



**Zimmer®
Trabecular Metal™
Monoblock Tibial
Components**



Setting a New Gold Standard in Cementless TKA

The Best Thing Next to Bone™

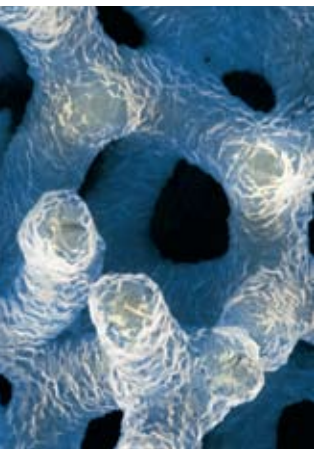


Trabecular Metal™

material resembles trabecular bone in its cellular structure and weight-bearing characteristics. By approximating the mechanical and physical properties of bone, *Trabecular Metal* material enables rapid and extensive bone infiltration.^{1,2}

Clinical experience in thousands of cases has proven the versatility of *Trabecular Metal* Technology in diverse orthopaedic applications.

75-80% Porosity • High Friction & Stability • Bone Matched Elasticity



Fully interconnected pores and high porosity allow approximately two to three times greater bone ingrowth than with conventional coatings and double the interface shear strength.^{1,2}

Trabecular Metal material produces more friction than sintered coatings on cancellous bone, which increases initial implant stability.^{8,9}

Trabecular Metal material is the only metal used in orthopaedics with elasticity similar to bone. The material's high strength-to-weight ratio and low modulus of elasticity provides more normal physiologic loading and helps minimize stress shielding.^{1,2,5,6}



Compatible with CR-Flex and LPS-Flex.

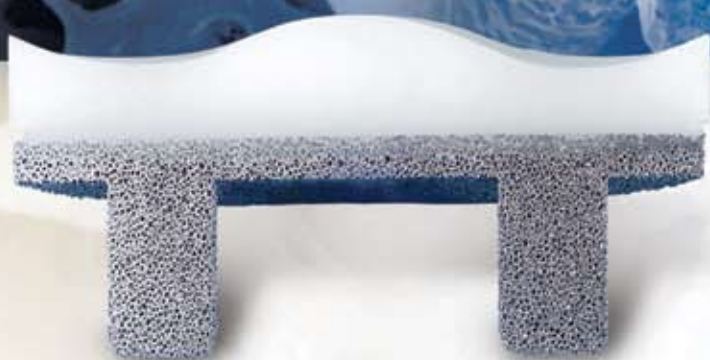
Trabecular Metal Monoblock Tibial Components combine the benefits of *Trabecular Metal* material with the geometries of the *NexGen*® Complete Knee Solution Cruciate Retaining (CR/CR-Flex) and *NexGen Legacy*® Knee Posterior Stabilized (LPS/LPS-Flex) Tibial Articular Surfaces.

NexGen Legacy
Posterior Stabilized
(LPS-Flex) Monoblock Tibia

NexGen Cruciate
Retaining (CR-Flex)
Monoblock Tibia



Trabecular Metal MONOBLOCK Components



Secure Polyethylene/ Trabecular Metal Interface

Direct compression molding of polyethylene into *Trabecular Metal* material eliminates the potential for backside wear.⁴

Designed To Optimize Load Transfer

Trabecular Metal material combines high compressive strength with low stiffness, which reduces the potential for stress shielding and lift-off.^{3,6}

Initial Stability – Press-fit Pegs Engage Bone

Holes are drilled into the bone, into which the hex-shape pegs are interference fit for secure fixation. The *Trabecular Metal* pegs are positioned within the strongest available bone, in line with condylar loading.³



