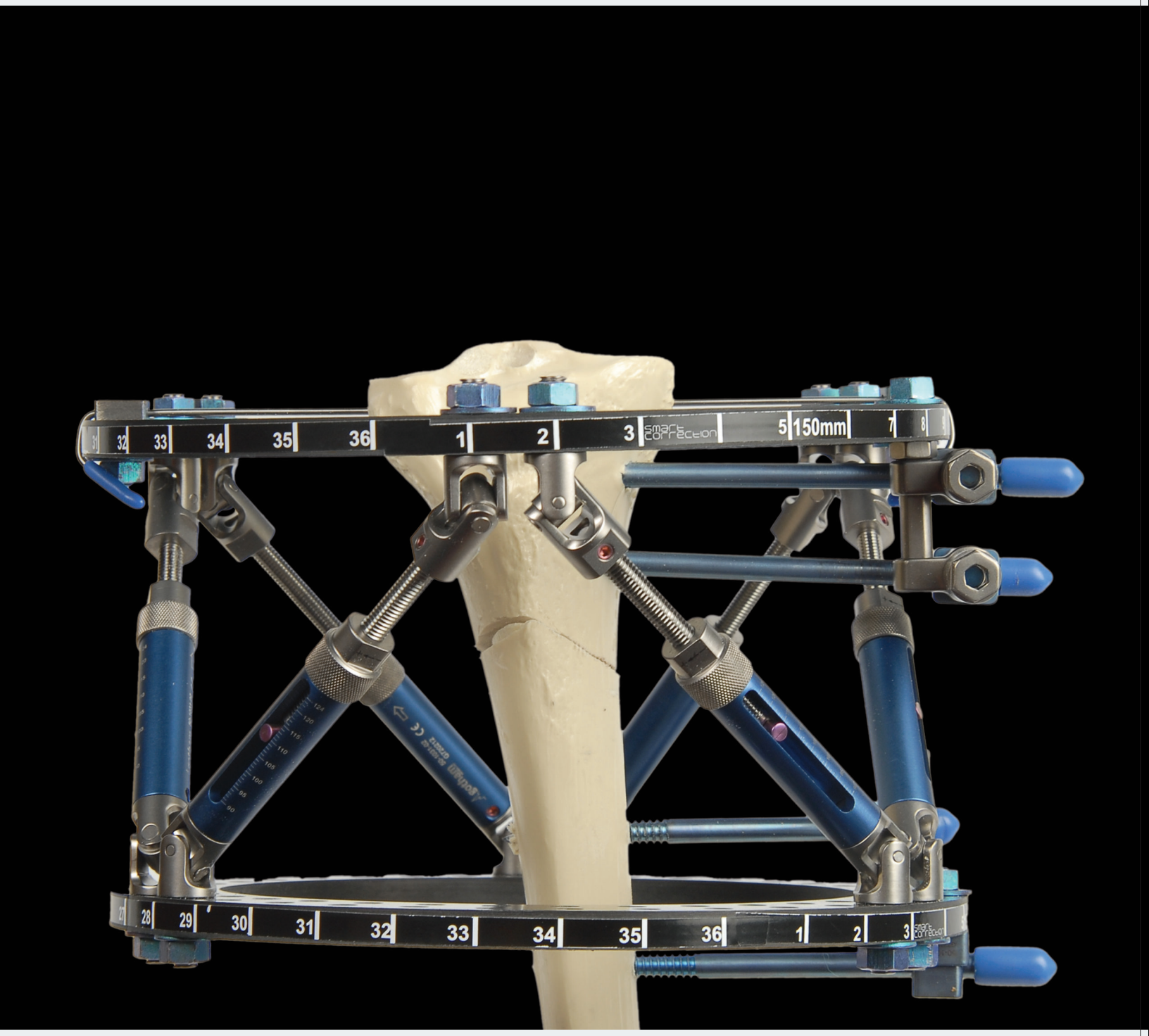
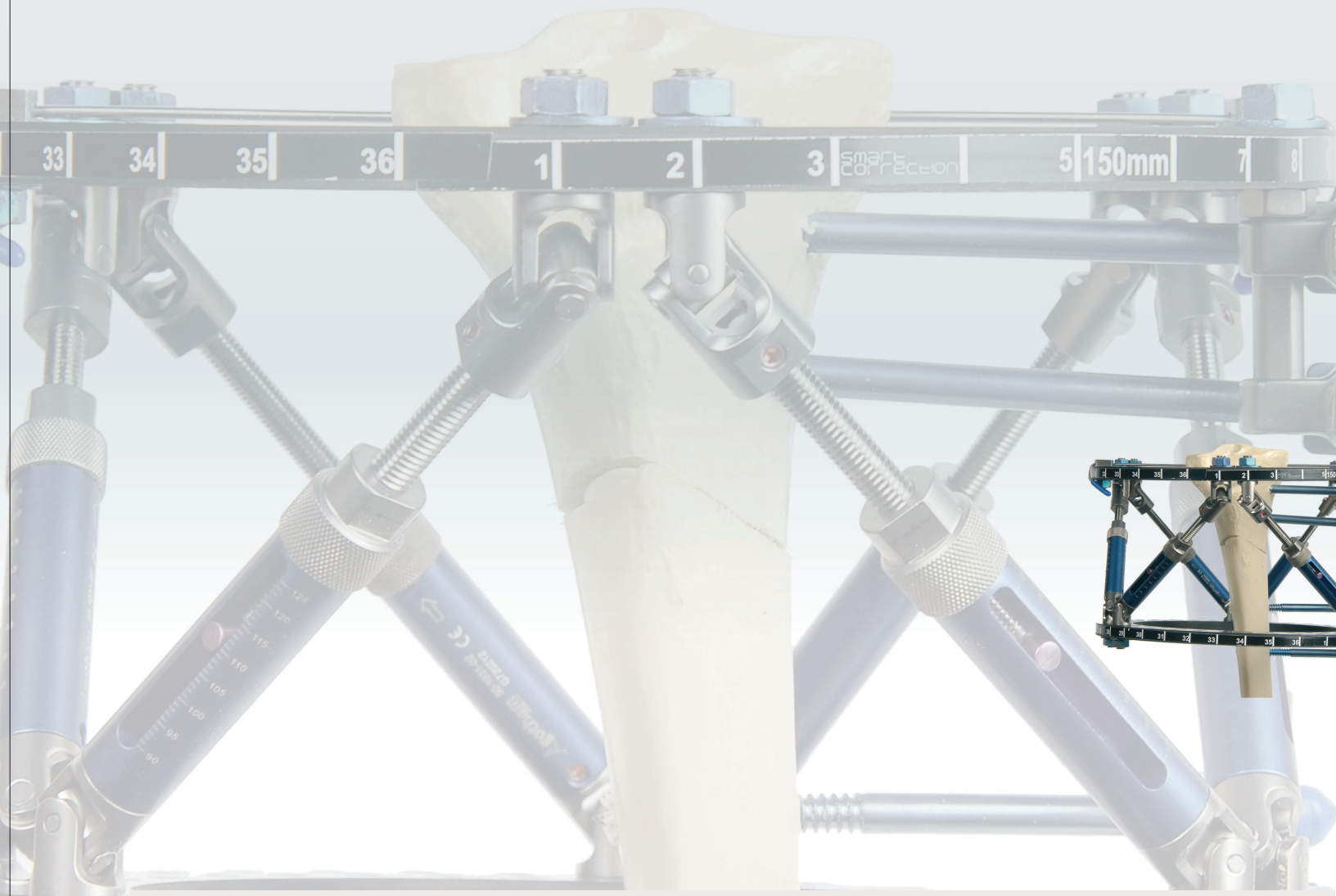
Smart Correction®

Computer Assisted
Hexapod Ring
External Fixator System



smart correction®

Computer-Assisted Hexapod Ring External Fixator System


33
34
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smart correction
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150mm
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smart correction®

Computer-Assisted Hexapod Ring External Fixator System

The Smart Correction® Computer-Assisted Circular External Fixator System is a copyrighted software based, deformity correction tool. This hexapod and ring external fixator, provides easy application, high mechanical stability and precise deformity correction via weblinked software.

Unique software facilitates deformity correction in all geometric planes (axial, frontal, coronal, translational) combined with compression and lengthening.

The advanced material technology employed in the manufacture of the Smart Correction® components make the system strong, but lightweight, enhancing patient comfort.

The composite rings, titanium wires, pins and screws improve clarity of X-ray and Magnetic Resonance Imaging.

smart correction®

Computer-Assisted Circular External Fixator System

Advanced Wire and Screw Clamps

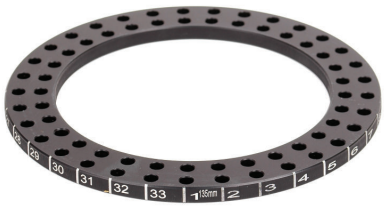
Provide desired screw and wire position on the rings, through fully adjustable wire and screw height angles.

Incremental Telescopic Struts

Manufactured from Titanium and Aluminium offering lightweight frame composition.

Dual Hole Rings

Provide double parallel sets of holes offering optimal positioning of wire and pin clamps in a lightweight ring. 2/3 and foot rings are also available. Dual Hole Rings are available in aluminium and carbon fiber.



Conical Self Drilling Bone Screws

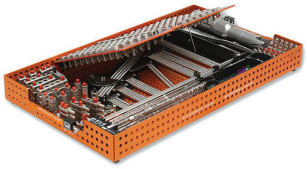
Manufactured in both Titanium and Stainless Steel, conical screw design provides optimal bone purchase.

Bolts, Nuts and Washers

Titanium bolts, nuts and washers provide lightweight frame and improve MRI compatibility.

