

Take a walk with us ...



EcoFit® hip system



# Eco Fit® hip system



### **TABLE OF CONTENTS**

INTRODUCTION	5
SURGICAL TECHNIQUE	7
IMPLANTS	13
INSTRUMENTS	17

**Nota Bene:** The described surgical technique is the suggested treatment for the uncomplicated procedure. In the final analysis the preferred treatment is that which addresses the needs of the individual patient.

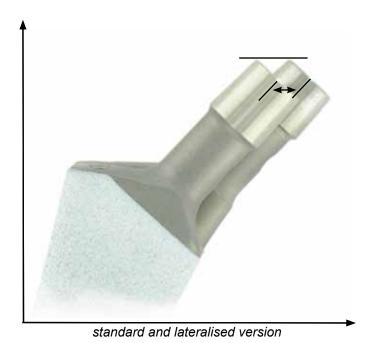
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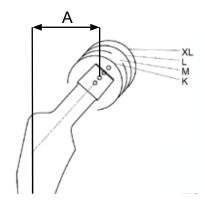


### INTRODUCTION





postoperative X-Ray EcoFit® stem



Offset measurement (A) EcoFit® stem in mm

Size	6,25	7,5	8,75	10	11,25	12,5	13,75	15	17,5	20
standard	34,5	35,2	35,8	36,5	37,1	37,7	38,3	39	40,2	41,5
lateral	42,3	43	43,6	44,3	44,9	45,5	46,1	46,8	48	49,3

The EcoFit®-total hip system includes a complete variety of cementless and cemented hip stems for the primary treatment of the hip joint.

Aside from the standard stem, lateralised stems are also available. The modular instrumentation allows the adaptation to the patients' anatomy and enables the surgeon to customize the treatment to the patient needs. The system includes 10 sizes of cementless and 5 sizes of cemented stems.

Tje cementless stems are available with implaFix® cpTi coating as well as implaFix® HA coating (hydroxylapatite). The cemented stems are available in matt and high polished version.

The choice of the material for each version is based on the scientific outcome of actual hip arthroplasty. Due to this the cementless stems are made of implatan® TiAl6V4-titanium alloy, the cemented stems are made of implavit® CoCrMo alloy. Economical aspects were considered when the variety, modularity and the pricing were concerned.





### PREOPERATIVE PLANNING

Pre-operative planning and precise surgical techniques are mandatory for optimal results. The instructions and the procedure given in the surgical technique to the system must be adhered to. Familiarity with the recommended surgical technique and its careful application is essential to achieve the best possible outcome.

Before surgery a surgical planning with regard to the dimensions of the prosthetic model and the positioning of the implant components in the bone has to be carried out by the surgeon. For this purpose, x-ray templates are available from implantcast GmbH.



# Figure 1

# Figure 2a

# **SURGICAL TECHNIQUE**

## Femoral neck osteotomy

Due to the preoperative planning the neck of the femur is resected (fig.1).

# Preparation of the acetabular bone

If the preparation of the acetabular bone is necessary, please consider the surgical technique provided in conjunction with the preferred implant.

# Opening of the femoral canal

Please use the special awl to open the intramedullary canal (fig. 2a).

### Notice:

Start to use the straight awl to open the canal laterally, so the canal is prepared in the length axis of the femur. Alternatively the special box chisel can be used (fig. 2b).



Figure 2b



# Broaching of the femoral canal

Begin with the smallest broach to prepare the intramedullary bone. If a large sized stem has been planned please begin with a broach which is 3 to 4 sizes smaller than the implant size. Enlarge the bone preparation with the broaches of increasing sizes until you reach the preoperatively chosen stem size (fig. 3a).

### Notice:

The broaches should be impacted until the depth marking on the handle corresponds to the rotational centre of the hip joint (regularly the marking corresponds to the tip of the greater trochanter) (fig. 3b).

If the mark reaches the tip of the greater trochanter a head of the neck length medium will meet the centre of rotation.

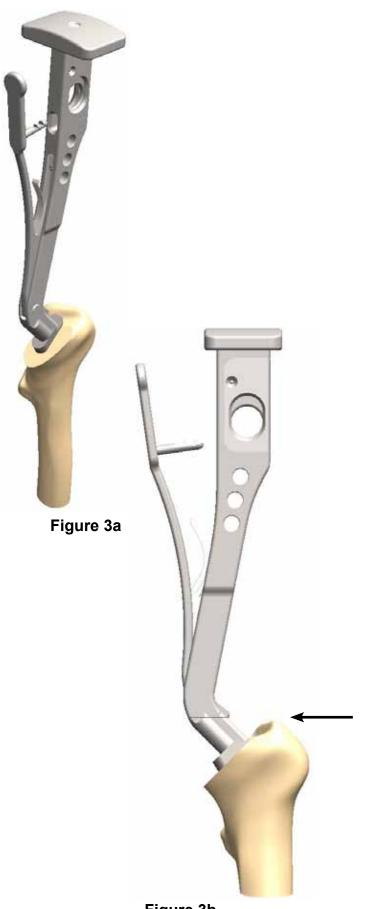


Figure 3b









**Trial reduction** 

Remove the broach handle (fig. 4a). Attach the trial neck 'standard' (fig. 4b) and the trail head (28 mm or 32 mm) of the length 'medium' (fig. 4c).

