## NexGen<sup>®</sup> Legacy<sup>®</sup> LPS-Flex Knee

Brochure







# What postoperative range of motion can your TKA patients expect?



For patients with the ability and desire to perform high-flexion activities, implant design should not limit postoperative range of motion. Now you can offer a NexGen<sup>®</sup> Complete Knee Solution designed to accommodate resumption of high-flexion daily activities. Attention to patient selection, surgical technique, implant design, and rehabilitation can help enhance the chances for success.

## The Anatomy of Flexion

Many activities of daily living require flexion beyond 120 degrees. Consider climbing stairs (75–140 degrees), sitting in a chair and standing up again (90–130 degrees), or squatting (130–150 degrees).<sup>1</sup> The typical pattern of femoral rollback is increased in deep flexion, as the lateral femoral condyle moves even farther posteriorly, increasing the amount of rotation. Also, the patella clears the femoral groove completely, contacting only the femoral condyles.<sup>2</sup>

#### Accommodating flexion with the NexGen Legacy LPS-Flex Knee

The LPS-Flex Knee extends the NexGen Complete Knee Solution to patients capable of up to 155 degrees of active flexion.

#### Accommodating Deep Flexion

Extended posterior condyles on the femoral component facilitate tibiofemoral contact to support deep flexion up to 155 degrees. Conforming geometry of the LPS-Flex femoral component with its articulating surface allows minimal loss of contact area in deep flexion.

#### Providing Extensor Mechanism Clearance

To reduce extensor mechanism tension and provide greater clearance for the patellar tendon during deep flexion, the bearing features a deep anterior patellar cut-out.

#### **Enhancing Stability**

A modified posterior stabilized cam/spine mechanism increases subluxation resistance at deep flexion angles. To provide additional stability and fit, the design includes proportionally sized pegs on the femoral component.



Flexion to 155 Degrees





Modified Cam/Spine

Increased Patella Clearance

## Providing a Full Spectrum of NexGen Solutions

The LPS-Flex Knee represents a new and distinct choice from the wide selection of NexGen Knees, which are compatible with CR/CS or PS philosophies for primary or revision cases. The LPS-Flex femoral component extends the NexGen Complete Knee Solution to patients capable of up to 155 degrees of active flexion. Now you have the freedom to select the best component combination for a given patient based on preoperative and intraoperative assessment.

> The deeper anterior flange on the femoral component aids in patellar tracking during extension and flexion.

> > The deep anterior patellar cut-out on the tibial articulating surface helps reduce tension and provide greater clearance for the extensor mechanism.







Patella Button

#### LPS-Flex Fixed Bearing Knee

The fixed bearing articulating surface mates with current NexGen Tibial Base Plates (available with stem extensions and tibial augments), and employs the same polyethylene dovetail locking mechanism. Tibial component implantation uses existing NexGen Instrumentation.

#### **Enabling Success**

A modified cam/spine

The LPS-Flex Knee allows use with the NexGen Instrument System of your choice:

- MICRO-MILL<sup>®</sup> Instrumentation Milling/5-in-1 Sawblade Options
- Multi-Reference<sup>™</sup> 4-in-1 Femoral Instrumentation System
- Intramedullary Instrumentation System
- Epicondylar Instrumentation System
- V-STAT<sup>®</sup> Variable Soft Tissue Alignment Tensor

Only one additional instrument—the Posterior Recut Guide is required to implant the LPS-Flex Knee.





**Precoat Stemmed Plate** 



A/P Wedge Stemmed Baseplate (Precoat)



Fluted Stemmed Baseplate (non-coated)



**Modular Tibial Augments** 



Straight and Offset Stem Extensions



#### References

- Niwa S. Hyperflexion In Japanese Knee Replacement Design and Clinical Results. Paper Presented at: The Wellington Knee Surgery Unit's 8<sup>th</sup> International Teaching Meeting, London, England. March 5–6, 1998.
- 2. Hefzy, M. *et al.* Kinematics of the Knee Joint in Deep Flexion: A Radiographic Assessment. *Medical Engineering & Physics.* 20: 302– 07, 1998.

For more information about NexGen LPS-Flex Knee, contact your Zimmer Biomet representative.

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