

# 4+1 Systems Knee Prosthesis Minimally Invasive



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### **Contents**

Introduction	3				
Using of Tibial Stage Intramedullary Cutting Guide					
Setting The Tibial Slope	9				
Setting The Level of The Cut	10				
Using of The Tibial Extramedullary Alignment Guide	11				
Assembling of The Upper Part	11				
Assembling of The Lower Part	11				
Positioning of The Guide	11				
Setting The Tibial Slope	12				
Setting The Level of The Cut	12				
Tibial Cutting	13				
Femoral Distal Cutting Application					
Preparation fo Femur Anterior Size Meter					
Other Stages of Femur Cuts					
Determination of Insert thickness of Fermoral & Tibial	16				
Inserting of the Femoral Test Component	17				
Points to Consider	17				
Determing of the Tibial Component	17				

Tibial Baseplate	19
Assembly Of The Standard And PS Mobile Test Inserts	19
Converting of Femoral to Posterior Stabilizier	19
Patella Stage Resurfacing Technique of Patella	19
Inset Patella Technique	20
Quadrofit Knee Prosthesis Instrumentation Set	21

#### Attention:

This document is intended as a guide for the surgeon only. There are multiple techniques for the insertion of Quadrof it Total Knee System and as with any surgical procedure, a surgeon should be thoroughly trained and beware that this procedure is appropriate for the patient before proceeding.



### 4+1 System Knee Prosthesis Minimally Invasive

4+1 Knee System is designed and developed for use in cemented, cementless and hybrid application of Total Knee arthroplasty.

The unique femoral cutting guide combines various functionalities in one component.

This enables the surgeon to shape the femur fast and accurate with only one guide positioning and fixing.

Quadrofit Total Knee system offers mobile and fixed insert options. This enables the surgeon to make the appropriate choice for the case.

#### Material

4+1 Knee System manufactured from:

- CoCrMo alloy according to ASTM F 75 ISO 5832/4 for Femoral Component and Tibial Component
- Ti6Al4V ELI alloy according to ASTM F 136 ISO 5832/3 for Tibial Component
- PE-UHMW Cross Linked and PE-UHMW according to ISO 5834/1-2 for Tibial Insert and Patella.



#### Attention:

Saw Blade to be used for cutting should be 1.2 mm thick ness. To use a thinner blade causes improper cutting.



### **Femoral Component**

0-5 Standard sizes; 6, 0.5, 1.5, 2.5, 3.5, 4.5, 5.5 - special order items (sizes)



Qua	drofit Standard	l Component (	Sterile)	
Ceme		C	entless oCr	
Co				a Coated
Right	Left	Size	Right	Left
EB8101C000S	EB8102C000S	0	EB8131C000S	EB8132C000S
EB8101C001S	EB8102C001S	1	EB8131C001S	EB8132C001S
EB8101C002S	EB8102C002S	2	EB8131C002S	EB8132C002S
EB8101C003S	EB8102C003S	3	EB8131C003S	EB8132C003S
EB8101C004S	EB8102C004S	4	EB8131C004S	EB8132C004S
EB8101C005S	EB8102C005S	5	EB8131C005S	EB8132C005S
EB8101C006S	EB8102C006S	6	EB8131C006S	EB8132C006S
EB8101C015S	EB8102C015S	0,5	EB8131C015S	EB8132C015S
EB8101C016S	EB8102C016S	1,5	EB8131C016S	EB8132C016S
EB8101C017S	EB8102C017S	2,5	EB8131C017S	EB8132C017S
EB8101C018S	EB8102C018S	3,5	EB8131C018S	EB8132C018S
EB8101C019S	EB8102C019S	4,5	EB8131C019S	EB8132C019S
EB8101C020S	EB8102C020S	5,5	EB8131C020S	EB8132C020S

0-5 Standard sizes; 6, 0.5, 1.5, 2.5, 3.5, 4.5, 5.5 - special order items (sizes)

Quadrofit Posterior Stabilized Femoral Component (Sterile)						
Ceme			ntless Cr			
Co	Cr			Coated		
Right	Left	Size	Right	Left		
EB8121C000S	EB8122C000S	0	EB8135C000S	EB8136C000S		
EB8121C001S	EB8122C001S	1	EB8135C001S	EB8136C001S		
EB8121C002S	EB8122C002S	2	EB8135C002S	EB8136C002S		
EB8121C003S	EB8122C003S	3	EB8135C003S	EB8136C003S		
EB8121C004S	EB8122C004S	4	EB8135C004S	EB8136C004S		
EB8121C005S	EB8122C005S	5	EB8135C005S	EB8136C005S		
EB8121C006S	EB8122C006S	6	EB8135C006S	EB8136C006S		
EB8121C015S	EB8122C015S	0,5	EB8135C015S	EB8136C015S		
EB8121C016S	EB8122C016S	1,5	EB8135C016S	EB8136C016S		
EB8121C017S	EB8122C017S	2,5	EB8135C017S	EB8136C017S		
EB8121C018S	EB8122C018S	3,5	EB8135C018S	EB8136C018S		
EB8121C019S	EB8122C019S	4,5	EB8135C019S	EB8136C019S		
EB8121C020S	EB8122C020S	5,5	EB8135C020S	EB8136C020S		





