



RATCHETS  
RATCHET ACCESSORIES  
DENTAL PRODUCTS

PRODUCT CATALOGUE

A company of the KLINGEL MEDICAL METAL GROUP








JOSEF GANTER  
Feinmechanik

## General information

All ratchets are available with different tool connections marked with colour codes. This allows you to easily identify the colour code of your ratchet and find the accessories available for it.

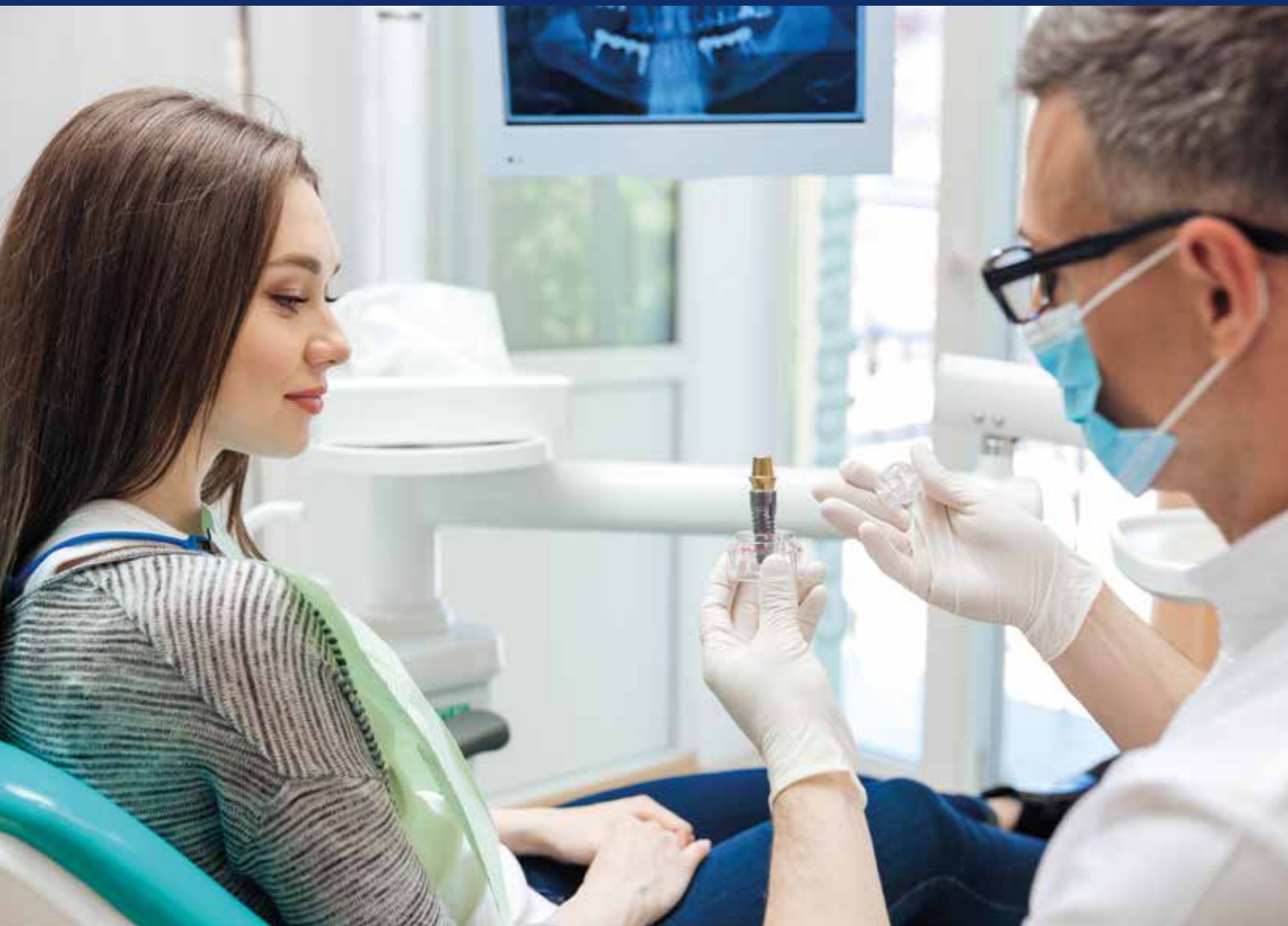
The tool connection is the inner diameter ( $\phi$ ) of the ratchet head into which the ratchet wheel and/or the tool will be fitted later.

