



Trabecular Metal™ Natural Cup System



Performance like nature intended . . . The Best Thing Next to Bone™



zimmer
Confidence in your hands®

Trabecular Metal™ Natural Cup System

Combining the benefits of a unique monoblock construct with those of *Trabecular Metal* material has led to a decade of clinical success for the *Trabecular Metal* Natural Cup.

Trabecular Metal Material

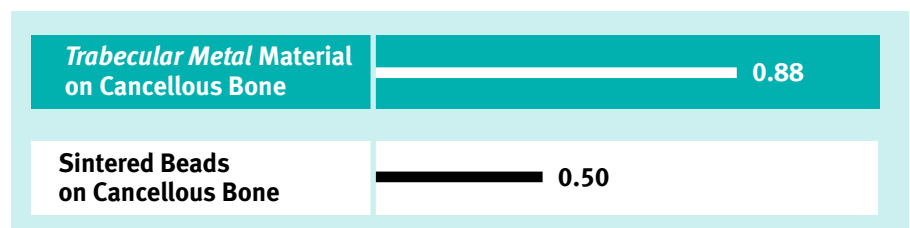
Ten years of ongoing clinical success for *Trabecular Metal* Material is attributed to its unique combination of characteristics.¹⁻²⁷ The material is designed to replicate the **natural** properties of bone, including the structure, porosity, elasticity, and weight-bearing characteristics.¹⁻⁴ The benefits include:

- An excellent scratch fit^{3,5-11} for proven initial fixation without screws^{8,9,12}
- A high porosity that yields enhanced fixation^{1-4,8-13} through rapid and extensive bone ingrowth^{3,10-15}
- Statistically improved gap filling to provide more bone for direct implant support^{7,9-12}

Bone Ingrowth



Coefficient of Friction^{5,7}



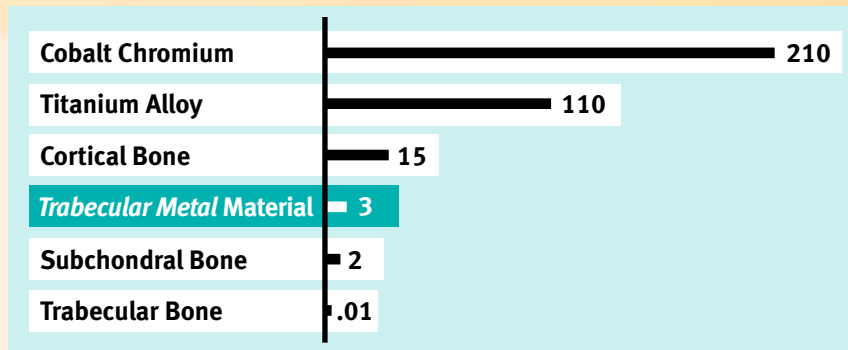
Trabecular Metal material possesses a substantially higher coefficient of friction than sintered bead coatings on cancellous bone.¹⁴ This property increases initial stability at

Bone Interface Shear Strength



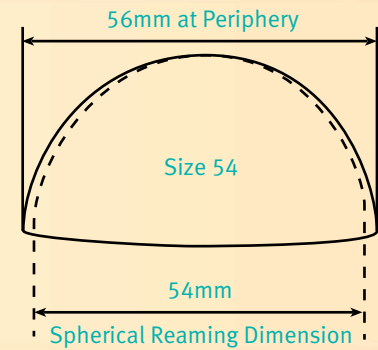
Bone interface shear strength (MPa) of Zimmer® *Trabecular Metal* Material compared with sintered beads at 4 weeks.^{7,9}

Elastic Modulus



Zimmer Trabecular Metal Material falls between cortical bone and subchondral bone in terms of elastic modulus (GPa).^{9,15}