### **Tibial Insert**



Quadrofit Standard Tibial Insert (Sterile) PE - UHMW Cross linked							
Ref. Number						Thickness	
0	1	2	3	4	5	THICKHESS	
EB8151U008S	EB8151U108S	EB8151U208S	EB8151U308S	EB8151U408S	EB8151U508S	8	
EB8151U010S	EB8151U110S	EB8151U210S	EB8151U310S	EB8151U410S	EB8151U510S	10	
EB8151U012S	EB8151U112S	EB8151U212S	EB8151U312S	EB8151U412S	EB8151U512S	12	
EB8151U015S	EB8151U115S	EB8151U215S	EB8151U315S	EB8151U415S	EB8151U515S	15	
EB8151U018S	EB8151U118S	EB8151U218S	EB8151U318S	EB8151U418S	EB8151U518S	18	

Quadrofit Posterior Stabilized Tibial Insert (Sterile)						
		PE - U	HMW Cross lii	nked		
	,		Ref. Number			Thistones
0	1	2	3	4	5	Thickness
EB8155U008S	EB8155U108S	EB8155U208S	EB8155U308S	EB8155U408S	EB8155U508S	8
EB8155U010S	EB8155U110S	EB8155U210S	EB8155U310S	EB8155U410S	EB8155U510S	10
EB8155U012S	EB8155U112S	EB8155U212S	EB8155U312S	EB8155U412S	EB8155U512S	12
EB8155U015S	EB8155U115S	EB8155U215S	EB8155U315S	EB8155U415S	EB8155U515S	15
EB8155U018S	EB8155U118S	EB8155U218S	EB8155U318S	EB8155U418S	EB8155U518S	18





		Quadrofit MB Tibial Insert (Sterile)				, 2, 4 - Stand	'
			HMW Cross lin	ked	1, 3, 5, 6- spe	cial order ite	ms (sizes)
			Ref. Number				Thickness
0	1	2	3	4	5	6	THICKHESS
EB8251U008S	EB8251U108S	EB8251U208S	EB8251U308S	EB8251U408S	EB8251U508S	EB8251U608	8
EB8251U010S	EB8251U110S	EB8251U210S	EB8251U310S	EB8251U410S	EB8251U510S	EB8251U610	10
EB8251U012S	EB8251U112S	EB8251U212S	EB8251U312S	EB8251U412S	EB8251U512S	EB8251U612	12
EB8251U015S	EB8251U115S	EB8251U215S	EB8251U315S	EB8251U415S	EB8251U515S	EB8251U615	15
EB8251U018S	EB8251U118S	EB8251U218S	EB8251U318S	EB8251U418S	EB8151U518S	EB8251U618	18

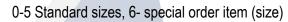
Quadrofit MB Posterior Stabilized Tibial Insert (Sterile)						
PE- UHMW Cross linked						
	Ref. Number		Thickness			
0						
EB8255U008S	EB8255U208S	EB8255U408S	8			
EB8255U010S	EB8255U210S	EB8255U410S	10			
EB8255U012S	EB8255U212S	EB8255U412S	12			
EB8255U015S	EB8255U215S	EB8255U415S	15			
EB8255U018S	EB8255U218S	EB8255U418S	18			





Quadrofit Standard Tibial Component (Sterile)						
Cemented CoCr	Size	Cementless CoCr Ti+Ha Coated				
EB5361C000S	0	EB5362C000S				
EB5361C001S	1	EB5362C001S				
EB5361C002S	2	EB5362C002S				
EB5361C003S	3	EB5362C003S				
EB5361C004S	4	EB5362C004S				
EB5361C005S	5	EB5362C005S				







Quadrofit MB Tibial Component (Sterile)						
Cemented CoCr	Size	Cementless CoCr Ti+Ha Coated				
EB8261C000S	0	EB8262C000S				
EB8261C001S	1	EB8262C001S				
EB8261C002S	2	EB8262C002S				
EB8261C003S	3	EB8262C003S				
EB8261C004S	4	EB8262C004S				
EB8261C005S	5	EB8262C005S				
EB8261C006S	6	EB8262C006S				

**Tibial Component Half Spacer** 

Quadrofit Tibial Component Half Spacer (Sterile)					
5mm Size 10mm					
EB5365T000S	0	EB5367T000S			
EB5365T001S	1	EB5367T001S			
EB5365T002S	2	EB5367T002S			
EB5365T003S	3	EB5367T003S			
EB5365T004S	4	EB5367T004S			
EB5365T005S	5	EB5367T005S			





### Patella Component

Quadrofit Insert Patella Component (Sterile) PE-UHMW Cross linked				
Ref.Number	Size			
EB8171U000S	0			
EB8171U001S	1			
EB8171U002S	2			



Quadrofit Insert Patella Component (Sterile) PE-UHMW	
Ref.Number Size	
EB8171E000N	0
EB8171E000S	1
EB8171E001N	2

Quadrofit ReSurfacing Patella Component (Sterile) PE-UHMW Cross linked		
Ref.Number Size		
EB8173U000S	0	
EB8173U001S 1		
EB8173U002S 2		
EB8173U003S	3	



Quadrofit ReSurfacing Patella Component (Sterile) PE-UHMW		
Ref.Number Size		
EB8173E000S	0	
EB8173E001S 1		
EB8173E002S	2	
EB8173E003S	3	

#### **Tibial Stem**



Quadrofit Tibial Stem (Sterile)				
Ref.Number				
CoCr	Ti	Tin Coated	Size	
EB8291C025S	EB5391T025S	EB8292C025S	25	
EB8291C050S	EB5391T050S	EB8292C050S	50	



#### Usage of Tibial Stage Intramedullary Cutting Guide

Enter the place which is sticked by anterior cruciate ligament to the tibia using Drill for Total Knee System/ Ø10 mm (Ref:EE0651S100N).

