

TEP kyčelního kloubu

2.Cementovaná náhrada kyčelního kloubu s rovným dřikem leštěným

Cementovaná jamka

Požadavek:

min.10velikostí

pro hlavice 26,28,32 mm

Symetrický nebo offest

PE

varianta X-link

PE

déle než 10 leté klinické zkušenosti

Vyšetření MR

výborné výsledky doložené jedním ze zahr.registrů

ZCA cementovaná jamka

Min. 10 velikostí, rozsah velikostí 43-61

ano

ano

ano

ano

ano

98,5% přežití po 5 letech

(Švédský registr 2007, str.64)

97,9% přežití po 15 letech s dřikem CPT

(Danish Hip Register 2014)

Kovová

hlavička

Požadavek:

28 a 32 mm

délka krčku min S,M,L, XL,

XXL

VerSys

ano

ano

Cementovaný

dřík

Požadavek:

min.12

velikostí

Standardní a lateralizovaná varianta

déle než 10 leté klinické zkušenosti

CDD úhel

Vysoce leštěný povrch

Možnost centralizéru a distalizéru

výborné výsledky doložené jedním ze zahr.registrů

MS 30

ano

ano

ano

125/135st

ano

ano

England, Wales & NI NJR 2014 ODEP Submission Data16

Follow-up: 10 years

Kaplan-Meier Stem survivorship all failure modes
stem: 98.6%

Kaplan-Meier Stem survivorship aseptic loosening
stem: 99.4%

Přežití po 10 letech 100 %

(Acta Chirurgiae Orthopaedicae 2005 str 153-159)

TEP kyčelního kloubu

3. Hybridní náhrada kyčelního kloubu

Necementovaná jamka

Požadavek:

Press fit jamka, hemisférická

povrch kombinace makro a mikrostruktury

min.17 velikostí

rozsah 42-74 mm

PE insert prům. 28,32 a 36 mm

PE symetrický a offsetový

možnost X-link, Vit E a keramické vložky

Děrované varianty pro fixaci šrouby

Možnost vyšetření MRI

déle než 10 leté klinické zkušenosti

výborné výsledky doložené jedním ze zahr.registrů

Allofit

ano

ano

ano

ano

ano

ano

ano

ano

ano

ano

97.2 % přežití po 10 letech

(Švédský registr 2011, str.76)

97,5% přežití po 11,9 letech

(Journal of Bone and Joint surgery, 2009)

Kovová hlavička

Požadavek:

28 a 32 mm

délka krčku min S,M,L, XL, XXL

VerSys

ano

ano

Cementovaný dřík

Požadavek:

min.9 velikostí

Standardní a lateralizovaná varianta

déle než 10 leté klinické zkušenosti

CDD úhel

výborné výsledky doložené jedním ze zahr.registrů

Original Muller Stem

18 velikostí

STD a LAT

ano

125/135st

96,6% přežití implantátu po 10 letech

STD a LAT

97,5 % přežití po 10 letech

(Orthopedic Surgery 2007)

TEP kyčelního kloubu

4. Necementovaná náhrada kyčelního kloubu typ pressfit

Necementovaná jamka	Allofit
Požadavek:	
Press fit jamka, hemisférická	ano
povrch kombinace makro a mikrostruktury	ano
min.17 velikostí	ano
rozsah 42-74 mm	ano
PE insert prům. 28,32 a 36 mm	ano
PE symetrický a offsetový	ano
možnost X-link, Vit E a keramické vložky	ano
Děrované varianty pro fixaci šrouby	ano
Možnost vyšetření MRI	ano
déle než 10 leté klinické zkušenosti	ano
výborné výsledky doložené jedním ze zahr.registrů	97.2 % přežití po 10 letech (Švédský registr 2011, str.76) 97,5% přežití po 11,9 letech (Journal of Bone and Joint surgery, 2009)

Keramická hlavička

Sulox

Požadavek:	
průměr 28 a 32, 36 mm vč.varianty pro revizní případy	ano
délka krčku min S,M,L	ano

Necementovaný dřík

CLS Spotorno

Požadavek:	
Proximálně kotvený dřík	ano
možnost lateralizace -min. 3 varianty CCD úhlu (125 °- 145°)	ano
velikostní škála celkem min.6 variant ke každému úhlu	ano
možnost miniinvazivní operativy	ano
déle než 10 leté klinické zkušenosti	ano-viz.
výborné výsledky doložené jedním ze zahr.registrů	97,9% přežití po 10 letech Swedish National Register 2012 25

nebo

Necementovaný dřík

Alloclassic Zweymuller

Požadavek:	
Distálně kotvený dřík	ano
návaznost revizního systému	ano
možnost lateralizace -min. 2 varianty CCD úhlu (125 °- 131°)	ano 121 - 131
velikostní škála celkem min. 14 variant	ano
déle než 10 leté klinické zkušenosti	ano

