

**CIF BIOTAN™ modular
5-holed press-fit
acetabular shell - TiAl6V4
DIN EN ISO 5832-3**

Ø38 mm	031-1120-0538
Ø40 mm	031-1120-0540
Ø42 mm	031-1121-0542
Ø44 mm	031-1121-0544
Ø46 mm	031-1122-0546
Ø48 mm	031-1122-0548
Ø50 mm	031-1123-0550
Ø52 mm	031-1123-0552
Ø54 mm	031-1124-0554
Ø56 mm	031-1124-0556
Ø58 mm	031-1125-0558
Ø60 mm	031-1125-0560
Ø62 mm	031-1126-0562
Ø64 mm	031-1126-0564

**CIF BIOTAN™ modular
5-holed press-fit
acetabular shell for revision
TiAl6V4 DIN EN ISO 5832-3**

Ø66 mm	031-1127-0566
Ø68 mm	031-1127-0568
Ø70 mm	031-1128-0570
Ø72 mm	031-1128-0572
Ø74 mm	031-1129-0574
Ø76 mm	031-1129-0576

**CIF BIOTAN™ modular
solid press-fit *
acetabular shell - TiAl6V4
DIN EN ISO 5832-3**

Ø38 mm	031-1120-0038
Ø40 mm	031-1120-0040
Ø42 mm	031-1121-0042
Ø44 mm	031-1121-0044
Ø46 mm	031-1122-0046
Ø48 mm	031-1122-0048
Ø50 mm	031-1123-0050
Ø52 mm	031-1123-0052
Ø54 mm	031-1124-0054
Ø56 mm	031-1124-0056
Ø58 mm	031-1125-0058
Ø60 mm	031-1125-0060
Ø62 mm	031-1126-0062
Ø64 mm	031-1126-0064

**CIF BIOTAN™ modular
solid press-fit *
acetabular shell for revision
TiAl6V4 DIN EN ISO 5832-3**

Ø66 mm	031-1127-0066
Ø68 mm	031-1127-0068
Ø70 mm	031-1128-0070
Ø72 mm	031-1128-0072
Ø74 mm	031-1129-0074
Ø76 mm	031-1129-0076

**Modular acetabular insert High Wall
UHMWPE - DIN EN ISO 5834-2**

size 20/inner Ø22 mm	022-2123-2022
size 21/inner Ø22 mm	022-2123-2122

size 22/inner Ø26 mm	022-2123-2226
size 23/inner Ø26 mm	022-2123-2326
size 24/inner Ø26 mm	022-2123-2426
size 25/inner Ø26 mm	022-2123-2526
size 26/inner Ø26 mm	022-2123-2626
size 27/inner Ø26 mm *	022-2123-2726
size 28/inner Ø26 mm *	022-2123-2826
size 29/inner Ø26 mm *	022-2123-2926

size 22/inner Ø28 mm	022-2123-2228
size 23/inner Ø28 mm	022-2123-2328
size 24/inner Ø28 mm	022-2123-2428
size 25/inner Ø28 mm	022-2123-2528
size 26/inner Ø28 mm	022-2123-2628
size 27/inner Ø28 mm	022-2123-2728
size 28/inner Ø28 mm	022-2123-2828
size 29/inner Ø28 mm	022-2123-2928

size 22/inner Ø32 mm	022-2123-2232
size 23/inner Ø32 mm	022-2123-2332
size 24/inner Ø32 mm	022-2123-2432
size 25/inner Ø32 mm	022-2123-2532

size 26/inner Ø32 mm	022-2123-2632
size 27/inner Ø32 mm	022-2123-2732
size 28/inner Ø32 mm	022-2123-2832
size 29/inner Ø32 mm	022-2123-2932

**Modular acetabular insert High Wall 10°
UHMWPE - DIN EN ISO 5834-2**

size 20/inner Ø28 mm	022-2124-2022
size 21/inner Ø28 mm	022-2124-2122
size 22/inner Ø28 mm	022-2124-2228
size 23/inner Ø28 mm	022-2124-2328
size 24/inner Ø28 mm	022-2124-2428
size 25/inner Ø28 mm	022-2124-2528
size 26/inner Ø28 mm	022-2124-2628
size 27/inner Ø28 mm *	022-2124-2728
size 28/inner Ø28 mm *	022-2124-2828
size 29/inner Ø28 mm *	022-2124-2928

size 22/inner Ø32 mm	022-2124-2232
size 23/inner Ø32 mm	022-2124-2332
size 24/inner Ø32 mm	022-2124-2432
size 25/inner Ø32 mm	022-2124-2532
size 26/inner Ø32 mm	022-2124-2632
size 27/inner Ø32 mm *	022-2124-2732
size 28/inner Ø32 mm *	022-2124-2832
size 29/inner Ø32 mm *	022-2124-2932