#### Additional Info:

Use the Drill for Total Knee System Ø10 mm for drilling the tibia, which could also be used for intramedullary entering on the femoral.



Intramedular Rod for Tibia (Ref:EE0802S055N) and the Tibial Guide Support (Ref:EE0851S162N) are settled as deep as possible into the tibia. After being hammered, they are in contact with the surface.



Tibial guide is inserted to the tibial support and the screw on the side is fixed by Screwdriver Ø3.5 mm (Ref:EE0401N065N).

Set the tibial slope at 0° by turning the frontal screw on the tibial guide.

90° Tibial Cutting Guide (left/right) (Ref:EE1201N11xN) is fixed on the tibial guide's peak point by using the fixation screw.

Insert the Telescop (Ref:EE0851S171N) into the tube of tibial guide.



#### Attention:

Ensure that the screw located in the Tibial Guide (Ref:EE0851S162N) is directly facing the centre of the tibial plate (the junction between the internal third and two external thirds of the tibial tuberosity)



#### Setting The Tibial Slope

Adjust the posterior slope between 0 and 10 degrees on the scale of the Tibial Guide(Ref:EE0851S162N) by turning the frontal screws of the guide anticlockwise.

#### Attention:

The tibial slope should be set before setting the height of the cut.

An excessive slope could damage the tibial insertion of the posterior cruciate ligament.



Extend the telescopic rod and ensure that the lower extremity end of the rod is aligned with the centre of the ankle joint. (2. metatars is taken as reference)





#### Setting The Level of The Cut

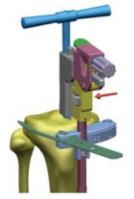
After a tibial cutting block is placed, the Tibial Stylus (Ref:EE0851S172N) is used to assess the cutting level. Aim is to make minimal cutting on the defected tibial condyle.

There are two setting options for the tibial stylus;

- 1. When the stylus is positioned from medial, marking at the point of stylus should show 0 mm.
- 2. When the stylus is positioned from lateral, marking at the point of stylus should show maximum 8mm. Cutting can be made in these two options.

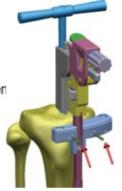


Additionally to ensure a sufficient cut of the contro-lateral compartment, with the assistance of the Blade Runner (Ref:EE0851S173N), if necessary, the micrometer adjustment screw can be used to adjust the level of the cut.



After determining the cutting level on the tibial cutting, block holes are drilled with Drill for Total Knee System Ø3.2x70 (Ref:EE0652N101N) as in neutral position.

Then the tibial guide fixation screw is released.



After removing Intramedullary rod, remove the tibial guide and tibial support. Following the tibial support is the Tibial Cutting Guide, when in contact with the Tibial, it's placed by sliding on the two pins. Next the tibial cutting guide's other fixing hole is drilled using the Ø3.2 mm Drill Bit, and fixed by the Nail for Total Knee System Ø3.0x55 mm (Ref:EE0657N255N).



The tibial plateau cutting is performed



During extension and flexion gap control, against the possibility of an additional 2 mm cut; tibial cutting block is removed but fixation nail should be kept on the tibial bone.



#### Using of The Tibial Extramedullary Alignment Guide

#### Assembling of The Upper Part

The Tibial cutting guide is settled on the tibial guide's peak point.

It is fixed by a fixation screw that is on the tibial guide. After that, the tibial guide is inserted into the tibial support and on the right side a screw is fixed with the Ø3.5 mm screwdriver.

The tibial slope is set at 0 degrees by turning the frontal screw on the tibial guide.

#### Assembling of The Lower Part

Assemble the Ankle Clamp for Tibial Guide (Ref:EE0851S155N).

### Positioning of The Guide

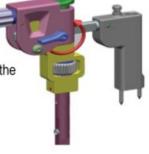
After lower and upper extramedullary parts are assembled, Ankle clamp (Ref:EE0851S155N) is positioned at the centre of the distal ankle joint.

The Tibial guide is settled in the Tibial Ankle clamp (Ref:EE0851S155N), and it is positioned taking the metatarsal bone as a reference. The lower and upper sides of the extramedullary guide are set to move into each other.





The Tibial support is hammered using the Nail Holder Pliers (Ref:EE0110S051N). The upper part of the tibial guide is approached to the tibial support, like the tibial cutting guide, is located 5 mm from the tibial epiphysis and fixed using the Ø3.5 mm screwdriver, which is on the side of guide.



#### **Setting The Tibial Slope**

#### Additional Info:

The Tibial slope can be set according to patient's anatomy by moving the lower part of the extramedullary guide.

#### Attention:

The tibial slope should be set up before setting the level of the cut.

Until correct position of the tibial cutting block is determined; the upper and lower part of the tibial apparatus should be set to move into each other.

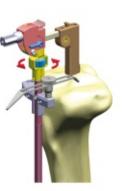
Chosing an excessive slope could damage the tibial insertion of the posterior cruciate ligament.



### Setting The Level of The Cut

After the tibial cutting block is placed; the Tibial Stylus (Ref:EE0851S172N) is used for assessing cutting level. The aim is to make a minimal cut on the defected tibial condyle. There are two setting options of the tibial stylus:

- -When the stylus is positioned from medial; marking at the point of stylus should show 0 mm.
- -When the stylus is positioned from lateral; marking at the point of stylus should show maximum 8 mm Cutting can be made in these two options.



