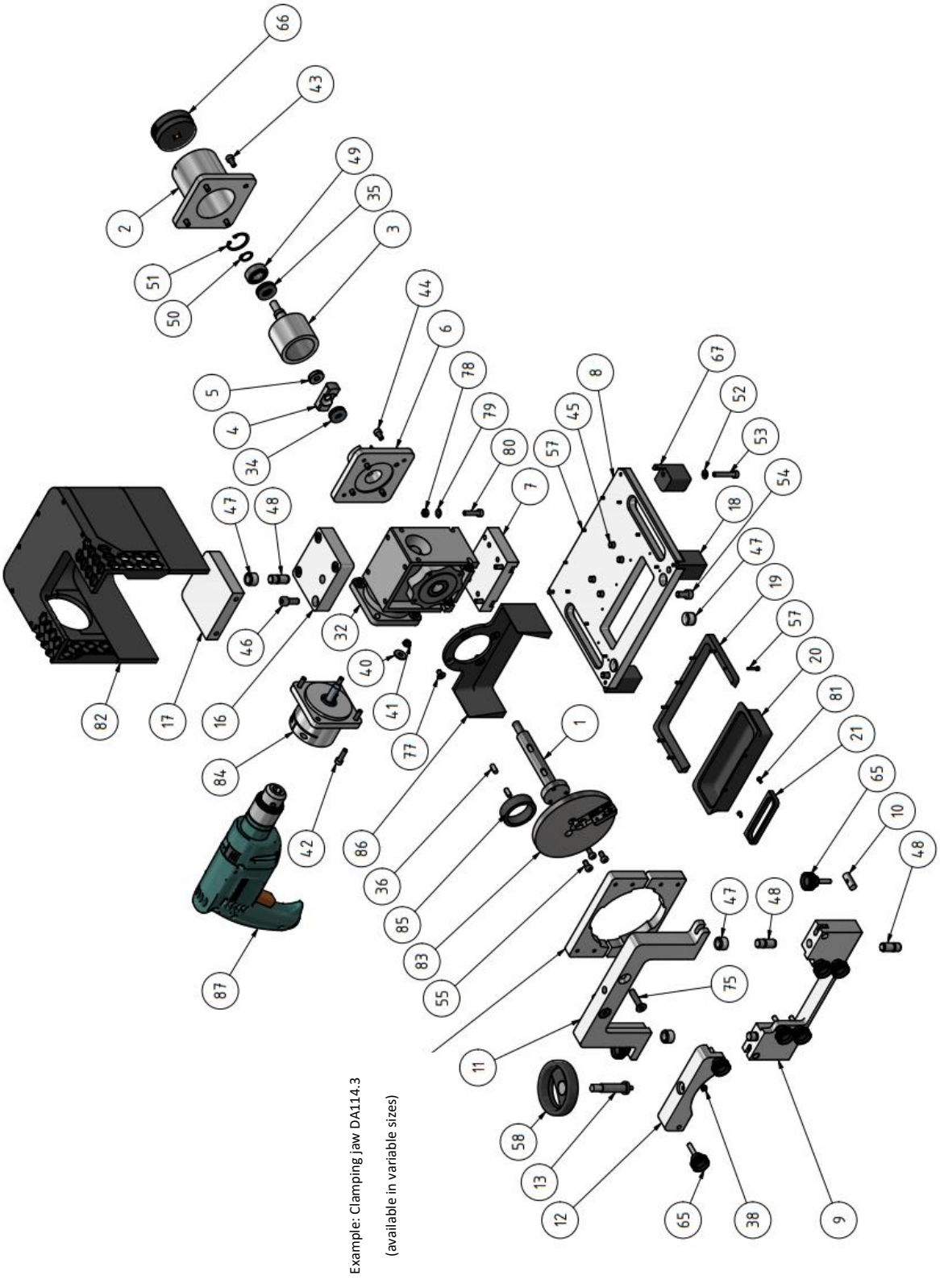
- TF Low Budget and the spare part number
- TF Low Budget + accessory designation and the spare part number

The photographs, diagrams and illustrations are purely intended to make the document easier to understand and are not contractually binding.

