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Wagner Cone Prosthesis® Stems and Wagner SL Revision® Stem

Options for Primary and Revision Hip Arthroplasty

A Longstanding Tradition

Launched in 1987, Professor Heinz Wagner's conical stem philosophy has had a profound impact on the way surgeons approach both revision* and complex primary total hip arthroplasty (THA).

*Applies to Wagner SL Revision Stem only

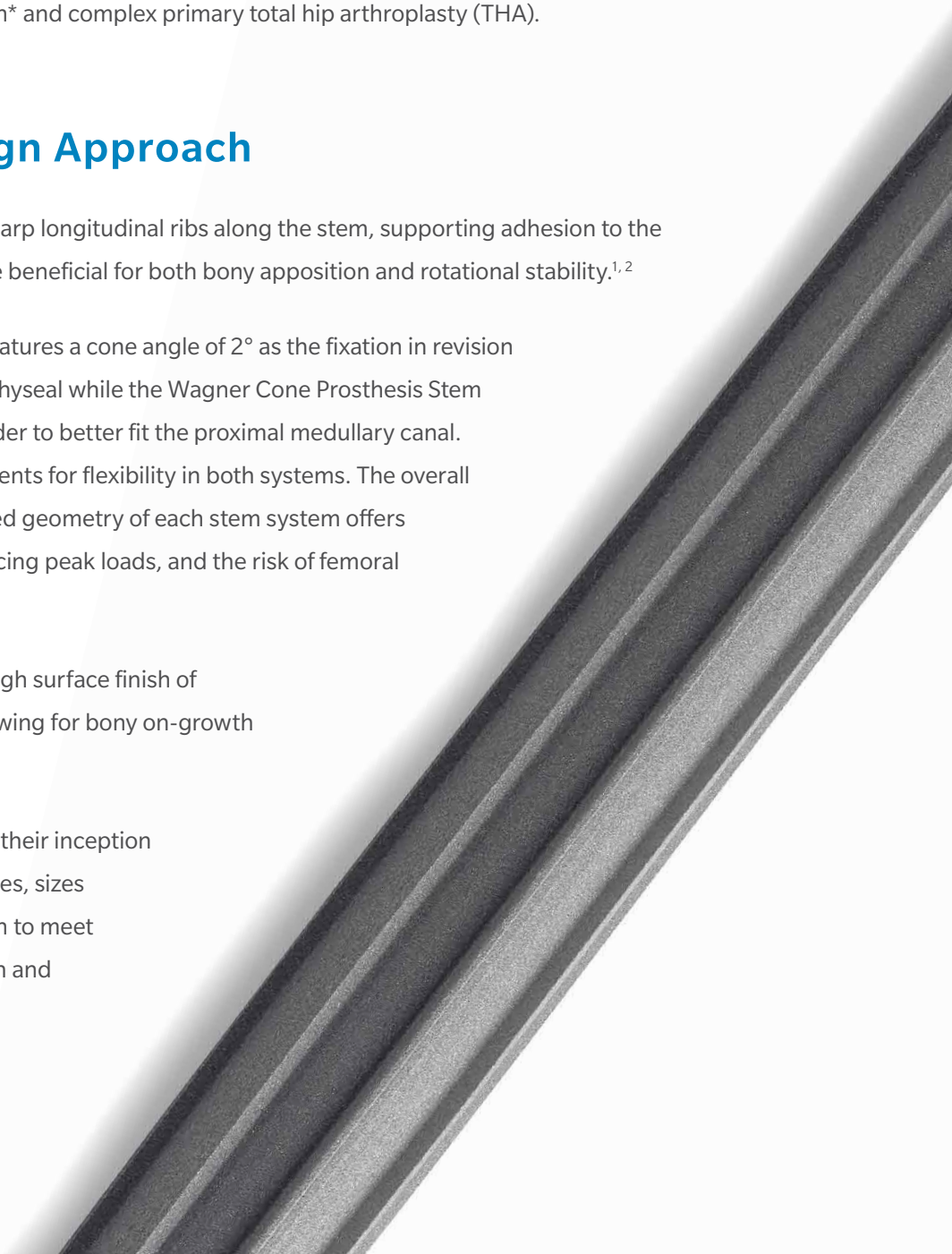
A Common Design Approach

A key design of Wagner is the sharp longitudinal ribs along the stem, supporting adhesion to the trochanter and is designed to be beneficial for both bony apposition and rotational stability.[1, 2]

