



SKII PS High Flexion Total Knee System

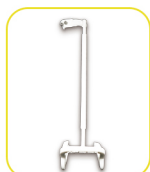
Surgical technique

Both fish and bear`s paw

KNEE STEPWISE SURVIVAL

Dynamic fatigue tests after 10 million cycles in the international

Dynamic wear tests after 5 million cycles in the international End



PSI HTO Guide



AJSK

FEMORAL COMPONENT



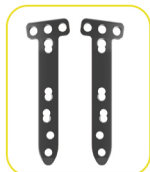
SKI



SKII CR



SKII PS



COFORLIN
Proximal medial tibia



AJSK

TIBIAL BEARING



SKI



SKII CR/AS



SKII PS



COFORLIN
Proximal lateral tibia



AJSK

TIBIAL TRAY



SKI

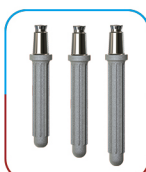


SKII

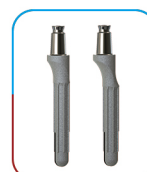


COFORLIN
Distal medial femur

STEM & AUGMENT



Neutral Stem



Offset Stem



Tibial Cone



COFORLIN
Distal lateral femur



AJSK

Unicompartmental Knee Prosthesis System



SKII™ PS
Primary TKA System



SKII™ CR
Primary TKA System



SKII™ PS
Primary TKA System

RGICAL SOLUTIONS

CNAS laboratory shows excellent results and no risk of fracture.

dolab® laboratory in Germany shows excellent wear resistance.



SKII PLUS



SKII PS



RSX



HR



SKII PLUS



SKII RPS



RSX



HR



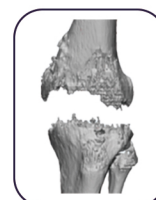
SKII RPS



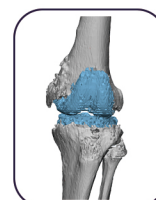
RSX



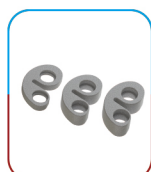
HR



Bone model restoration-1



Bone model restoration-2



Tibial Augment



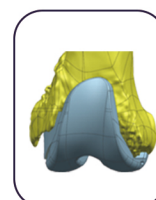
Distal Femoral Augment



Posterior Femoral Augment



Knee Spacer



Customized prosthesis design



SKII™ PLUS
Primary TKA System



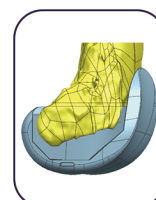
SKII™ RPS
Primary TKA System



RSK™
Revision TKA System



HRSK®
Hinge Rotating TKA System



Customized product simulated implantation

COMPLEX PRIMARY

REVISION

CUSTOMIZED

Imported Raw Material

All raw material of UHMWPE inserts were manufactured in Germany, meeting the technical requirements in ISO 5834 part 2 and ASTM F648.

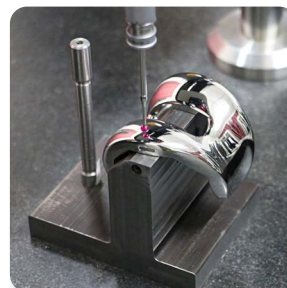


Precise Processing



Strict Inspection

JUST MEDICAL Inspection Center

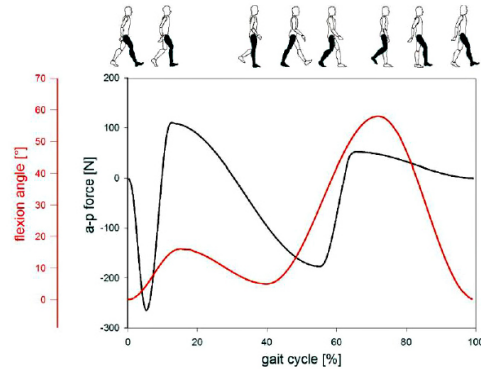
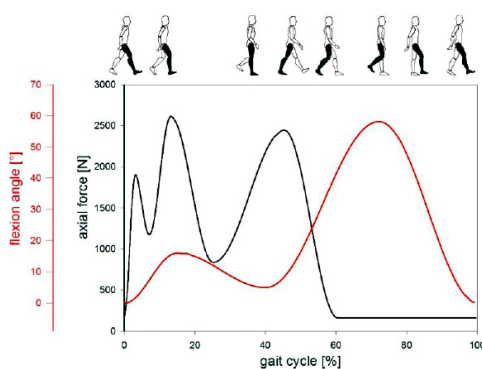
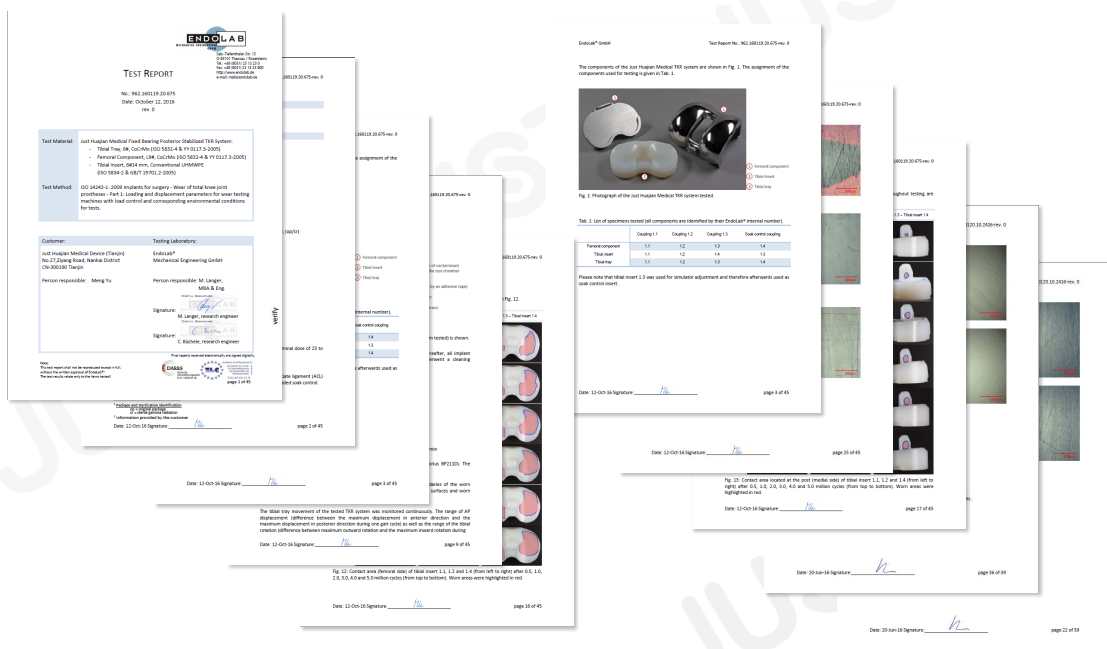