Pic	Item no.	Tool connection	Colour code
0	0000000	$\phi$ 7 mm e.g. "Straumann"	
0	0000000	$\phi$ 8 mm e.g. "Nobel Biocare"	
0	0000000	$\phi$ 9.5 mm with changeable ratchet wheel	
0	0000000	$\phi$ 9.5 mm with changeable ratchet wheel	
0	0000000	$\phi$ 12 mm for adapter rings shown on page 14, compatible with all tool connections	

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# Introduction



Josef Ganter Feinmechanik has been well-known for the development and manufacturing of torque ratchets. The DIN EN ISO 13485:2016 certified company belongs to the Klingel medical metal group, with their headquarters in Pforzheim and their worldwide operation. Josef Ganter offers a wide range of standard ratchets going along with customized versions as well as all additional accessories needed.

### Why use a Josef Ganter ratchet?

Our ratchets are robust, long-lasting, easy to handle with uncomplicated cleaning instructions. We use a larger spring than other manufacturers. The spring force therefore remains constant over a long period and doesn't change. The ratchet can be adjusted as required. We colour individual labellings with sterilizable ceramic paint, so that the values set are more clear and readable at any time. Multicolour designs are also available.

With 10 to 100 Ncm we cover a wide range of torques in various designs. All torque ratchets have a locking function to enable transmission of greater torques and are certified as a class 1 medical product within the scope of the MDR regulation (EU). With modern state-of-the-art CNC long turning machines and turning and milling centers with up to 12 axes, we manufacture small and large series as well as sample parts according to customer requirements.

### Application and operating of the torque ratchets

The success of the implant treatment depends on the precise tightening of the parts placed directly on the implant. A pre-stressed tightening of the screw will help avoid any risk of screw loosening. Also, high tightening torques may lead to screw fracture.

A secure tightening can only be generated through the use of a precision instrument offering a torque control system.

The torque ratchet is used for inserting implants or torque-controlled tightening of screw-retained abutments. The head of the ratchet has a holder for various tools, such as screwdrivers and insertion instruments.

# 1

## One-piece torque ratchet



NEW!

## Your advantages

- > Individual colour paint or laser print customer logo/logotype available.
- > Position of the customer's logo: on the bending rod torque ratchet.
- > Optimum readability of scale values with sterilizable ceramic paint.
- > Different colours are available for all coloured labels. Multicolour designs are also possible.
- > Also available as gold-plated version.
- > Comprises only one single part. Minimum cleaning effort without dismounting of the ratchet – therefore significant time saving while preparing in the medical daily routine.



# One-piece torque ratchet



# One-piece torque ratchet



Gold-plated ratchet

Pic	Item no.	Tool connection	Colour code
-	1000900-F	Ø 7 mm	●
-	1000901-F	Ø 8 mm	●
1	1000902-F	Ø 9,5 mm with changeable ratchet wheel, see accessories	●

Pic	Item no.	Tool connection	Colour code
-	1000900-G	Ø 7 mm	●
-	1000901-G	Ø 8 mm	●
2	1000902-G	Ø 9,5 mm with changeable ratchet wheel, see accessories	●



# 2

## Ratchet with optional torque attachment



Can be used as ratchet without torque indication or be expanded within seconds into a ratchet with torque indication by simply attaching the torque attachment.

## Your advantages

- > Colour paint or laser print customer logo/logotype available.
- > Position of the customer's logo: on the ratchet and/or on the torque attachment.
- > Optimum readability of scale values with sterilizable ceramic paint.
- > Different colours are available for all coloured labels. Multicolour designs are also possible.
- > Comprises two/three individual parts only. Dismounting of the ratchet for sterilization is done within seconds.



# Ratchet

# Torque attachment



Each of the ratchets listed here can be combined with the torque attachment shown on page 13.



Each of the torque attachments listed here can be combined with each type of ratchets shown on page 12.