Trabecular Metal Monoblock Tibial Ordering Information

LPS Monoblock Implants

Prod. No.	Description
00-5886-004-01	Trabecular Metal Monoblock LPS Implant Set (Includes 1 each of the items listed below)
00-5886-053-10	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 3 C/D, 10mm
00-5886-053-12	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 3 C/D, 12mm
00-5886-053-14	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 3 C/D, 14mm
00-5886-053-17	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 3 C/D, 17mm
00-5886-054-10	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 4 C/D, 10mm
00-5886-054-12	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 4 C/D, 12mm
00-5886-054-14	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 4 C/D, 14mm
00-5886-054-17	Trabecular Metal Monoblock LPS Tibia, Yellow, Size 4 C/D, 17mm
00-5886-075-10	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 C/D, 10mm
00-5886-075-12	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 C/D, 12mm
00-5886-075-14	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 C/D, 14mm
00-5886-075-17	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 C/D, 17mm
00-5886-076-10	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 C/D, 10mm
00-5886-076-12	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 C/D, 12mm
00-5886-076-14	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 C/D, 14mm
00-5886-076-17	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 C/D, 17mm
00-5886-063-10	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 3 E/F, 10mm
00-5886-063-12	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 3 E/F, 12mm
00-5886-063-14	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 3 E/F, 14mm
00-5886-063-17	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 3 E/F, 17mm
00-5886-064-10	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 4 E/F, 10mm
00-5886-064-12	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 4 E/F, 12mm
00-5886-064-14	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 4 E/F, 14mm
00-5886-064-17	Trabecular Metal Monoblock LPS Tibia, Str Yellow, Size 4 E/F, 17mm
00-5886-055-10	Trabecular Metal Monoblock LPS Tibia, Green, Size 5 E/F, 10mm
00-5886-055-12	Trabecular Metal Monoblock LPS Tibia, Green, Size 5 E/F, 12mm
00-5886-055-14	Trabecular Metal Monoblock LPS Tibia, Green, Size 5 E/F, 14mm
00-5886-055-17	Trabecular Metal Monoblock LPS Tibia, Green, Size 5 E/F, 17mm
00-5886-056-10	Trabecular Metal Monoblock LPS Tibia, Green, Size 6 E/F, 10mm
00-5886-056-12	Trabecular Metal Monoblock LPS Tibia, Green, Size 6 E/F, 12mm
00-5886-056-14	Trabecular Metal Monoblock LPS Tibia, Green, Size 6 E/F, 14mm
00-5886-056-17	Trabecular Metal Monoblock LPS Tibia, Green, Size 6 E/F, 17mm
00-5886-067-10	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 7 E/F, 10mm
00-5886-067-12	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 7 E/F, 12mm

Prod. No.	Description
00-5886-067-14	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 7 E/F, 14mm
00-5886-067-17	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 7 E/F, 17mm
00-5886-068-10	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 8 E/F, 10mm
00-5886-068-12	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 8 E/F, 12mm
00-5886-068-14	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 8 E/F, 14mm
00-5886-068-17	Trabecular Metal Monoblock LPS Tibia, Str Blue, Size 8 E/F, 17mm
00-5886-065-10	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 G/H, 10mm
00-5886-065-12	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 G/H, 12mm
00-5886-065-14	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 G/H, 14mm
00-5886-065-17	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 5 G/H, 17mm
00-5886-066-10	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 G/H, 10mm
00-5886-066-12	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 G/H, 12mm
00-5886-066-14	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 G/H, 14mm
00-5886-066-17	Trabecular Metal Monoblock LPS Tibia, Str Green, Size 6 G/H, 17mm
00-5886-057-10	Trabecular Metal Monoblock LPS Tibia, Blue, Size 7 G/H, 10mm
00-5886-057-12	Trabecular Metal Monoblock LPS Tibia, Blue, Size 7 G/H, 12mm
00-5886-057-14	Trabecular Metal Monoblock LPS Tibia, Blue, Size 7 G/H, 14mm
00-5886-057-17	Trabecular Metal Monoblock LPS Tibia, Blue, Size 7 G/H, 17mm
00-5886-058-10	Trabecular Metal Monoblock LPS Tibia, Blue, Size 8 G/H, 10mm
00-5886-058-12	Trabecular Metal Monoblock LPS Tibia, Blue, Size 8 G/H, 12mm
00-5886-058-14	Trabecular Metal Monoblock LPS Tibia, Blue, Size 8 G/H, 14mm
00-5886-058-17	Trabecular Metal Monoblock LPS Tibia, Blue, Size 8 G/H, 17mm