The Wagner SL Revision Stem features a cone angle of 2° as the fixation in revision situations is predominantly diaphyseal while the Wagner Cone Prosthesis Stem features a cone angle of 5° in order to better fit the proximal medullary canal. Sizing is offered in 1 mm increments for flexibility in both systems. The overall circular cross section and tapered geometry of each stem system offers even distribution of stress, reducing peak loads, and the risk of femoral fracture during stem insertion.

Both stem systems feature a rough surface finish of Protasul®-100 titanium alloy allowing for bony on-growth and biocompatibility.[3]

The systems have evolved since their inception with a wider variety of neck angles, sizes and streamlined instrumentation to meet the unique challenges of revision and complex primary THA.



Paprosky Femoral Defect Classification in Revision

Arcos® Modular Femoral Revision System

Wagner SL Revision Stem, Arcos One-piece System

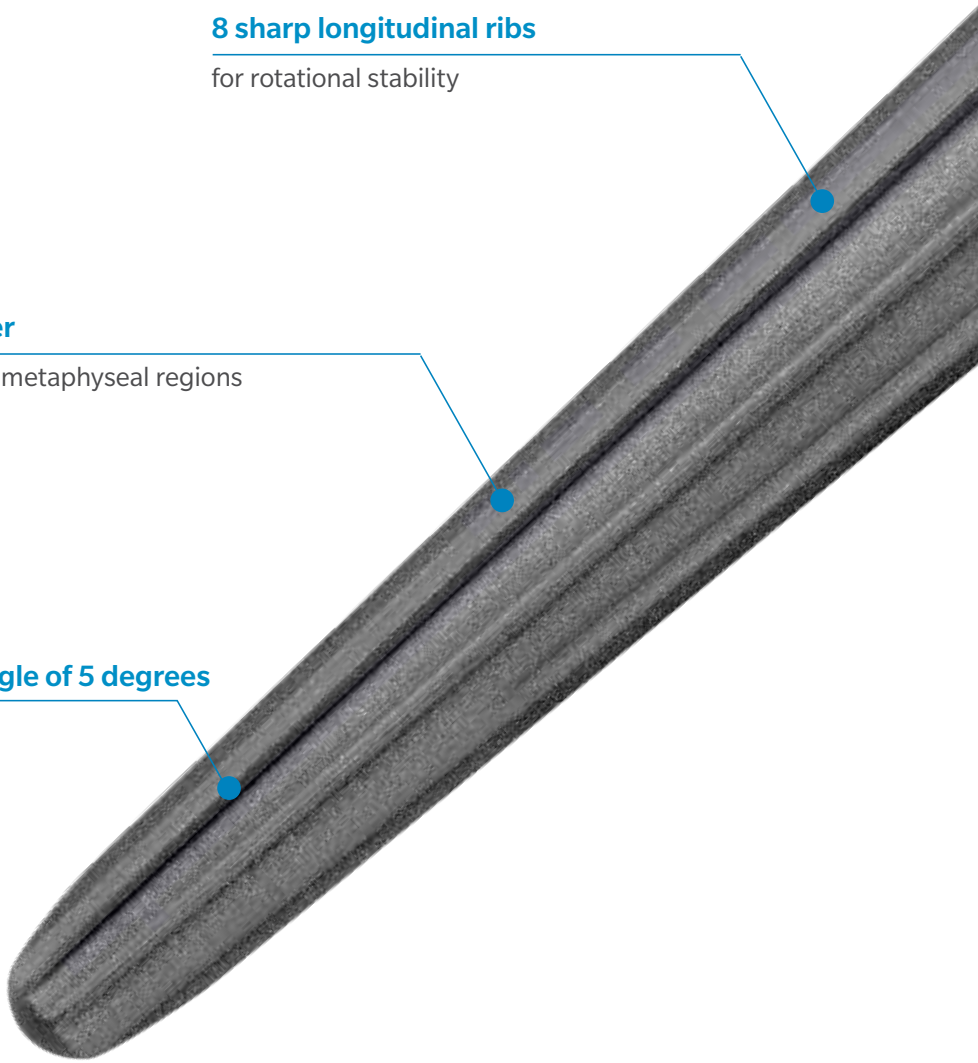
Wagner Cone Prosthesis Stem

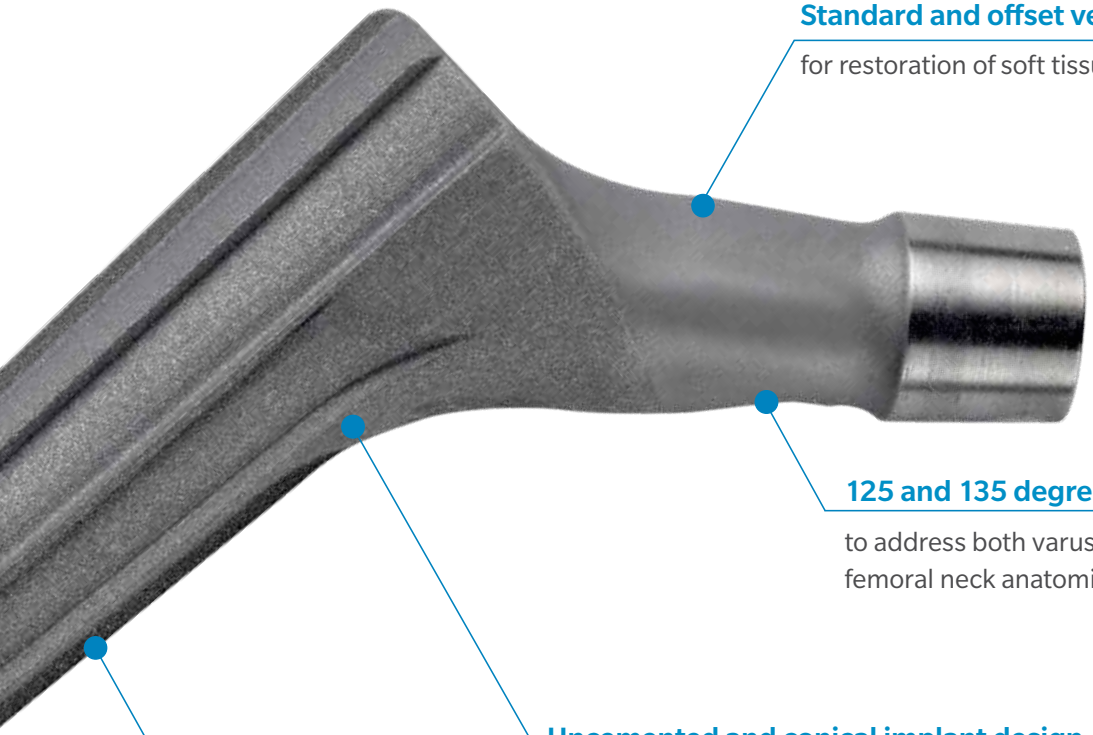
Complex Primary THA

The Wagner Cone Prosthesis Stem is designed for uncemented fixation, addressing bone conditions at the proximal end of the femur and for congenital dysplasia of the hip (CDH) cases.

It was designed specifically to accommodate bone conditions at the proximal femur such as deformities in which fixation of a traditional primary type prosthesis can be difficult.

The Wagner Cone Prosthesis Stem is ideally suited for cases where variable version control is important and a smaller diameter, shorter length implant is usually necessary in a primary application.





Standard and offset version

for restoration of soft tissue tension.

125 and 135 degree neck angles

to address both varus and standard femoral neck anatomies.

Uncemented and conical implant design

allowing for rotational freedom when setting stem version.

Circular cross-section for intraoperative flexibility

circular profile along the entire length of the stem allows adjustment of version angle and canal preparation with reamers to preserve bone.