možnost implantace s pomocí pneu. kladiva
výborné výsledky doložené jedním ze zahr.registrů

ano

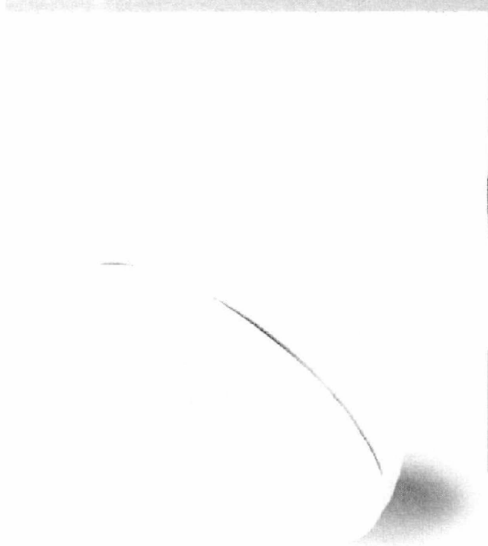
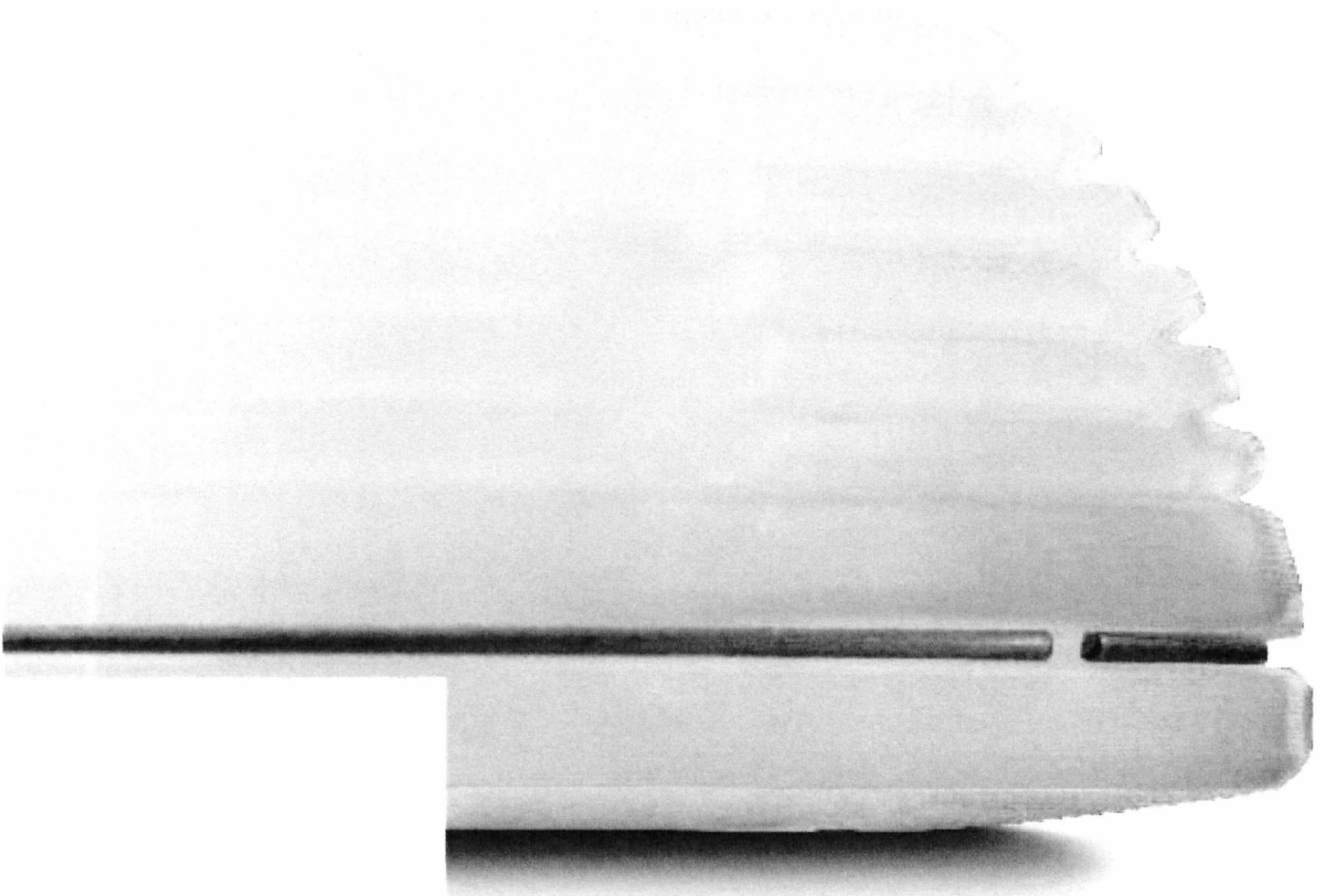
Australian National Register 20153
Alloclassic – Allofit Follow-up: 10 years
po 10 letech 95,3% (4,7% revi.rating)

Cast 1.1.



