



**Smith+Nephew**

LEGION<sup>◇</sup>  
CONCELOC<sup>◇</sup>  
Cementless Total Knee System

Messaging Brochure

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# LEGION<sup>◇</sup> CONCELOC<sup>◇</sup>

## Cementless

## Total Knee System

Smith+Nephew's legacy of trusted innovation brings you the latest cementless TKA technology in LEGION CONCELOC. The LEGION CONCELOC Knee System's innovative 3D printed cementless technology will revolutionize Smith+Nephew's comprehensive knee portfolio, providing:

- CONCELOC Advanced Porous Titanium  
**biological fixation**
- **Efficiency** and **versatility** in the OR<sup>1</sup>
- **Proven technology** through trusted innovation<sup>2</sup>

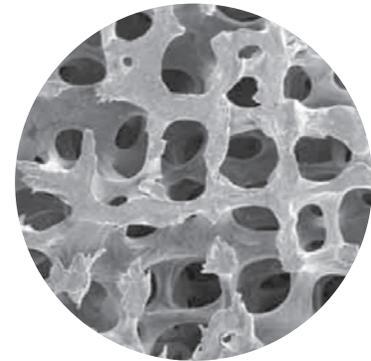
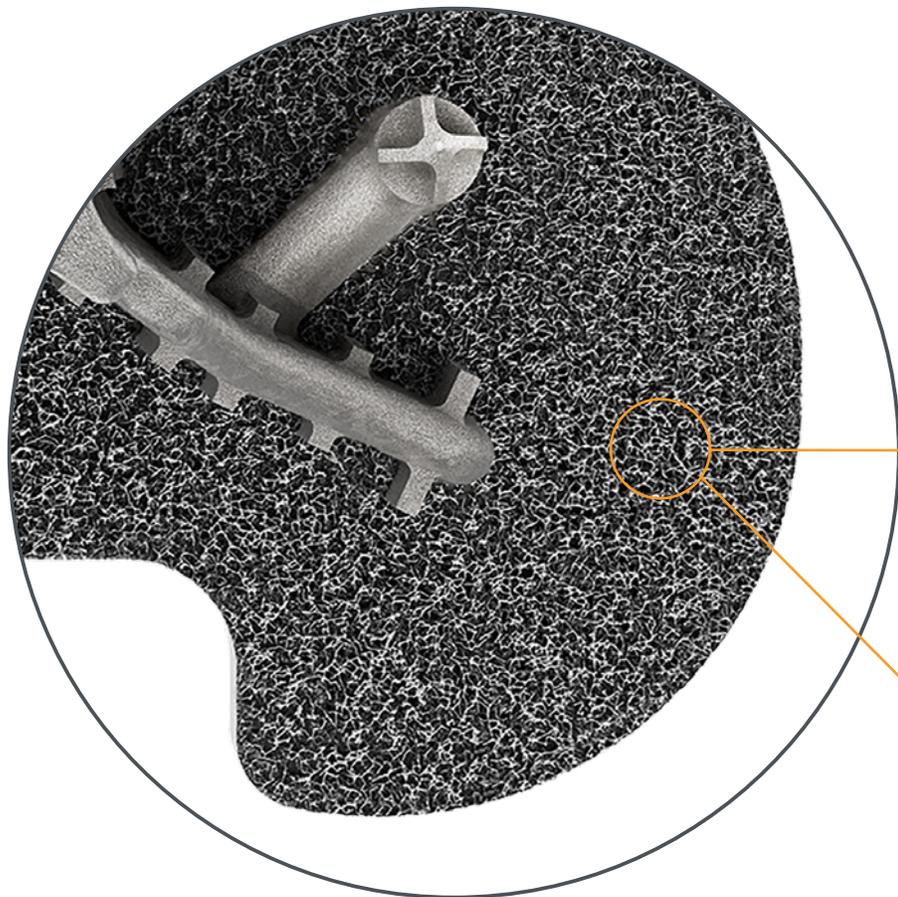


# CONCELOC<sup>®</sup> Advanced Porous Titanium

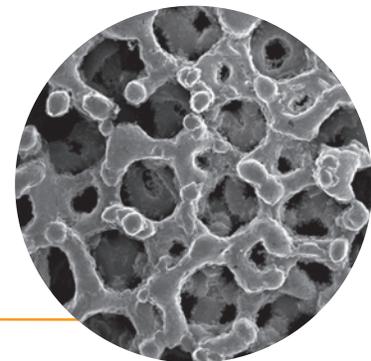
## Biological fixation

Smith+Nephew pioneered CONCELOC Advanced Porous Titanium, a patented method for creating a fully randomized porous structure with predictable porosity, pore size and node interconnectivity. CONCELOC is made from Ti-6Al-4V, and has been shown to provide excellent biological fixation in a validated, ovine model.<sup>3,4</sup> This is the same technology with over 5 years of clinical history in Smith+Nephew's REDAPT<sup>®</sup> Revision Hip System.<sup>5,6</sup>

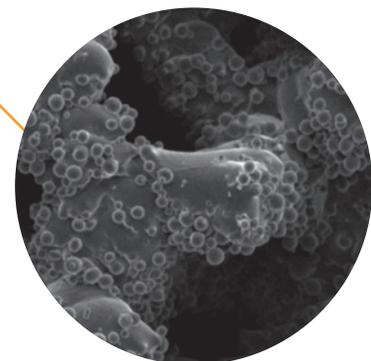
- **Porosity: 80%**<sup>6</sup>
- **Pore size: 228µm to 633µm**<sup>7</sup>
- **Material: Titanium Alloy (Ti-6Al-4V)**<sup>8</sup>