**Acetabular fixation screws *
Ø6,5mm – TiAl6V4 DIN EN ISO 5832-3**

15 mm*	151-0111-6515
20 mm*	151-0111-6520
25 mm	151-0111-6525
30 mm	151-0111-6530
35 mm	151-0111-6535
40 mm	151-0111-6540
45 mm*	151-0111-6545

Ceramic Insert (Al2O3)

22/inner diam: 28 mm	022-2323-2228
23/inner diam: 28 mm	022-2323-2328
24/inner diam: 28 mm	022-2323-2428
25/inner diam: 28 mm	022-2323-2528
26/inner diam: 28 mm	022-2323-2628

**Müller acetabular cup
UHMWPE - DIN EN ISO 5834-2**

outer Ø38 mm/inner Ø22,2 mm *	021-0101-3822
outer Ø40 mm/inner Ø22,2 mm *	021-0101-4022
outer Ø42 mm/inner Ø22,2 mm *	021-0101-4222

outer Ø44 mm/inner Ø26 mm *	021-0101-4426
outer Ø46 mm/inner Ø26 mm *	021-0101-4626
outer Ø48 mm/inner Ø26 mm *	021-0101-4826
outer Ø50 mm/inner Ø26 mm *	021-0101-5026
outer Ø52 mm/inner Ø26 mm *	021-0101-5226
outer Ø54 mm/inner Ø26 mm *	021-0101-5426
outer Ø56 mm/inner Ø26 mm *	021-0101-5626
outer Ø58 mm/inner Ø26 mm *	021-0101-5826
outer Ø60 mm/inner Ø26 mm *	021-0101-6026
outer Ø62 mm/inner Ø26 mm *	021-0101-6226

outer Ø44 mm/inner Ø28 mm	021-0101-4428
outer Ø46 mm/inner Ø28 mm	021-0101-4628
outer Ø48 mm/inner Ø28 mm	021-0101-4828
outer Ø50 mm/inner Ø28 mm	021-0101-5028
outer Ø52 mm/inner Ø28 mm	021-0101-5228
outer Ø54 mm/inner Ø28 mm	021-0101-5428
outer Ø56 mm/inner Ø28 mm	021-0101-5628
outer Ø58 mm/inner Ø28 mm	021-0101-5828
outer Ø60 mm/inner Ø28 mm	021-0101-6028
outer Ø44 mm/inner Ø32 mm	021-0101-4432
outer Ø46 mm/inner Ø32 mm	021-0101-4632
outer Ø48 mm/inner Ø32 mm	021-0101-4832
outer Ø50 mm/inner Ø32 mm	021-0101-5032
outer Ø52 mm/inner Ø32 mm	021-0101-5232
outer Ø54 mm/inner Ø32 mm	021-0101-5432

outer Ø56 mm/inner Ø32 mm	021-0101-5632
outer Ø58 mm/inner Ø32 mm	021-0101-5832
outer Ø60 mm/inner Ø32 mm	021-0101-6032

**Müller acetabular cup for revision
UHMWPE - DIN EN ISO 5834-2**

outer Ø62 mm/inner Ø28 mm	021-0101-6228
outer Ø64 mm/inner Ø28 mm	021-0101-6428
outer Ø66 mm/inner Ø28 mm	021-0101-6628
outer Ø68 mm/inner Ø28 mm	021-0101-6828
outer Ø70 mm/inner Ø28 mm	021-0101-7028

outer Ø62 mm/inner Ø32 mm	021-0101-6232
outer Ø64 mm/inner Ø32 mm	021-0101-6432
outer Ø66 mm/inner Ø32 mm	021-0101-6632
outer Ø68 mm/inner Ø32 mm	021-0101-6832
outer Ø70 mm/inner Ø32 mm	021-0101-7032

