Advanced instrumentation

Provided for accurate and reliable soft tissue tensioning and gap balancing for preservation of bone stock, stability and implant positioning for optimum function.

The approach enables maximum visibility of the joint space throughout the procedure for confirmation without excessive on-table and radiographic checks.

Ligament tensioning technique

for optimum tension in the soft tissue envelope with lowest profile construct and minimal bone resection.

Soft tissue balancing technique

for validation of component positioning, ensuring stability and maximised ROM.

Precise alignment and precise preparation instruments

for restoration of alignment, stable fixation and protection of tissues including malleoli.

Intuitive instrument layout for OR efficiency and ease of use.

Reduced learning curve

with a fully jigged procedure from start to finish and instruments that produce repeatable results.


BOX

Total Ankle Replacement

Product Brochure

Balanced Natural Movement

MatOrtho Limited | 13 Mole Business Park | Randalls Road | Leatherhead | Surrey | KT22 7BA | United Kingdom
T: +44 (0)1372 224 200 | info@MatOrtho.com | For more information visit: www.MatOrtho.com

Part No. ML-300-037 L | Issue 3
The BOX® Total Ankle Replacement stands apart from other contemporary devices. Its design is based on original research into the movement and stability of healthy ankle joints and the role of the ligaments in controlling and limiting joint movement.

**A more natural gait and function**

- **Physiological freedom of movement** for the normal and traumatised tissue envelope
- **Coupled rotations and varying inclination of the flexion axis** throughout ROM for a more natural gait and function
- **Complete stability throughout ROM** with double-convex encapsulation for the meniscal bearing, ligament tensioning technique, full conformity throughout ROM and allowance for normal inversion / eversion
- **Meniscal bearing translates AP during flexion,** remaining centred on the load-bearing vector for increased ROM

**Implant and sizing options**

- **4th generation design** with greater freedom of movement than other TAR devices
- **Designed to treat primary or post-traumatic arthritis**
- **Anatomically profiled components** based on radiographic morphology data and experience with previous prostheses
- **1mm incremental meniscal bearing inserts**

**Enables physiological AP translation of the flexion axis** compatible with the collateral ligaments for a more normal flexion

**Low-profile resurfacing design** does not require gross bone removal that could lead to weakness and entry route for wear particles

**Maximum preservation of bone stock** with ligament tensioning technique for the lowest profile construct, limiting exposure of metaphyseal cancellous bone and separating the mallock from the talar

**Confidence in results**

Patients with end-stage arthritis can now be treated with the most advanced total ankle replacement (TAR) to achieve pain relief with more normal levels of mobility, function and gait, (where alternative options fall short) as well as avoiding long-term complications associated with reduction in mobility of the tibiotalar joint.

The BOX® Total Ankle Replacement was designed specifically to allow a more natural pattern of movement in the ankle with large coupled rotations. It works without imposing a non-physiological fixed flexion axis, resulting in an excellent range of motion and better function.

**Designed for longevity**

- **Low-profile resurfacing design** with proven as-cast beaded fixation and HAP coating for long-term stability
- **Full area contact throughout ROM** for complete stability and low wear with minimal thickness bearing
- **Proven materials and articulating couples**

**Confidence in results**

Registry data reports for a cohort of 404 ankles, maximum 6 years (mean 2 years) postoperatively, that just 2.5% have required further operation, 60% of which required only a change of meniscal component. Multicentre study data reports over 97% survivorship with no failures due to aseptic loosening. Excellent mid-term results are demonstrated.

A high rate of patient satisfaction is also reported. Combining all key principles for long-term stable fixation, with full congruency throughout ROM for stability and low wear, the BOX® Ankle sets a new benchmark for the success of TAR.