



MP® Reconstruction Prosthesis

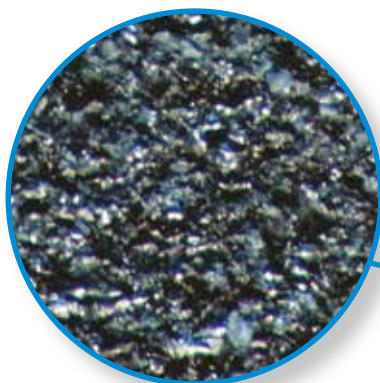
cementless & cemented

Design & Features

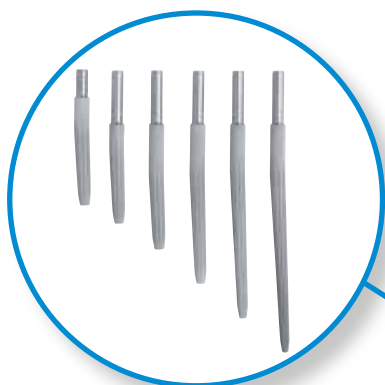
Proximal spacers for leg length adjustment
10 mm, 20 mm or 30 mm



Microporous surface
Distance of peaks ~160 µm***



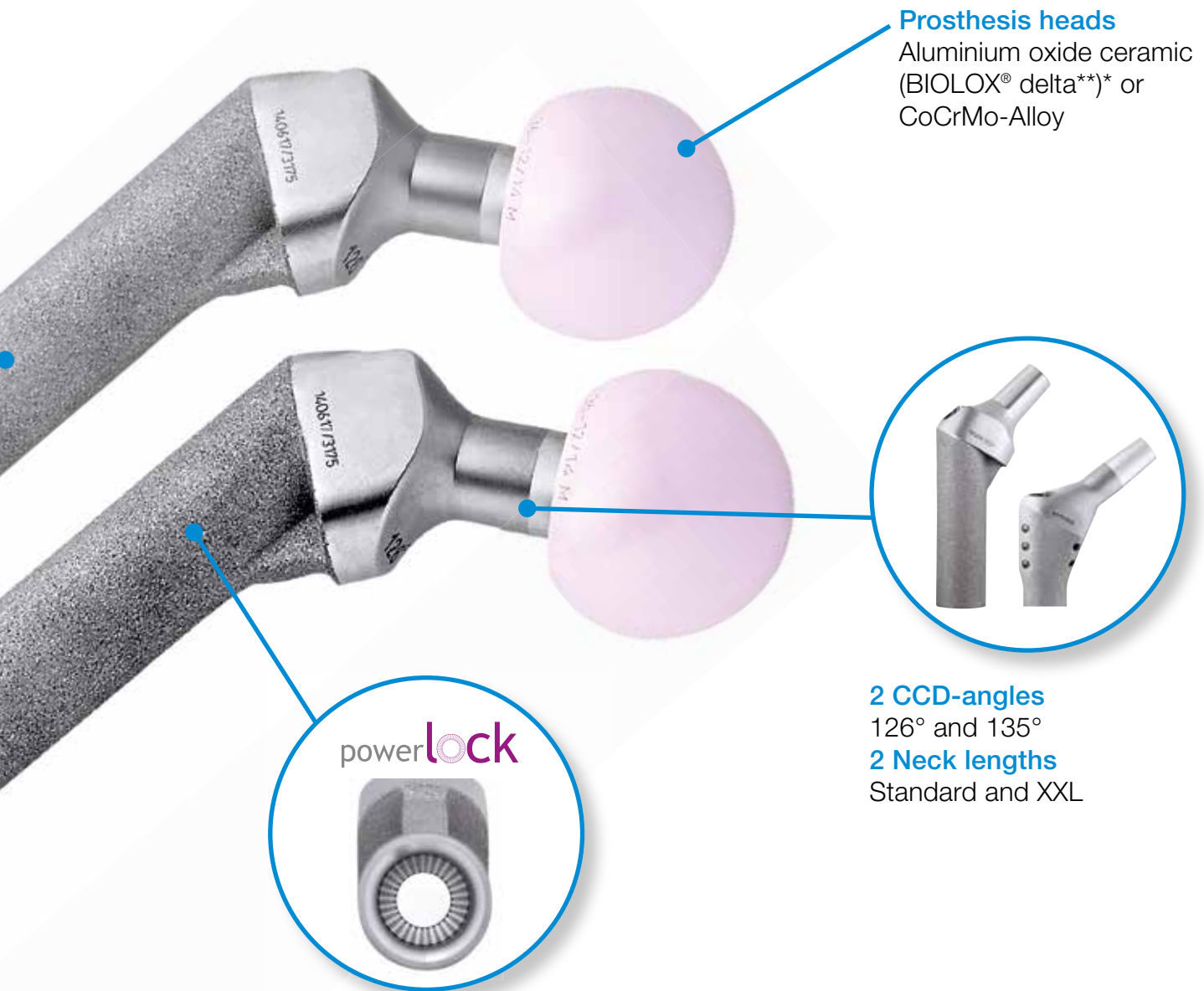
6 Lengths
160 mm - 330 mm
7 Diameters
12 mm - 25 mm



Cementless and cemented* stem fixation

Conical stem in LINK philosophy
proven for more than 30 years





The better SOLUTION!