**Original
M.E. Müller®
Low Profile Cup**

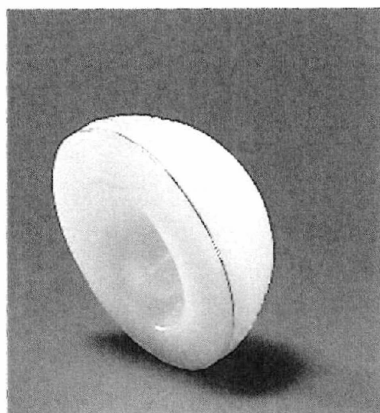
Surgical Technique



Evolution of a Proven Concept

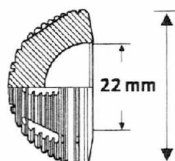


Implants



M. E. Müller®
Low Profile Cup, cemented

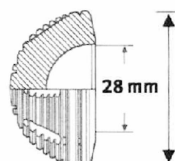
Details
UHMW Polyethylene
(Sulene® PE)
Radiological mark
CP Titanium
(Protasul® Ti)



STERILE R

Size [mm]	REF
36 ¹	63.22.36
38 ¹	63.22.38
40 ¹	63.22.40
42	63.22.42
44	63.22.44
46	63.22.46
48	63.22.48
50	63.22.50
52	63.22.52
54	63.22.54
56	63.22.56
58	63.22.58
–	–
–	–
–	–

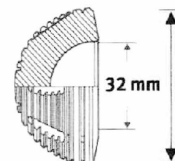
Details
UHMW Polyethylene
(Sulene® PE)
Radiological mark
CP Titanium
(Protasul® Ti)



STERILE R

Size [mm]	REF
–	–
–	–
–	–
42 ¹	63.28.42
44	63.28.44
46	63.28.46
48	63.28.48
50	63.28.50
52	63.28.52
54	63.28.54
56	63.28.56
58	63.28.58
60	63.28.60
62	63.28.62
64	63.28.64

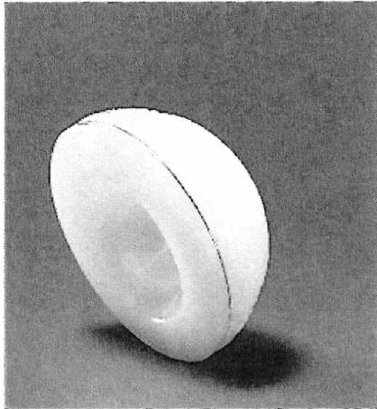
Details
UHMW Polyethylene
(Sulene® PE)
Radiological mark
CP Titanium
(Protasul® Ti)



STERILE R

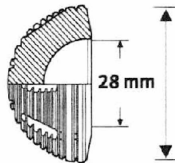
Size [mm]	REF
–	–
–	–
–	–
–	–
44 ¹	63.32.44
46 ¹	63.32.46
48	63.32.48
50	63.32.50
52	63.32.52
54	63.32.54
56	63.32.56
58	63.32.58
60	63.32.60
62	63.32.62
64	63.32.64

¹ Must be used in combination with cages and rings.



M. E. Müller®
Low Profile Cup, cemented

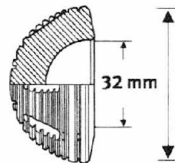
Details
Durasul®
Radiological mark
CP Titanium
(Protasul® Ti)



STERILE EO

Size [mm]	REF
42	01.00284.042
44	01.00284.044
46	01.00284.046
48	01.00284.048
50	01.00284.050
52	01.00284.052
54	01.00284.054
56	01.00284.056
58	01.00284.058
60	01.00284.060
62	01.00284.062
64	01.00284.064

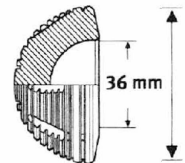
Details
Durasul®
Radiological mark
CP Titanium
(Protasul® Ti)



STERILE EO

Size [mm]	REF
—	—
44	01.00324.044
46	01.00324.046
48	01.00324.048
50	01.00324.050
52	01.00324.052
54	01.00324.054
56	01.00324.056
58	01.00324.058
60	01.00324.060
62	01.00324.062
64	01.00324.064

Details
Durasul®
Radiological mark
CP Titanium
(Protasul® Ti)