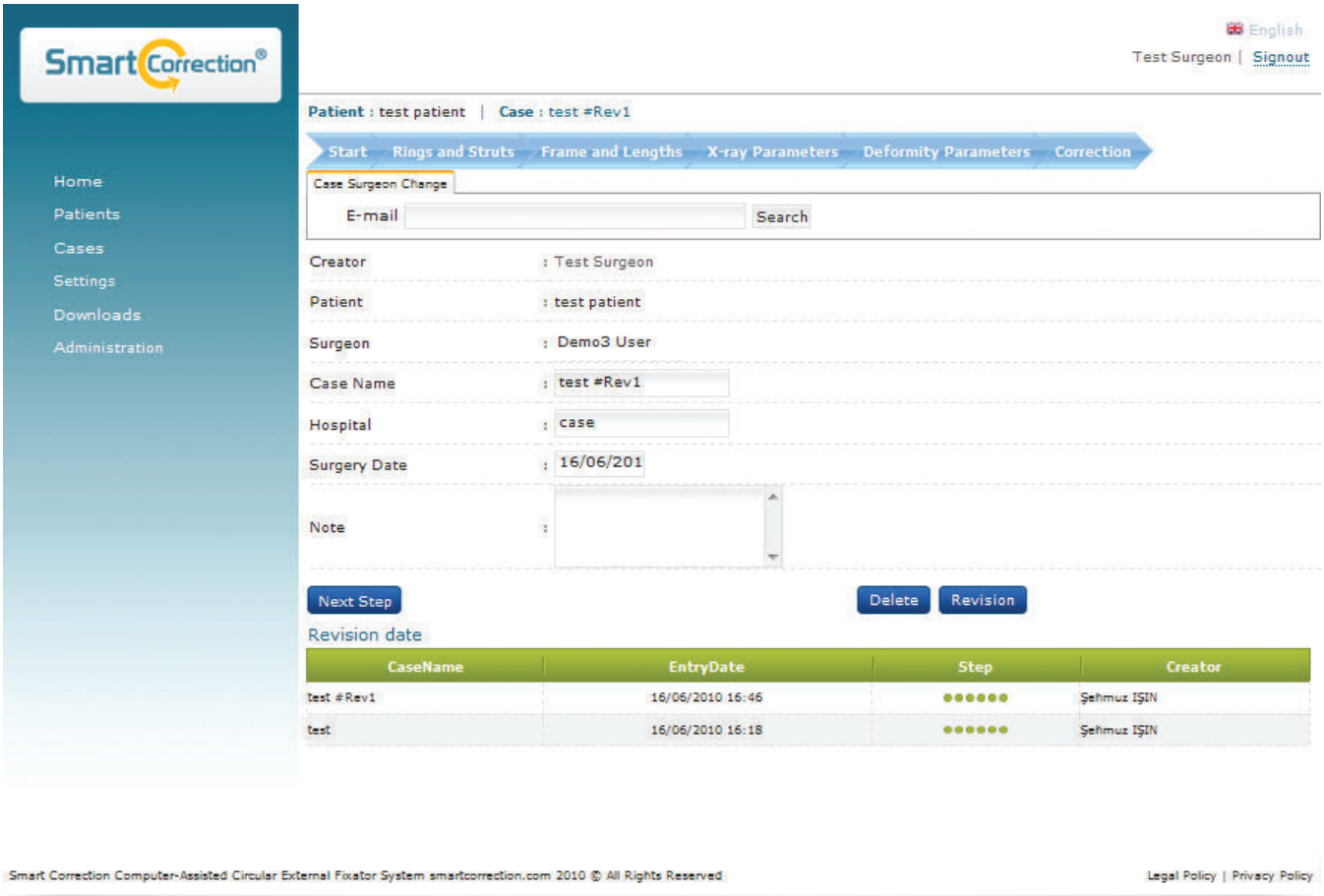
Lightweight Sterilisation Trays

Provide optimal cleaning and drying of the separate instruments and components.

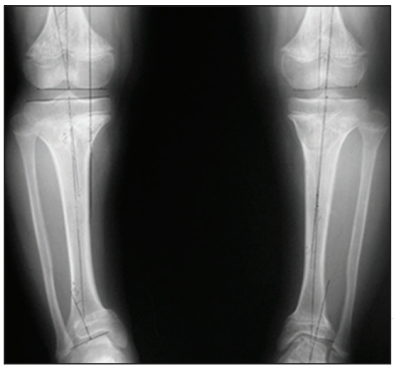
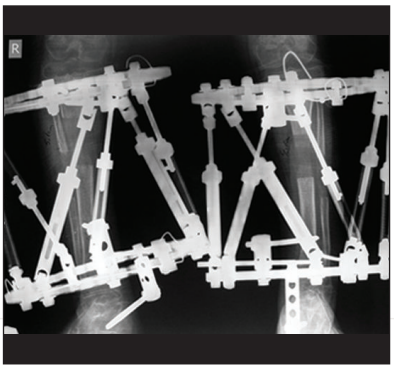
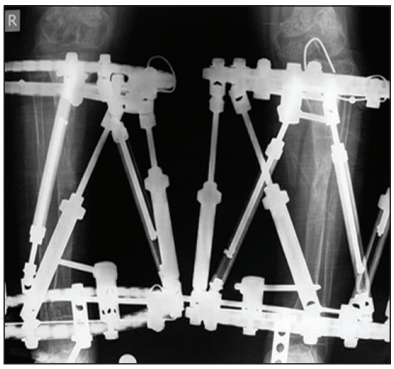


Accurate User Friendly Software

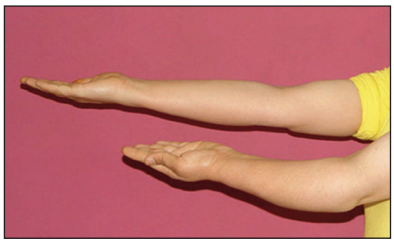
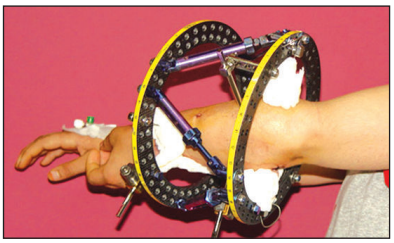
Provides an accurate Deformity Correction Schedule for the patient and surgeon, which is kept on file and can be reviewed and modified at any point in the correction procedure.



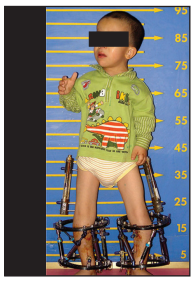
Case Examples

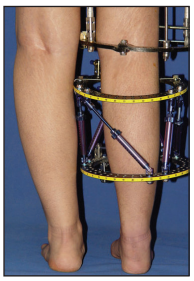
Ricketts sequelae, bilateral severe femoral and tibial varus.


F25; Left ulna hemimelia and forearm varus deformity; radial lengthening and deformity correction.

M5; Achondroplasia, short stature, bilateral lengthening and correction, 15cm lengthening observed.

F26; Unilateral tibial deformity correction of external rotation.

Introduction

The Smart Correction® Computer-Assisted Circular External Fixator System offers the orthopaedic surgeon computer aided deformity correction in all six planes of movement, coupled with easy application and high mechanical stability.

The basic system is comprised of two carbon fibre rings, combined with six “click rachet” struts. The system is augmented by web-based software which provides a schedule detailing the necessary strut adjustments needed to achieve the chosen deformity correction.

Positioning of the First (Proximal) Ring

The appropriate sized ring should be chosen to avoid ring contact with the skin both initially and during the correctional procedure. There are seven ring diameters available (120 mm, 135mm, 150mm, 165mm, 180mm, 195mm, 210mm). The rings have two concentric hole series. When constructing the fixator the outer holes must be used for the strut connections.

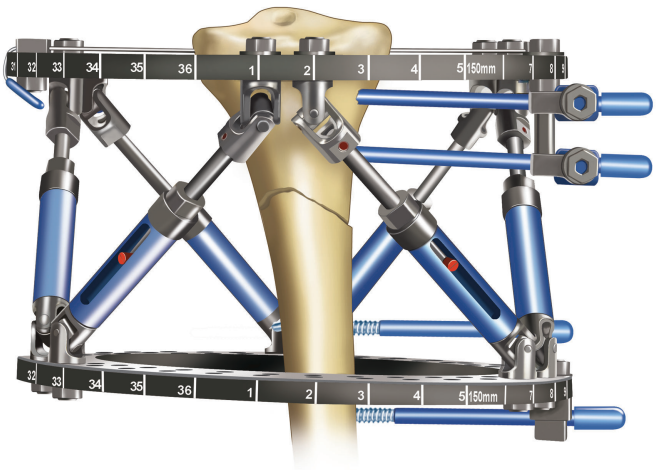
Position the first ring, such that the fixation hole marked with no. 1 is placed as approximately Anterior to the bone as possible in the Sagittal plane. In general the ring is placed perpendicular (at 90 degrees) to the long axis of the bone (in this example the proximal tibia), although this is not an absolute requirement. Following local clinical protocol attach the ring to the Proximal bone fragment using suitable Smart Correction® external fixation wires and half pins.

Patient Position

Surgeon should follow normal practice for patient position, draping and procedure.

First Strut Position

Introduce the first strut (Strut 1) into the hole marked with the no. 1 and lock it into place using the locking nut provided.



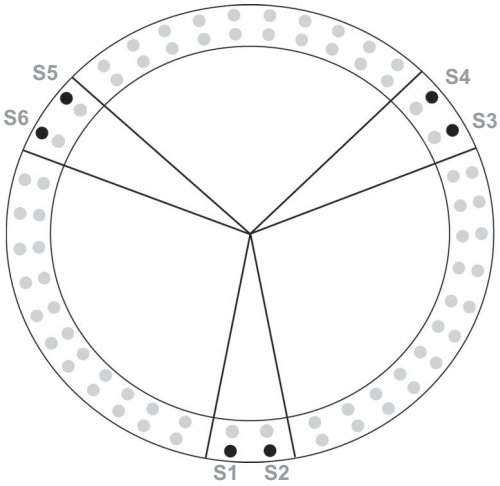
Strut 2

The next strut (Strut 2) should be placed in hole No. 2 in the Proximal ring. This is the ideal position, although if necessary the strut can be placed up to two holes away. The system has the capability to cope with minor variations.

Strut 3-4 and Strut 5-6

The remaining struts are placed in pairs approximately equidistant around the circumference of the ring. In the 39 hole ring (165mm) example below strut 3 and 4 are fitted to holes 14 and 15, while struts 5 and 6 are attached at holes 27 and 28. However, due to the advanced nature of the system this position is not an absolute requirement. The Smart Correction® offers the surgeon the flexibility to place the struts anywhere within a range of holes. The diagram and table illustrate the acceptable range of holes for each ring size.