Cancellous bone at 25x magnification

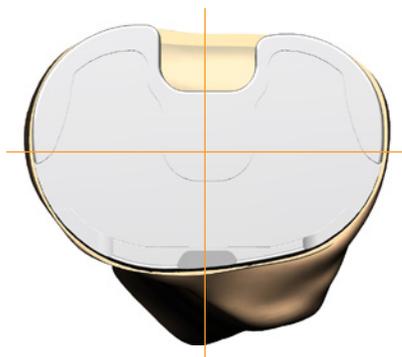


CONCELOC at 25x magnification



CONCELOC at 80x magnification

# Anatomic design



## Anatomic footprint

- Achieves >90% bony coverage on average<sup>9</sup>
- Designed to match anatomy of the tibia for optimal cortical rim coverage and even stress distribution which could potentially decrease the incidence of subsidence<sup>9-13</sup>
- Designed to minimize tibia rotational errors and baseplate overhang<sup>10-15</sup>



## CONCELOC<sup>®</sup> Tibia Baseplate

- Optimized press fit pegs and self prepping ribs
- Precision Milled Insert Locking Mechanism with over 15 years of clinical success<sup>16</sup>
- Anterior bridges for enhanced strength
- Indicated for cemented and cementless applications



## Optimized Anatomic Keel

- Proportionally medialized on the proximal tibia to align with the intramedullary canal
- Anatomically-shaped tibial baseplates have an improved fin design and significantly improve coverage of the tibia<sup>\*9-13</sup>
- Asymmetric anterior fins

\*Compared to symmetrical tibial baseplates



# Efficiency and versatility in the OR

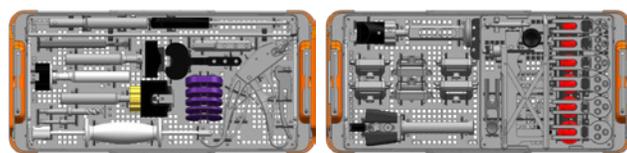
The LEGION<sup>®</sup> CONCELOC<sup>®</sup> Cementless Total Knee's versatility can be used in conjunction with our enabling technology solutions, including VISIONAIRE<sup>®</sup> Patient Matched Technology, CORI<sup>®</sup> Surgical System, SYNC Instrumentation and the entire Real Intelligence ecosystem. This versatility enables Smith+Nephew surgeons to increase accuracy as well as OR efficiency,<sup>\*17-19</sup> productivity by reducing surgical steps<sup>\*\*20,21</sup>, and designed to reduce instrument footprint and time.<sup>†</sup>

## VISIONAIRE Patient Matched Technology

Benefits include:<sup>20</sup>

- Less invasive procedure for patients<sup>5^</sup>
- Reduces blood loss<sup>5</sup>
- Shortens surgery time (by 7.3%)<sup>5</sup>
- Reduces odds of mechanical alignment outliers (by 40%)<sup>5</sup>
- Reduces instrumentation needed for surgery<sup>5</sup>

**In totality LEGION CONCELOC combined with VISIONAIRE on average can lead to a 50% savings in time by removing cement setup time and 23 instrumented steps from the procedure.<sup>22-24</sup>**



## CORI Surgical System

The CORI System offers precision milling<sup>25</sup> that allows surgeons to have an accurate bone resection combined with advanced ligament balancing.<sup>\*\*\*26</sup> CORI System's precision milling also provides the bone slurry shown to aid biological fixation for TKA porous.<sup>26</sup>

\* CORI Surgical System vs conventional surgery

\*\* VISIONAIRE Patient Matched Technology vs conventional TKA

† SYNC Instrumentation vs conventional

\*\*\* With the use of the handpiece



<sup>5</sup>compared to conventional TKA; meta-analysis of 24 studies

<sup>†</sup>due to the elimination of the required intramedullary alignment rods

# Smith+Nephew's legacy of trusted innovation

With more than 25 years of successful clinical history,<sup>6,27,28</sup> LEGION<sup>®</sup> TKS utilizes Smith+Nephew's unique CONCELOC<sup>®</sup> Advanced Porous Titanium combined with clinically relevant features that has allowed LEGION TKS to be a mainstay in knee orthopaedics. LEGION CONCELOC Cementless Total Knee System offers a suite of legacy and proven design features, including:

- Anatomic tibia design
- Medialized anatomic tibial keel
- CONCELOC advanced cementless fixation with 5 years of clinical history<sup>5,6\*</sup>
- S-shaped trochlear groove for optimal patella tracking<sup>10,29</sup>
- 1mm poly increments

• GENESIS<sup>®</sup> Total Knee System



• GENESIS II Total Knee System



• 1984



• TRICON Total Knee System

• 1988

• 1995



• PROFIX<sup>®</sup> Total Knee System

• 1996

• 2009



• LEGION Total Knee System

\*Clinical history based on Smith+Nephew's REDAPT<sup>®</sup> Revision Hip System<sup>5,6</sup>



**Disclaimer:** Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Smith+Nephew representative or distributor if you have questions about the availability of Smith+Nephew products in your area.

**Smith & Nephew, Inc.**  
1450 Brooks Road  
Memphis, Tennessee 38116  
USA

[www.smith-nephew.com](http://www.smith-nephew.com)

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