STERILE EO

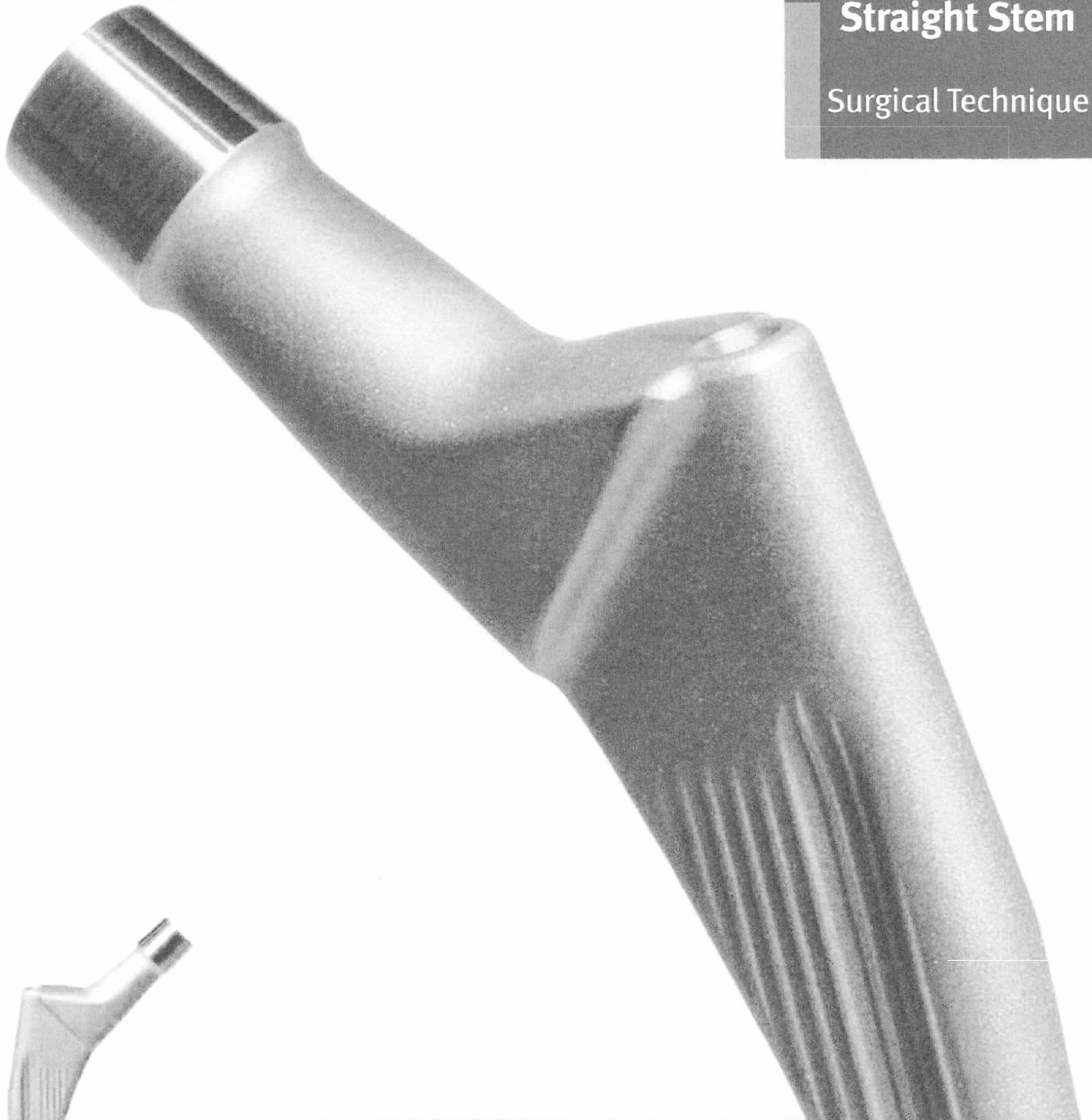
Size [mm]	REF
—	—
—	—
—	—
48	05.95001.050
50	05.95001.051
52	05.95001.052
54	05.95001.053
56	05.95001.054
58	05.95001.055
60	05.95001.056
62	05.95001.057
64	05.95001.058

Cast 1.1.
1.3.



Original
M. E. Müller™
Straight Stem

Surgical Technique



Only the Really Big Ideas can take Constant
Change in their Stride.