Wear Test in EndoLab®

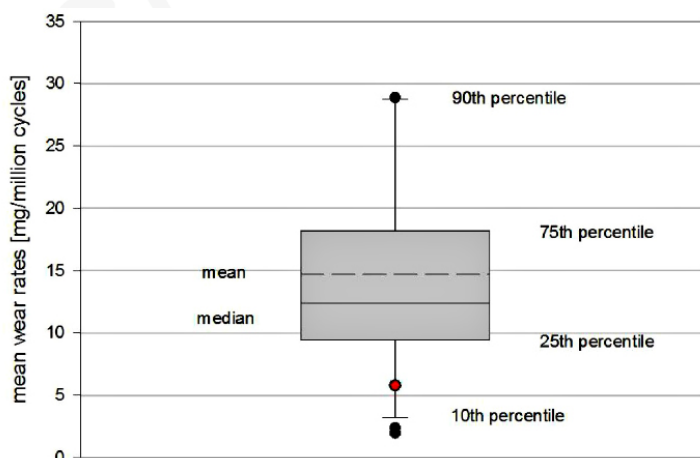
EndoLab® GmbH offers a variety of technological implant testingservices to develop and certify medical products.

EndoLab® is an accredited (DAkKS O-PL-18838-02-00) and certified (ZLG-P-944.98.07) test laboratory according to DIN EN ISO/IEC 17025 and 93/42/EWG.

The company is a spin-off from the Technical University of Munich and is closely connected to several national and international research departments.



- ▲ The purpose of this test was to determine the wear behavior of the Just Huajian Medical fixed bearing posterior stabilized TKR system.



▲ The value established herein is marked by a red dot.

Patent Certificate

Patent : An integrated structure of femoral trial and intercondylar notch preparation for CR and PS.

Patent No.: ZL 2015 1 0940960.0

Patent : A femoral condylar prosthesis with the modified trochlear groove.

Patent No.: ZL 2015 2 0299126.3

Patent : Tibial plateau prosthesis.

Patent No.: ZL 2016 3 0617285.3



High-Flexion, Versatile, Simplified

For Primary And Complex Primary TKA

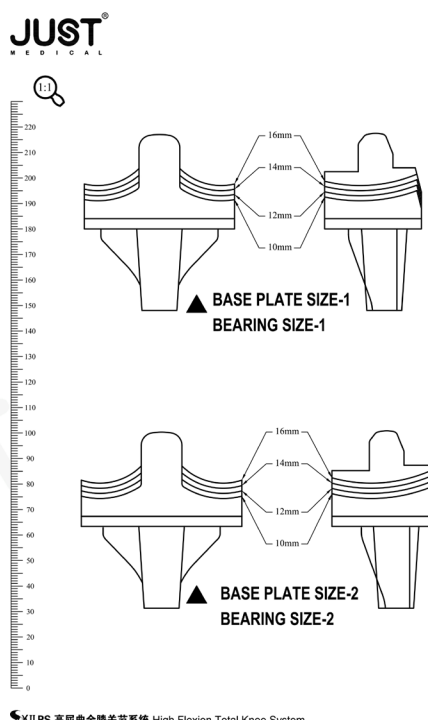
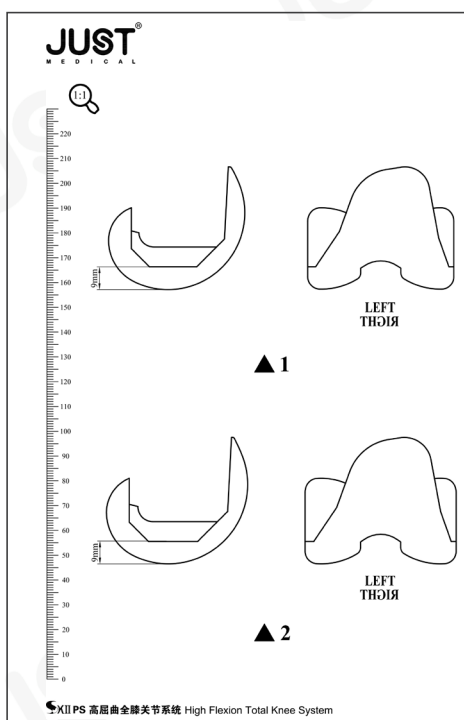
◆ Design Features

- ◆ Sizing;
- ◆ Optimized patellofemoral articular surface: deeper, extended, swept-back, wider trochlear groove;
- ◆ Extended cam and heighten PS post;
- ◆ Maximized preservation of bone stock;
- ◆ There are two models to choose from: Standard and PLUS
- ◆ The tibial component can be connected to the augment and stems using for Serious deformity and instability problems in complex primary total knee arthroplasties;
- ◆ Effective reduction of postoperative wear.



Preoperatively Plan

In order to assess bone stock, potential ligament instability and the anatomical axis, a long standing A/P X-ray is recommended. Determine the angle between the anatomic and mechanical axis, assuring the distal femoral cut is perpendicular to the mechanical axis. Estimate femoral component size preoperatively by using lateral view X-ray and radiographic templates. Confirmation of the appropriate size component intraoperatively is critical for normal kinematics.