Pic	Item no.	Tool connection	Colour code
3	1000603	Ø 7 mm e.g. "Straumann"	Green
4	1000604	Ø 8 mm e.g. "Nobel Biocare"	Yellow
5	1000605	Ø 9.5 mm with changeable ratchet wheel, see accessories	Black
6	1000606	Ø 12 mm for adapter rings shown on page 14, compatible with all tool connections	Red

Pic	Item no.	Torque range	Comments
7	1010624	10-35 Ncm	
8	1010625	10-45 Ncm	
9	1010623	10-70 Ncm	
10	1010626	10-100 Ncm	
11	1010628	50-250 Ncm	For safe implant extraction

## Adapter rings for ratchet 1000606



With only one ratchet, each of the three tool connections can be operated by changing the adapter rings.

Pic	Item no.	Tool connection	
12	1000677	Ø 7 mm	e.g. "Straumann"
13	1000678	Ø 8 mm	e.g. "Nobel Biocare"
14	1000679	Ø 9.5 mm	with changeable ratchet wheel, see accessories

## Adapter rings for ratchet 1000606





# 3

## Bending rod torque ratchet



### Your advantages

- > Colour paint or laser print customer logo/ logotype available.
- > Position of the customer's logo: on the ratchet.
- > Optimum readability of scale values with sterilizable ceramic paint.
- > Different colours are available for all coloured labels. Multicolour designs are also possible.
- > Comprises two individual parts only. Dismounting of the ratchet for sterilization is done within seconds.

# Bending rod torque ratchet



Pic	Item no.	Torque range	Tool connection	Colour code
15	1000600	10-70 Ncm	Ø 7 mm e.g. "Straumann"	●
16	1000602	10-70 Ncm	Ø 8 mm e.g. "Nobel Biocare"	●
17	1000601	10-70 Ncm	Ø 9.5 mm with changeable ratchet wheel	●

The torque range can be reduced or customized figures be applied, e.g. 10-50 Ncm / 25-70 Ncm / 25-55 Ncm. Please ask for an individual offer.

# 4

## Ratchet



### Your advantages

- > Colour paint or laser print customer logo/ logotype available.
- > Position of the customer's logo: on the ratchet.
- > Optimum readability of scale values with sterilizable ceramic paint.
- > Different colours are available for all coloured labels. Multicolour designs are also possible.
- > Comprises two individual parts only. Dismounting of the ratchet for sterilization is done within seconds.

# Ratchet

18



Total length: 90 mm

Pic	Item no.	Tool connection	Colour code
-	1000212	Ø 7 mm e.g. "Straumann"	●
-	1000213	Ø 8 mm e.g. "Nobel Biocare"	●
18	1000204	Ø 9.5 mm with changeable ratchet wheel	●

19



Total length: 71 mm

Pic	Item no.	Tool connection	Colour code
-	1000281	Ø 7 mm e.g. "Straumann"	●
-	1000282	Ø 8 mm e.g. "Nobel Biocare"	●
19	1000283	Ø 9.5 mm with changeable ratchet wheel, see accessories	●

# Ratchet

20



Total length: 54 mm

Pic	Item no.	Tool connection	Colour code
-	1000284	Ø 7 mm e.g. "Straumann"	●
-	1000285	Ø 8 mm e.g. "Nobel Biocare"	●
20	1000286	Ø 9.5 mm with changeable ratchet wheel, see accessories	●



# 5

## Torque ratchet



These ratchets offer an excellent user-friendliness, since the torque can be adjusted before starting the surgical procedure.

As soon as the required torque value is reached during the surgery, a clicking sound will indicate its achievement and the applied force will instantly be turned off.



Special ratchets are also available.

## Your advantages

- > Colour paint or laser print customer logo/ logotype available.
- > Position of the customer's logo: on the ratchet.
- > Optimum readability of scale values with sterilizable ceramic paint.
- > Different colours are available for all coloured labels. Multicolour designs are also possible.
- > Can completely be disassembled for sterilization.
- > In addition to the option of setting a pre-defined torque value, the ratchet offers a blocking function allowing the transfer of higher torques.
- > The large external spring ensures a constant, non-changing spring force level over a long period.