zimmer
Confidence in your hands®

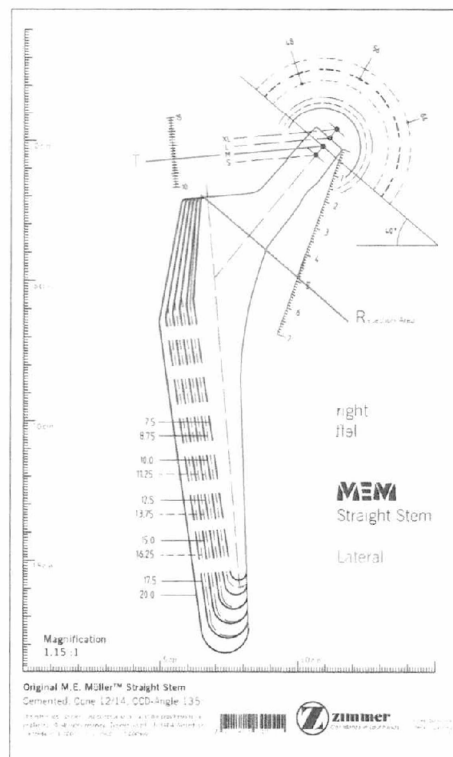
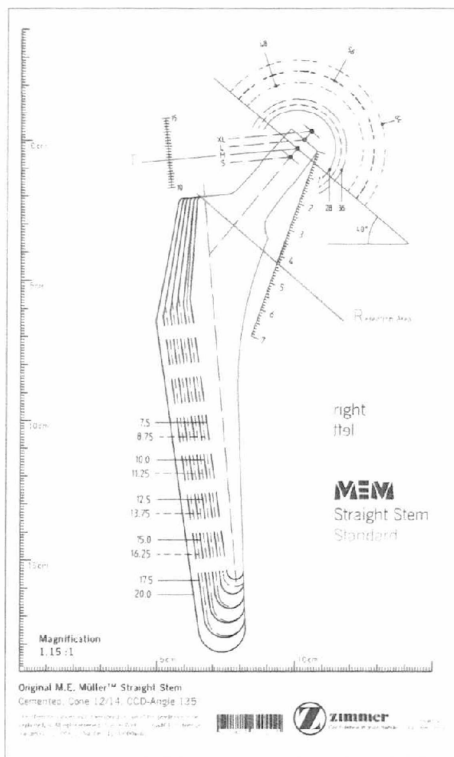
Pre-Operative Planning – Purpose and Aids

The graphic planning of the hip replacement implantation forces the orthopedic surgeon to carry out detailed analysis of the X ray image, and to anticipate the operation in detail.

“This (correct planning – author) provides important information about the choice of the correct model and the correct size of the prosthesis, the depth of the acetabulum preparation, the height of the neck resection, and the positioning and alignment of the pelvic and femoral components. It allows fast and systematic execution of the operation and thus minimizes the risk of complications for the patient.” (Müller, M. E., Jaberg, H., 1989)

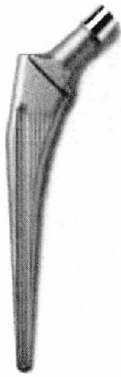
Besides the obvious advantages of anticipating intraoperative difficulties, the pre-operative planning serves to correct and avoid differences in leg length.

As a part of quality assurance, pre-operative planning supports the work of the surgical team, and serves as a method of self-monitoring for the surgeon.



Planning template Original M. E. Müller Straight Stem, standard and lateral, enlargement factor 1.15 : 1, Lit. No. 06.01114.000

Implants – Original M. E. Müller™ Straight Stem



Müller™ Straight Stem, standard



Müller™ Straight Stem, lateral



Müller™ Straight Stem, standard



Müller™ Straight Stem, lateral

Protasul® 10
Cemented
M.E. Müller™



STERILE R

Size in mm	REF
7.5	12.00.29-075
8.75	05.95001.064
10.0	12.00.29-100
11.25	12.00.29-112
12.5	12.00.29-125
13.75	12.00.29-137
15.0	12.00.29-150
16.25	12.00.29-162
17.5	12.00.29-175

Protasul® 10
Cemented
M.E. Müller™



STERILE R

Size in mm	REF
7.5	12.00.39-075
8.75	05.95001.065
10.0	12.00.39-100
11.25	12.00.39-112
12.5	12.00.39-125
13.75	12.00.39-137
15.0	12.00.39-150
16.25	12.00.39-162
17.5	12.00.39-175

Protasul®-S30
Cemented
M.E. Müller™



STERILE R

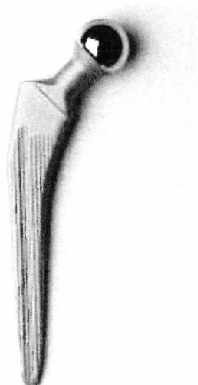
Size in mm	REF
7.5	35.00.29-075
8.75	05.95001.066
10.0	35.00.29-100
11.25	35.00.29-112
12.5	35.00.29-125
13.75	35.00.29-137
15.0	35.00.29-150
16.25	35.00.29-162
17.5	35.00.29-175

Protasul®-S30
Cemented
M.E. Müller™

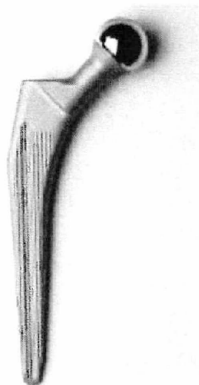


STERILE R

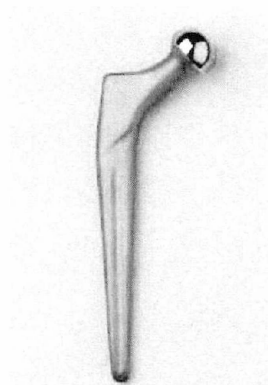
Size in mm	REF
7.5	35.00.39-075
8.75	05.95001.067
10.0	35.00.39-100
11.25	35.00.39-112
12.5	35.00.39-125
13.75	35.00.39-137
15.0	35.00.39-150
16.25	35.00.39-162
17.5	35.00.39-175