Canal Entry Location

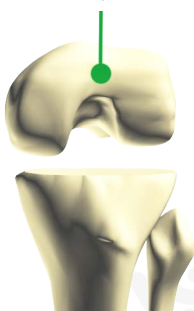


Figure1-1

III. Intramedullary Fixed Distal Femoral Resection

Utilize the intramedullary taphole drill to penetrate the femoral canal to a depth of approximately 3.5-5 cm. Place the canal entry location 1cm above the insertion of the posterior ligament and slightly medial in the intercondylar notch (Figure 1-1).

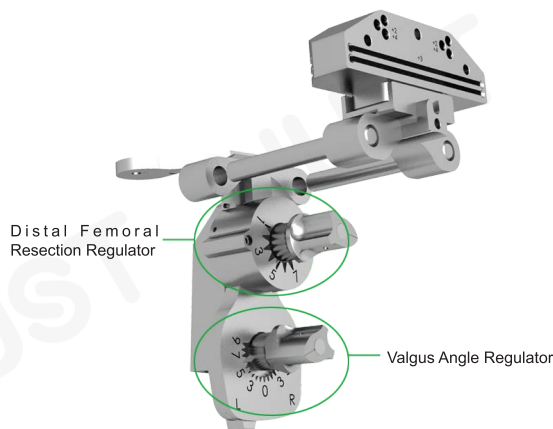


Figure1-2

Set the adjustable distal femoral osteotomy guide to the desired valgus angle by pressing and turning the valgus angle dial. A valgus angle setting of 5 to 7 degrees is available. Select the depth of 9mm of distal resection by turning the resection level dial (Figure 1-2).

Attach the adjustable distal femoral osteotomy module connector and distal femoral osteotomy block to the adjustable femoral resection guide by sliding the two legs on the connector through the anterior holes of the osteotomy guide. Attach the distal femoral osteotomy block to the distal osteotomy guide. Continue sliding the connector until the block is sitting against the anterior cortex. Pin the osteotomy block into place (Figure 1-3).

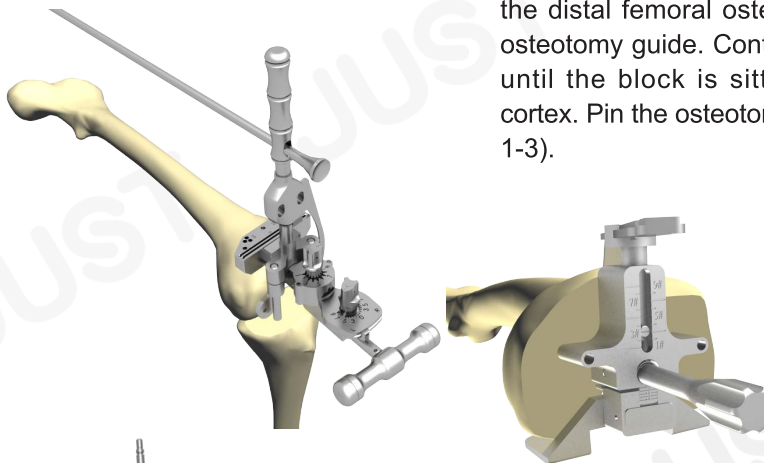


Figure1-3



Figure1-4

To confirm the valgus angle, the power line calibrator can be inserted into the adjustable distal osteotomy block and an 6.4mm alignment rod can be inserted. Make sure the valgus is correct(Figure 1-4).

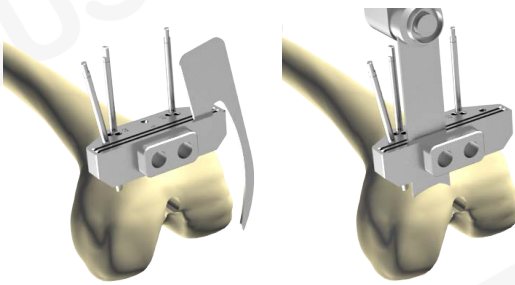


Figure1-5

The two resection slots of 0 and +3mm are available for the distal resection. The 0mm slot will resect 9mm from the most prominent part of the contacting distal condyle. If additional distal resection is required, the +3mm slot will resect 12mm. If additional distal resection is required beyond the +3mm slot, shift the rosteotomy module connector proximal by utilizing the +2 or +4mm pin holes (Figure 1-5).

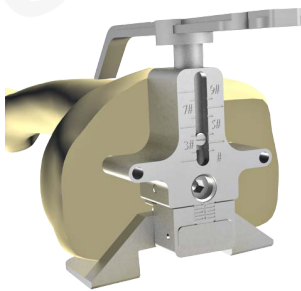


Figure2-1

V. Femoral Sizing

Place the adjustable A/P measuring device against the resected distal surface with the feet in contact with posterior condyles of the femur. Three options are available feet: 3 degree external rotation (left and right) and neutral (Figure 2-1).

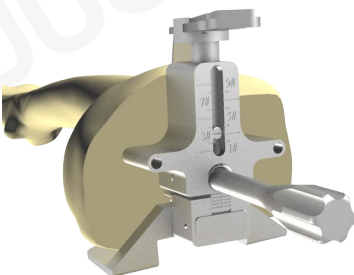


Figure2-2

Adjustable dial feet can be used with the A/ P measuring device. They are available in left and right with the ability to set external rotation from 0 to 10 degrees. It is suggested that an initial setting of 3 degrees of external rotation be utilized. The femoral component size can now be read from the central scale. If the size indicated is in-between standard sizing or a larger flexion gap is desired, a choice may be made to choose the smaller size and shift the femoral 4-in-1 placement anteriorly. To shift the component anteriorly, turn the screw mechanism in the central portion of the sizer, which in turn raises the level of drill holes in 1mm increment (Figure 2-2). A scale is located on the sizer how far the component will be anteriorly shifted.