Ring 1 Size	Ideal Position Strut 3&4	Ideal position Strut 5&6	Acceptable Tolerance
120 mm	11&12	21&22	±2 holes
135mm	12&13	23&24	±2 holes
150mm	13&14	25&26	±2 holes
165mm	14&15	27&28	±3 holes
180mm	15&16	29&30	±3 holes
195mm	16&17	31&32	±4 holes
210mm	17&18	33&34	±4 holes



Upper (Proximal) Ring

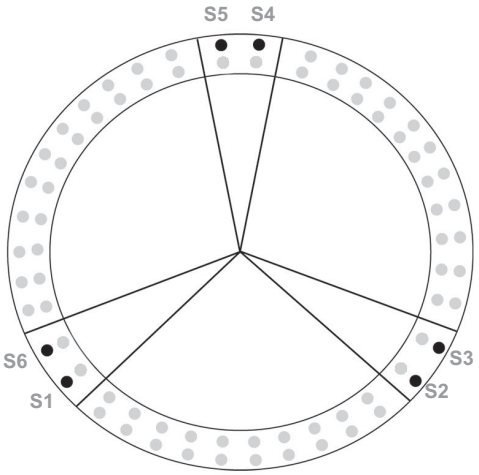
Positioning of the Second (Distal) Ring

Although the numbered position of the second ring is not critical it is suggested for simplicity that hole No. 1 is also placed in alignment Anterior to the bone in the Sagittal plane. The second ring is attached to the Distal bone fragment following local clinical protocol using suitable Smart Correction® external fixation wires and half pins.

Second (Distal) Ring Strut Attachment

The struts are now attached to the second ring in pairs, in this case struts 2 & 3, struts 4 & 5 and struts 6 & 1. Ideally the pairs of struts should be attached at adjacent holes, however due to the advanced design of the Smart Correction® System the strut pairs can be separated by up to two or three ring holes. Similarly, the ideal position of the strut pairs is equidistant around the second ring also. On a standard 39 hole example ring (165mm) this would be position 7 & 8 for strut 2 & 3, position 20 & 21 with struts 4 & 5 and finally position 32 & 33 with strut 6 & 1. The table below shows the acceptable range of holes on the second ring for each ring size.

Ring 1 Size	Ideal Position Strut 2&3	Ideal Position Strut 4&5	Ideal Position Strut 6&1	Acceptable Tolerance
120mm	6&7	16&17	26&27	±2 holes
135mm	6&7	17&18	28&29	±2 holes
150mm	7&8	19&20	31&32	±2 holes
165mm	7&8	20&21	32&33	±3 holes
180mm	8&9	22&23	36&37	±3 holes
195mm	9&10	24&25	39&40	±4 holes
210mm	9&10	25&26	41&42	±4 holes



Lower (Distal) Ring

Advanced Capabilities

In addition to lightweight carbon fibre ring construction, the Smart Correction® System allows 2/3rd rings and foot rings to be used, enhancing patient comfort and easing X-Ray and Magnetic Resonance Imaging (MRI).

Recording Frame to Patient Orientation

Post-operatively the orientation of the frame, the position of the struts and the ring sizes need to be recorded on the Patient Data Form (see below).

SmartCorrection
Computer Assisted Circular External Fixator System

Patient Data Form

Patient Name: _____ **Hospital:** _____
Case Name: _____ **Surgery Date:** _____

Rings:

	Upper	Lower	
50-1012-13			Dual Hole Full Ring, 135mm inner diameter
50-1012-15			Dual Hole Full Ring, 150mm inner diameter
50-1012-16			Dual Hole Full Ring, 165mm inner diameter
50-1012-18	x	x	Dual Hole Full Ring, 180mm inner diameter
50-1012-19			Dual Hole Full Ring, 195mm inner diameter
50-1012-21			Dual Hole Full Ring, 210mm inner diameter
50-1012-22			Dual Hole Full Ring, 225mm inner diameter

Struts:

	1st	2nd	3rd	4th	5th	6th	
50-1031-01							Dual Joint Strut, Extra Short (XS)
50-1031-02							Dual Joint Strut, Short (S)
50-1031-03	x	x	x	x	x	x	Dual Joint Strut, Medium (M)
50-1031-04							Dual Joint Strut, Long (L)
50-1031-05							Dual Joint Strut, Extra Long (XL)

	Upper Ring Hole Identifiers	Lower Ring Hole Identifiers	Strut Length (mm)
Strut 1	1	31	125
Strut 2	2	6	145
Strut 3	13	7	145
Strut 4	14	18	145
Strut 5	25	19	125
Strut 6	26	30	125

Approximate Ring center-to-center Spacing 130 mm

Frontal

Distance from x-ray source to film cartridge (a)	1065 mm
Nearest point to x-ray source on upper ring (b)	1 mm
Nearest point to x-ray source on lower ring (c)	0 mm

Lateral

Distance from x-ray source to film cartridge (a)	1065 mm
Nearest point to x-ray source on upper ring (b)	9 mm
Nearest point to x-ray source on lower ring (c)	8 mm

Deformity Parameters

Frontal	**X1**	**Y1**	**X2**	**Y2**
Upper (Proximal) Segment	-21	126	16	20
Lower (Distal) Segment	16	15	14	-125

Lateral	**X1**	**Y1**	**X2**	**Y2**
Upper (Proximal) Segment	-16	81	-21	21
Lower (Distal) Segment	-27	16	-33	-55

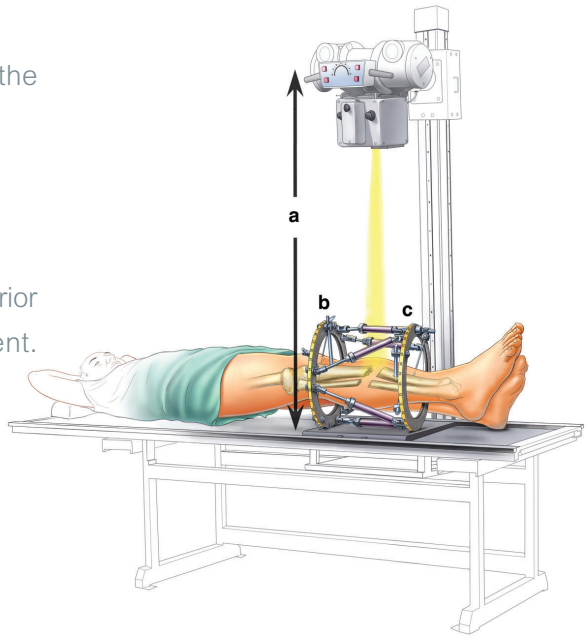
Distraction 0mm Rotation 0°
First correction date _____ **Correction Step** _____ **days**
Surgeon _____

X-Ray Measurement

The surgeon is required to obtain a post-operative x-ray of the treated limb, and record the following parameters in both the Frontal and Lateral Plane. The Radiant Point for the X-ray machine should be centralised over the mid-point of the frame.

(a) Distance from the X-Ray Machine's Radiant Point to the X-ray cartridge.
(b) Nearest point to the X-ray source on the Upper ring.
(c) Nearest point to the X-ray source on the Lower ring.

Note – The X-rays do not need to be taken from absolute Anterior and Lateral views. A close approximation will be sufficient.



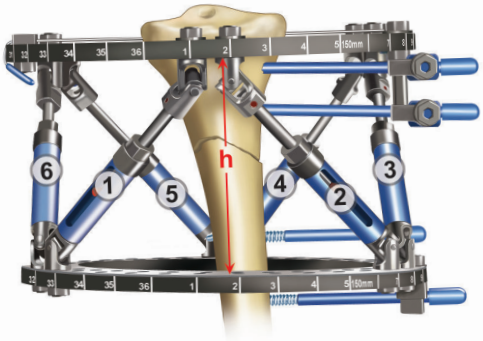
Recording Ring and Strut Size

There are eight ring diameters available ranging from 120mm to 225mm, and six strut lengths (XXShort, XShort, Short, Medium, Long and Extra Long). Each pair of holes in the ring is numbered, in order for the system to be able to provide a precise deformity correction protocol. The position and size of each strut and the size of the rings needs to be recorded. Any combination of ring and strut size may be used relevant to the deformity and patient requirements. Only Smart Correction® components are suitable for use with the software.

The sizes and position of the rings and struts used are recorded on the Smart Correction® Patient Data Form either during the procedure or postoperatively.

Frame Height

Measure and record the estimated total height of the frame; this is the distance between the upper and lower ring centres.