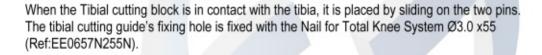


Ensure a sufficient cut is made to the contro-lateral compartment with the assistance of the Blade Runner (Ref:EE0851S173N). If it is necessary, use the micrometer adjustment screw to adjust the level of the cut.

After determining the cutting level, two holes which are placed on the left and right bottom side of tibial cutting block, are fixed with Nail for Total Knee System Ø3.2 x70(Ref:EE0657N570N). Then the Tibial guide fixation screw is released

#### Attention:

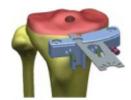
While the tibial guide and the extramedullary guide are being removed ensure that the tibial cutting block is not moving.





### **Tibial Cuting**

The tibial plateau cutting is performed.



During extension and flexion gap control, to avoid the possibility of an additional 2mm cut, Tibial cutting block is removed, but fixation nail should be kept on the tibial bone.



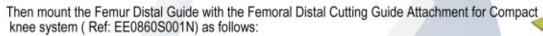


#### **Femoral Distal Cutting Application**

The operated knee is positioned at 90 degrees. The axis of the femoral is drilled by the Ø10 mm drill starting at the front of the femoral insertion of the posterior cruciate ligament.

4+1 System Femur Distal Guide ( Ref: EE0802S07xN) is used according to the Varus/Valgus angle 0° / 3° / 5° / 6° /9° right and left.

Mount the Femur Distal Guide and the Intramedullary Rod for Femoral (Ref: EE0802S056N) until they touch to femoral distal.



Mount the Femur Distal Cutting Block for Compact knee system (Ref: EE0859S001N) using the Femur Distal Cutting Guide Attachment.

Ensure fixation by turning the clamping arm next to the Femur Distal Cutting Guide Attachment counterclockwise. In order to adjust the Femur Distal Cutting Guide attachment, turn the thumb well on the cutting guide counterclockwise until the cutting block is included in the defective area. Make sure to cut it at a satisfactory level by the means of the Blade runner (Ref: EE0851S173N).

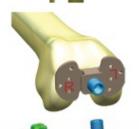
After the cut level is determined, using the Nail / Ø 3,2x70 (Ref: EE0657N570N) through No. 0 holes marked on the distal cut block.

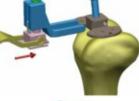
The femoral is fixed with nail Ø3,0x55 (Ref: EE0657N255N) by using angled holes in the right and left of the distal cut block.

The nail holder pliers (Ref: EE0110S051N) are used for nailing.

If needed, the femur cutting block stabilization attachment for compact knee system (Ref: EE0852S013N) may be used.

Once fixed, the femur distal cut adjustment apparatus and femur distal guide are removed. The femur distal cut is performed with a 1.2 mm blade.













### **Preparation of Femur Anterior Size Meter**

After the femur distal cutting is completed, place the Femur Anterior Sizing Stylus (Ref: EE0852S016N) in such a way that it contacts the femur distal and posterior condyle in order to determine the femur's measurement. Loosen the thumbwheel on the Femur Anterior Sizing Stylus and select the external rotation as 0° / 3° / 6° and 9° according to the right and left bone. Generally, 3° external rotation is applied.

The measurement is obtained by contacting the highest point of the femur cortex with the stylus on the Femur Anterior Sizing Stylus.



The Nail for Total Knee system / Ø3,2x70 (Ref: EE0657N570N) is driven. Once the size measurement is determined, remove the Femur Anterior Sizing Stylus.

### Other Stages Of Femur Cuts

Insert the Femoral Cutting Block (Ref: EE1202N00xN) in compliance with the defined measurement until they contact with the femur distal plateau over the reference nails. The femur cutting block holder (Ref: EE0142S001N) is used for this operation.



Check the cut level through the Blade Runner (Ref: EE0851S173N) over the femur cutting block slots. Make sure that the cut line doesn't slip into the femur cortex.



Drive the Nail / Ø3,0x55 (Ref: EE0657N255N) to the femur. The Nail holder pliers (Ref:EE0110S051N) are used for nailing. Next, fixing is done by screwing through the fixing holes on the femur cut block using Femoral cutting block fixing screws (Ref: EE0858S005N) and Screwdriver for total knee system (Ref: EE0401N065N).

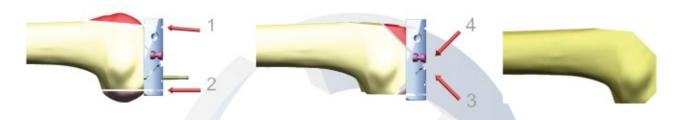




After the femur cutting block is fixed, cutting is performed with the 1.2mm blade in the following order. In cases where the fixation of the femur cut block is not sufficient, the femur Cutting block stabilization attachment(Ref: EE0852S013N) can be used.

- 1. Anterior
- Posterior
- 3. Anterior Chamfer
- 4. Posterior Chamfer



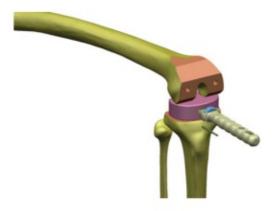


#### Determination of Insert Thickness of Femoral and Tibial

To determine the thickness of the tibia insert after completing the femur and tibia cuts, Femoral Cutting Block Holder (Ref: EE0142S001N) and GAP Extension Test (Ref: EE0802S20xN) are assembled to each other. Insert thickness is determined by measuring the gap of the femur and tibia at flexion and extension angles.