Wagner SL Revision Stem

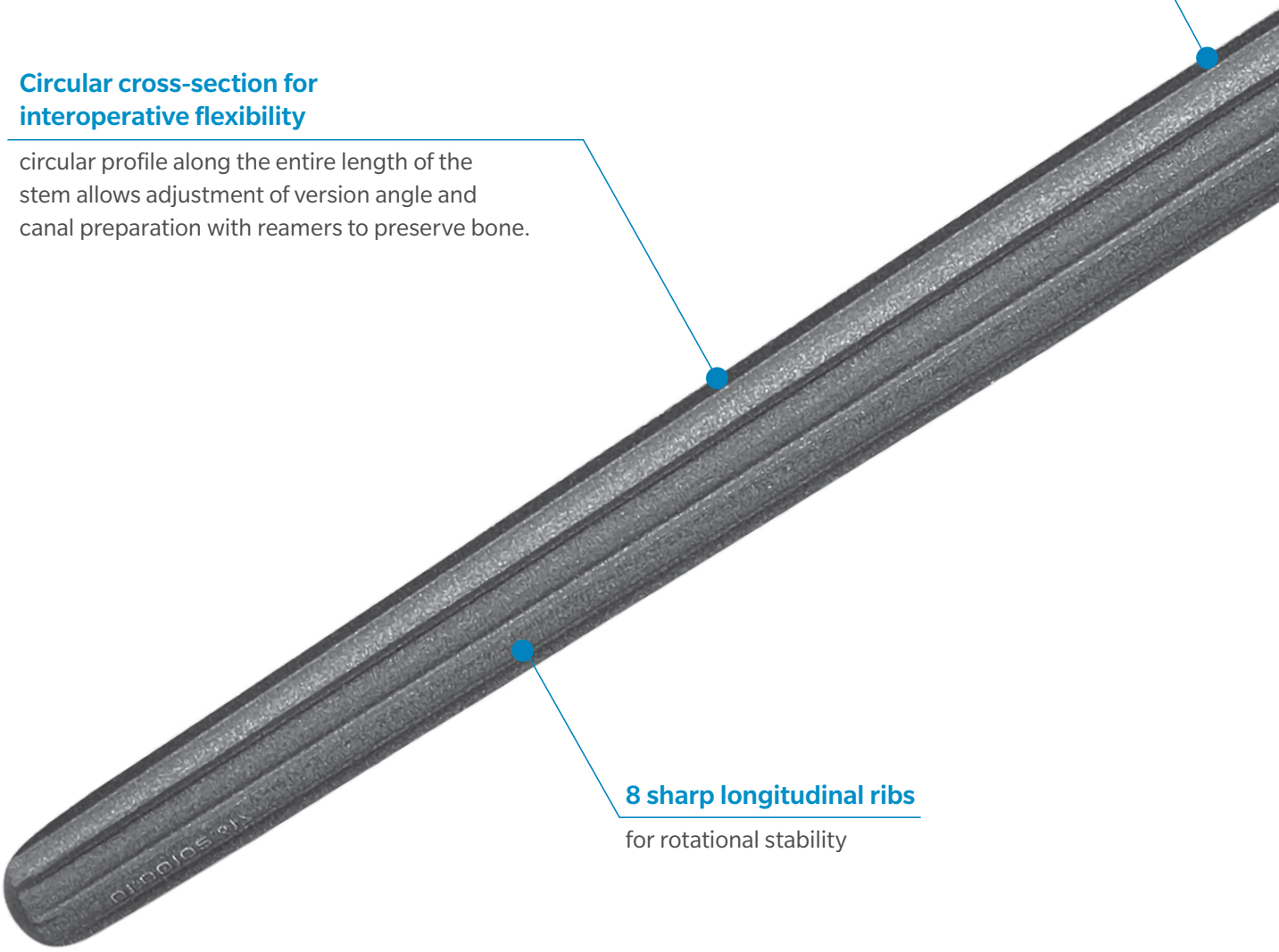
The Wagner SL Revision Stem is used in revision cases as an uncemented femoral implant generally when loosening is the primary cause for a revision procedure.

Uncemented and conical implant design

allowing for rotational freedom when setting stem version.