Web-Based Deformity Correction Software

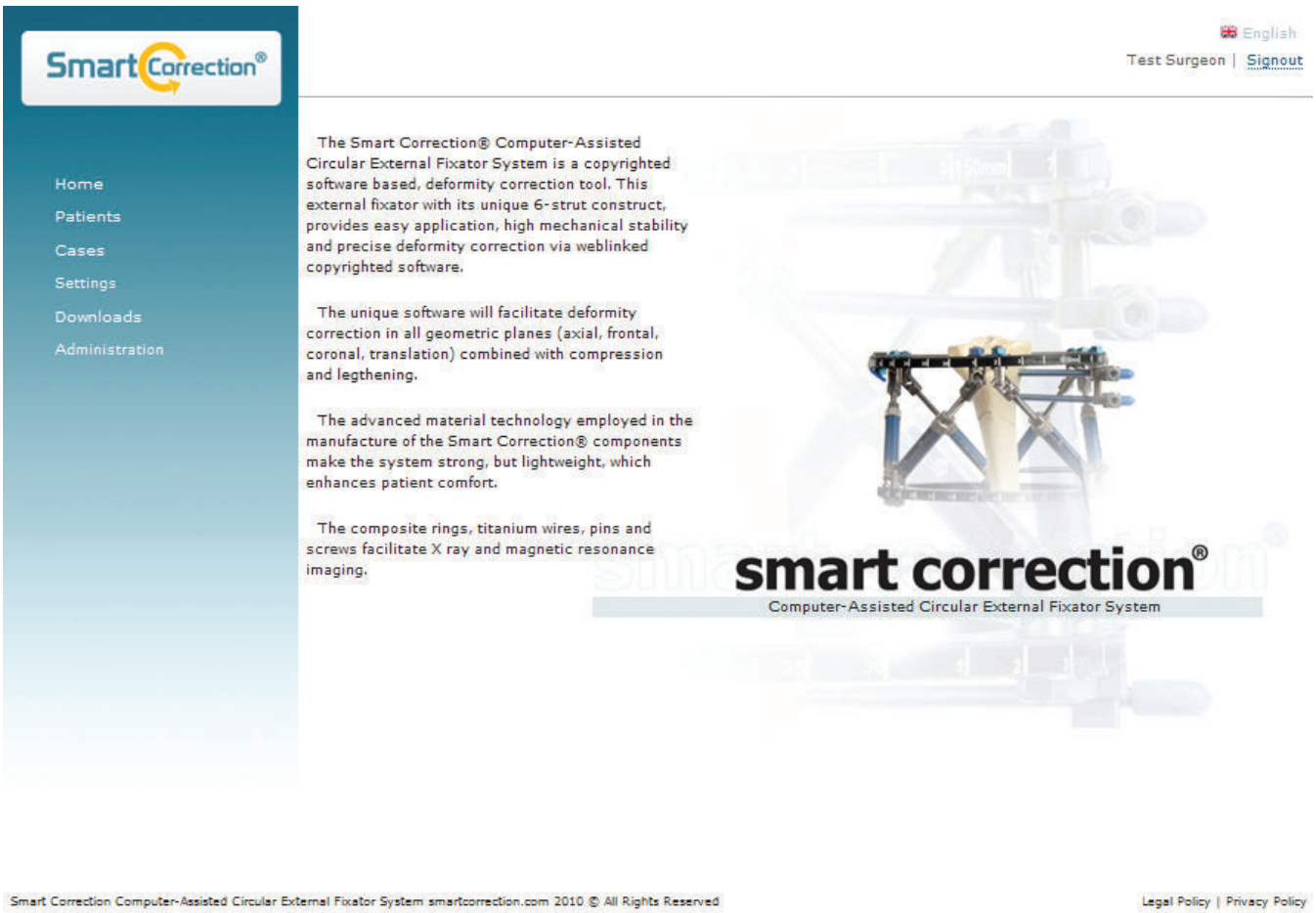
The external physical Smart Correction® components only form one half of the system. The second part of the system consists of copyrighted web-based software, which calculates the schedule of frame adjustments to be carried out during the post-operative treatment needed to achieve the specific deformity correction.

Software Access

In order to access the site, all users need to complete a registration process prior to use. Please go to www.smartcorrection.com. Select “Sign up for Smart Correction” to register. The user will be assigned a Password and Username, which will be confirmed, via e-mail.

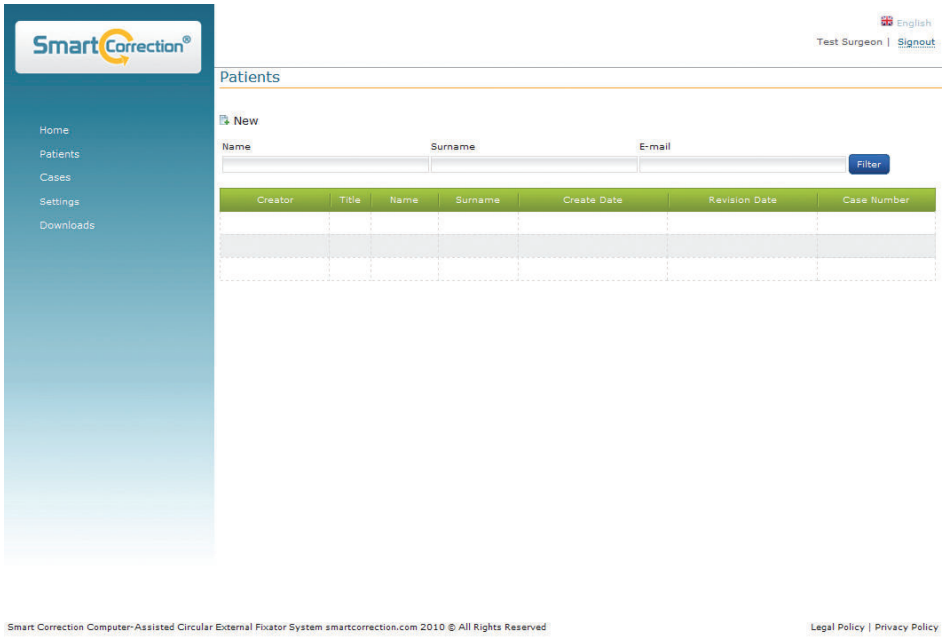
Software Instructions – Log-In and Welcome Page

Following entry of your Username and Password, the Welcome Screen appears. Select the “Patient” Tab on the left. This allows the clinician to review the records and cases for each patient, track correction, and undertake on-screen searches, facilitating easier clinical follow-up. The clinician also has access to review, amend, revise or create new Patient Records.

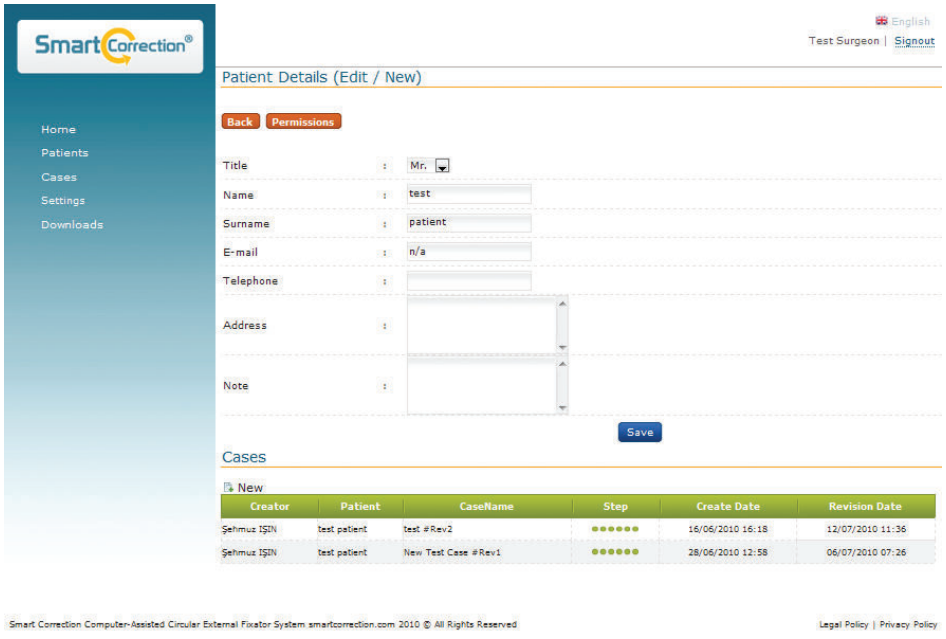


Software Instructions – New Patient Record

To create a new Patient Record the user simply clicks on the “New” button.

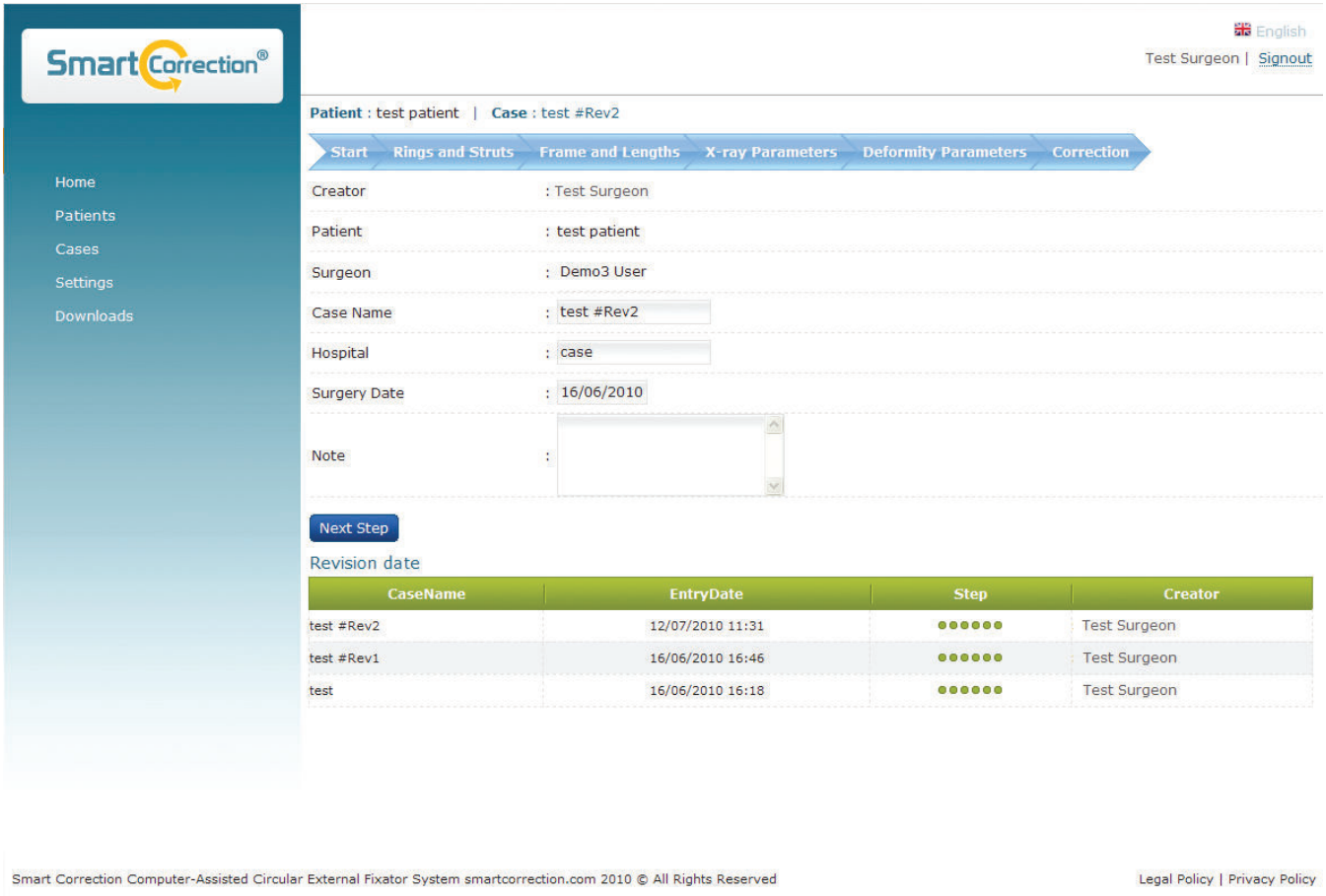


The clinician is free to add as much or as little information as necessary, however, the system will require the name, surname and date of birth. After creating the initial Patient Record, the system will direct the user to create a new case record.