Tibial insert is available in 5 differnet thicknesses. All information is labeled in test instruments.







#### Inserting of the Femoral Test Component

In the Standard System: Femoral Component Test (Ref: EE0856NxxxN) is assembled to Femoral Component Impactor (Ref: EE0852S105N).

In the Posterior Stabilizier System: Posterior Stabilisation Schaft for femoral component test (Ref: EE0856N010N) is placed on Femoral Component Test (Ref: EE0856NxxxN), then assemble to Slide Hammer (Ref: EE0852S032N). With using Slide Hammer hammer the Femoral Component Test to Femoral.



Nail holes are drilled on Femoral Component Test by Drill Ø7mm (Ref: EE0651S070N)

#### Points to consider

using for PS femroal or cruciate ligament is cutted

#### 1st. Medthod

Protrusion area extended to a depth of 2cm by using Notching Instrument (Ref: EE0852S004N).

#### Attention:

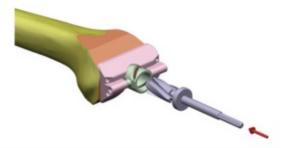
Posterior Stabilization Attachment for Tibial Insert Test (Ref: EE0851N805N) should be checked, if it is in contact with femur during extension of femur and tibia test.

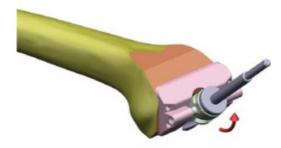
#### 2nd. Medthod

The test component is removed from femur. PS Box Guide (Ref: EE0891SxxxN) is attached by refered nails holes on the femur. The broach process is made by Reamer for PS Femroal Component (Ref: EE1041S001N).

After broach process, rotate Reamer towards the posterior.

Remove PS Box Guide, then reinstall the test component, after that check the flexion and extension.







### **Determining of the Tibial Component**

A suitable component test is chosen by using the Tibial Component Test for Total Knee System (Ref:EE0851S00xN).

Two Pcs of Nail for Total Knee System Ø2.5 x40 (Ref:EE0657N140N) are driven into anterior positioned holes.

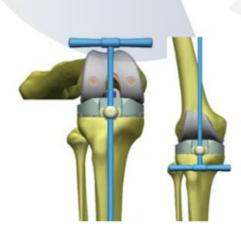
#### Additional Info:

The length of the tibial insert can be determined by measuring the cut part of the tibia.

The suitable size of the tibial insert test is placed and the Tibial Component Test Handle (Ref:EE0851S010N) is assembled for the tibial component test.



A Fixed femoral component test: The femoral and tibial gap of flexion and extension are controlled.





If all stages are is suitable, flexion of the tibial cutting guide is removed, and then you can continue with the tibial finishing.

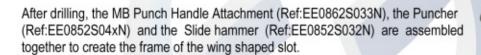
2 pcs of Nail Ø2,5 X 40 (Ref: EB0657N140N) are driven into the posterior positioned holes for ensuring that tibial test component is into correct place;

Protecting the lateral slip that could be occured during the punching of the wing shoped slot, and then assemble Barrel( Ref: EE0703S501N).

Use Drill Ø10 mm (Ref: EE0651S100N).

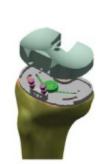


If Tibial Stem (Ref: EB5391..) is not used, perform drilling until the first line on the drill. If Tibial Stem is used, perform drilling until second line.



When adding a tibial stem after using the puncher itself, the selected tibial test stem is screwed to the end of the puncher and the whole unit is placed through the tibial component test to prepare the necessary place to implant the tibial stem.

The Tibial insert test can be placed on the tibial component without removing the placed puncher on the tibial component test for testing.



### **Tibial Baseplate**

If it is necessary, the intended lengthening could be achieved by screwing the 25 and 50 mm Quadrofit Tibial Stem to the tibial component.





### **Assembly Of The Standard And PS Mobile Test Inserts**

End of the tibial finishing process:

For Mobile Standard Knee System: After Medullary channel is reamed, remove Tibial Test Component (Ref: EE0851S00xN), and then settle MB Tibial Component Test (Ref: EE0861S00xN) on the place.

For Mobile PS System: After Posterior Stabilization attachment for Tibial Insert Test(Ref: EE0851N805N) is placed on MB Tibial Test Insert (Ref: EE0851S00xN), are then settle on Mobile Bearing Tibial Component (Ref: EB0861S00xN).

#### **Converting of Femoral to Posterior Stabilizier**

With a 1 cm Notchplasty at the gap of 2 condyles with Notching Instrument (Ref: EE0852S004N), the loos of bone is minimal. This way the posterior curciate ligament is cut and the tibial test insert posterior stabilization attachment is ensured according to the femoral component.



### Patella Stage Resurfacing Technique of Patella

The Patella Cutting Guide (Ref: EE0853N51xN) (Left/Right) is assembled into Patella Clamp (Ref: EE0853N505N). After releasing the periphery of the patella carefully, Patella Cutting Guide is positioned in suitable cutting level by assistance of the Patella Stylus (Ref: EE0853N561N), Patella Clamp is firmly locked. Patella cut is performed through the slots of the Cutting Guide.







After cutting has been completed; The patella clamp is released and the patellar cutting attachment is removed. The Dirilling Template (Ref:EE0853N528N) is placed on the the part of the patella that has been cut and with this template use the Ø5 mm drill.