## Torque range 10–35 Ncm and 10–45 Ncm



21



22



23

Pic	Item no.	Torque range	Tool connection	Colour code
21	1000205	10–35 Ncm	Ø 7 mm e.g. “Straumann”	●
–	1000203	10–45 Ncm	Ø 7 mm e.g. “Straumann”	●
–	1000214	10–35 Ncm	Ø 8 mm e.g. “Nobel Biocare”	●
22	1000215	10–45 Ncm	Ø 8 mm e.g. “Nobel Biocare”	●
–	1000201	10–35 Ncm	Ø 9.5 mm with changeable ratchet wheel	●
23	1000202	10–45 Ncm	Ø 9.5 mm with changeable ratchet wheel	●

## Torque range 10–70 Ncm



24



25

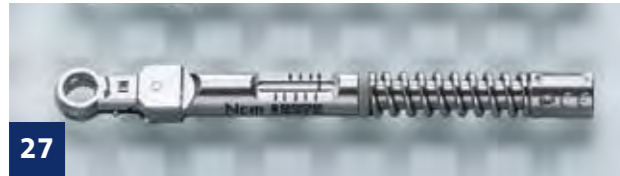


26

Pic	Item no.	Torque range	Tool connection	Colour code
24	1000701	10–70 Ncm	Ø 7 mm e.g. “Straumann”	●
25	1000700	10–70 Ncm	Ø 8 mm e.g. “Nobel Biocare”	●
26	1000702	10–70 Ncm	Ø 9.5 mm with changeable ratchet wheel	●

## Torque range 15–60 Ncm / 15–80 Ncm / 15–100 Ncm

## Torque range 15–60 Ncm / 15–80 Ncm / 15–100 Ncm



Pic	Item no.	Torque range	Tool connection	Colour code
–	1000206	15–60 Ncm	Ø 7 mm e.g. “Straumann”	●
27	1000207	15–80 Ncm	Ø 7 mm e.g. “Straumann”	●
28	1000208	15–100 Ncm	Ø 7 mm e.g. “Straumann”	●
–	1000216	15–60 Ncm	Ø 8 mm e.g. “Nobel Biocare”	●
–	1000217	15–80 Ncm	Ø 8 mm e.g. “Nobel Biocare”	●
–	1000218	15–100 Ncm	Ø 8 mm e.g. “Nobel Biocare”	●
29	1000209	15–60 Ncm	Ø 9.5 mm with changeable ratchet wheel	●
–	1000210	15–80 Ncm	Ø 9.5 mm with changeable ratchet wheel	●
–	1000211	15–100 Ncm	Ø 9.5 mm with changeable ratchet wheel	●



# 6

## Accessories for ratchets



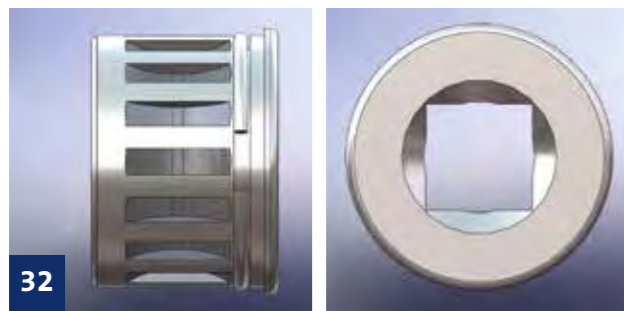
Ratchet wheels are used to attach tools of different forms and sizes to the ratchet.

### Your advantages

- > “With ball” means that the ball is used to protect the tool attached afterwards from falling out.
- > Ratchet wheels withstand a torque force of up to approx. 200 Ncm, hardened ratchet wheels up to approx. 400 Ncm.
- > “With spring ring outside”: a spring ring protects the ratchet wheel in the ratchet from falling out.
- > “With spring ring inside”: the tool is protected with a spring ring inside the ratchet wheel from falling out.