CR Monoblock Implants

Prod. No.	Description
00-5886-004-00	Trabecular Metal Monoblock CR Implant Set (Includes 1 each of the items listed below)
00-5886-043-10	Trabecular Metal Monoblock CR Tibia, Yellow, Size 3 C-H, 12mm
00-5886-043-12	Trabecular Metal Monoblock CR Tibia, Yellow, Size 3 C-H, 12mm
00-5886-043-14	Trabecular Metal Monoblock CR Tibia, Yellow, Size 3 C-H, 14mm
00-5886-043-17	Trabecular Metal Monoblock CR Tibia, Yellow, Size 3 C-H, 17mm
00-5886-044-10	Trabecular Metal Monoblock CR Tibia, Yellow, Size 4 C-H, 10mm
00-5886-044-12	Trabecular Metal Monoblock CR Tibia, Yellow, Size 4 C-H, 12mm
00-5886-044-14	Trabecular Metal Monoblock CR Tibia, Yellow, Size 4 C-H, 14mm
00-5886-044-17	Trabecular Metal Monoblock CR Tibia, Yellow, Size 4 C-H, 17mm
00-5886-045-10	Trabecular Metal Monoblock CR Tibia, Green, Size 5 C-H, 10mm
00-5886-045-12	Trabecular Metal Monoblock CR Tibia, Green, Size 5 C-H, 12mm
00-5886-045-14	Trabecular Metal Monoblock CR Tibia, Green, Size 5 C-H, 14mm
00-5886-045-17	Trabecular Metal Monoblock CR Tibia, Green, Size 5 C-H, 17mm
00-5886-046-10	Trabecular Metal Monoblock CR Tibia, Green, Size 6 C-H, 10mm
00-5886-046-12	Trabecular Metal Monoblock CR Tibia, Green, Size 6 C-H, 12mm
00-5886-046-14	Trabecular Metal Monoblock CR Tibia, Green, Size 6 C-H, 14mm
00-5886-046-17	Trabecular Metal Monoblock CR Tibia, Green, Size 6 C-H, 17mm
00-5886-047-10	Trabecular Metal Monoblock CR Tibia, Blue, Size 7 C-H, 10mm
00-5886-047-12	Trabecular Metal Monoblock CR Tibia, Blue, Size 7 C-H, 12mm
00-5886-047-14	Trabecular Metal Monoblock CR Tibia, Blue, Size 7 C-H, 14mm
00-5886-047-17	Trabecular Metal Monoblock CR Tibia, Blue, Size 7 C-H, 17mm
00-5886-048-10	Trabecular Metal Monoblock CR Tibia, Blue, Size 8 C-H, 10mm
00-5886-048-12	Trabecular Metal Monoblock CR Tibia, Blue, Size 8 C-H, 12mm
00-5886-048-14	Trabecular Metal Monoblock CR Tibia, Blue, Size 8 C-H, 14mm
00-5886-048-17	Trabecular Metal Monoblock CR Tibia, Blue, Size 8 C-H, 17mm

References

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2. JD Bobyn, GJ Stackpool, SS Hacking, M Tanzer, JJ Krygier, "Characteristics of Bone In-Growth and Interface Mechanics of a New Porous Tantalum Biomaterial", the Journal of Bone and Joint Surgery (British Version), Sep 1999, 81-B no. 5, pp 907-914."
3. Florio, C.S., Poggie, R.A., Sidebotham, C., Lewallen, D.G., Hanssen, A., "Stability Characteristics of a Cementless Monoblock Porous Tantalum Tibial Implant without Ancillary Fixation", Presented at the 2004 Annual Meeting of the ORS, San Francisco, CA, March 7-10, 2004.
4. RA Poggie, R Cohen, RG Averill, "Characterization of Porous Tantalum Metal, Direct Compression Molded UHMWPE Junction", 44th ORS, New Orleans, LA, March 16-19, 1998, pp 777.
5. DR Pedersen, TD Brown, RA Poggie, "Finite Element Analysis of Peri-Acetabular Stress of Cemented, Metal-Backed, and Porous Tantalum-Backed Acetabular Components", The 45th Orthopaedic Research Society Meeting, Anaheim, CA, Feb 1-4, 1999.
6. Rawlinson, JJ, Wright, TM, Bartel, DL, "Finite Element Analysis of a Porous Tantalum Monoblock Tibia Compared with a Metal-Backed Tibial Component", Presented at the 51st Annual ORS, Washington D.C., February, 2005.
7. RA Poggie and JE Wood, "Preliminary Clinical and Radiographic Results of Porous Tantalum in Primary TKA", IMECHE's Knee Arthroplasty: Engineering Functionality, April 7-9, 2005 Royal College of Surgeons, London, UK conference proceedings, pp 57-60.
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9. A Shirazi-Adl, M Dammak, G Paiement, "Experimental determination of friction characteristics at the Trabecular bone/porous-coated metal interface in cementless implants", the J of Biomedical Research, Vol 27, 1993, pp167-175.

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