Profemur® L
Simply Versatile™

Driving Platform
Dimpled impaction platform for stem impaction

Lateral Shoulder
On anterior, posterior and medial sides, the surface presents grooves perpendicular to stem longitudinal axis and parallel with each other, providing a larger bone-stem contact surface for bone on-growth and preventing stem subsidence

Distal Rectangular Section and Grooves
Parallel to the stem longitudinal axis on all sides are designed to protect the stem against rotational stresses

Sizes
The Profemur® L Primary Stem is available in sizes 1-11

Stem Material
Titanium Alloy (Ti6Al4V) and HA coating, thickness [µm] 180 +/- 50

Dual Taper Geometry
Provides optimal primary fixation and load transfer
Design Features

Proven design philosophy
The Profemur® L stem has been developed based on the wide experience of the hydroxyapatite (HA) fully coated stems. The double taper geometry of the self-locking cementless stem allows optimal metaphyseal primary stability and load transfer; this is designed to encourage a rapid bone response to the HA extensive coating.

Implant Stability
Medial curvature
Horizontal and vertical macrostructures to distribute loading forces and promote rotational stability
Reduced lateral shoulder to facilitate easy insertion

Implant Specifications
Titanium stem surface with full Hydroxyapatite coating 180 µm thickness to enhance osteointegration and fixation
Modular or classic option
11 sizes (1-11)

History
Over the last decades, Total Hip Arthroplasty has become a standard procedure. In order to obtain an optimal result, a perfect reconstruction and balance of the hip are essential. Simultaneous correction of leg length, offset, rotation, varus or valgus deformity seems to be impossible with one single hip system.

The choice of classic femoral stem options combined with modularity is offering the surgeon a highly valuable tool to achieve optimal hip reconstruction even in challenging cases. The PROFEMUR® L Stem has been designed with the aim of combining flexibility with the proven features of a fully hydroxyapatite coated stem philosophy.

The concept of an extensive hydroxyapatite (HA) coating for the fixation of a tapered femoral stem was introduced 30 years ago with the intent of achieving durable biological fixation while preserving normal periprosthetic bone activity. The value of uncemented fixation using HA-coated implants is now widely accepted.

The double progressive taper shape of the metaphyseal portion aims to reduce the possible risk of subsidence, while the rectangular cross-section of the stem provides resistance to torsion. The medial curvature, resting on the calcar and filling the proximal femur, serves the primary stability of the implant. The transverse and longitudinal macro-structures on the stem continue to distribute load during long term anchorage of the implant. The slowly absorbing hydroxyapatite provides an additional stimulus for trabecular bone formation onto the roughened surface of the implant.

References
2. Reikeras O, Gunderson RB; Excellent results of HA coating on a grit-blasted stem; Acta Orthop Scand. 2003;74(2):140-5
3. An Interview with: J.C. Cartillier and J.P. Vidalain – ARTRO Group Maitrise Orthopedique – January 2000 - No. 90 (French and English version)

Disclaimer
Individual results and activity levels after surgery vary and depend on many factors including age, weight and prior activity level. There are risks and recovery times associated with surgery and there are certain individuals who should not undergo surgery.