**Müller acetabular cup, lowered
UHMWPE - DIN EN ISO 5834-2**

outer Ø44 mm/inner Ø28 mm	021-0103-4428
outer Ø46 mm/inner Ø28 mm	021-0103-4628
outer Ø48 mm/inner Ø28 mm	021-0103-4828
outer Ø50 mm/inner Ø28 mm	021-0103-5028
outer Ø52 mm/inner Ø28 mm	021-0103-5228
outer Ø54 mm/inner Ø28 mm	021-0103-5428
outer Ø56 mm/inner Ø28 mm	021-0103-5628
outer Ø58 mm/inner Ø28 mm	021-0103-5828
outer Ø60 mm/inner Ø28 mm	021-0103-6028

outer Ø44 mm/inner Ø32 mm	021-0103-4432
outer Ø46 mm/inner Ø32 mm	021-0103-4632
outer Ø48 mm/inner Ø32 mm	021-0103-4832
outer Ø50 mm/inner Ø32 mm	021-0103-5032
outer Ø52 mm/inner Ø32 mm	021-0103-5232
outer Ø54 mm/inner Ø32 mm	021-0103-5432
outer Ø56 mm/inner Ø32 mm	021-0103-5632
outer Ø58 mm/inner Ø32 mm	021-0103-5832
outer Ø60 mm/inner Ø32 mm	021-0103-6032

**Müller acetabular cup for revision, lowered
UHMWPE - DIN EN ISO 5834-2**

outer Ø62 mm/inner Ø28 mm	021-0103-6228
outer Ø64 mm/inner Ø28 mm	021-0103-6428
outer Ø66 mm/inner Ø28 mm	021-0103-6628
outer Ø68 mm/inner Ø28 mm	021-0103-6828
outer Ø70 mm/inner Ø28 mm	021-0103-7028

outer Ø62 mm/inner Ø32 mm	021-0103-6232
outer Ø64 mm/inner Ø32 mm	021-0103-6432
outer Ø66 mm/inner Ø32 mm	021-0103-6632
outer Ø68 mm/inner Ø32 mm	021-0103-6832
outer Ø70 mm/inner Ø32 mm	021-0103-7032

**Müller acetabular cup, dysplastic
UHMWPE - DIN EN ISO 5834-2**

outer Ø44 mm/inner Ø28 mm	021-0105-4428
outer Ø46 mm/inner Ø28 mm	021-0105-4628
outer Ø48 mm/inner Ø28 mm	021-0105-4828
outer Ø50 mm/inner Ø28 mm	021-0105-5028
outer Ø52 mm/inner Ø28 mm	021-0105-5228
outer Ø54 mm/inner Ø28 mm	021-0105-5428
outer Ø56 mm/inner Ø28 mm	021-0105-5628
outer Ø58 mm/inner Ø28 mm	021-0105-5828
outer Ø60 mm/inner Ø28 mm	021-0105-6028
outer Ø44 mm/inner Ø32 mm	021-0105-4432
outer Ø46 mm/inner Ø32 mm	021-0105-4632
outer Ø48 mm/inner Ø32 mm	021-0105-4832
outer Ø50 mm/inner Ø32 mm	021-0105-5032
outer Ø52 mm/inner Ø32 mm	021-0105-5232
outer Ø54 mm/inner Ø32 mm	021-0105-5432
outer Ø56 mm/inner Ø32 mm	021-0105-5632
outer Ø58 mm/inner Ø32 mm	021-0105-5832
outer Ø60 mm/inner Ø32 mm	021-0105-6032

* - optional

**Müller acetabular cup for revision, dysplastic
UHMWPE - DIN EN ISO 5834-2**

outer Ø62 mm/inner Ø28 mm	021-0105-6228
outer Ø64 mm/inner Ø28 mm	021-0105-6428
outer Ø66 mm/inner Ø28 mm	021-0105-6628
outer Ø68 mm/inner Ø28 mm	021-0105-6828
outer Ø70 mm/inner Ø28 mm	021-0105-7028

outer Ø62 mm/inner Ø32 mm	021-0105-6232
outer Ø64 mm/inner Ø32 mm	021-0105-6432
outer Ø66 mm/inner Ø32 mm	021-0105-6632
outer Ø68 mm/inner Ø32 mm	021-0105-6832
outer Ø70 mm/inner Ø32 mm	021-0105-7032