Müller™ Straight Stem,
standard, Ø 28 mm



Müller™ Straight Stem,
lateral, Ø 28 mm



CDH stem,
Ø 22 mm

Protasul®-S30
Cemented
M. E. Müller™



Protasul®-S30
Cemented
M. E. Müller™



Protasul®-S30
Cemented
M. E. Müller™



STERILE R

Size in mm	REF
7.5	35.28.29-075
10.0	35.28.29-100
11.25	35.28.29-112
12.5	35.28.29-125
13.75	35.28.29-137
15.0	35.28.29-150
17.5	35.28.29-175

STERILE R

Size in mm	REF
7.5	35.28.39-075
10.0	35.28.39-100
11.25	35.28.39-112
12.5	35.28.39-125
13.75	35.28.39-137
15.0	35.28.39-150
17.5	35.28.39-175

STERILE R

Size in mm	REF
5.0	30.22.69-050
7.5	30.22.69-075
10.0	30.22.69-100
12.5	30.22.69-125

The special instruments for
implantation of the CDH stem
(monobloc rasps and test
protheses) are available
under REF 99.41.00-00.

Cast 1.2.



ZCA[®]
All-Poly
Acetabular Cup

Surgical Technique

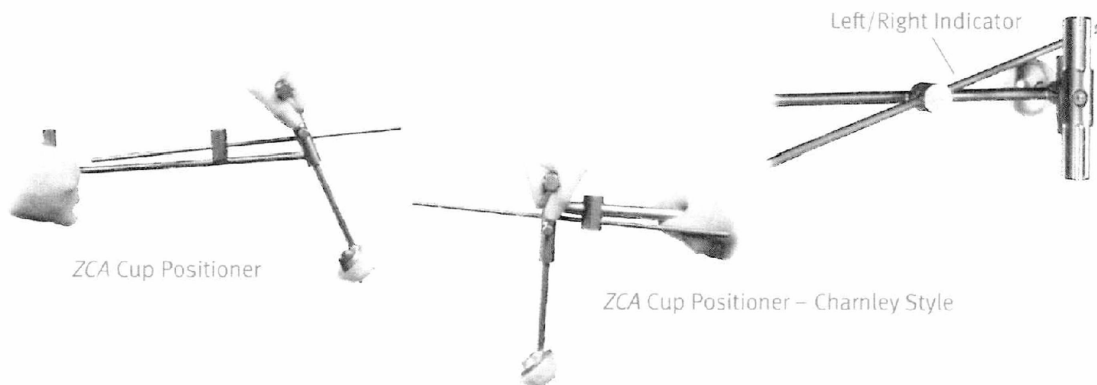


3 Cup Positioning and Alignment

Select the appropriate ZCA Cup Positioner – Charnley Style for a lateral or anterolateral approach, or ZCA Cup Positioner for a posterior or posterolateral approach. If a 32mm ID cup will be used, the standard 32mm Cup Positioner **must** be used. The Charnley-Style Cup Positioner is held with the handle cephalad. The ZCA Cup Positioner handle is held in a caudad direction. Both positioners have a base plate with prongs to which the acetabular cup is attached.

Insert the Alignment Rod into the hole marked right or left to match the leg that is being operated. The positioners orient the cup in 45° of abduction and 20° of anteversion when the alignment rod is held parallel to the long axis of the patient.

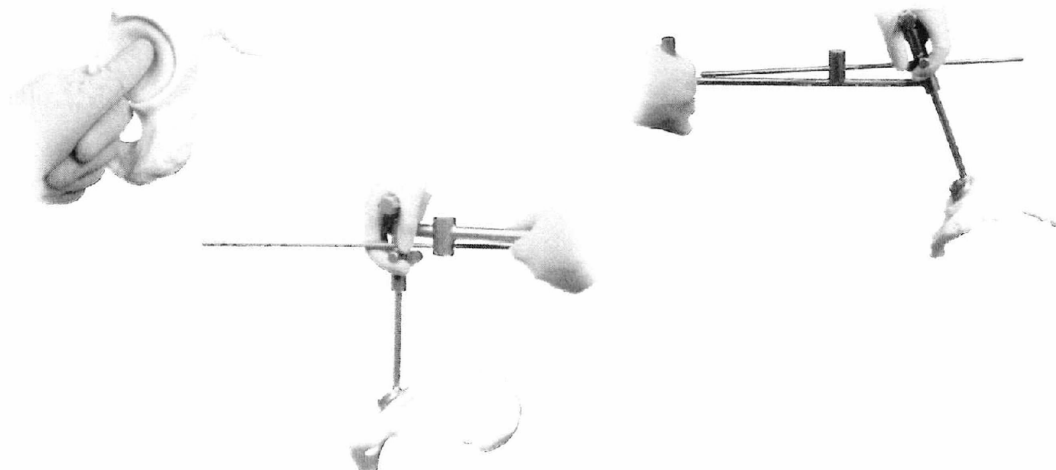
Note: If using a cup with an inclined face, appropriate adjustment must be made to ensure proper orientation with instrumentation.