Reduce the joint and check the range of motion as well as the stability of the joint.

If necessary replace the trial neck by the trial neck 'lateralised' or a head of a different neck length and check again the range of motion. If sufficient stabilization is achieved, remove all instruments and trial components (fig. 4d).



Figure 4c



Figure 4d



# Implantation of the EcoFit® stem

# **Cementless implantation**

Choose the stem of the same size as the last broach. Use the stem impactor to insert the cementless EcoFit® stem (fig. 5a and 5b).

# **Cemented implantation**

Please use the stem which is one size smaller than the last broach.

Please consider the table below to choose the cemented stem of the appropriated size.

broach	cemented stem
7,5mm	6,25mm
8,75mm	7,5mm
10mm	7,5mm
11,25mm	10mm
12,5mm	10mm
13,75mm	12,5mm
15mm	12,5mm
17,5mm	15mm

Clean and dry the intramedullary canal. Insert the bone cement and impact the cemented stem by using the impactor.

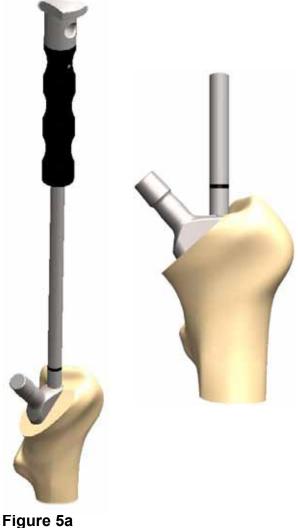
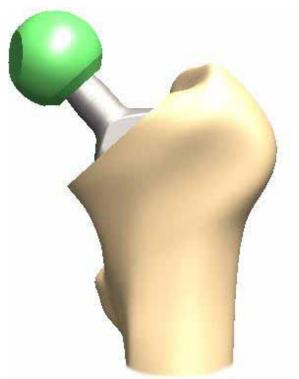




Figure 5b





# Impaction of the head

It is optional to perform a final stability and range of motion test (fig 6). Therefore insert a trial head of the formally used neck length. Clean and dry the taper (12/14) and add the original head to the tester of the stem. Use the head implants with a few strokes of a mallet to secure the taper connection (fig. 7).

Figure 6

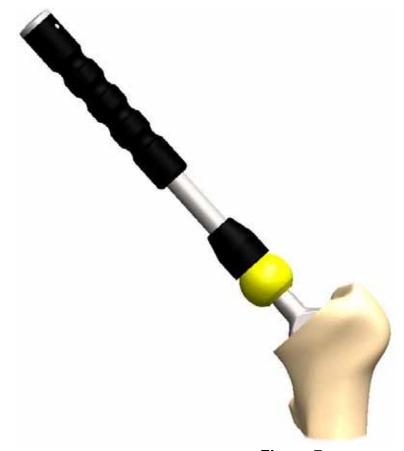


Figure 7







# **IMPLANTS**



# EcoFit® stem, cementless,

implaFix® CpTi-coating implatan® TiAl<sub>6</sub>V<sub>4</sub>-wrought alloy acc. to DIN ISO 5832/3, CpTi-coating (acc. to DIN ISO 5832/2)

standard	Size	lateralised
3039-3062	6,25mm	3039-4062
3039-3075	7,5mm	3039-4075
3039-3087	8,75mm	3039-4087
3039-3100	10mm	3039-4100
3039-3112	11,25mm	3039-4112
3039-3125	12,5mm	3039-4125
3039-3137	13,75mm	3039-4137
3039-3150	15mm	3039-4150
3039-3175	17,5mm	3039-4175
3039-3200	20mm	3039-4200

# EcoFit® stem, cementless,

implaFix® HA-coating implatan® TiAl<sub>6</sub>V<sub>4</sub>-wrought alloy acc. to DIN ISO 5832/3, CpTi-coating (acc. to DIN ISO 5832/2)

+ hydroxyapatite coating

standard	Size	lateralised
3038-3062	6,25mm	3038-4062
3038-3075	7,5mm	3038-4075
3038-3087	8,75mm	3038-4087
3038-3100	10mm	3038-4100
3038-3112	11,25mm	3038-4112
3038-3125	12,5mm	3038-4125
3038-3137	13,75mm	3038-4137
3038-3150	15mm	3038-4150
3038-3175	17,5mm	3038-4175
3038-3200	20mm	3038-4200

# EcoFit® stem, cementless,

**implaFix**® **total HA-coating** implatan® TiAl<sub>6</sub>V<sub>4</sub>-wrought alloy acc. to DIN ISO 5832/3, CpTi-coating (acc. to DIN ISO 5832/2)