**Additional support for Müller cup *
UHMWPE - DIN EN ISO 5834-2**

for outer Ø38 mm/inner Ø22,2 mm	021-0104-3822
for outer Ø40 mm/inner Ø22,2 mm	021-0104-4022
for outer Ø42 mm/inner Ø22,2 mm	021-0104-4222
for outer Ø44 mm/inner Ø26 mm	021-0104-4426
for outer Ø46 mm/inner Ø26 mm	021-0104-4626
for outer Ø48 mm/inner Ø26 mm	021-0104-4826
for outer Ø50 mm/inner Ø26 mm	021-0104-5026
for outer Ø52 mm/inner Ø26 mm	021-0104-5226
for outer Ø54 mm/inner Ø26 mm	021-0104-5426
for outer Ø56 mm/inner Ø26 mm	021-0104-5626
for outer Ø58 mm/inner Ø26 mm	021-0104-5826
for outer Ø60 mm/inner Ø26 mm	021-0104-6026
for outer Ø62 mm/inner Ø26 mm	021-0104-6226
for outer Ø44 mm/inner Ø28 mm	021-0104-4428
for outer Ø46 mm/inner Ø28 mm	021-0104-4628
for outer Ø48 mm/inner Ø28 mm	021-0104-4828
for outer Ø50 mm/inner Ø28 mm	021-0104-5028
for outer Ø52 mm/inner Ø28 mm	021-0104-5228
for outer Ø54 mm/inner Ø28 mm	021-0104-5428
for outer Ø56 mm/inner Ø28 mm	021-0104-5628
for outer Ø58 mm/inner Ø28 mm	021-0104-5828
for outer Ø60 mm/inner Ø28 mm	021-0104-6028
for outer Ø62 mm/inner Ø28 mm	021-0104-6228
for outer Ø44 mm/inner Ø32 mm	021-0104-4432
for outer Ø46 mm/inner Ø32 mm	021-0104-4632
for outer Ø48 mm/inner Ø32 mm	021-0104-4832
for outer Ø50 mm/inner Ø32 mm	021-0104-5032
for outer Ø52 mm/inner Ø32 mm	021-0104-5232
for outer Ø54 mm/inner Ø32 mm	021-0104-5432
for outer Ø56 mm/inner Ø32 mm	021-0104-5632
for outer Ø58 mm/inner Ø32 mm	021-0104-5832
for outer Ø60 mm/inner Ø32 mm	021-0104-6032
for outer Ø62 mm/inner Ø32 mm	021-0104-6232

**Modular acetabular inlay dislasia
UHMWPE – DIN EN ISO 5832-2**

for outer 22/inner Ø28 mm	022-2128-2228
for outer 22/inner Ø32 mm	022-2128-2232
for outer 23/inner Ø28 mm	022-2128-2328
for outer 23/inner Ø32 mm	022-2128-2332
for outer 24/inner Ø28 mm	022-2128-2428
for outer 24/inner Ø32 mm	022-2128-2432
for outer 25/inner Ø28 mm	022-2128-2528
for outer 25/inner Ø32 mm	022-2128-2532
for outer 26/inner Ø28 mm	022-2128-2628
for outer 26/inner Ø32 mm	022-2128-2632
for outer 27/inner Ø28 mm	022-2128-2728
for outer 27/inner Ø32 mm	022-2128-2732
for outer 28/inner Ø28 mm	022-2128-2828
for outer 28/inner Ø32 mm	022-2128-2832
for outer 29/inner Ø28 mm	022-2128-2928
for outer 29/inner Ø32 mm	022-2128-2932
for outer 30/inner Ø28 mm	022-2128-3028
for outer 30/inner Ø32 mm	022-2128-3032
for outer 31/inner Ø28 mm	022-2128-3128
for outer 31/inner Ø32 mm	022-2128-3132
for outer 32/inner Ø28 mm	022-2128-3228
for outer 32/inner Ø32 mm	022-2128-3232

Cups, Shells, Inserts and Accessories



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"Movement is Life"

CIF Uncemented Acetabular System

Long term survival of acetabular components is depending on established design considerations such as: initial stability, ingrowth surface, insert fixation and insert/shell congruency. The CIF acetabular components meet those criteria, thereby offering a solution to stable acetabular component fixation.

The titanium hemispherical shell is available in 5-holed and solid (1 hole) version. Both are provided with a 15° rim flare, oblique peripheral fins and tabs on the rim for rotational stability and additional fixation, and coated in Biotan plasma-sprayed porous titanium coating, or optionally Hydroxyapatite coating. Option: subhemispherical outer shape of press-fit.

Size range from 38-90 mm Ø with 2 mm increment. Small sizes are intended for dysplasia cases (Ø 38-44 mm) with inserts with 22,2 mm inner diameter.

The threaded apical hole allows the surgeon to check the apposition of the cup to the acetabular bone, either visual or by means of a probe.

Insert congruency minimizes „cold flow“ and potential back side wear because of relative motion. **Uniform** polyethylene better distributes stresses over the cup inner surface.

The Rim flare at outer geometry of the (sub)hemispherical shell, contributes significantly to the primary stability, yet allowing size-for-size reaming. The „Cliplock“ fixation mechanism securely locks the inserts and provides a maximum resistance to lever-out and push-out forces.

Rim tabs increase rotational stability, thereby contributing to poly wear reduction as a result of micro motion. Oblique Rim fins will further secure the cup against the rotation, providing a firm hold in the anterior and posterior column of the superior acetabular rim, the os pubis nad os ischium.