4 Cup Insertion

Prior to inserting the implant, lavage and dry the acetabulum. Mix bone cement and pack it into the created keyholes first. Then pack cement into acetabulum.

Mount the ZCA Cup on the selected cup positioner and place the cup into the acetabulum. If using a cup with an inclined face, be sure to orient it in the proper direction. Depress the handle to release the implant.



Ordering Information

Zimmer Standard Polyethylene

Cat No.	Size
22mm Neutral Spacer	
00-8005-540-22 through 00-8005-558-22	43mm OD through 61mm OD
26mm Neutral Spacer	
00-8005-542-26 through 00-8005-558-26	45mm OD through 61mm OD
28mm Neutral Spacer	
00-8005-544-28 through 00-8005-558-28	47mm OD through 61mm OD
32mm Neutral Spacer	
00-8005-546-32 through 00-8005-558-32	49mm OD through 61mm OD
22mm 10° Inclined Face Spacer	
00-8005-640-22 through 00-8005-658-22	43mm OD through 61mm OD
26mm 10° Inclined Face Spacer	
00-8005-642-26 through 00-8005-658-26	45mm OD through 61mm OD
28mm 10° Inclined Face Spacer	
00-8005-644-28 through 00-8005-658-28	47mm OD through 61mm OD
32mm 10° Inclined Face Spacer	
00-8005-646-32 through 00-8005-658-32	49mm OD through 61mm OD
22mm Neutral Flanged Spacer*	
00-8005-740-22 through 00-8005-758-22	43mm OD through 61mm OD
26mm Neutral Flanged Spacer*	
00-8005-742-26 through 00-8005-758-26	45mm OD through 61mm OD
28mm Neutral Flanged Spacer*	
00-8005-744-28 through 00-8005-758-28	47mm OD through 61mm OD
22mm 10° Inclined Face Flanged Spacer*	
00-8005-840-22 through 00-8005-858-22	43mm OD through 61mm OD
26mm 10° Inclined Face Flanged Spacer*	
00-8005-842-26 through 00-8005-858-26	45mm OD through 61mm OD
28mm 10° Inclined Face Flanged Spacer*	
00-8005-844-28 through 00-8005-858-28	47mm OD through 61mm OD
32mm Snap-In Spacer	
00-8005-900-32	Snap-in Spacer Set
00-8005-946-32 through 00-8005-958-32	49mm OD through 61mm OD

Longevity® Highly Crosslinked Polyethylene

Cat No.	Size
22mm Neutral Spacer	
00-8065-540-22 through 00-8065-558-22	43mm OD through 61mm OD
26mm Neutral Spacer	
00-8065-542-26 through 00-8065-558-26	45mm OD through 61mm OD
28mm Neutral Spacer	
00-8065-544-28 through 00-8065-558-28	47mm OD through 61mm OD
32mm Neutral Spacer	
00-8065-546-32 through 00-8065-558-32	49mm OD through 61mm OD
22mm 10° Inclined Face Spacer	
00-8065-640-22 through 00-8065-658-22	43mm OD through 61mm OD
26mm 10° Inclined Face Spacer	
00-8065-642-26 through 00-8065-658-26	45mm OD through 61mm OD
28mm 10° Inclined Face Spacer	
00-8065-644-28 through 00-8065-658-28	47mm OD through 61mm OD
32mm 10° Inclined Face Spacer	
00-8065-646-32 through 00-8065-658-32	49mm OD through 61mm OD
22mm Neutral Flanged Spacer*	
00-8065-740-22 through 00-8065-758-22	43mm OD through 61mm OD
26mm Neutral Flanged Spacer*	
00-8065-742-26 through 00-8065-758-26	45mm OD through 61mm OD
28mm Neutral Flanged Spacer*	
00-8065-744-28 through 00-8065-758-28	47mm OD through 61mm OD
32mm Neutral Flanged Spacer*	
00-8065-746-32 through 00-8065-758-32	49mm OD through 61mm OD
22mm 10° Inclined Face Flanged Spacer*	
00-8065-840-22 through 00-8065-858-22	43mm OD through 61mm OD