Unique elliptical cup geometry provides secure initial stability

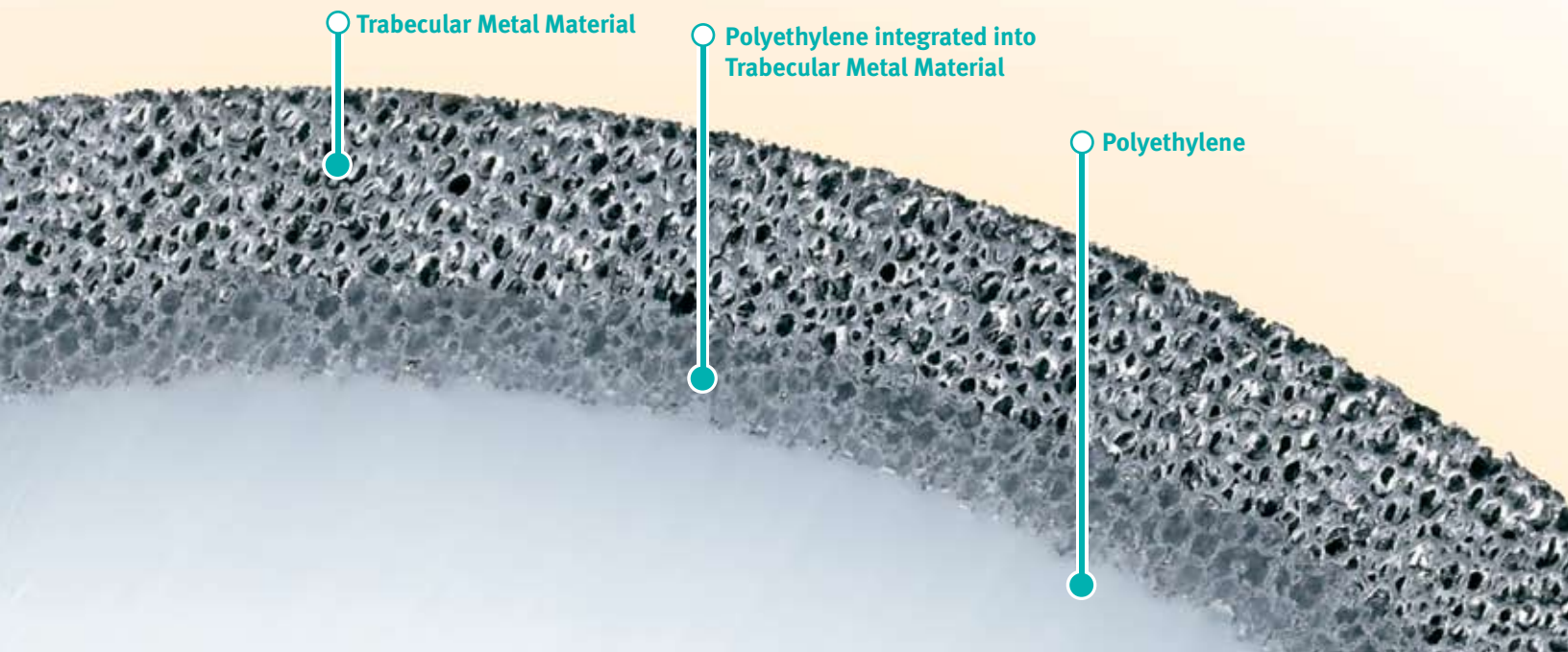


Bone contact and initial stability are maximized by a 2mm interference fit at the periphery of the cup combined with a high coefficient of friction.^{1, 3, 6, 9, 16, 20, 24, 25}

Flexible Monoblock Construct

Polyethylene is compression molded directly into the *Trabecular Metal Material*. This is possible because *Trabecular Metal Material* is a highly porous, three-dimensional, self-supporting biomaterial. The benefits include:

- A more flexible construct reduces the potential for stress shielding^{16, 17}
- No backside motion between the liner and shell, significantly reduces the potential for backside polyethylene wear²⁸
- Elimination of pathways for debris to pass through the shell to the acetabulum since there are no dome screw holes



MIS Friendly & Time Saving

By eliminating steps in the procedure, the cup potentially saves OR time and is more MIS friendly.

- Fixation is achieved without screws, eliminating the step of drilling and inserting screws.
- The monoblock design eliminates the step of inserting a liner.