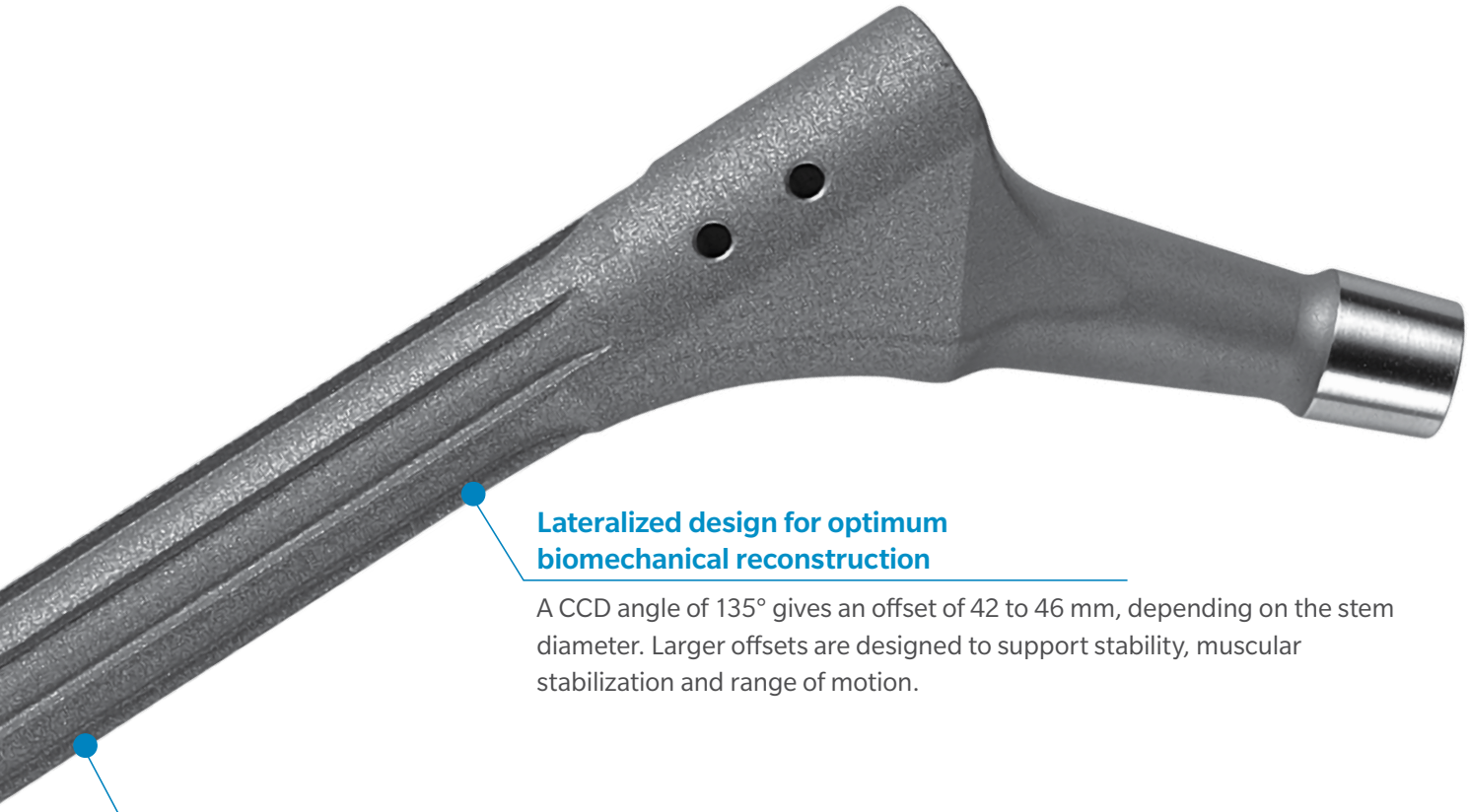
Circular cross-section for interoperative flexibility

circular profile along the entire length of the stem allows adjustment of version angle and canal preparation with reamers to preserve bone.



8 sharp longitudinal ribs

for rotational stability



Lateralized design for optimum biomechanical reconstruction

A CCD angle of 135° gives an offset of 42 to 46 mm, depending on the stem diameter. Larger offsets are designed to support stability, muscular stabilization and range of motion.

Tapered shape with an angle of 3 degrees

for press-fit fixation

Sometimes in revision, acetabulum bone quality can be compromised. The Trabecular Metal™ Acetabular Revision System (TMARS) has been proven to address and effectively treat defects[4-9] while working alongside the Wagner SL Revision Stem.

References

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