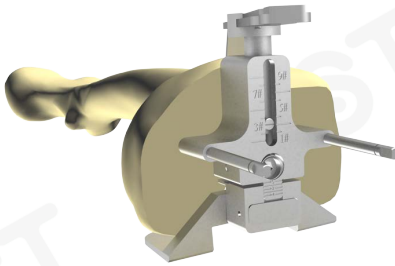


Figure2-3

Place the A/P measuring device in the middle of the femoral condyle. (Figure 2-3)



Figure3-1

VI. Femoral 4-in-1 Resection

Choose the slotted femoral 4-in-1 cutting block that matches the selected size on the A/P measuring device and place it into the holes drilled into the distal femur. Handles can be attached into the sides of femoral 4-in-1 block. Ensure the A/ P block is sitting flush against the distal femur (Figure 3-1).

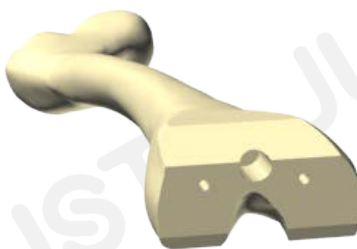


Figure3-2

If additional stability is required, pins can be placed in the side holes provided. Once the block position is satisfactory, resect the anterior and posterior bone, and anterior and posterior chamfers, with saw blade (Figure 3-2).

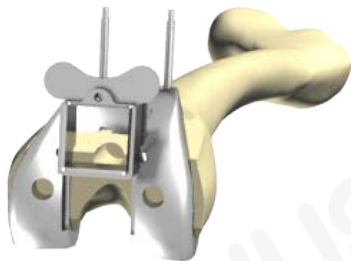


Figure4-1

XIV. Intercondylar Box Resection

Attach the collet to the femoral trial by pulling forward on the tabs of the collet and sliding the housing collet (anterior to posterior) into the slots on the distal face of the femoral trial. Attach the housing reamer dome and the P-S reamer sleeve to the patellar reamer shaft. Ream through the housing resection collet in both the anterior and posterior positions until the depth stop contacts the collet (Figure 4-1).



Figure4-2

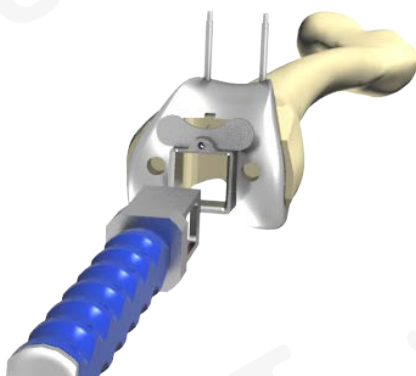
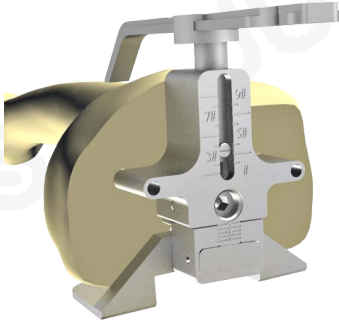


Figure4-3

Impact the housing box chisel through the housing resection collet to square the corners of the housing. The housing box chisel should be used anteriorly and posteriorly to ensure that the full length of the box is prepared (Figure 4-3).

XII PS 胫骨侧普通初次置换手术技术（方案一）



II.Extramedullary Tibial Resection

With the knee flexed, placed the spring loaded arm of the ankle clip around the distal tibia just above the malleoli. Press the silver button on the body of the tibial resection to change the height of the tibial cutting block. Place the tibial cutting block against the proximal tibia. (Figure 5-1).

Figure5-1

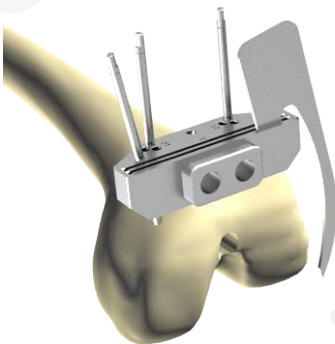


Figure5-2

Set the stylus to read 10mm. From the sagittal view, depress the side of the EM guide along the perpendicular shaft of the guide bottom until the tubular body is parallel with the shaft of the tibia. Once the adjustment of the resector axis is correct in the M/L view, rotate the resector until the shaft of resector is just medial to the tibial tubercle. Push the gold button on the top of the stylus to release the stylus locking mechanism and snap the stylus into the top of the tibial cutting locking. Set the stylus to read 2mm when referencing the most affected condylar. (Figure 5-2)

To confirm alignment, an power line calibrator can be placed on the tibial cutting block and an 6.4mm alignment rod can be inserted into the lateral hole of the power line calibrator. (Figure 5-3)



Figure5-3

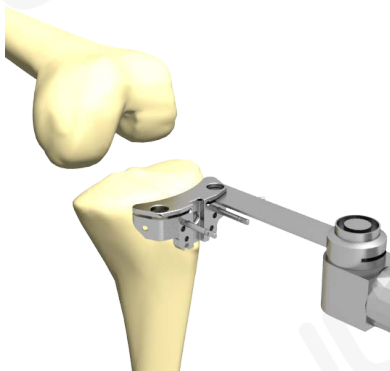


Figure5-4

Resect the proximal tibia, using a sawblade (Figure 5-4).

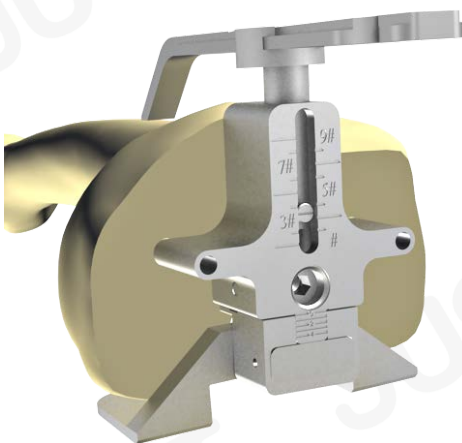


Figure6-1

IX. Tibial Plateau Sizing

Slight external rotation is preferred to optimize patellofemoral tracking. Perform an initial trial reduction to confirm proper external rotation. When correct lateral rotation has been determined, mark the position by extending the anterior mark of the baseplate onto the anterior tibia with electrocautery and fix the tibial trial tray with the screw (Figure 6-1).