The Patella Dirilling Template is removed from the patella clamp;
Correct size is chosen from Patella Component Test (Ref: EE0857N10xN) and positioned on the patella.

There are 3 different sizes of patella in our system.



#### Insert Patella Technique

Patella size is determined by using different Barrel (Ref:EE0853N54xN) sizes. Patella Clamp Attachment with Pointed Jaw (Ref:EE0853N507N) and suitable size of Barrel are assembled to the patella clamp



Ensure that the Barrel is positioned on the right place and that the suitable size reamer is placed in the Barrel and reamed until it contacts the upper part of the reamer.

If reamed holes are not enough, the Barrel is removed, the depth can be reamed more



The Patella component Test is assembled with the patellar clamp.

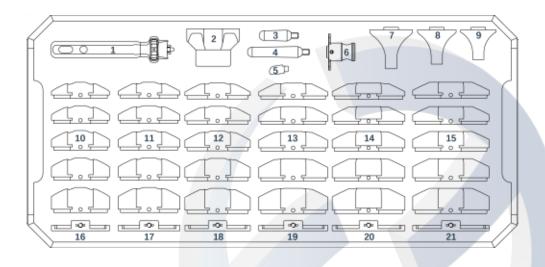
#### Attention :

The surgical power tool should be operated after reamer is settled into the guide completely. To eliminate the risk of breaking the patella, the reaming process should be performed carefully, low speed and by a closed patella clamp.



## 4+1 Quadrofit Knee System Compact Application Set (EK1103N001N) STANDARD SET

essential trials for the special order items (sizes) - will be offered under customer's request



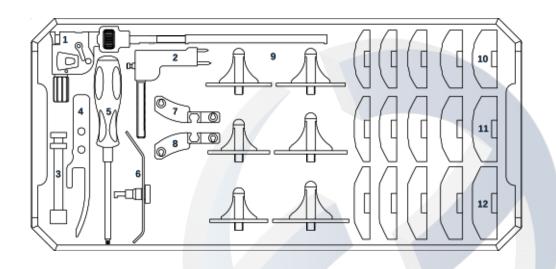


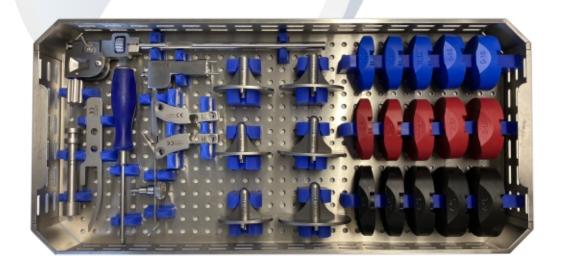


No	Ref. No	Description			
1	EE0851S010N	Tibial component test handle for total knee system			
2	EE0851S205N	Tibial component impactor			
3	EE0851S325N	Tibial stem test for total kr	Tibial stem test for total knee system/25		
4	EE0851S350N	Tibial stem test for total kr	nee sy	stem/50	
5	EE0851N805N	Posterior stabilization atta	chmer	nt for tibial tnsert te	est
6	EE0703S501N	Barrel			
7	EE0852S045N	Puncher / 4-5			
8	EE0852S043N	Puncher / 2-3			
9	EE0852S041N	Puncher / 0-1			
	EE0855N008N	Tibial insert test / 0-8		EE0855N308N	Tibial insert test / 3-8
	EE0855N010N	Tibial insert test / 0-10		EE0855N310N	Tibial insert test / 3-10
10	EE0855N012N	Tibial insert test / 0-12	13	EE0855N312N	Tibial insert test / 3-12
	EE0855N015N	Tibial insert test / 0-15		EE0855N315N	Tibial insert test / 3-15
	EE0855N018N	Tibial insert test / 0-18		EE0855N318N	Tibial insert test / 3-18
	EE0855N108N	Tibial insert test / 1-8		EE0855N408N	Tibial insert test / 4-8
	EE0855N110N	Tibial insert test / 1-10		EE0855N410N	Tibial insert test / 4-10
11	EE0855N112N	Tibial insert test / 1-12	14	EE0855N412N	Tibial insert test / 4-12
	EE0855N115N	Tibial insert test / 1-15		EE0855N415N	Tibial insert test / 4-15
	EE0855N118N	Tibial insert test / 1-18		EE0855N418N	Tibial insert test / 4-18
	EE0855N208N	Tibial insert test / 2-8		EE0855N508N	Tibial insert test / 5-8
	EE0855N210N	Tibial insert test / 2-10		EE0855N510N	Tibial insert test / 5-10
12	EE0855N212N	Tibial insert test / 2-12	15	EE0855N512N	Tibial insert test / 5-12
	EE0855N215N	Tibial insert test / 2-15		EE0855N515N	Tibial insert test / 5-15
	EE0855N218N	Tibial insert test / 2-18		EE0855N518N	Tibial insert test / 5-18
16	EE0851S000N	Tibial component test for t	otal kr	nee system / 0	
17	EE0851S001N	Tibial component test for t	total kr	nee system / 1	
18	EE0851S002N	Tibial component test for t	total kr	nee system / 2	
19	EE0851S003N	Tibial component test for total knee system / 3			
20	EE0851S004N	Tibial component test for total knee system / 4			
21	EE0851S005N	Tibial component test for total knee system / 5			