Software Instructions – Patient Records

Each patient can have several different cases held under their Patient Record, including revisions.

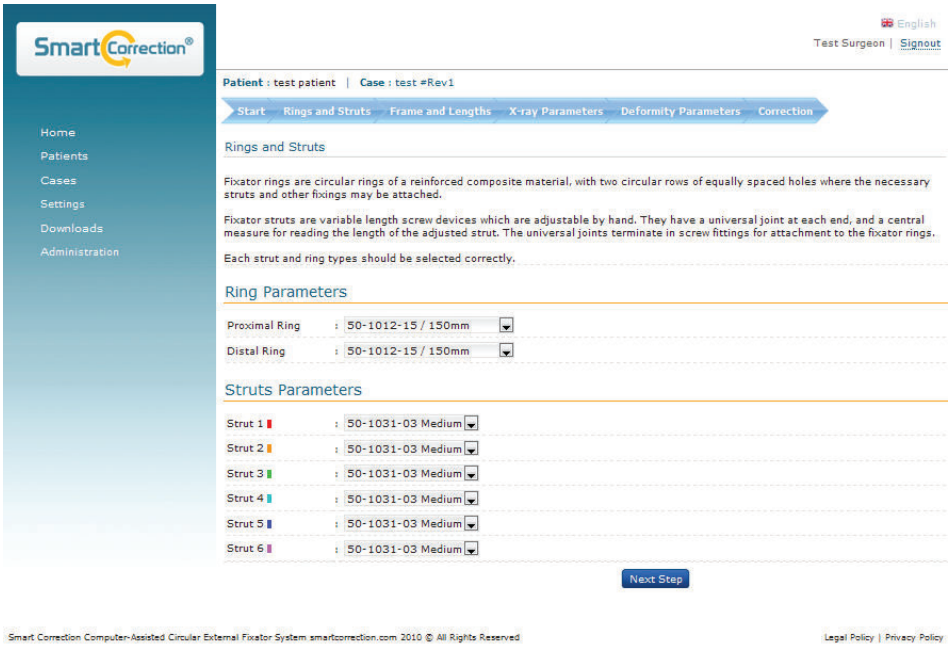


Data Entry – Enter Ring Size, Strut Size and Position

The information recorded on the Patient Data Form needs to be entered into the software in order for the software to create the patient treatment protocol.

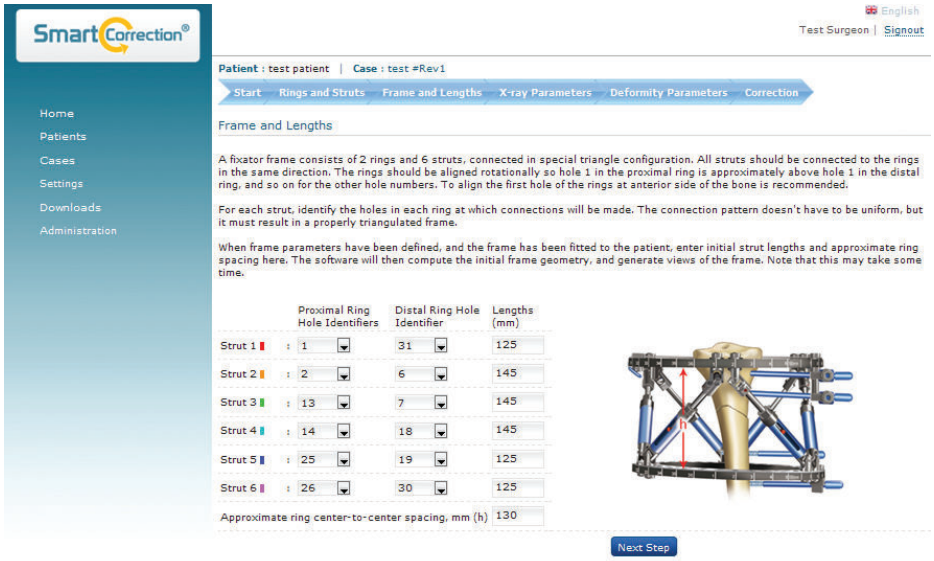
Ring and Strut Data Entry

Select the Ring and Strut tab, and select appropriate ring and strut sizes from each drop-down menu as recorded in the Patient Data Form.



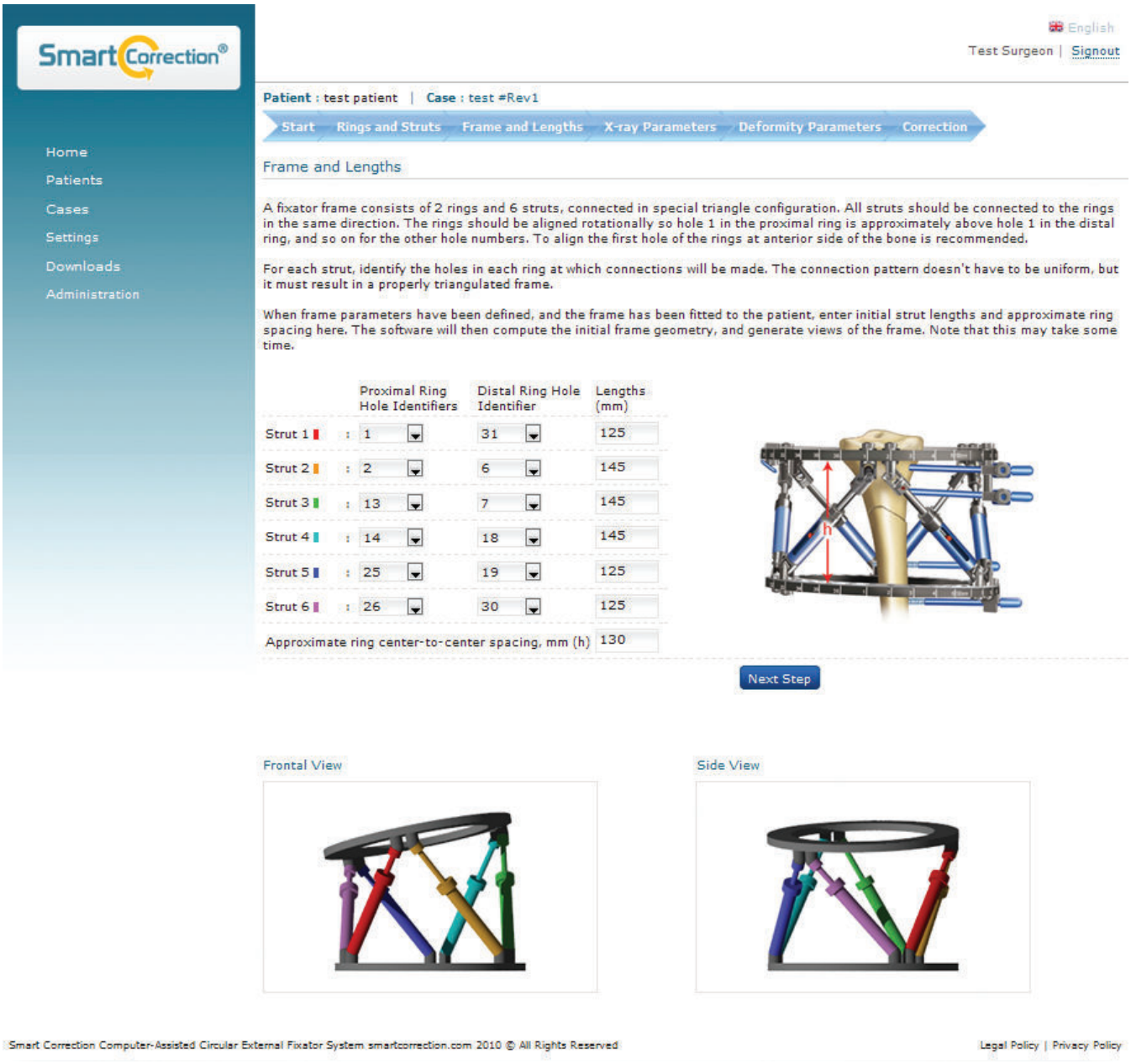
Strut Length, Position and Frame Height Data Entry

Select the Frame and Length tab. Enter each strut length and the estimated total height of the frame as recorded on the Patient Data Form.