# Ratchet wheels

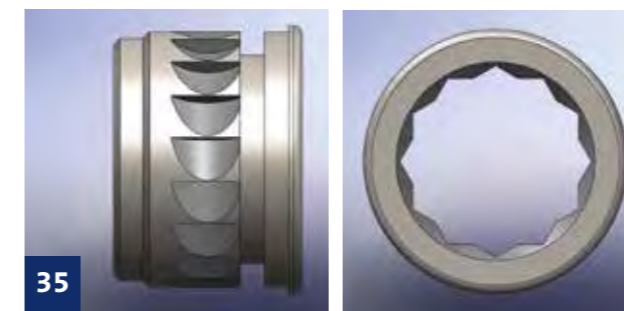
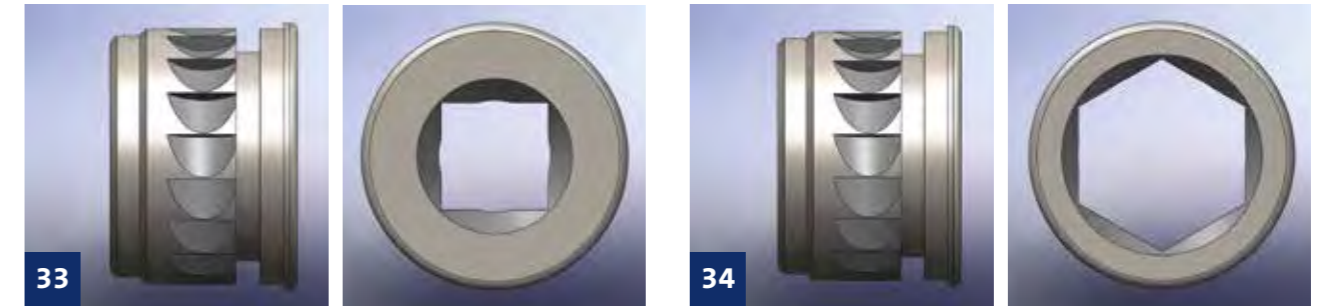


In case you need a ratchet wheel with different dimensions, we will be happy to send you our offer.

Pic	Item no.	Ratchet*	Ratchet wheel*	Colour code
-	1000236	Ø 7 mm	square 4 mm	● ●
30	1000296	Ø 7 mm	square 4 mm / hardened	● ●
-	1000279	Ø 7 mm	square 4 mm / hardened / 2 balls	● ●
-	1000270	Ø 7 mm	hexagon 3.5 mm	● ●
-	1000234	Ø 7 mm	hexagon 3.7 mm	● ●
-	1000273	Ø 7 mm	hexagon 4 mm	● ●
-	1000275	Ø 8 mm	hexagon 4 mm**	● ●
-	1000292	Ø 8 mm	square 4 mm / hardened / 2 balls**	● ●
-	1000293	Ø 8 mm	square 4 mm / hardened**	● ●
-	1000295	Ø 8 mm	square 4 mm**	● ●
31	1000675	Ø 9.5 mm	hexagon 6.4 mm**	● ●
32	1000676	Ø 9.5 mm	square 4 mm**	● ●
-	1000261	Ø 9,5 mm	square 4 mm / 2 balls	● ●

\* Tool connection, \*\* with spring ring outside

# Ratchet wheels



All ratchet wheels shown on this page are protected against falling out of the ratchet.

Pic	Item no.	Ratchet*	Ratchet wheel*	Colour code
-	1000233	Ø 9.5 mm	square 3 mm / 1 ball	●
33	1000222	Ø 9.5 mm	square 4 mm	●
-	1000229	Ø 9.5 mm	square 4 mm / 2 balls	●
-	1000271	Ø 9.5 mm	square 4 mm / hardened	●
-	1000297	Ø 9.5 mm	2x square 4 mm	●
-	1000237	Ø 9.5 mm	square 4.1 mm	●
-	1000247	Ø 9.5 mm	square 4.5 mm	●
-	1000248	Ø 9.5 mm	hexagon 3 mm	●
-	1000239	Ø 9.5 mm	hexagon 3.5 mm	●
-	1000262	Ø 9,5 mm	hexagon 4 mm	●
-	1000238	Ø 9.5 mm	hexagon 5.1 mm	●
-	1000225	Ø 9.5 mm	2x hexagon 5.8 mm***	●
-	1000221	Ø 9.5 mm	2x hexagon 6 mm	●
-	1000224	Ø 9.5 mm	2x hexagon 6 mm***	●

\*\*\* with spring ring inside

## Ratchet wheels

## Ratchet adapters for instruments with dental shanks DIN EN ISO 1797-1

Pic	Item no.	Ratchet*	Ratchet wheel*	Colour code
34	1000220	Ø 9.5 mm	hexagon 6.26 mm	●
35	1000227	Ø 9.5 mm	2x hexagon 6.26 mm	●
-	1000228	Ø 9.5 mm	hexagon 6.4 mm	●
-	1000280	Ø 9.5 mm	hexagon 6.4 mm / hardened	●
-	1000272	Ø 9.5 mm	hexagon 6.46 mm	●
-	1000226	Ø 9.5 mm	hexagon 6.6 mm	●