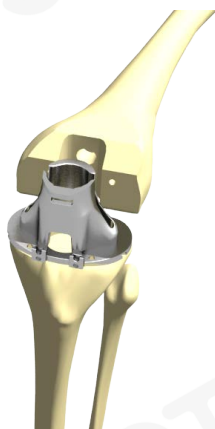


Figure6-2

X. Tibial Plateau Shaping

Assemble the punch guide tower to the tibial tray (Figure 6-2).

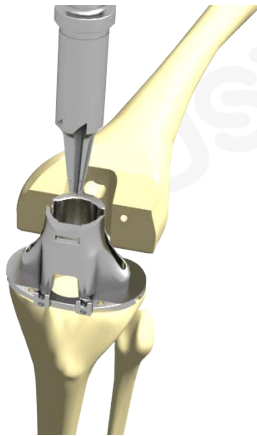


Figure6-3

Introduce the primary reamer bore to provide an initial hole into the tibia. The primary reamer bore should be fully engage in the punch guide before power is started (Figure 6-3).

After the punch is fully seated, press the button on top of the punch handle to release the punch head. The punch head sits in the tibial trial plate and acts as the trial stem.

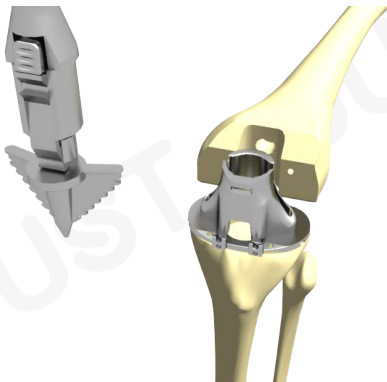


Figure6-4

Hitting reversely, and remove the Tibial Keel Punch handle and guide. The head of the Tibial Keel Punch is retained in the Tibial Trial and will be use for restoration.(Figure 6-4/6-5/6-6).

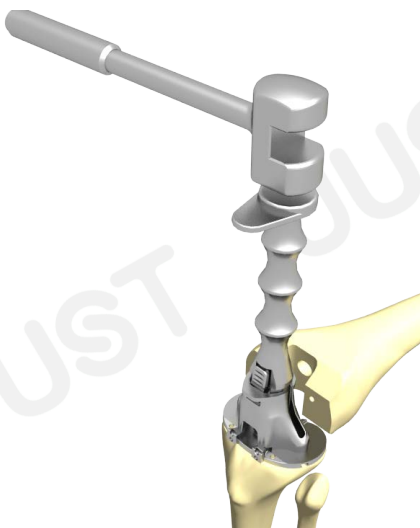


Figure6-5

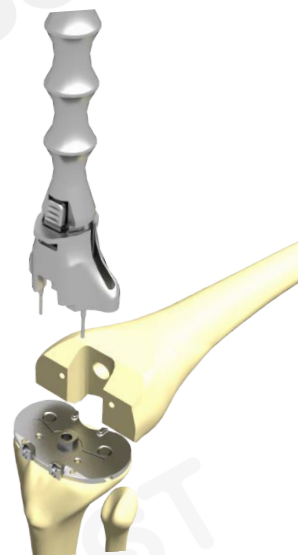


Figure6-6

XI. Trial Reduction

Place the appropriate trial in the right position. When the trial components are in place, check range-of-motion and stability of the knee (Figure 7-1).



Figure7-1

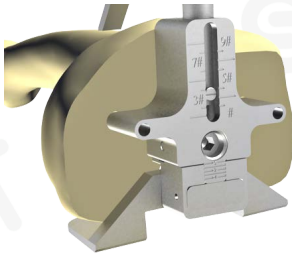


Figure8-1

XIII. Implant Insertion

Implant insertion sequence: (patellar implant)-
tibial implant-condylar-tibial bearing

Tibial Implant Insertion

Assemble the modular tibial component, by choosing the appropriate stem. Utilize the tibial impactor to firmly seat the component (Figure 8-1). Remove excess cement with a curette.



Figure8-2

PS Femoral Implant Insertion

Place the appropriate femoral component into position manually as far as possible. impacting with blow helps to pressurize the cement. Remove the extruded cement with a curette. The provisional bearing may be reinserted, and a trial reduction performed to confirm joint tension and stability. (Figure 8-2).

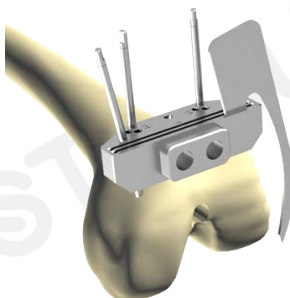


Figure8-3

Tibial Plateau Insert Insertion

Place the appropriate polyethylene bearing insert on the tibial tray and make the final insertion (Figure 8-3).

SKII PS 胫骨侧复杂初次置换手术技术 (方案二)

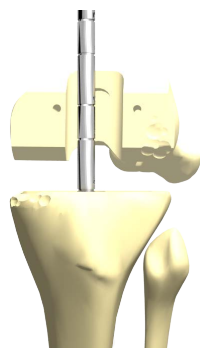


Figure5-1

IV. Tibial Preparation--Reaming

SKII reamers are available in 1 mm increment diameters from 10 mm to 20mm, extended stems are in 2mm increment. Reamers' depth marking from 40-160mm in 20mm increments (Figure 5-1). The reamer is universal. Reamers include depth markings showing stem lengths on one side ("XX"for femoral stem, "XXT"for tibial stem), and stem length depth markings on the other designated (colourless for femoral stem, black for tibial stem)

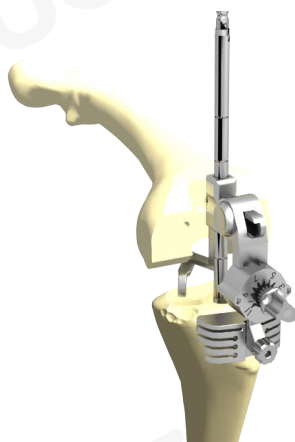


Figure5-2

Ream the canal until cortical contact is achieved using progressively larger diameter reamers, making note of the depth and diameter. Leave the last reamer used in the tibial canal acting as intramedullary alignment rod (Figure 5-2).