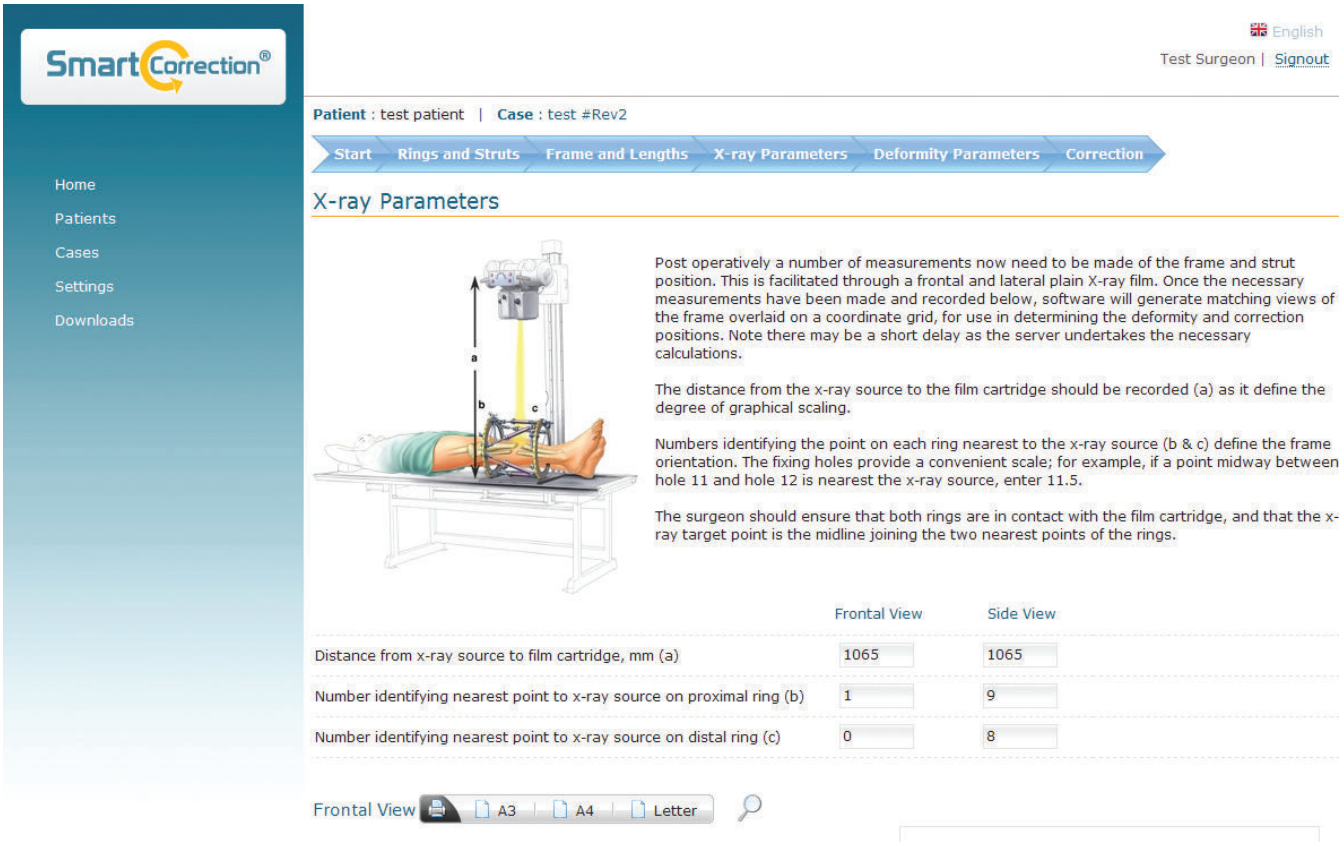
Model Creation

After strut lengths and the frame height parameter have been entered the software creates a frame model and shows both a Frontal/Anterior and Lateral/Medial view.



Data Entry - X-ray parameters

Select the X-ray parameters tab. Enter the data from Patient Data Form for parameter a, b and c, for the Frontal and Lateral X-rays.



Once the x-ray imaging parameters have been entered the software creates two gridline diagrammes, one for the Frontal (Anterior) and the second for the Side (Lateral) X-ray images. Ensure that both of the gridline views match with the views on the x-ray images. If they don't, please confirm the data entered on the Ring and Strut, Frame and Lengths, and X-Ray Tabs.

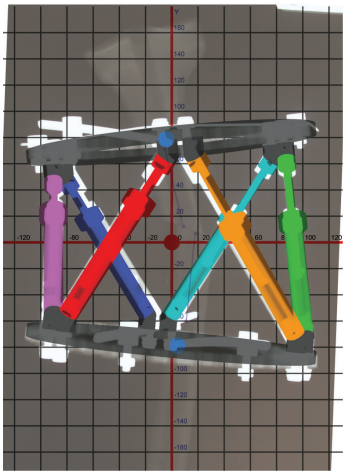
Bone Segment Mapping

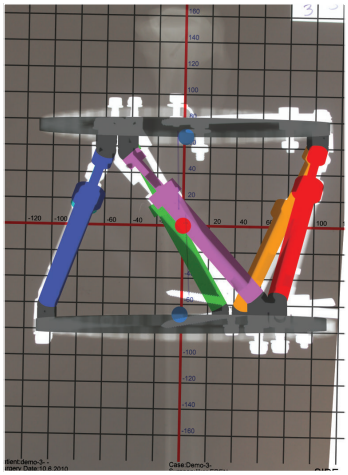
It is important to establish the position of the bone fragment relative to the frame. This is achieved either manually by overlaying the grid maps generated by the software on the patient's X-ray, or by importing the x-ray images in jpeg format into the software.

Manual Mapping

The software can create two sizes of printout (A3 and A4) "at the X-Ray Parameters stage". If the operator has an A3 size printer, it is generally easy to overlay the parameters on the X-ray film, otherwise A4 size print outs can be used. In all cases, the surgeon should be mindful of any scaling issues.

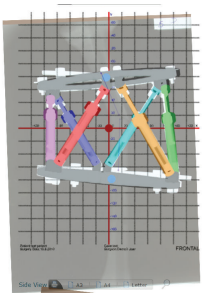
The position of the distal and proximal ends of the bone segments in both the frontal and lateral views need to be marked on the gridline diagrammes. The position of these points can then be read as X and Y co-ordinates and recorded on the Patient Data Form and entered under "Deformity Parameters", including the anticipated level of distraction/compression and rotation required.

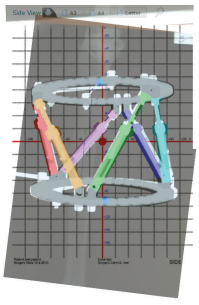




Software Mapping

Following generation of the two gridline diagrammes the patient x-rays will need to be uploaded to the software. Select the file by clicking on "Browse", choose the file corresponding to the A/P view. Once the file has been selected it needs to be uploaded to the smart correction website, this is achieved by clicking the "Upload" button. Note: the screen may darken slighly as the data is transmitted.

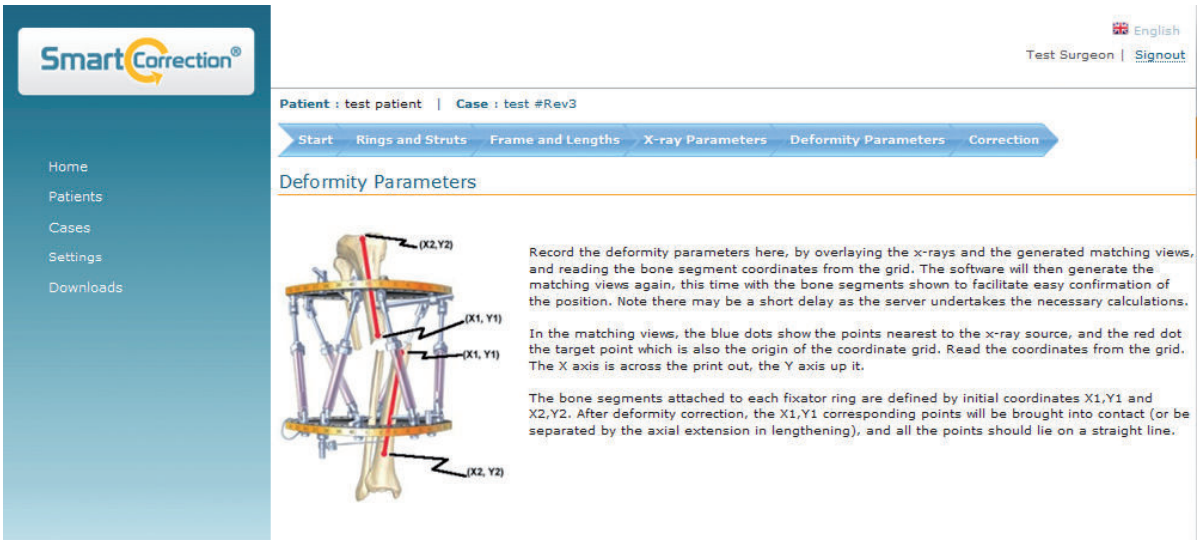




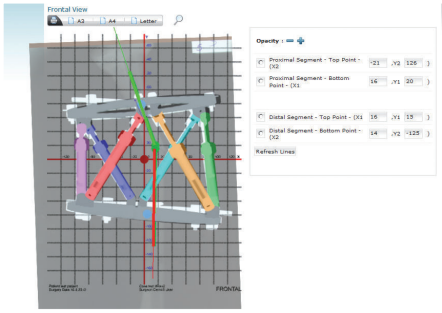
Once the screen brightens again the orientation of the x-ray image can be adjusted to match the gridline image. This is achieved by adjusting a combination of the images Rotation, Position, Size and Opacity. Once the x-ray image of the frame has been aligned to the virtual frame on the gridmap image the user should click on the “Save Coordinate” button. This locks the image in position.
The same steps are repeated for the Lateral image. Then select “Next Step” to proceed to the Deformity Parameters page.

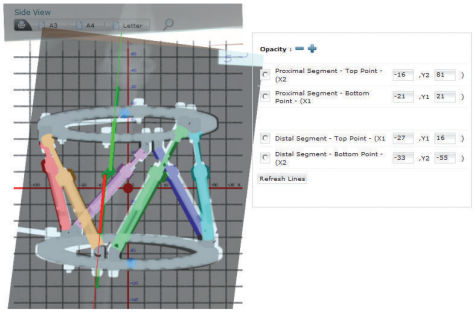
Deformity Parameters

The surgeon is now required to locate the upper and lower margins of each bone segment on both the Frontal and Lateral Views.

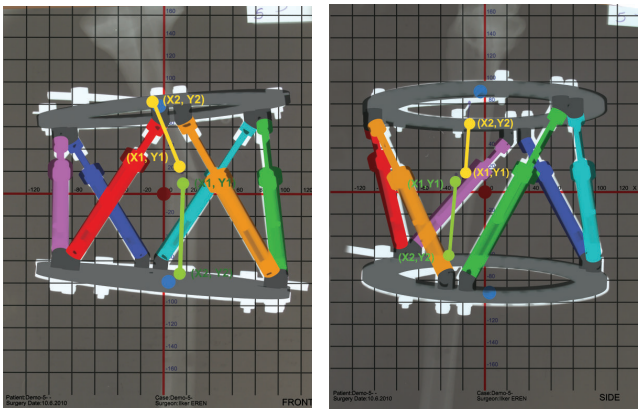


This is best achieved by using the software to first increase the level of Opacity to the point where only the x-ray image is visible. Select the “Upper (Proximal) Segment - Upper Point” from the list, using the pointer, click on the point on the image corresponding to this description. Repeat this step for the remaining three segment points for the Frontal view. Note: X and Y parameters may also be entered manually as numerical figures. This process is then repeated for the Lateral view.