“To our knowledge, there is no other modular, cementless, distally fixed implant for which in the face of deficient proximal support of the prosthesis is advocated by the manufacturer.” ¹

“It is noteworthy that the modular junction of this implant performed well at this length of follow-up with no failures attributable to it. When the modular junctions was examined during the 3 re-revisions performed by us (2 for dislocations and 1 for cup revision), there was no evidence of corrosion or any damage to the modular junction.” ²

* No FDA approval

** BIOLOX® delta is made by CeramTec GmbH, Plochingen, Germany

*** Bobyns study revealed an optimal distance of peaks between 50 and 400µm (important for vascularization)

LINK® MP®: All the advantages of a modular stem and the strength of a monolithic stem!

Clear Indication

"To our knowledge, there is no other modular, cementless, distally fixed implant for which in the face of deficient proximal support of the prosthesis is advocated by the manufacturer."³

Strength

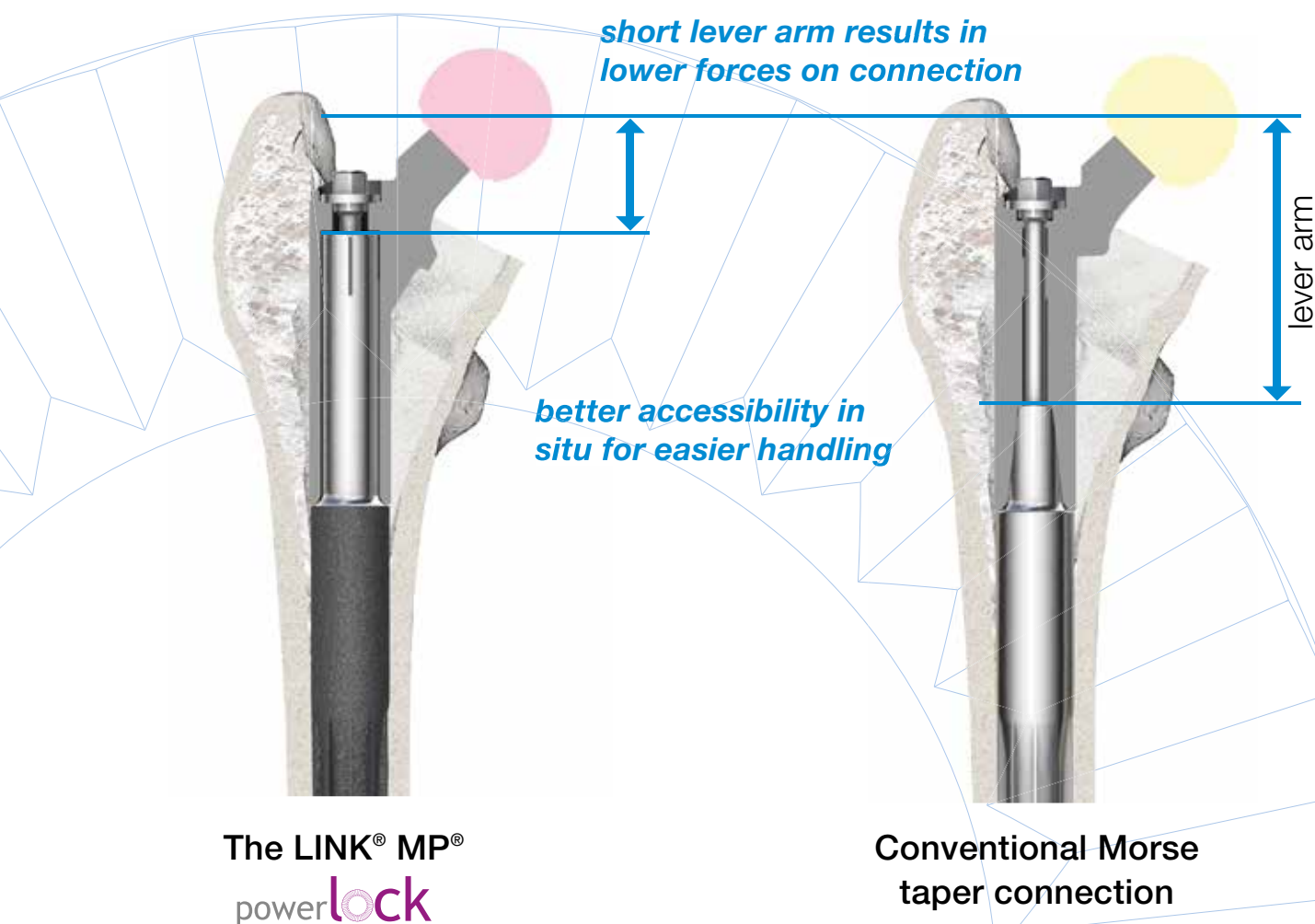
Location of locking mechanism, not a morse taper design "[...] strongly suggest a structural benefit of the extreme length of the distal neck sleeve."⁴