Plasma-sprayed porous titanium coating provides a „scratch fit“ stability and a seal at the implant/bone interface, reducing polyethylene debris and fluids to migrate causing possible osteolysis. Coating specifications: porosity approximately 30%, pore size ranges from 75 to 350 micron, thickness of 500 micron. The superior biocompatibility of the coating material nad specifications is known by its well-documented bone response. Option: hydroxyapatite coating.

The holed cup is designed for additional screw fixation by means of 6.5 mm Ø cancellous bone screws, available in lenghts 10-65 mm / 5 mm increments.

Polyethylene inserts are manufactured from UHMWPE, packed and gamma irradiated in oxygen free environment to strongly improve wear resistance. Inserts are available in 22,2 mm, 28 mm, 32mm, 36 mm and optional 26 mm inner diameter.

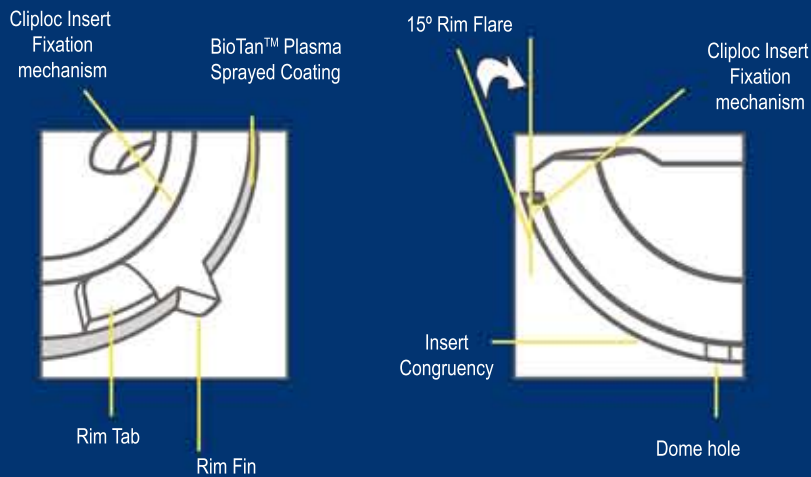
Option: polyethylene inserts with possibility of slope, „cross-linked“ inserts and „High Wall“ inserts for extended joint surface, wich increase acetabular stability and can be inserted at any position. Ceramical inserts are also available in 28 mm, 32 mm and 36 mm diameter, and metal inserts in 28 mm, 32 mm and 36 mm diameter.

Possibility of intraoperative combining of inserts (ceramical/metal/polyethylene) into the same metal acetabulum. Possibility of combining the ceramical insert with a the metal head.

In Biotech hip system, revision acetabular components are available, with three-pointed fixation using the cancellous bone screws (Ø 6.5 mm, lenght 10-65 mm), holes for fixating to the acetabular rim and holes for fixation of bone substitute; and revision hip inserts.

Modular revision acetabular press-fit is available in cemented and uncemented version with hydroxyapatite coating, in 44-60 mm diameter. Revision polyethylene inserts are available in two version: standard and with 15° elevation which allows the lateralisation of the head, in 44-60 mm diameter.

Biotech hip system can be implanted using the minimal invasive surgical techniqe.



Acetabular component Type “Müller” – Cemented All Poly

Cemented all poly acetabular components type „Müller” have proven over the years to provide lasting services. This hemispherical design is available in sizes ranging from 38 to 70 mm diameter, with 2 mm increments.

Wear characteristics are improved by manufacturing the acetabular components from UHMWPE according to ISO 5834-2.

To further improve wear resistance, all components are gamma irradiated in an oxygen free environment.

Grooves are circumferentially applied for enhanced cement/ cup fixation, without compromising the minimally required polyethylene thickness.

Angle and Version of the acetabular component can be calculated from AP X-ray through a metal wire applied parallel to the equator of the acetabular component.

Range of Motion is maximised through a 30° chamfer around the bore of the cup. This chamfer allows for an increase in RoM, thereby strongly reducing the possibility of neck / cup impingent, which might result in:

- Sub-luxation
- Luxation
- Early loosening
- Accelerated Polyethylene wear

Simple & Functional

- The cemented acetabular component type „Müller” is manufactured from UHMWPE and gamma irradiated under oxygen free conditions.
- Components are available from 38-70 mm outer Ø, in 2 mm increments
- Circumferentially applied grooves strongly enhance cup / cement fixation
- Head inner Ø 22mm, 26mm, 28mm and 32mm

Sources:

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