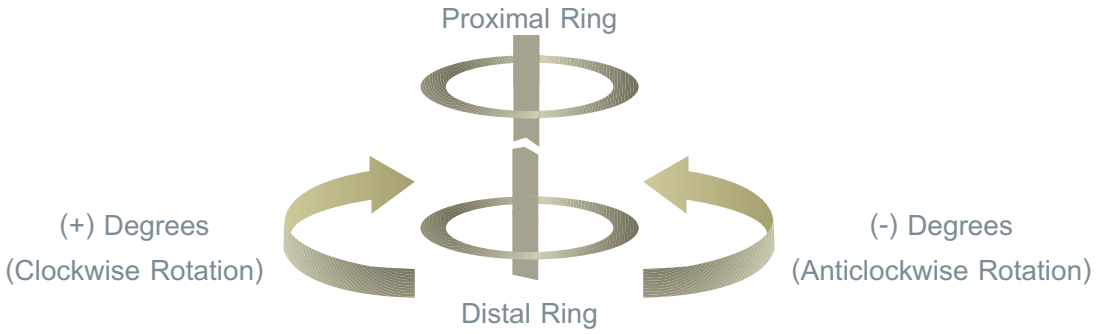


If the surgeon is not satisfied with the positioning of the segment markers, it can be changed at this point, before moving to the next step.



Distraction and Rotation

The surgeon may now select the amount of lengthening (mm) and rotation (degrees) to be achieved. Rotation of the frame takes place in the lower ring and is relative to the position of the upper ring. Rotation of the lower ring clockwise (as viewed from above) is entered as positive (+) degrees and rotation anticlockwise is entered as a negative (-) number.



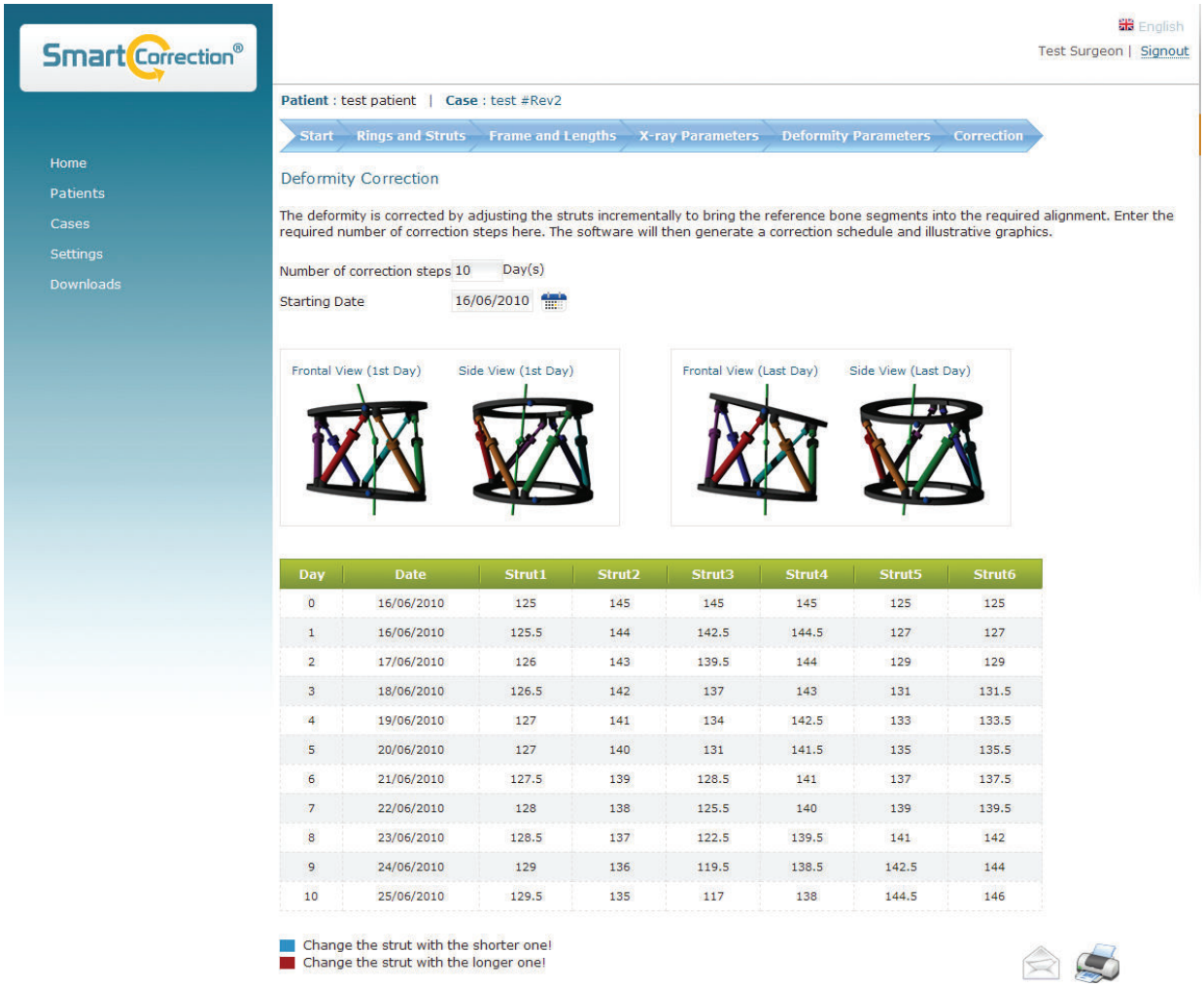
After entering the bone coordinates and Distraction/Rotation parameters, The surgeon should now save the data by clicking the “Save” button. **Note: The screen will darken slightly while the information is uploaded to the Smart Correction site.** The software will now generate new graphic images of the corrected bone axes which can be seen on the gridline images.

Once the surgeon is satisfied that all parameters are correct, press “Save”, and then “Next Step”.

Deformity Correction Schedule

Select the “Correction Tab”. Enter the starting date for Callus distraction and the total correction period. The software will then generate the strut length adjustment schedule.

This can then be e-mailed to the patient straight from the system, along with consultation dates chosen by the surgeon.



Day	Date	Strut1	Strut2	Strut3	Strut4	Strut5	Strut6
0	16/06/2010	125	145	145	145	125	125
1	16/06/2010	125.5	144	142.5	144.5	127	127
2	17/06/2010	126	143	139.5	144	129	129
3	18/06/2010	126.5	142	137	143	131	131.5
4	19/06/2010	127	141	134	142.5	133	133.5
5	20/06/2010	127	140	131	141.5	135	135.5
6	21/06/2010	127.5	139	128.5	141	137	137.5
7	22/06/2010	128	138	125.5	140	139	139.5
8	23/06/2010	128.5	137	122.5	139.5	141	142
9	24/06/2010	129	136	119.5	138.5	142.5	144
10	25/06/2010	129.5	135	117	138	144.5	146

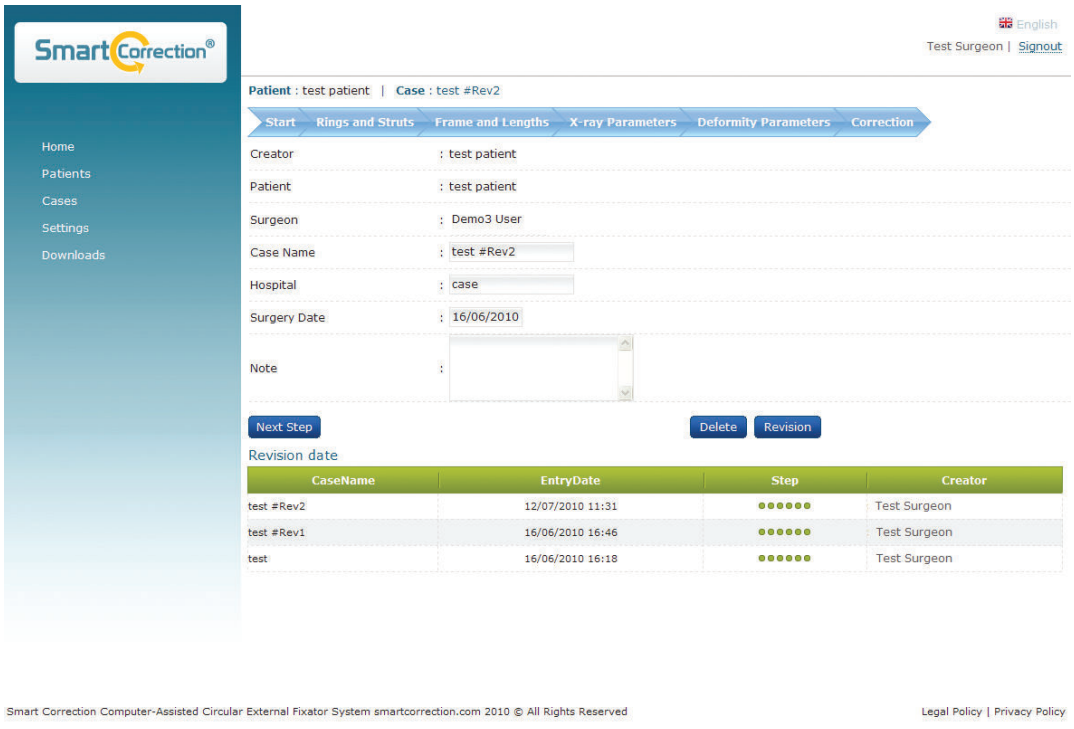
The information is saved by selecting “Save Case”.

Strut Replacement

During the course of treatment struts may need to be changed to accommodate changes in ring distances. This indicated within the correction schedule. Where longer struts are required, they are highlighted in red. When shorter struts are required, they are highlighted in Blue as shown above. Note : When changing struts, remember to set the replacement strut length at the same value as the strut being removed.

Revision

In order to revise or change any parameters within the Patient Record, select the "Revision" button. The "Revision" button appears on the first screen "Start" tab. Once the revised data has been entered into the Patient Record, select the both the “Calculate” and "Save Case". This will overwrite the data in that Patient Record.