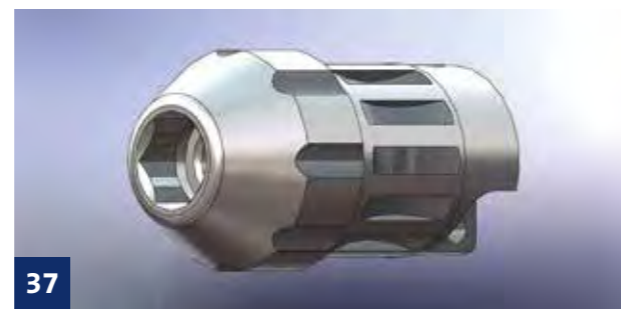
The ratchet adapter allows to attach tools with dental shanks (RA shanks) acc. to DIN EN ISO 1797-1 to the ratchet and to hold them securely, e.g. drill extensions or different screwdrivers/tools.

\* Tool connection

## Ratchet adapters for instruments with dental shanks DIN EN ISO 1797-1



36



37



38



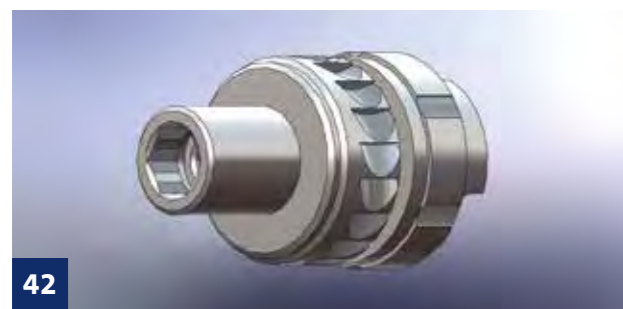
39



40



41



42

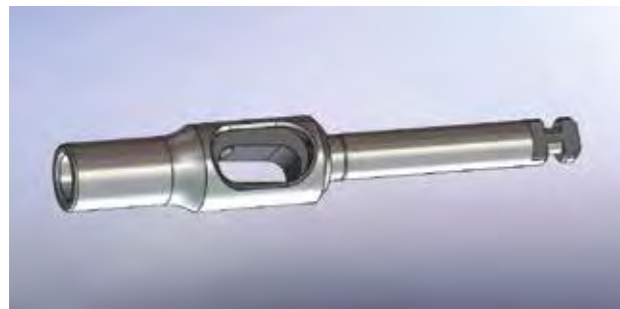
## Ratchet adapters for instruments with dental shanks DIN EN ISO 1797-1

Pic	Item no.	Tool connection	Colour code
36	1000235	Ø 7 mm (e.g. "Straumann")	● ●
37	1000274	Ø 7 mm (e.g. "Straumann") with W&H-connection (hexagon 3 mm)	● ●
38	1000249	Ø 8 mm (e.g. "Nobel Biocare")	● ●
39	1000278	Ø 8 mm (e.g. "Nobel Biocare") with W&H-connection (hexagon 3 mm)	● ●
40	1000246	Ø 9.5 mm (with changeable ratchet wheel) required ratchet wheel item no. 1000675 (hexagon 6.26 mm)	● ●
		required ratchet wheel item no. 1000220 / item no. 1000228 or item no. 1000280	●
41	1000288	Ø 9.5 mm (with changeable ratchet wheel) (W&H hexagon 3 mm) required ratchet wheel item no. 1000675	● ●
		required ratchet wheel item no. 1000220 / item no. 1000228 or item no. 1000280	●
42	1000294	Ø 9.5 mm direct connection (no additional ratchet wheel)	●

# Drill extensions

Used to extend the length of instruments with dental shanks acc. to DIN EN ISO 1797-1 (RA shanks).

These articles are certified as a class IIa medical product.