Tray 2



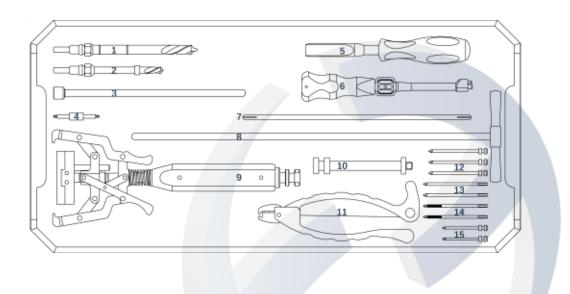


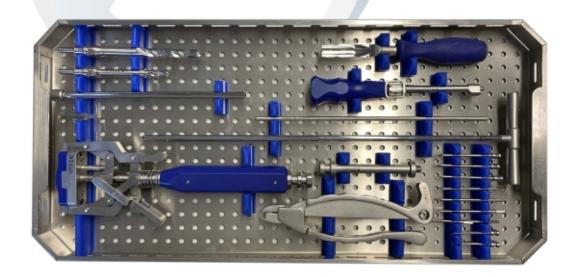


No	Ref. No	Description
1	EE0851S161N	Tibial guide
2	EE0851S162N	Tibial guide support
3	EE0862S033N	MB punch handle attachment
4	EE0851S173N	Blade runner
5	EE0401N065N	Screwdriver for Total Knee System
6	EE0851S172N	Tibial stylus
7	EE1201N112N	90° Tibial cutting guide / left
8	EE1201N111N	90° Tibial cutting guide / right
	EE0861S000N	MB Tibial Component Test / 0
	EE0861S001N	MB Tibial Component Test / 1
9	EE0861S002N	MB Tibial Component Test / 2
	EE0861S003N	MB Tibial Component Test / 3
	EE0861S004N	MB Tibial Component Test / 4
	EE0861S005N	MB Tibial Component Test / 5
	EE0861N008N	MB Tibial Insert Test / 0 - 8
	EE0861N010N	MB Tibial Insert Test / 0 - 10
10	EE0861N012N	MB Tibial Insert Test / 0 - 12
	EE0861N015N	MB Tibial Insert Test / 0 - 15
	EE0861N018N	MB Tibial Insert Test / 0 - 18
	EE0861N208N	MB Tibial Insert Test / 2 - 8
	EE0861N210N	MB Tibial Insert Test / 2 - 10
11	EE0861N212N	MB Tibial Insert Test / 2 - 12
	EE0861N215N	MB Tibial Insert Test / 2 - 15
	EE0861N218N	MB Tibial Insert Test / 2 - 18
	EE0861N408N	MB Tibial Insert Test / 4 - 8
	EE0861N410N	MB Tibial Insert Test / 4 - 10
12	EE0861N412N	MB Tibial Insert Test / 4 - 12
	EE0861N415N	MB Tibial Insert Test / 4 - 15
	EE0861N418N	MB Tibial Insert Test / 4 - 18



Tray 3





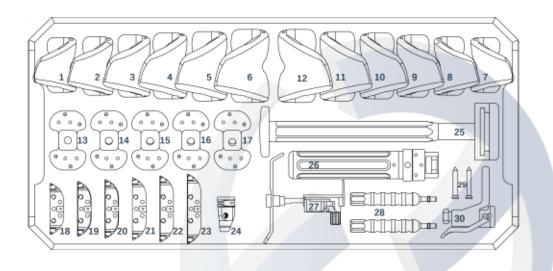


Tray 3

No	Ref. No	Description
1	EE0651S100N	Drill for Total Knee System / Ø10
2	EE0651S070N	Drill for Total Knee System / Ø7
3	EE0802S056N	Intramedular rod for femur
4	EE0856N010N	Posterior Stabilisation shaft for femoral component test
5	EE0852N004N	Notching instrument
6	EE0142S001N	Quadrofit 4+1 system femoral cutting block holder
7	EE0851S171N	Telescope
8	EE0802S055N	Intramedular rod for tibia
9	EE0852S105N	Femoral component impactor
10	EE0852S033N	Punch handle
11	EE0110S051N	Nail holder pliers
12	EE0657N255N	Nail for total knee system / Ø3,0 X 55
13	EE0657N570N	Nail for total knee system / Ø3,2 X 70
14	EE0652N101N	Threaded nail for total knee system / Ø3,2 X 70
15	EE0657N140N	Nail for total knee system / Ø2,5 X 40