7-Year Follow-up



Variety of Cup Options

Non-holed Cup

- With neutral or 10° liner elevation
- For 22mm, 28mm, and 32mm head sizes

Peripheral-holed Cup

- With 10° liner elevation
- For 22mm and 28mm head sizes

Trabecular Metal Technology References and History

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3. Bobynd JD, Hacking SA, Chan SP, Toh KK, Krygier JJ, Tanzer M. Characterization of a new porous tantalum biomaterial for reconstructive orthopaedics. Scientific Exhibition: 66th Annual Meeting of the American Academy of Orthopaedic Surgeons; 1999; Anaheim, CA.
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12. Gruen T, Christie M, Eilers V, et al. Radiographic evaluation of a non-modular acetabular cup - a 2-to-5 year multi-center study. Scientific Exhibition: 71st Annual Meeting of the American Academy of Orthopaedic Surgeons; 2004; San Francisco, CA.
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Ordering Information

Implants

Non-holed Cups – 0° Liner

Prod. No.	Description
00-7255-040-22	0° Cup, 40mm OD x 22mm ID
00-7255-042-22	0° Cup, 42mm OD x 22mm ID
00-7255-044-22	0° Cup, 44mm OD x 22mm ID
00-7255-046-22	0° Cup, 46mm OD x 22mm ID
00-7255-048-28	0° Cup, 48mm OD x 28mm ID
00-7255-050-28	0° Cup, 50mm OD x 28mm ID
00-7255-052-32	0° Cup, 52mm OD x 32mm ID
00-7255-054-32	0° Cup, 54mm OD x 32mm ID
00-7255-056-32	0° Cup, 56mm OD x 32mm ID
00-7255-058-32	0° Cup, 58mm OD x 32mm ID
00-7255-060-32	0° Cup, 60mm OD x 32mm ID
00-7255-062-32	0° Cup, 62mm OD x 32mm ID
00-7255-064-32	0° Cup, 64mm OD x 32mm ID
00-7255-066-32	0° Cup, 66mm OD x 32mm ID
00-7255-068-32	0° Cup, 68mm OD x 32mm ID
00-7255-070-32	0° Cup, 70mm OD x 32mm ID

Non-holed Cups – 10° Liner

Prod. No.	Description
00-7260-040-22	10° Cup, 40mm OD x 22mm ID
00-7260-042-22	10° Cup, 42mm OD x 22mm ID
00-7260-044-22	10° Cup, 44mm OD x 22mm ID
00-7260-046-22	10° Cup, 46mm OD x 22mm ID
00-7260-048-28	10° Cup, 48mm OD x 28mm ID
00-7260-050-28	10° Cup, 50mm OD x 28mm ID
00-7260-052-32	10° Cup, 52mm OD x 32mm ID
00-7260-054-32	10° Cup, 54mm OD x 32mm ID
00-7260-056-32	10° Cup, 56mm OD x 32mm ID
00-7260-058-32	10° Cup, 58mm OD x 32mm ID
00-7260-060-32	10° Cup, 60mm OD x 32mm ID
00-7260-062-32	10° Cup, 62mm OD x 32mm ID
00-7260-064-32	10° Cup, 64mm OD x 32mm ID
00-7260-066-32	10° Cup, 66mm OD x 32mm ID
00-7260-068-32	10° Cup, 68mm OD x 32mm ID
00-7260-070-32	10° Cup, 70mm OD x 32mm ID

Screw-holed Cups – 10° Liner

Prod. No.	Description
00-7210-040-22	10° Cup, 40mm OD x 22mm ID
00-7210-042-22	10° Cup, 42mm OD x 22mm ID
00-7210-044-22	10° Cup, 44mm OD x 22mm ID
00-7210-046-22	10° Cup, 46mm OD x 22mm ID
00-7210-048-28	10° Cup, 48mm OD x 28mm ID
00-7210-050-28	10° Cup, 50mm OD x 28mm ID
00-7210-052-28	10° Cup, 52mm OD x 28mm ID
00-7210-054-28	10° Cup, 54mm OD x 28mm ID
00-7210-056-28	10° Cup, 56mm OD x 28mm ID
00-7210-058-28	10° Cup, 58mm OD x 28mm ID
00-7210-060-28	10° Cup, 60mm OD x 28mm ID
00-7210-062-28	10° Cup, 62mm OD x 28mm ID
00-7210-064-28	10° Cup, 64mm OD x 28mm ID
00-7210-066-28	10° Cup, 66mm OD x 28mm ID
00-7210-068-28	10° Cup, 68mm OD x 28mm ID
00-7210-070-28	10° Cup, 70mm OD x 28mm ID