Fully Proven

LINK® MP® testing data conclusion: "[...] the structural characteristics of the LINK® MP® Hip Stem are such that it offers the prospect of in vivo longevity."⁴

**No modular
junction failures**

Proximal junction guarantees a safer connection



Expansion Screw - the better solution

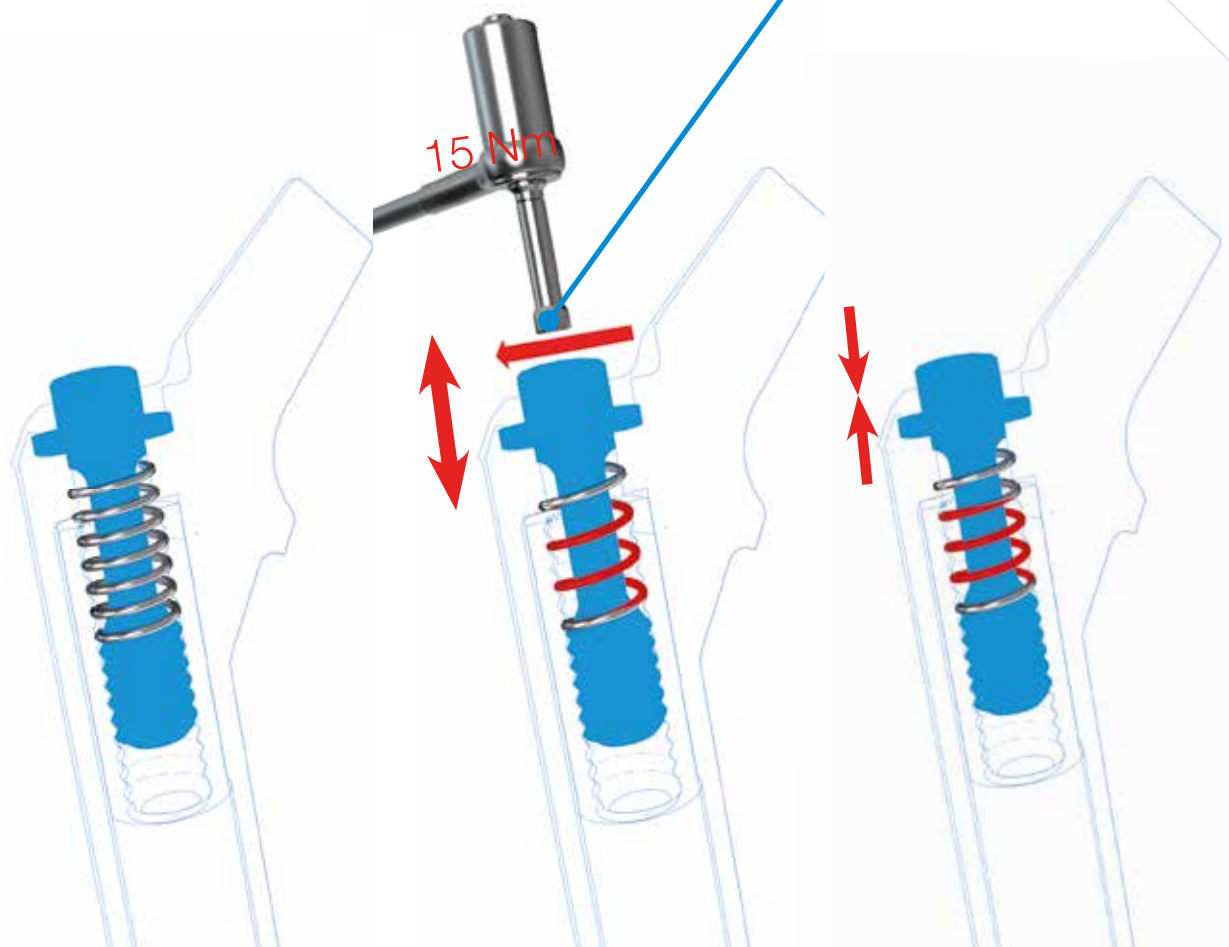
Expansion screws are commonly used in any heavy duty situation, such as engines and big machines, where dynamic forces and alternating stress occurs.