Tray 4



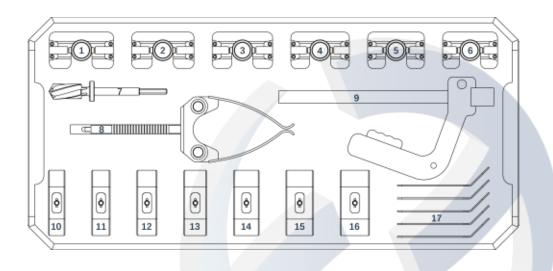


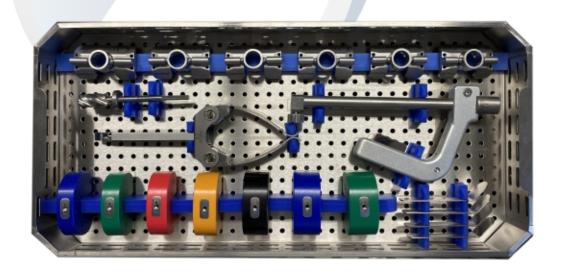


No	Ref. No	Description
1	EE0856N100N	Femoral component test / Right - 0
2	EE0856N101N	Femoral component test / Right - 1
3	EE0856N102N	Femoral component test / Right - 2
4	EE0856N103N	Femoral component test / Right - 3
5	EE0856N104N	Femoral component test / Right - 4
6	EE0856N105N	Femoral component test / Right - 5
7	EE0856N200N	Femoral component test / Left - 0
8	EE0856N201N	Femoral component test / Left - 1
9	EE0856N202N	Femoral component test / Left - 2
10	EE0856N203N	Femoral component test / Left - 3
11	EE0856N204N	Femoral component test / Left - 4
12	EE0856N205N	Femoral component test / Left - 5
13	EE0802S079N	4+1 SYSTEM FEMUR DISTAL GUIDE 9°
14	EE0802S076N	4+1 SYSTEM FEMUR DISTAL GUIDE 6°
15	EE0802S075N	4+1 SYSTEM FEMUR DISTAL GUIDE 5°
16	EE0802S073N	4+1 SYSTEM FEMUR DISTAL GUIDE 3°
17	EE0802S070N	4+1 SYSTEM FEMUR DISTAL GUIDE 0°
18	EE1202N000N	Femur cutting block/ 0
19	EE1202N001N	Femur cutting block/ 1
20	EE1202N002N	Femur cutting block/ 2
21	EE1202N003N	Femur cutting block/ 3
22	EE1202N004N	Femur cutting block/ 4
23	EE1202N005N	Femur cutting block/ 5
24	EE0859S001N	Femoral Distal Cutting Block
25	EE0715N005N	Universal Impactor for femoral component
26	EE0852S032N	Slide hammer for total knee system
27	EE0852S016N	Femur Anterior Sizing Stylus
28	EE0852S013N	Femur distal cut fixing arm
29	EE0858S005N	Femoral Cutting Block Fixing Screw
30	EE0860S001N	Femoral distal cutting guide attachment for compact knee system



Tray 5



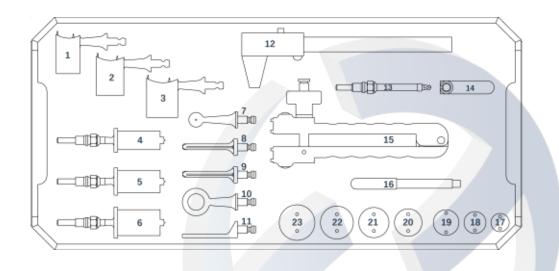


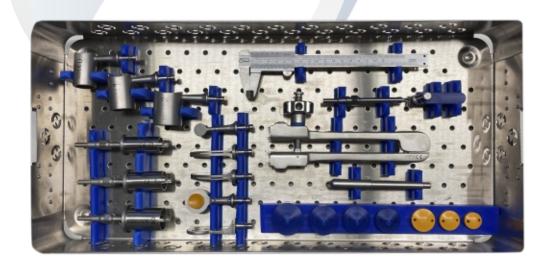


Ref. No	Description
EE0891S000N	Box guide for PS Femoral Component / 0
EE0891S001N	Box guide for PS Femoral Component / 1
EE0891S002N	Box guide for PS Femoral Component / 2
EE0891S003N	Box guide for PS Femoral Component / 3
EE0891S004N	Box guide for PS Femoral Component / 4
EE0891S005N	Box guide for PS Femoral Component / 5
EE1041S001N	Reamer for PS Femoral Component
EE0851S155N	Ankle Clamp for Tibial Guide
EE0802S200N	GAP Extension Test / 08
EE0802S201N	GAP Extension Test / 10
EE0802S202N	GAP Extension Test / 12
EE0802S203N	GAP Extension Test / 15
EE0802S204N	GAP Extension Test / 18
EE0802S205N	GAP Extension Test / 20
EE0802S206N	GAP Extension Test / 22
EE0893S001N	Gauge for femoral size reduction
	EE0891S000N EE0891S001N EE0891S002N EE0891S003N EE0891S004N EE0891S005N EE1041S001N EE0851S155N EE0802S200N EE0802S201N EE0802S202N EE0802S203N EE0802S204N EE0802S205N EE0802S206N



Tray 6







No	Ref. No	Description
1	EE0853N540N	Barrel for patella clamp / 0
2	EE0853N541N	Barrel for patella clamp / 1
3	EE0853N542N	Barrel for patella clamp / 2
4	EE0853N550N	Patella remaer / 0
5	EE0853N551N	Patella remaer / 1
6	EE0853N552N	Patella remaer / 2
7	EE0853N507N	Patella clamp attachment with ponited jaw
8	EE0853N511N	Patella cutting guide / right
9	EE0853N512N	Patella cutting guide / left
10	EE0853N525N	Parella pressurizing jaw
11	EE0853N528N	Drilling template
12	EE0853S005N	Calliper gauge
13	EE0651S050N	Drill for Total Knee System / Ø5
14	EE0853N561N	Patella stylus
15	EE0853N505N	Patella clamp
16	EE0712S001N	Impactor PIM for Total Knee System
17	EE0857N100N	Patella component test / 0
18	EE0857N101N	Patella component test / 1
19	EE0857N102N	Patella component test / 2
20	EE0857N200N	Re-surfacing Patella component test / 0
21	EE0857N200N	Re-surfacing Patella component test / 1
22	EE0857N200N	Re-surfacing Patella component test / 2
23	EE0857N200N	Re-surfacing Patella component test / 3



Comments
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