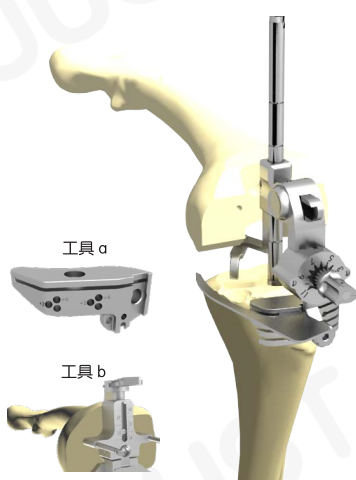


Figure6-1

Slide the cutting block onto the vertical alignment bar("a"for cutting without bone defect; "b" for augment cutting, 5 mm,10 mm or 15 mm thick augments available.)

Scenario With Bone Defect

Place the IM Tibial Resection Block over the proximal end of the reamer and lower it until the stylus contacts the least affected tibial condyle. A feeler gauge can be used through the cut slots to help evaluate position(Figure 6-1).

Position the stylus at a point where a clean-up cut will provide a smooth, flat surface for the tibial implant.

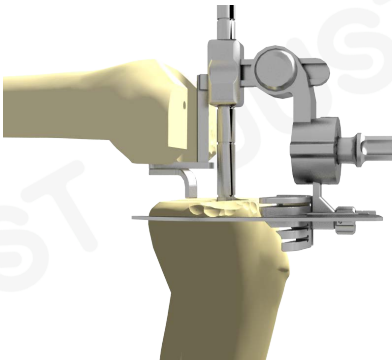


Figure6-2

A feeler gauge can be used through the cut slots to help evaluate bone defect position, when accessed, make a augment transverse cut (Figure 6-2).



Figure6-3

Remove the tibial trial assembly from the canal. For hemi-stepped wedges, make a sagittal clean-up cut by using the pin located at the resection level as a guide(Figure 6-3).

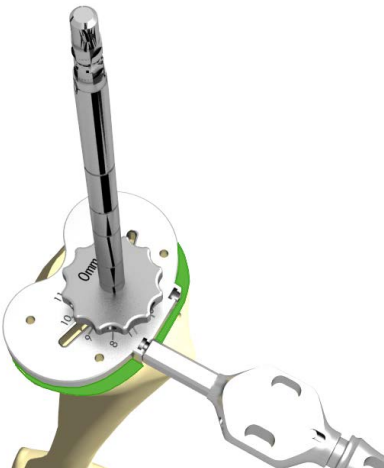


Figure7-1

VI. Tibial Offset Access

Assembly and assess the A-P and M-L position and rotation to ensure adequate tibial coverage. Starting with a 0 mm (non-offset) coin, if an appropriate position is still not found, repeat the process with 2.5mm or 5mm offset coins(Figure 7-1).

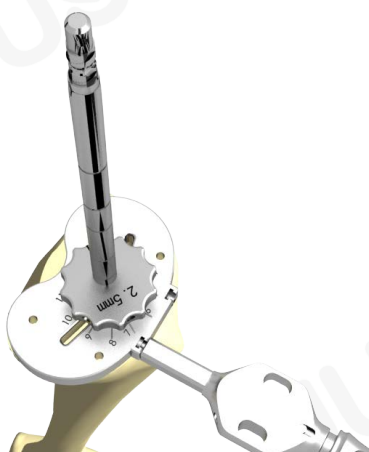


Figure7-2

2.5mm Offset

Rotate the 2.5mm offset collet until the Tibial Offset Bushing Assembly is positioned appropriately. The clock position of the arm references the positioning of the femoral collet relative to the canal (Figures 7-2).

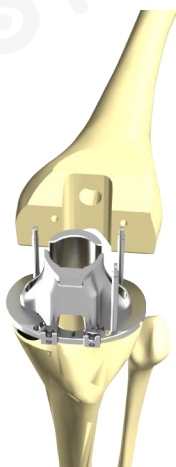


Figure7-3

Assemble the punch guide tower to the tibial tray (Figure 7-3).

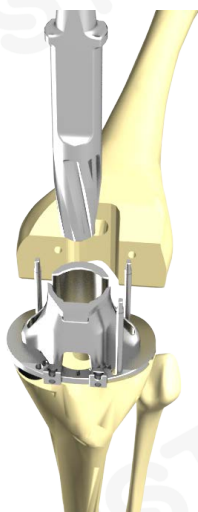


Figure7-4

Introduce the primary reamer bore to provide an initial hole into the tibia. The primary reamer bore should be fully engage in the punch guide before power is started (Figure 7-4).

After the punch is fully seated, press the button on top of the punch handle to release the punch head. The punch head sits in the tibial trial plate and acts as the trial stem.

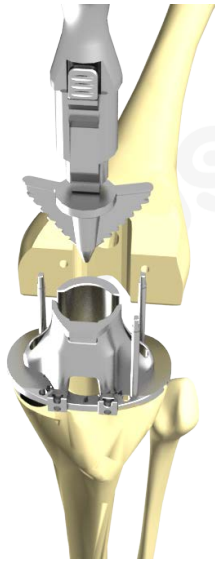


Figure7-5

Place the Tibial Keel Punch into the Tibial Keel Punch Guide and shape the proximal tibia by using the Slotted Hammer until it is stopped by the limiter of the Tibial Keel Punch Guide.(Figure 7-5).

