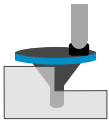


Summary of the most commonly used test methods

Total Knee Replacement

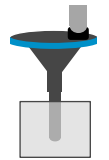
Tibial tray and bearing / insert



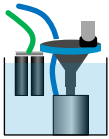
ISO 14879-1 - Implants for surgery — Total knee-joint prostheses — Part 1: Determination of endurance properties of knee tibial trays
ASTM F1800 - Standard practice for cyclic fatigue testing of metal tibial tray components of total knee joint replacements



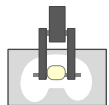
ASTM F3334 - Standard practice for finite element analysis (FEA) of metallic orthopaedic total knee tibial components



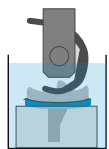
S05 - Test methods for fatigue testing of tibial component stem extensions



S15 based on ASTM F1875 - Test methods for fretting corrosion testing of tibial component stem extensions



ASTM F1814 - Standard guide for evaluating modular hip and knee joint components (disassembly tests)



ASTM F1814 - Standard guide for evaluating modular hip and knee joint components (post fatigue tests)

Femoral component

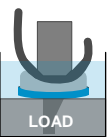


S06 based on WK51649 - Standard test method for fatigue testing of total and partial knee femoral components

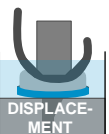


ASTM F3161 - Standard test method for finite element analysis (FEA) of metallic orthopaedic total knee femoral components under closing conditions

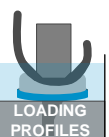
Total knee replacement



ISO 14243-1 - Implants for surgery — Wear of total knee-joint prostheses — Part 1: Loading and displacement parameters for wear-testing machines with load control and corresponding environmental conditions for test
ISO 14243-2 - Implants for surgery — Wear of total knee-joint prostheses — Part 2: Methods of measurement



ISO 14243-3 - Implants for surgery — Wear of total knee-joint prostheses — Part 3: Loading and displacement parameters for wear-testing machines with displacement control and corresponding environmental conditions for test
ISO 14243-2 - Implants for surgery — Wear of total knee-joint prostheses — Part 2: Methods of measurement



ASTM F3141 - Standard guide for total knee replacement loading profiles

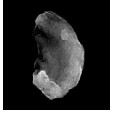
For further information please contact:

SpineServ GmbH & Co. KG, Soefflinger Strasse 100, 89077 Ulm, Germany
 Phone: +49 (0)731 175 6788
experts@spineserv.de
www.spineserv.com

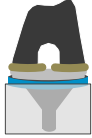
Summary of the most commonly used test methods

Total Knee Replacement

Total knee replacement



ASTM F1877 - Standard practice for characterization of particles
ISO 17853 - Wear of implant materials — Polymer and metal wear particles — Isolation and characterization



ASTM F2083 - Standard specification for knee replacement prosthesis (contact area and contact pressure)



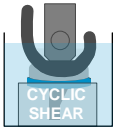
ASTM F2083 - Standard specification for knee replacement prosthesis (flexion-extension range of motion)



ASTM F1223 - Standard test method for determination of total knee replacement constraint



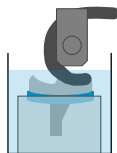
ASTM F2722 - Standard practice for evaluating mobile bearing knee tibial baseplate rotational stops



ASTM F2723 - Standard test method for evaluating mobile bearing knee tibial baseplate/bearing resistance to dynamic disassociation

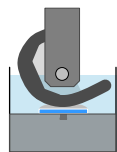


ASTM F2724 - Standard test method for evaluating mobile bearing knee dislocation



ASTM F2777 - Standard test method for evaluating knee bearing (tibial insert) endurance and deformation under high flexion

Patella implants



ISO 14243-5 - Implants for surgery — Wear of total knee prostheses — Part 5: Durability performance of the patellofemoral joint



ASTM F1672 - Standard specification for resurfacing patellar prosthesis

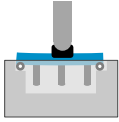
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www.spineserv.com

Summary of the most commonly used test methods

Total Knee Replacement

Unicondylar knee prostheses

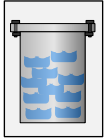


ASTM F3140 - Standard test method for cyclic fatigue testing of metal tibial tray components of unicondylar knee joint replacements



S06 based on WK51649 - Standard test method for fatigue testing of total and partial knee femoral components

Aging

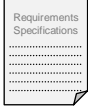


ASTM F2003 - Standard practice for accelerated aging of ultra-high molecular weight polyethylene after gamma irradiation in air

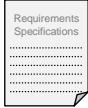
Specifications and requirements



ASTM F2083 - Standard specification for knee replacement prosthesis



ASTM F1672 - Standard specification for resurfacing patellar prosthesis



ISO 21536 - Non-active surgical implants — Joint replacement implants — Specific requirements for knee-joint replacement implants

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