Smart Correction® System Ordering Information

Code Number	Description
50-1012-12A	Dual Hole Full Ring, 120mm inner diameter, Aluminium
50-1012-13A	Dual Hole Full Ring, 135mm inner diameter, Aluminium
50-1012-15A	Dual Hole Full Ring, 150mm inner diameter, Aluminium
50-1012-16A	Dual Hole Full Ring, 165mm inner diameter, Aluminium
50-1012-18A	Dual Hole Full Ring, 180mm inner diameter, Aluminium
50-1012-19A	Dual Hole Full Ring, 195mm inner diameter, Aluminium
50-1012-21A	Dual Hole Full Ring, 210mm inner diameter, Aluminium
50-1012-22A	Dual Hole Full Ring, 225mm inner diameter, Aluminium
50-1012-12C	Dual Hole Full Ring, 120mm inner diameter, Carbon Composite
50-1012-13C	Dual Hole Full Ring, 135mm inner diameter, Carbon Composite
50-1012-15C	Dual Hole Full Ring, 150mm inner diameter, Carbon Composite
50-1012-16C	Dual Hole Full Ring, 165mm inner diameter, Carbon Composite
50-1012-18C	Dual Hole Full Ring, 180mm inner diameter, Carbon Composite
50-1012-19C	Dual Hole Full Ring, 195mm inner diameter, Carbon Composite
50-1012-21C	Dual Hole Full Ring, 210mm inner diameter, Carbon Composite
50-1012-22C	Dual Hole Full Ring, 225mm inner diameter, Carbon Composite
50-1015-01	Foot Ring, Small
50-1015-02	Foot Ring, Large
50-1017-12A	Dual Hole 2/3 Ring, 120mm inner diameter, Aluminium
50-1017-13A	Dual Hole 2/3 Ring, 135mm inner diameter, Aluminium
50-1017-15A	Dual Hole 2/3 Ring, 150mm inner diameter, Aluminium
50-1017-16A	Dual Hole 2/3 Ring, 165mm inner diameter, Aluminium
50-1017-18A	Dual Hole 2/3 Ring, 180mm inner diameter, Aluminium
50-1017-19A	Dual Hole 2/3 Ring, 195mm inner diameter, Aluminium
50-1017-21A	Dual Hole 2/3 Ring, 210mm inner diameter, Aluminium
50-1017-22A	Dual Hole 2/3 Ring, 225mm inner diameter, Aluminium
50-1017-12C	Dual Hole 2/3 Ring, 120mm inner diameter, Carbon Composite
50-1017-13C	Dual Hole 2/3 Ring, 135mm inner diameter, Carbon Composite
50-1017-15C	Dual Hole 2/3 Ring, 150mm inner diameter, Carbon Composite
50-1017-16C	Dual Hole 2/3 Ring, 165mm inner diameter, Carbon Composite
50-1017-18C	Dual Hole 2/3 Ring, 180mm inner diameter, Carbon Composite
50-1017-19C	Dual Hole 2/3 Ring, 195mm inner diameter, Carbon Composite
50-1017-21C	Dual Hole 2/3 Ring, 210mm inner diameter, Carbon Composite
50-1017-22C	Dual Hole 2/3 Ring, 225mm inner diameter, Carbon Composite
50-1031-00	Dual Joint Strut, Extra Short (XXS)
50-1031-01	Dual Joint Strut, Extra Short (XS)
50-1031-02	Dual Joint Strut, Short (S)
50-1031-03	Dual Joint Strut, Medium (M)
50-1031-04	Dual Joint Strut, Long (L)
50-1031-05	Dual Joint Strut, Extra Long (XL)
50-1033-00	Dual Joint Strut, Extra Short (XXS), VariJoint
50-1033-01	Dual Joint Strut, Extra Short (XS), VariJoint
50-1033-02	Dual Joint Strut, Short (S), VariJoint

Smart Correction® System Ordering Information (Continued)

Code Number	Description
50-1033-03	Dual Joint Strut, Medium (M), VariJoint
50-1033-04	Dual Joint Strut, Long (L), VariJoint
50-1041-30	Advanced Pin Clamp, Short
50-1041-40	Advanced Pin Clamp, Long
50-1041-00	Pin Clamp
50-1042-30	Advanced Screw Clamp, Short
50-1042-40	Advanced Screw Clamp, Long
50-1042-00	Screw Clamp
50-1056-01	Cube, 1 hole
50-1056-02	Cube, 2 hole
50-1056-03	Cube, 3 hole
50-1056-04	Cube, 4 hole
50-1056-05	Cube, 5 hole
50-1056-60	Screw Sleeve for Cube, 6 mm
50-1061-18	K-wire - 1.8 mm
50-1061-20	K-wire - 2.0 mm
50-1062-18	K-wire with Olive- 1.8 mm
50-1062-20	K-wire with Olive- 2.0 mm
50-1074-123	Bone Screw, 4.5mm diameter, 120mm shank, 30mm threaded, Ti.
50-1074-124	Bone Screw, 4.5mm diameter, 120mm shank, 40mm threaded, Ti.
50-1074-153	Bone Screw, 4.5mm diameter, 150mm shank, 30mm threaded, Ti.
50-1074-154	Bone Screw, 4.5mm diameter, 150mm shank, 40mm threaded, Ti.
50-1076-153	Bone Screw, 6.0mm diameter, 150mm shank, 30mm threaded, Ti.
50-1076-154	Bone Screw, 6.0mm diameter, 150mm shank, 40mm threaded, Ti.
50-1076-183	Bone Screw, 6.0mm diameter, 180mm shank, 30mm threaded, Ti.
50-1076-184	Bone Screw, 6.0mm diameter, 180mm shank, 40mm threaded, Ti.
50-1076-204	Bone Screw, 6.0mm diameter, 200mm shank, 40mm threaded, Ti.
50-1076-223	Bone Screw, 6.0mm diameter, 220mm shank, 30mm threaded, Ti.
50-1076-224	Bone Screw, 6.0mm diameter, 220mm shank, 40mm threaded, Ti.
50-1076-225	Bone Screw, 6.0mm diameter, 220mm shank, 40mm threaded, Ti.
50-1076-253	Bone Screw, 6.0mm diameter, 250mm shank, 30mm threaded, Ti.
50-1076-254	Bone Screw, 6.0mm diameter, 250mm shank, 40mm threaded, Ti.
50-1086-153	Bone Screw, 6.0mm diameter, 150mm shank, 30mm threaded, SS
50-1086-154	Bone Screw, 6.0mm diameter, 150mm shank, 40mm threaded, SS
50-1086-183	Bone Screw, 6.0mm diameter, 180mm shank, 30mm threaded, SS
50-1086-184	Bone Screw, 6.0mm diameter, 180mm shank, 40mm threaded, SS
50-1086-204	Bone Screw, 6.0mm diameter, 200mm shank, 40mm threaded, SS
50-1086-223	Bone Screw, 6.0mm diameter, 220mm shank, 30mm threaded, SS
50-1086-224	Bone Screw, 6.0mm diameter, 220mm shank, 40mm threaded, SS
50-1086-253	Bone Screw, 6.0mm diameter, 250mm shank, 30mm threaded, SS
50-1086-254	Bone Screw, 6.0mm diameter, 250mm shank, 40mm threaded, SS
50-1074-123H	Bone Screw, HA Coated, 4.5mm diameter, 120mm shank, 30mm threaded
50-1074-124H	Bone Screw, HA Coated, 4.5mm diameter, 120mm shank, 40mm threaded

Smart Correction® System Ordering Information (Continued)

Code Number	Description
50-1074-153H	Bone Screw, HA Coated, 4.5mm diameter, 150mm shank, 30mm threaded
50-1074-154H	Bone Screw, HA Coated, 4.5mm diameter, 150mm shank, 40mm threaded
50-1076-153H	Bone Screw, HA Coated, 6.0mm diameter, 150mm shank, 30mm threaded
50-1076-154H	Bone Screw, HA Coated, 6.0mm diameter, 150mm shank, 40mm threaded
50-1076-183H	Bone Screw, HA Coated, 6.0mm diameter, 180mm shank, 30mm threaded
50-1076-184H	Bone Screw, HA Coated, 6.0mm diameter, 180mm shank, 40mm threaded
50-1076-223H	Bone Screw, HA Coated, 6.0mm diameter, 220mm shank, 30mm threaded
50-1076-225H	Bone Screw, HA Coated, 6.0mm diameter, 220mm shank, 40mm threaded
50-1076-253H	Bone Screw, HA Coated, 6.0mm diameter, 250mm shank, 30mm threaded
50-1076-255H	Bone Screw, HA Coated, 6.0mm diameter, 250mm shank,40mm threaded
50-1070-02	Bone Screw Covers, 6mm diameter, 15mm length (6 per pack)
50-1070-06	Wire Cover, 1.8/2.0mm diameter, 15mm length (6 per pack)

Smart Correction® System Instrument Set

Code Number	Description	Qty
00-9030-00	Smart Correction Complete Set	1
00-8040-00	Smart Correction Basic Case	1
00-0022-00	Hammer	1
00-0034-40	Wire Cutter	1
00-0041-32	Drill Guide 3.2mm	2
00-0041-48	Drill Guide 4.8mm	2
00-0052-60	Soft Tissue Guide	2
00-0082-02	Wire Tensioner	1
00-0083-02	Wire Tensioner	1
00-0130-10	Osteotome, Narrow	Optional
00-0130-15	Osteotome, Wide	Optional
00-1011-01	Screw Driver Handle	1
00-2011-02	1.5mm Hex Driver (00-2033-15T)	1
00-2012-02	3.0mm Hex Driver	1
00-2035-15	5mm Allen Wrenchs	2
00-2036-00	Screw Driver T-Handle	2
00-2050-10	10/10 Handle	2
00-2050-10P	10/10 Handle, 90	1
00-2050-14	14/14 Handle	2
00-3481-28	4,8 mm Dril bit 280 mm	2
00-3321-20	3,2 mm Dril bit 200 mm	2
00-3483-28	4,8 mm Dril bit 280 mm Cannulated	1
00-3323-20	3,2 mm Dril bit 200 mm Cannulated	1

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