Due to the geometry in this slim midsection, the expansion screw is distinctly elastically stretch-able (like a spring). When tightened with a defined torque, the expansion screw stretches until the desired retention force is reached. This force contracts and secures the neck segment and stem.

Why not just a regular screw?

When two pieces are connected with a screw, after a while the material settles. Consecutively a ridged screw would protrude and the retention force automatically decreases. This leads to a loosening of the assembly.

An expansion screw is elastic in its elongation. It compensates the settlement of the connected components. As a result, it provides the desired retention force and ensures a safe connection.



Surgical Technique – Summary

1.



Distal reaming

2.



Impaction of the stem

3.



Proximal reaming

4.



Trial reduction

5.



Final assembly

6.



Full proximal modularity
with distally cemented stems

Simple and
precise surgical
technique

low risk of stem
subsidence

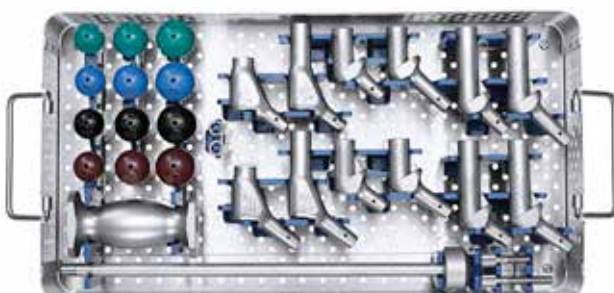
strong primary
stability

Features

Trial implants
to ensure joint
stability

Fewer
instrument trays

Technique for
distally cemented
stems with
full proximal
modularity



Quotes

In our opinion, the MP® reconstruction stem offers a variety of advantages in direct comparison with non-modular revision implants. These include distal fixation without further cementing; adjustment of the femoral neck; variable offset and rotation, and, furthermore, related adjustments of the soft tissue.⁵

We believe that the use of a modular tapered fluted titanium stem offers an excellent option for the management of femora bone defects in revision total hip arthroplasty. Fixation is reproducibly achieved, with minimal subsidence. Femoral bone stock appears to be improves in many cases with no cases of severe stress shielding.⁶

In this study, radiographic evidence of osseointegration (involving the “distal segment” of the implant) was seen in all stems, and there were no cases of progressive subsidence or subsidence beyond 10mm. [...] in conclusion, the “LINK® MP® stem” achieved reproducible and durable implant fixation, as well as restoration of clinical function in femoral revision with bone-loss.²

At final follow-up, all patients had stable implants and all acute fractures were healed. Marked reconstruction of proximal femoral bone stock was observes consistently. [...] the preliminary result of this method show a high rate of stable implant fixation and fracture healing with preservation and reconstitution of the host femur.⁷

¹ Kwong LM, Miller JA, Lubinus P: A Modular Distal Fixation Option for Proximal Bone Loss in Revision Total Hip Arthroplasty. J Arthroplasty Vol. 18 No. 3 Suppl. 1 2003.”

² Rodriguez et al. – Reproducible fixation with a tapered, fluted, modular, titanium stem in revision hip arthroplasty at 8-15 years follow-up, The Journal of Arthroplasty 29 Suppl. 2 (2014) 214-218

³ Kwong LM, Miller JA, Lubinus P: A Modular Distal Fixation Option for Proximal Bone Loss in Revision Total Hip Arthroplasty. J Arthroplasty Vol. 18 No. 3 Suppl. 1 2003

⁴ Postak PD, Greenwald AS: The Influence of Modularity on the Endurance Performance of the LINK® MP® Hip Stem. Orthopaedic Research Laboratories, Cleveland, OH, 2001 - Note: Depicted expansion bolts not cleared for sale in the U.S.A.

⁵ Klauser et al. - Medium-term Follow-Up of a Modular Tapered Noncemented Titanium Stem in Revision Total Hip Arthroplasty, The Journal of Arthroplasty Vol 28 No. 1, 2013, 84–89

⁶ Rodriguez et al. – two-year to five-year follow-up of femoral defects in femoral Revision treated with the LINK® MP® Modular stem, The Journal of Arthroplasty Vol. 24 No. 5 2009

⁷ Berry –Treatment of Vancouver B3 Periprosthetic Femur Fractures With a Fluted Tapered Stem, Clinical Orthopaedics and related research Number 417, pp 224-231

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