+ hydroxyapatite coating

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standard	Size	lateralised			
3038-6062	6,25mm	3038-6062			
3038-6075	7,5mm	3038-6075			
3038-6087	8,75mm	3038-6087			
3038-6100	10mm	3038-6100			
3038-6112	11,25mm	3038-6112			
3038-6125	12,5mm	3038-6125			
3038-6137	13,75mm	3038-6137			
3038-6150	15mm	3038-6150			
3038-6175	17,5mm	3038-6175			
3038-6200	20mm	3038-6200			

**IMPLANTS** 



# EcoFit® stem, cemented,

implavit® CoCrMo-casting alloy acc. to DIN ISO 5832/4

standard	Size	lateralised
3039-6062	6,25mm	3039-8062
3039-6075	7,5mm	3039-8075
3039-6100	10mm	3039-8100
3039-6125	12,5mm	3039-8125
3039-6150	15mm	3039-8150
3039-6175	17,5mm	3039-8175

# EcoFit® stem, cemented, high polished implavit® CoCrMo-casting alloy acc. to DIN ISO 5832/4

standard	Size	lateralised
3038-0062	6,25mm	3038-1062
3038-0075	7,5mm	3038-1075
3038-0100	10mm	3038-1100
3038-0125	12,5mm	3038-1125
3038-0150	15mm	3038-1150
3038-0175	17,5mm	3038-1175

# EcoFit® Subsider

for the use in conjunction with high polished cemented EcoFit® stems

REF	Size	Subsider
0299-0750	6,25mm	2
0299-1000	7,5mm	3
0299-1250	10mm	4
0299-1500	12,5mm	5
0299-1650	15mm	6
0299-1650	17,5mm	6





# **IMPLANTS**



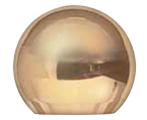


wrought alloy acc. to DIN 5832/12

acc. to DIN ISO 5832/3 with TiN-coating

REF	Size	REF
2387-2800	28mm, S	2787-2800
2387-2805	28mm, M	2787-2805
2387-2810	28mm, L	2787-2810
2387-2815	28mm, XL	2787-2815
2387-3200	32mm, S	2787-3200
2387-3205	32mm, M	2787-3205
2387-3210	32mm, L	2787-3210
2387-3215	32mm, XL	2787-3215
-	36mm, S	2787-3600
-	36mm, M	2787-3605
-	36mm, L	2787-3610
-	36mm, XL	2787-3615





CoCrMo implavit® CoCrMo-	ic-head	Titanium implatan® TiAl <sub>6</sub> V <sub>4</sub>
2587-3610	36mm, L	2586-3610
2587-3605	36mm, M	2586-3605
2587-3600	36mm, S	2586-3600
2587-3210	32mm, L	2586-3210
2587-3205	32mm, M	2586-3205
2587-3200	32mm, S	2586-3200
2587-2810	28mm, L	2586-2810
2001 2000	20111111, 141	2000 2000

**IMPLANTS** 



### ACCIS® head modular

implavit® CoCrMo-casting alloy acc. to DIN 5832/4 with TiNbN-coating

REF	Size
2902-0032	32mm
2902-0036	36mm
2902-0040	40mm
2902-0044	44mm

The ACCIS® heads may be combined with the ACCIS® liners and the heads are used with the modular neck adapters.



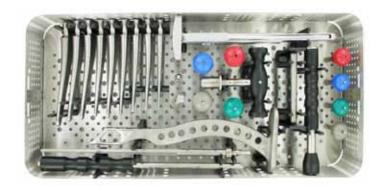
modular neck, taper 12/14 implatan® TiAl<sub>6</sub>V<sub>4</sub>-wrought alloy acc. to DIN/ISO 5832/3

REF	Size
2932-3600	32-36mm, S
2932-3605	32-36mm, M
2932-3610	32-36mm, L
2932-3615	32-36mm, XL
2938-4400	38-44mm, S
2938-4405	38-44mm, M
2938-4410	38-44mm, L
2938-4415	38-44mm, XL





# **INSTRUMENTS**



7999-7043 EcoFit® easy lock container



7999-7049 EcoFit® easy lock GIS® container





# **INSTRUMENTS**

### EcoFit® broach

7039-3062	6,25mm
7039-3075	7,5mm
7039-3087	8,75mm
7039-3100	10mm
7039-3112	11,25mm
7039-3125	12,5mm
7039-3137	13,75mm
7039-3150	15mm
7039-3175	17,5mm

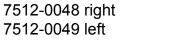


(The EcoFit® broach 20mm (REF 7039-3200) is available on request)

# **EcoFit® broach handle easy lock** 7512-0040



# EcoFit® broach handle easy lock GIS® 7512-0048 right





# **Cross bar tapered 10mm**

7513-9999





# **INSTRUMENTS**



ic T-handle Zimmer-Jakobs 4223-0023



**Box chisel** 7512-1099



EcoFit® trial neck 7039-1214 standard 7040-1214 lateralised



# Trial head snap taper 12/14

7962-2800	28mm short
7962-2805	28mm medium
7962-2810	28mm large
7962-2815	28mm extra large
7962-3200	32mm short
7962-3205	32mm medium
7962-3210	32mm large
7962-3215	32mm extra large



Head impactor 7512-4444



Stem impactor 3039-0103



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