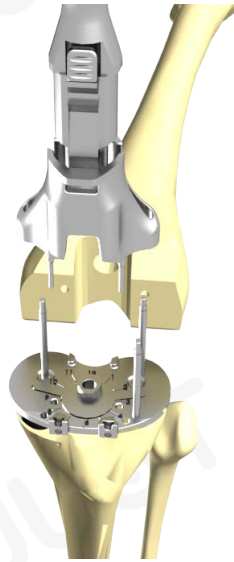


Figure7-6

Hitting reversely, and remove the Tibial Keel Punch handle and guide, The head of the Tibial Keel Punch is retained in the Tibial Trial and will be use for restoration.(Figure7-6)



Figure8-1



Figure8-2

VIII. Tibial Trial Preparation

Insert the tibial trial/offset coupler trial/stem trial assembly into the tibial cannal (Figure 8-1/8-2/8-3/8-4).

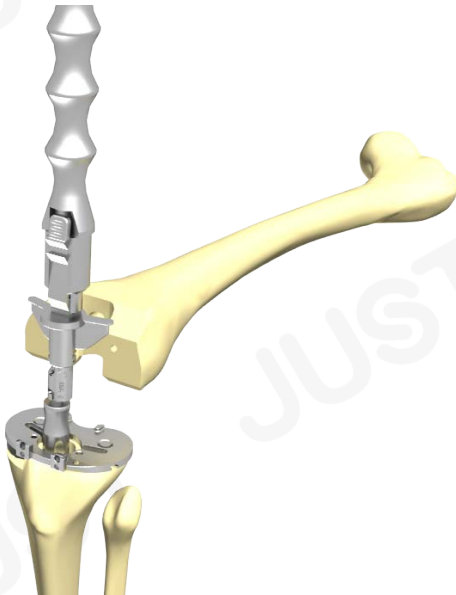


Figure8-3



Figure8-4

XI. Trial Reduction

Place the appropriate trial in the right position. When the trial components are in place, check range-of-motion and stability of the knee (Figure 9-1).



Figure9-1

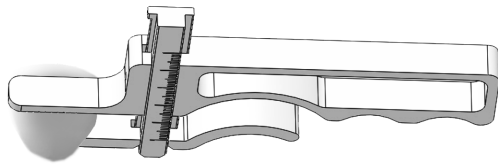


Figure10-1

XII. Patellar Resection

Tilt the patella to 90 degrees and remove the osteophytes and peripatellar tissues down to the level of the tendinous insertions of quadriceps and patellar tendons. Determine the level of the cut through caliper measurement of the total patellar thickness (Figure 10-1).

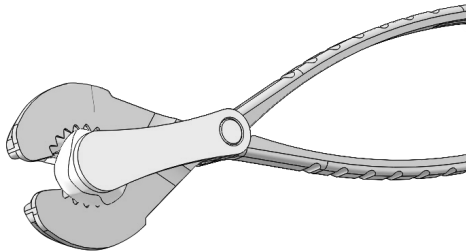


Figure10-2

Perform the initial patellar resection utilizing the patella clamp surface cut guide. Clamp the guide to perform a flat cut across the patella. A magnetic depth stylus may be utilized to determine the appropriate resection level. Select a trial patellar component to optimize coverage without increasing patellar thickness beyond pre-resection height (Figure 10-2).

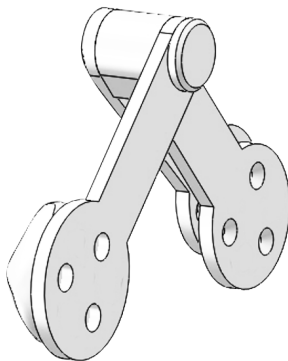


Figure10-3

Use the drill bit to make the central holes (Figure 10-3).

The insertion placement of patellar component is usually in the medial side of patellar center.

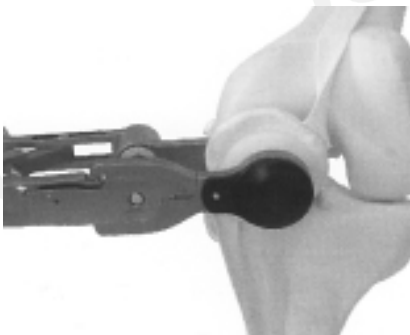


Figure10-4

Implant the prepared patellar component into position. Compact the clamp and remove extruded cement (Figure 10-4).



Figure11-1

XIII. Implant Insertion

Implant insertion sequence: (patellar implant)-
tibial implant-condylar-tibial bearing .

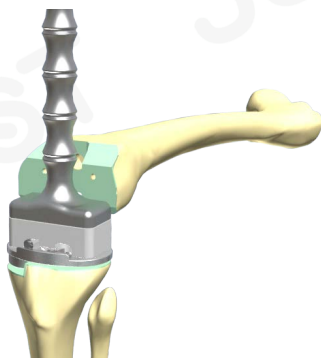


Figure11-2

Assemble extended off set stem, augment and tibial implant. Secure the connection with the hex screwdriver by turning until a click is felt. The prepared bone cement is pre-coated on the bone surface and the dorsal side of the prosthesis, and the tibial component was implanted with a tibial impactor (FIG. 11-2). all excess cement must be removed carefully.



Figure11-3

PS Femoral Implant Insertion

Place the appropriate femoral component into position manually as far as possible. impacting with blow helps to pressurize the cement. Remove the extruded cement with a curette. The provisional bearing may be reinserted, and a trial reduction performed to confirm joint tension and stability. (Figure 11-3).



Figure11-4

Tibial Plateau Insert Insertion

Place the appropriate polyethylene bearing insert on the tibial tray and make the final insertion (Figure 11-4).