Cat No.	Size
26mm 10° Inclined Face Flanged Spacer*	
00-8065-842-26 through 00-8065-858-26	45mm OD through 61mm OD
28mm 10° Inclined Face Flanged Spacer*	
00-8065-844-28 through 00-8065-858-28	47mm OD through 61mm OD
32mm 10° Inclined Face Flanged Spacer*	
00-8065-846-32 through 00-8065-858-32	49mm OD through 61mm OD
32mm Snap-In Spacer	
00-8065-900-32	Snap-in Spacer Set
00-8065-946-32 through 00-8065-958-32	49mm OD through 61mm OD

Cat No.	Description
00-8005-400-00	ZCA Instrument Set (includes the following):
00-8005-260-00	Cup Pusher Shaft
00-8005-260-22	Cup Pusher Head, 22mm
00-8005-260-26	Cup Pusher Head, 26mm
00-8005-260-28	Cup Pusher Head, 28mm
00-8005-260-32	Cup Pusher Head, 32mm
00-1814-005-00	Cutting Scissors
00-8000-214-00	Acetabular Drill, 6mm
00-8000-215-00	Acetabular Drill, 13mm
00-8000-216-00	Acetabular Drill, 10mm
00-5785-079-00	Alignment Guide
00-8005-300-00	ZCA Cup Provisional Set (includes the following):
00-8005-300-43 through 00-8005-300-61	ZCA Cup Provisional, 43mm through 61mm OD
00-8005-096-00	ZCA Tray Assembly**
00-8005-095-00	ZCA Sterilization Case Assembly**
00-8005-210-00	ZCA Cup Positioner, Charnley Style,[†] fits 22, 26, 28mm cups OR
00-8005-250-00	ZCA Cup Positioner,[†] fits 22, 26, 28mm cups
00-8005-230-00	ZCA Cup Positioner,[†] fits 32mm cup only

* Neutral Flanged Spacer Cups and 10° Inclined Face Flanged Spacer Cups are not available for sale in the U.S.

** Holds instruments and provisionals.

[†] One positioner will fit into Tray Assembly.

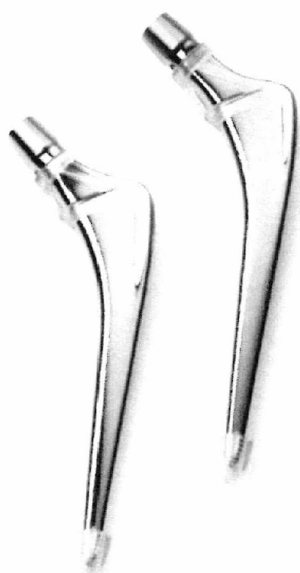
Note: To receive the entire system, order all part numbers in bold.

Cast 1.2.



**MS-30® Stem
Cemented**

Surgical Technique



Modern shaft concept for cemented anchoring



zimmer
Confidence in your hands™

MS-30 Stem Cemented: Introduction

The philosophy of the *MS-30* stem features a cemented anchorage. The three-dimensional tapered design without corners or edges maintains the strength of the cement mantle in the various Gruen zones. The geometry of the cement mantle is established during the preoperative planning.

The highly polished surface, together with the hollow-space design of the distal centralizer, permits debonding in the uninterrupted cement mantle.

For good long-term results for cemented stems, particular attention should be paid to the cementing technique¹: Fundamental factors are insertion under pressure and ensuring a stable cement mantle particularly in the calcar region.

Different offset options allow the creation or restoration of normal anatomy and biomechanics. The standard version and the lateral version of the *MS-30* stem allow the surgeon greater intraoperative flexibility.

With the *MS-30* stem, one can choose the surgical technique of Professor Morscher for a lateral approach, or that of Professor Spotorno for a posterior approach.

Hip arthroplasties using the *MS-30* stem have been carried out since 1990. The *MS-30* stem with a mat surface was introduced on the market in 1992; in 1994, the *MS-30* stem with a polished surface² was launched internationally.

Since 1992, over 100,000 stems have been implanted worldwide with excellent ten-year results^{3,4}.

With these characteristics, the *MS-30* stem fulfills the demanding requirements of modern endoprosthesis.



¹ Barrack RL, Mulroy RD, Harris WH: Improved cementing techniques and femoral component loosening in young patients with hip arthroplasty. A 12-year radiographic review. *J Bone Joint Surg* 74B: 1992: 385–389.

² Berli B, Elke R, Morscher EW: The cemented MS-30 stem in total hip replacement, matte versus polished surface: minimum of five years of clinical and radiographic results of a prospective study. In: Winters GL, Nutt MJ (ed): *Stainless steels for medical and surgical applications*. ASTM STP 1438, 2003: 249–261.

³ Spotorno L, Grappiolo G, Penenberg BL, Burastero G: Eight to eleven years review of hybrid THA using a femoral stem and cementless titanium acetabulum. AAOS Dallas, 2002.

⁴ Berli B, Schäfer D, Dick W: 100% 10-year survival of a hybrid total hip replacement (MS-30 cemented stem and Morscher Press-Fit cup). EFORT Helsinki, 2003.