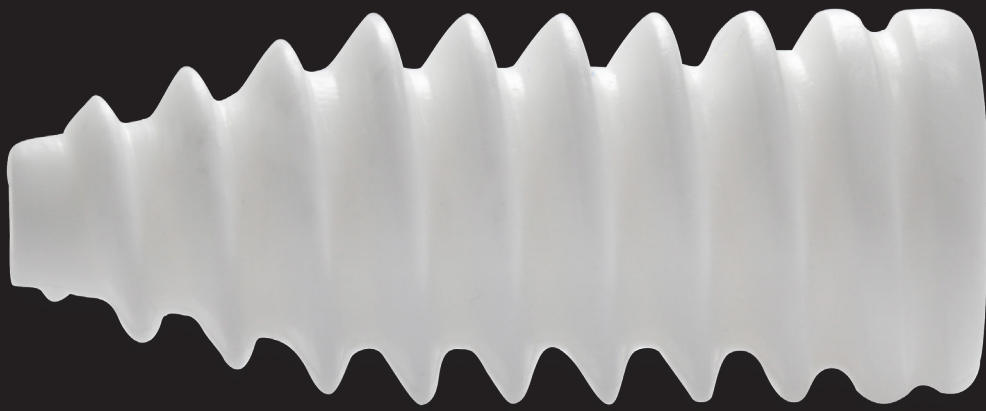


MISBIO+™

RESORBABLE COMPOSITE INTERFERENCE SCREW



Product Brochure

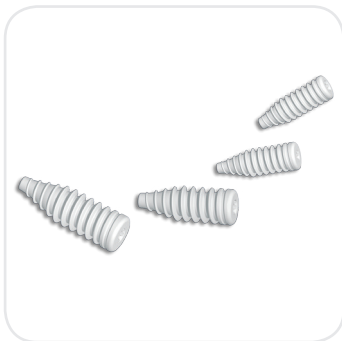
MISBIO+ RESORBABLE COMPOSITE INTERFERENCE SCREW

MISBIO+ is a resorbable composite interference screw that is indicated for ligament reconstruction. With 75% (PLDLLA) and 25% (MBCP™ Technology), which is composed of Hydroxyapatite (HA) and Tricalcium Phosphate (TCP), MISBIO+ contains the perfect combination to provide strong ligament fixation with clinically proven osteoconductive properties¹.

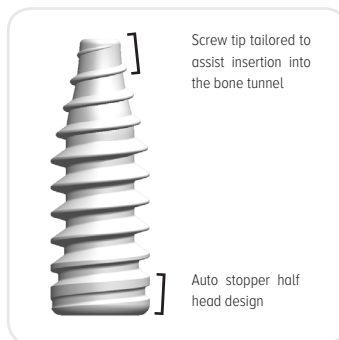
BENEFITS OF MISBIO+

DESIGNED FOR OPTIMAL FIXATION

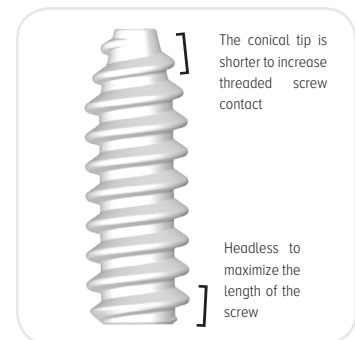
- Atraumatic thread to protect the ligament
- Strong biocompatible, bio-absorbable and osteoconductive fixation
- Tapered screw tip designed to assist with the insertion of the screw (25mm & 30mm only)
- Inserter fills whole length of the screw (20mm only)
- Headless design to maximize the thread length for stronger fixation (20mm only)



ALL SIZES



TAPERED DESIGN
LENGTHS 25MM AND
30MM



HEADLESS DESIGN
LENGTH 20MM

IDEAL MATERIAL COMBINATION

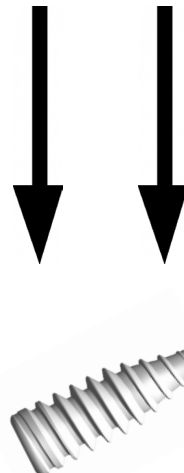


75% PLDLLA

- ✓ Better balance between degradation and mechanical strength than PLGA and PLA^{2,3,4}
- ✓ L-Lactide provides greater mechanical resistance
- ✓ DL-Lactide is amorphous (the crystallinity has been removed) which increases the resorption rate