Preoperative X-ray



Postoperative X-ray



Preoperative X-ray



Postoperative X-ray

Name	REF No.	Specification(L/R)	A/P(mm)	M/L(mm)
Femoral Condyle	716008	1#(R)	55	59
	716009	2#(R)	57	61
	716010	3#(R)	59	64
	716011	4#(R)	61	66
	716012	5#(R)	63	68
	716013	6#(R)	66	71
	716014	7#(R)	68	73
	716015	8#(R)	70	75
	716016	9#(R)	72	78
	716017	1#(L)	55	59
	716018	2#(L)	57	61
	716019	3#(L)	59	64
	716020	4#(L)	61	66
	716021	5#(L)	63	66
	716022	6#(L)	66	71
	716023	7#(L)	68	73
	716024	8#(L)	70	75
	716025	9#(L)	72	78

Name	REF No.	Specification	A/P (mm)	M/L (mm)	Thickness (mm)
Tibial Plateau Pad (PS)	716238	1# × 10	38	59	10
	716239	1# × 12	38	59	12
	719240	1# × 14	38	59	14
	716997	1# × 16	38	59	16
	716242	2# × 10	41/43	63/67	10
	716243	2# × 12	41/43	63/67	12
	716244	2# × 14	41/43	63/67	14
	716998	2# × 16	41/43	63/67	16
	716250	4# × 10	46/48	71/75	10
	716251	4# × 12	46/48	71/75	12
	716252	4# × 14	46/48	71/75	14
	716999	4# × 16	46/48	71/75	16
	716258	6# × 10	51/53	79/83	10
	716259	6# × 12	51/53	79/83	12
	716260	6# × 14	51/53	79/83	14
	717000	6# × 16	51/53	79/83	16

Name	REF No.	Specification	A/P (mm)	M/L (mm)	Thickness (mm)
Tibial Plateau Pad (PLUS)	719175	1# × 10	38	59	10
	719176	1# × 12	38	59	12
	719177	1# × 14	38	59	14
	719178	1# × 16	38	59	16
	719179	2# × 10	41/43	63/67	10
	719180	2# × 12	41/43	63/67	12
	719181	2# × 14	41/43	63/67	14
	719182	2# × 16	41/43	63/67	16
	719183	4# × 10	46/48	71/75	10
	719184	4# × 12	46/48	71/75	12
	719185	4# × 14	46/48	71/75	14
	719186	4# × 16	46/48	71/75	16
	719187	6# × 10	51/53	79/83	10
	719188	6# × 12	51/53	79/83	12
	719189	6# × 14	51/53	79/83	14
	719190	6# × 16	51/53	79/83	16

Name	REF No.	Specification	A/P(mm)	M/L(mm)
Tibial Tray	716150	1#	38	59
	716151	2#	41	63
	716152	3#	43	67
	716153	4#	46	71
	716154	5#	48	75
	716155	6#	51	79
	716156	7#	53	83

Name	REF No.	Specification
Patellar	716042	20x8
	716043	30x9
	716044	34x9

Name	REF No.	Specification	Length (mm)	Offset (mm)
Stem Extension	716837	10x40	40	0
	716838	12x40		0
	716839	14x40		0
	716840	16x40		0
	716841	18x40		0
	716842	20x40		0
	716843	10x80	80	0
	716844	12x80		0
	716845	14x80		0
	716846	16x80		0
	716847	18x80		0
	716848	20x80		0
	716849	10x120	120	0
	716850	12x120		0
	716851	14x120		0
	716852	16x120		0
	716853	18x120		0
	716854	20x120		0

Name	Specification	Length (mm)	REF No.	Offset (mm)	REF No.	Offset (mm)
Stem Extension	10x80	80	716855	2.5	716873	5.0
	12x80		716856	2.5	716874	5.0
	14x80		716857	2.5	716875	5.0
	16x80		716858	2.5	716876	5.0
	18x80		716859	2.5	716877	5.0
	20x80		716860	2.5	716878	5.0
	10x120	120	716861	2.5	716879	5.0
	12x120		716862	2.5	716880	5.0
	14x120		716863	2.5	716881	5.0
	16x120		716864	2.5	716882	5.0
	18x120		716865	2.5	716883	5.0
	20x120		716866	2.5	716884	5.0
	10x160	160	716867	2.5	716885	5.0
	12x160		716868	2.5	716886	5.0
	14x160		716869	2.5	716887	5.0
	16x160		716870	2.5	716888	5.0
	18x160		716871	2.5	716889	5.0
	20x160		716872	2.5	716890	5.0

Name	REF No.	Specification	REF No.	Specification	Thickness
Tibial Augment	716705	1# (L)	716706	1# (R)	5
	716707	1# (L)	716708	1# (R)	10
	716709	1# (L)	716710	1# (R)	15
	716711	2# (L)	716712	2# (R)	5
	716713	2# (L)	716714	2# (R)	10
	716715	2# (L)	716716	2# (R)	15
	716717	3# (L)	716718	3# (R)	5
	716719	3# (L)	716720	3# (R)	10
	716721	3# (L)	716722	3# (R)	15
	716723	4# (L)	716724	4# (R)	5
	716725	4# (L)	716726	4# (R)	10
	716727	4# (L)	716728	4# (R)	15
	716729	5# (L)	716730	5# (R)	5
	716731	5# (L)	716732	5# (R)	10
	716733	5# (L)	716734	5# (R)	15
	716891	XSM (L)	716892	XSM (R)	5
	716893	XSM (L)	716894	XSM (R)	10
	716895	XSM (L)	716896	XSM (R)	15
	716897	SML (L)	716898	SML (R)	5
	716899	SML (L)	716900	SML (R)	10
	716901	SML (L)	716902	SML (R)	15

Name	REF No.	Specification	Offset (mm)
SKII Special extension rod	832904	10 × 4	0

JUST MEDICAL DEVICE(TIANJIN)CO.,LTD

Add:No.27,Ziyang RD,Nankai DIST,Tianjin,300190,China

Tel: +86 22 2339 9501 Mobile: +86 150 2277 3540(Whatsapp)

Web: www.just-ortho.com

E-mail: sales@justmedical.cn

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