mediCAD Knee® 3D

*New powerful tool for hip surgeries of the future*

With the new 3D hip module, you can create more efficient plans, shorten operating times and reduce complications with the three-dimensional representations of your plans. Below is a list of options included in this module:

- Anatomical 3D and 2D views
- Segmentation of the 3D object
- Simple analysis of the current pathological situation
- Transparent view for better detection of positioning
- Precise, simple and automatic measurement process
- Simple correction of the planned position
- Range of motion (ROM)
- Increased accuracy of when selecting the implant
- Distance and bone contact visualization
- Torsion calculations
- CT image stitching for low radiation exposure
- Individual preferences, with individual positioning and detection of special anatomical conditions
- Retention of the femoral head
- Digital documentation
- Data report for 3D printing
- The screws' material

mediCAD Shoulder® 3D

*Ensure security and confidence in shoulder surgery planning*

mediCAD Shoulder® 3D is an easy-to-use software solution that allows the surgeon to easily create a plan for any situation. The software gives you the option to carry out various measurements, select the appropriate implants and automatically place them in the proper position. The following features are available:

- Anatomical 3D and 2D viewing
- Simple analysis of the current pathological situation
- Segmentation of the shoulder joint
- Exact assessment of the glenoid type per Walch
- Determination of the size of the glenoid
- Determination of the inclination angle
- Rotational alignment
- Lateral/humerus offset
- Coraco-cubital and anterior-posterior centering
- Simple selection and exact positioning of implants
- Transparent view for better detection of the planned position
- Increased accuracy when selecting the implant
- Distance and bone contact visualization
- Individual preferences
- Digital documentation
- Data report for 3D printing of body areas
- The screws' material

mediCAD Spine® 3D

*Increase planning security in spinal column surgery*

mediCAD Spine® 3D, in collaboration with neuro and orthopedic surgeons, offers many new functions and extensions from its most recent version. The following improvements have been added to simplify your planning process:

- Sagittal balance with automatic correction
- Automatic screw placement (transoral and multiaxial)
- Automatic cage placement (intervertebral discs and vertebral replacements)
- Multiple osteotomies (e.g. for spinal procedures)
- Automatic insertion of rods and auto-tail alignment
- Surgical planning, outcome CT and Tiffany images
- Automatic segmentation of CT images
- Automatic measurements (vertebral body diameter, lordosis, etc.)
- Visualization of soft tissues and organs
- Navigation interface
- XR viewer
- Automatic planning report with all measurements and implants used

mediCAD Knee® 3D

*Completely new options in preoperative planning for knee surgeries*

 completamente new options in preoperative planning for knee surgeries.

- Anatomical 3D and 2D viewing
- Segmentation of the 3D object and automatic determination of various landmarks
- Simple analysis of the current pathological situation
- Precise, simple and automatic measurement process
- Simple correction of the planned position
- Range of motion (ROM)
- Increased accuracy of when selecting the implant
- Distance and bone contact visualization
- Torsion calculations
- CT image stitching for low radiation exposure
- Individual preferences, with individual positioning and detection of special anatomical conditions
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- Automatic planning report with all measurements and implants used
HERE’S WHAT’S EVEN BETTER:

- Further development of the hip module (Femoral Acetabular Impingement)
- Compliance with AGA criteria/AWMF guidelines
- Osteotomies can be changed after completion
- Leg length comparison
- With additional user information
- With optimized display
- Summary of leg length comparison and difference
- AP/ML planning combined in the hip and shoulder modules
- Independent adjustment of femoral and tibial resection angle
- Permanent display of the scaling magnification factor
- Bundled arrangement of labels
- Femoral shaft axis detection and EndoDok® interface in the intertrochanteric osteotomy and triple pelvic osteotomy modules
- Selective window leveling
- Adjustment of image contrasts and brightness in multiple areas of the DICOM image

Based on an SQL database, the mediCAD® QueryClient allows group/user-based administration and complete client separation. It is also possible to use the active directory to log on. This means users only have to remember one password!

CHECK OUT WHAT'S NEW:

Hip
- Automatic measuring of femoral or acetabular offset
- Automated femoral offset through automatic contour detection of the femur
- Manual planning of the workflow
- Automatic updating of measurement results
- Femoral offset, acetabular offset or leg length differences are automatically updated after changes
- Automatic detection of the ischial tangent
- Triple pelvis osteotomy (PFO) with interface to EndoDok®

Knee
- Unicompartment knee planning (adapted nomogram): the healthy part stays in the image
- Lateral dimensioning per Sirois

Full leg
- Determination of femur and tibia tension per Waidelich (using CT scans)
- EndoDok® interface

Foot
- Automatic measuring of the per cavius and flat foot (AP and ML imaging)
- Determination of talus/valgus and varus through intermetatarsal angles IV and V
- Addition of the DMSA angle
- Osteotomy planning including multiple osteotomies
- Automatic updating of measurement results
- EndoDok® interface

Covers all modules
- Exportable dimension list: including PDF export
- mediMark® scaling method: exact calculation of the magnification factor
- mediCAD® QueryClient 2.5 PACS interface
- Upgrade to mediCAD® 5.0 at no charge for customers with purchased versions mediCAD® 4.0/4.5 and valid maintenance contract.

PLEASE NOTE:

- As of December 31, 2017, the software version mediCAD® 3.5 and all their previous versions will no longer be supported by mediCAD Hectec GmbH. Working with mediCAD® 3.5 and lower is specifically not supported by the manufacturer referring to FDA and MPR and all other international regulations.
- Upgrade to mediCAD® 5.0 at no charge for customers with purchased versions mediCAD® 4.0/4.5 and valid maintenance contract.