Instruments

Prod. No.	Description
00-7000-015-20	Core Instrument Set
00-7040-040-00	Provision Shells, 40mm (2mm increments)
Through ↓	Through ↓
00-7040-070-00	Provision Shells, 70mm (2mm increments)
00-7045-040-00	Bayonets, 40mm (2mm increments)
Through ↓	Through ↓
00-7045-070-00	Bayonets, 70mm (2mm increments)
00-7050-030-00	Cup Rim Impactor
00-7050-031-00	Cup Version Guide
00-7050-032-00	Provisional Liner Extractor
00-7050-033-00	Bayonet Handle & Plunger
00-7050-034-00	Provisional Shell Impactor Handle
00-7050-035-00	Medial Cup Impactor
00-7050-001-22	Acetabular Impactor Head – 22mm
00-7050-001-28	Acetabular Impactor Head – 28mm
00-7050-001-32	Acetabular Impactor Head – 32mm
00-7050-010-00	Instrument Case Assembly

With each core set, order one of the following liner trial trays.
– liner trial trays stack and assemble to core set

Prod. No.	Description
00-7000-015-25	Non-holed Cups – 0° Liner Trial Tray
00-7360-040-22	0° Liner Trials, 40mm OD x 22mm ID
Through ↓	Through ↓
00-7360-046-22	0° Liner Trials, 46mm OD x 22mm ID
00-7360-048-28	0° Liner Trials, 48mm OD x 28mm ID
Through ↓	Through ↓
00-7360-050-28	0° Liner Trials, 50mm OD x 28mm ID
00-7360-052-32	0° Liner Trials, 52mm OD x 32mm ID
Through ↓	Through ↓
00-7360-070-32	0° Liner Trials, 70mm OD x 32mm ID
00-7360-010-00	Instrument Tray Assembly

Prod. No.	Description
00-7000-015-26	Non-holed Cups – 10° Liner Trial Tray
00-7361-040-22	10° Liner Trials, 40mm OD x 22mm ID
Through ↓	Through ↓
00-7361-046-22	10° Liner Trials, 46mm OD x 22mm ID
00-7361-048-28	10° Liner Trials, 48mm OD x 28mm ID
Through ↓	Through ↓
00-7361-050-28	10° Liner Trials, 50mm OD x 28mm ID
00-7361-052-32	10° Liner Trials, 52mm OD x 32mm ID
Through ↓	Through ↓
00-7361-070-32	10° Liner Trials, 70mm OD x 32mm ID
00-7360-010-00	Instrument Tray Assembly

Prod. No.	Description
00-7000-015-27	Screw-holed Cups – 10° Liner Trial Tray (supplemental to Non-holed 10° liner trial tray)
00-7361-052-28	10° Liner Trials, 52mm OD x 28mm ID
Through ↓	Through ↓
00-7361-070-28	10° Liner Trials, 70mm OD x 28mm ID
00-7360-010-00	Instrument Tray Assembly

Peripheral Bone Screws

Prod. No.	Description
00-7250-050-20	Peripheral Bone Screw, 5mm x 20mm
00-7250-050-25	Peripheral Bone Screw, 5mm x 25mm
00-7250-050-30	Peripheral Bone Screw, 5mm x 30mm
00-7250-050-35	Peripheral Bone Screw, 5mm x 35mm
00-7250-050-40	Peripheral Bone Screw, 5mm x 40mm
00-7250-050-45	Peripheral Bone Screw, 5mm x 45mm
00-7250-050-50	Peripheral Bone Screw, 5mm x 50mm
00-7250-050-55	Peripheral Bone Screw, 5mm x 55mm
00-7250-050-60	Peripheral Bone Screw, 5mm x 60mm
00-7250-050-65	Peripheral Bone Screw, 5mm x 65mm

Prod. No.	Description
00-7000-016-00	Peripheral Bone Screw Instrument Set
00-7050-070-00	Screw Instrument Case
00-7050-040-00	Screwdriver Ratchet Handle
00-7050-041-00	Rigid Screwdriver Shaft
00-7050-042-00	Flexible Screwdriver Shaft
00-7050-043-00	Drill Guide
00-7050-044-00	Drill Bit, 2.3mm (quantity 4)
00-7050-045-00	Depth Gauge
00-7050-046-00	Drill Chuck w/shaft

Contact your Zimmer representative or visit us at www.zimmer.com