25% MBCP™ TECHNOLOGY

- ✓ Promotes the scaffold effect for osteoconduction and osteogenesis during the resorption of the polymer by hydrolysis⁵
- ✓ For bioactive ionic exchange: TCP dissolution and bony crystal precipitation. Newly bioactive interference with bone cells
- ✓ Regeneration of architectural bone



INNOVATIVE MBCP TECHNOLOGY

MBCP™ is a bioactive calcium phosphate ceramic, composed of Hydroxyapatite (HA) and Tricalcium Phosphate (TCP). With over 30 years of clinical background, MBCP is the osteoconductive element of MISBIO+ with a molecular mixture of 60% Hydroxyapatite and 40% Tricalcium Phosphate.

By incorporating the MBCP technology with PLDLLA in the form of a bioactive⁶ resorbable interference screw the patient can receive the benefits from both materials including architectural bone growth, greater corticalization* and a pH neutral environment to significantly reduce the possibility of an inflammatory response.

SIMPLE AND EFFECTIVE INSTRUMENTATION

The Torx Screwdriver has been specifically designed for MISBIO+ to provide the optimal distribution of force across the entire length of the screw. The mean failure torque is 6Nm whereas other leading interference screws show a breakage rate of 5Nm and 5.3Nm*.



TORX SCREWDRIVER



STARTER TAP



TUNNEL DILATOR



GUIDE WIRE

Unlike many other screws on the market, MISBIO+ is homogenous (Polymer & bone graft), guaranteeing phosphate granules on the surface of the material. These granules interact immediately with bone making MISBIO+ a truly osteoconductive interference screw.

Over 50,000 units have been sold with no reported biological adverse reactions*.



*Data on file and available upon request.

Product List

MISBIO+™

Product Code	Description
7.25MISBIO+	Interference screw 7x25mm
7.30MISBIO+	Interference screw 7x30mm
8.25MISBIO+	Interference screw 8x25mm
8.30MISBIO+	Interference screw 8x30mm
9.25MISBIO+	Interference screw 9x25mm
9.30MISBIO+	Interference screw 9x30mm
10.30MISBIO+	Interference screw 10x30mm
11.35MISBIO+	Interference screw 11x35mm*
12.35MISBIO+	Interference screw 12x35mm*
08INTO001	Torx Screwdriver
11INTA001	Starter Tap
08INCO001	Tunnel Dilator Ø 07/08*
08INCO002	Tunnel Dilator Ø 09/10*
3602-A	Guide Wire

*Available on request

References

Ref 1 Barth, J et al. Efficacy of osteoconductive ceramics in bioresorbable screws for anterior cruciate ligament reconstruction, The Orthopaedic Journal of Sports Medicine, 4(5), 2016. Ref 2 Weiler, A., R. F. Hoffmann, et al. Hamstring tendon fixation using interference screws: a biomechanical study in calf tibial bone. Arthroscopy: The Journal of Arthroscopic and Related Surgery 14(1): 29-37, 1998. Ref 3 Hunt, J. A. and J. T. Callaghan. Polymer-hydroxyapatite composite versus polymer interference screws in anterior cruciate ligament reconstruction in a large animal model. Knee Surgery, Sports Traumatology, Arthroscopy 16(7): 655-660, 2008. Ref 4 Black, J. Does corrosion matter? The Journal of Bone and Joint Surgery, 70-B(4): 517-520, 1988. Ref 5 Uzel, A. P., E. Seris, et al. Preclinical and clinical cases of new absorbable composite interference screws in osteoarthritic surgery. Key Engineering Materials 529-530: 325-330, 2013. Ref 6 Suchenski, M., M. B. McCarthy, et al. Material Properties and Composition of Soft-Tissue Fixation. The Journal of Arthroscopic and Related Surgery 26(6): 821-831, 2010.



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