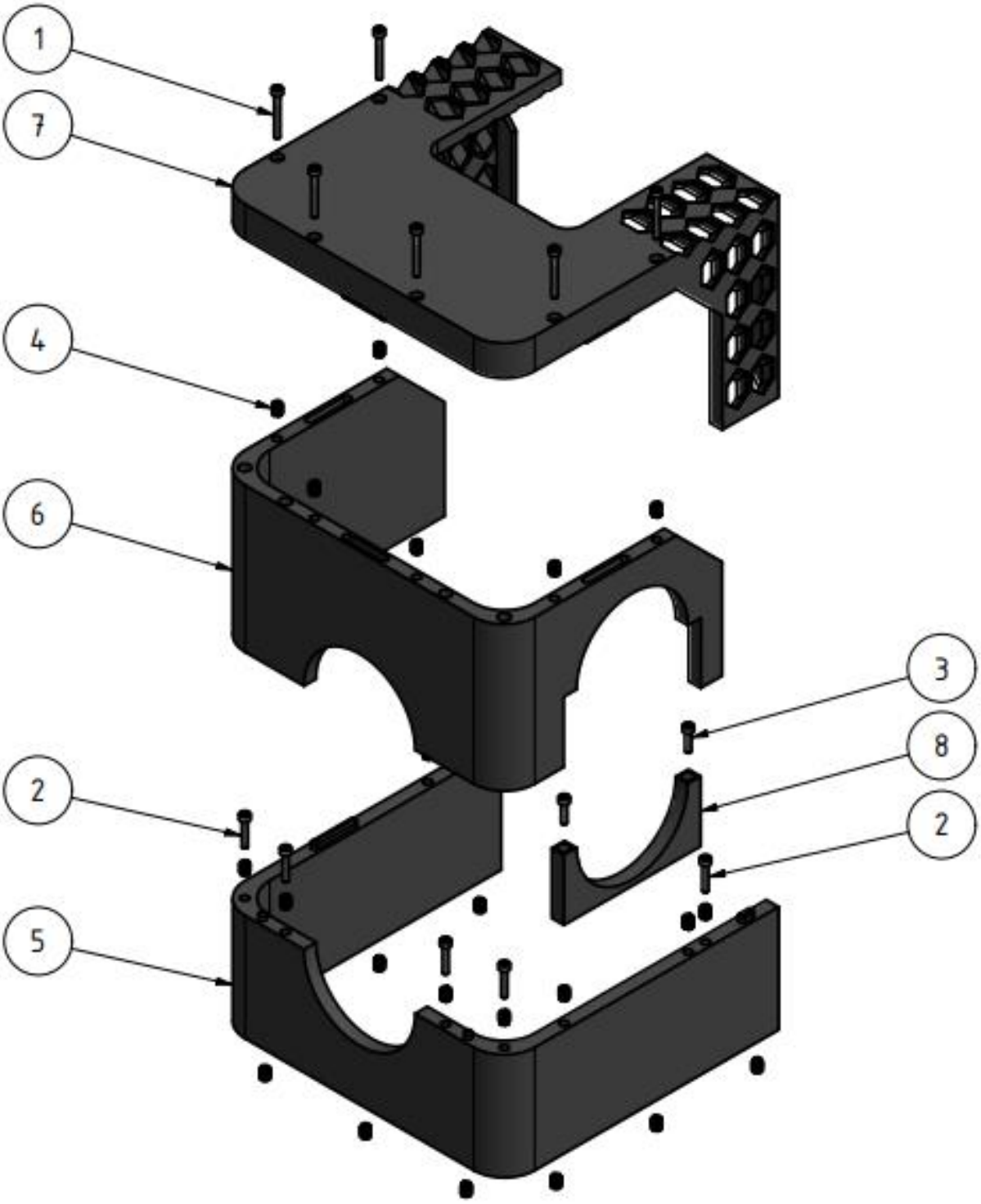
8. List of figures

9. Appendix

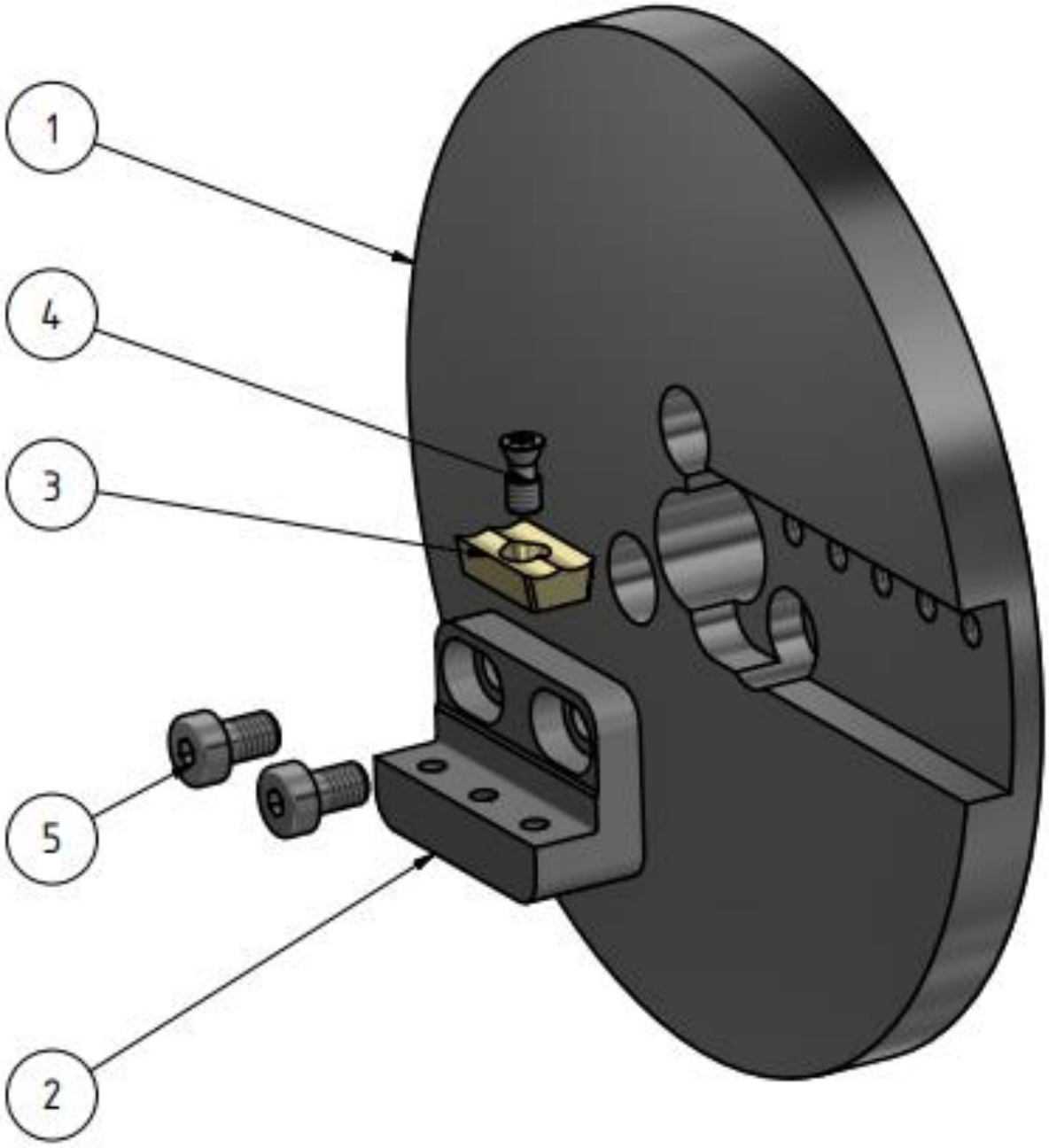
9.1 Exploded drawing of the TF Low Budget



9.2 Exploded drawing of the casing



9.3 Exploded drawing of the tool holder



9.4 Exploded drawing of the drill holder