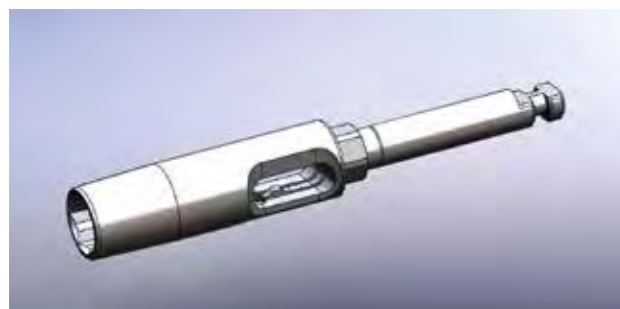
**Drill extension  
Item no. 320-13-R**

- › Extension to approx. 18 mm
- › Max. loading: 40 Ncm



**Drill extension  
Item no. 320-16-R**

- › Extension to approx. 16 mm
- › Max. loading with hardened RA-shanks: 80 Ncm
- › Max. loading with non hardened RA-shanks: 40 Ncm



**Drill extension with W&H-connection  
(hexagon 3 mm) Item no. 320-17-R**

- › Extension to approx. 16 mm
- › Only for instruments with dental shanks with hexagon 3 mm and according to DIN EN ISO 1797-1
- › Max. loading: 100 Ncm



# 7

## Other dental products



## Josef Ganter Feinmechanik GmbH is manufacturer for:

- > **Tools and screwdrivers in different variations and sizes (as OEM-manufacturer)**
- > **A large variety of turned and milled parts can be made according to customer technical specifications and demands (as contract manufacturer)**
- > Starting from  $\varnothing$  0.5 mm
- > Threads starting from M0.6
- > Hexagon sockets and Torx® starting from SW 0.7

### Made of:

- > Titanium and its alloys
- > Stainless steel
- > Special alloys e.g. Monel
- > Plastics e.g. PEEK, POM, PA
- > Non-ferrous metals e.g. aluminium, brass, nickel silver
- > Machining steel

## Other dental products



Examples of:  
abutments, implants, bone screws, prosthetic  
screws, special parts, gingival formers, screws

## Other dental products





# 8

## Kit-/Storage boxes



**Black plastic storage box**  
**Item no. 1000244**

- > made of black plastic
- > with transparent cover and blue foam insert
- > without ratchet and tools



**Plastic storage box**  
**Item no. 1000245**

- > without ratchet



**Stainless steel implantology kit "small"**  
**Item no. 1000257**

- > without ratchet and tools
- > place holder for equipment
- > sterilizable



**Stainless steel implantology kit "medium"**  
**Item no. 1000258**

- > without ratchet and tools
- > place holder for equipment
- > sterilizable



**Stainless steel implantology kit "large"**  
**Item no. 1000259**

- > without ratchet and tools
- > place holder for equipment
- > sterilizable



## Josef Ganter Feinmechanik

Josef Ganter Feinmechanik GmbH belongs to the Klingel medical metal group in Pforzheim. The company was founded in 1926 with its headquarters in Dauchingen (Tuttlingen Area), Germany. For all these years it has grown constantly having customers around the globe and servicing their needs day by day.

Our quality management system meets the requirements of the DIN EN ISO 13485:2016 standards when it comes to development, production, assembly and sales of precision-turned parts for the dental medicine as well as the contract manufacturing and assembly of precision-turned parts for components of medical products.

Benefit from our long-term experience, our know-how, our flexibility and our reliability. Our capable employees will support you and work for your success.

On 30 state-of-the-art CNC long-turning lathes and turning and milling centers with up to 12 axes, we manufacture complexly turned parts of highest quality. From small to medium and up to large lot sizes. We cover a diameter range from 0.5 to 32 mm.

We offer a wide variety of raw materials such as titanium, special alloys, stainless steels, free-cutting steels, non-ferrous metals and plastics.

Beside CNC-milling, our service portfolio includes sliding surface grinding, polishing, sandblasting, laser welding, passivating, centerless cylindrical grinding, anodizing of titanium, component assembly, engraving, coloured inscriptions and markings as well as packaging. We support your project right from the start – in terms of design, construction and drafting.



# JOSEF GANTER FEINMECHANIK

More than 236,000 ratchets sold in the last 10 years stand for the incomparable success of our ratchets.

Benefit from our wide range of products and our long years of experience. Don't hesitate to contact us and get your ratchets at unbeatable conditions.

A company belonging to the KLINGEL MEDICAL METAL GROUP



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