

DYNA-MBS

Medical-Bone-Screw

General Information

Servo-electric testing machine for testing metallic bone screws according to ASTM F543:

- Static torsion test
- Determination of screw torque
- Pull-out test
- Determination of self-tapping properties of self-tapping medical bone screws

Technical Data

- Nominal force: 1 kN
- Displacement: 300 mm
- Max. speed: 10 mm/s
- Torque: 20 Nm
- Angle of rotation: 3.600 °
- Max. rotational speed: 30 rpm



Test Modules

- Software Module "ASTM F543: Torsional Test"
 - Torque/Angle controlled test with predefined speed
 - Adjustable fracture detection
 - Determination of yield strength, max. torque, fracture angle
 - Display and storage of the time signal
- Software Modul "ASTM F543: Driving Torque Test"
 - Angle controlled screwing in/out of bone screws with predefined speed under axial load
 - Determination of the max. driving torque
 - Display and storage of the time signal
- Software Module "ASTM F543: Pull-out Test"
 - Angle controlled screwing in in with predefined speed
 - Displacement controlled pull-out with predefined speed
 - Adjustable fracture detection
 - Display and storage of the time signal
- Software-Module "ASTM F543: Self-Tapping Bone Screws"
 - Angle controlled screwing in under increasing axial load
 - Determination of the axial force at which the self-tapping effect begins
 - Display and storage of the time signal

