

Revision Cup System

Design Rationale



Flexibility. Precision. Confidence.

DePuy Synthes is proud to offer the PINNACLE® Revision Acetabular Cup System to address the need for enhanced stability and biomechanical optimization while providing immediate and long-term fixation.

The PINNACLE Revision Acetabular Cup System was designed to deliver intraoperative flexibility with precision-crafted components to address the unique challenges of revision acetabular surgery.

The PINNACLE Revision Acetabular Cup System consists of the Standard Profile, Deep Profile (DPx) and a Multi-hole shell that feature:

- Allowance for mechanical fixation in the rim or dome
- Dome screw holes that can angulate up to 34 degrees designed for intraoperative flexibility and optimal bony purchase
- Peripheral screw holes allow fixation at the rim for further stability
- The patented VIP taper that accommodates multiple bearing options to address a wide array of patients, activity levels and demand requirements
- Available sizes ranging from 38 to 80 mm

Designed in consultation with:

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University of Washington*

Daniel Berry, MD, Rochester MN
*Associate Professor of Orthopedics
Mayo Medical Center*

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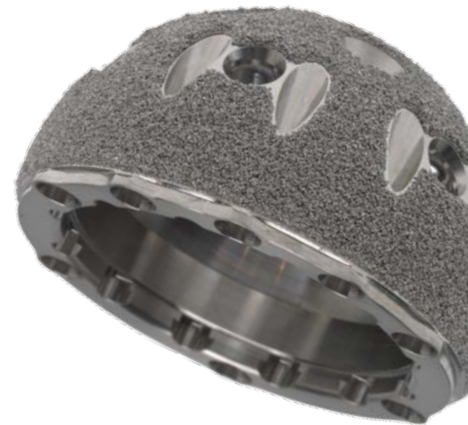
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Fixation: Immediate & Long-Term

Standard and Deep Profile (DPx) shells feature:

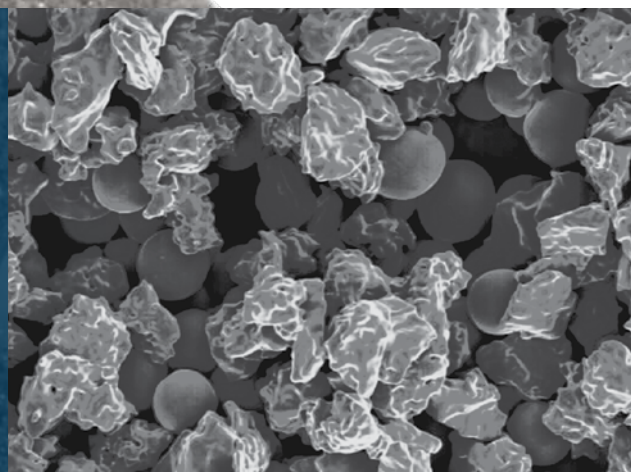
- A full 180-degree hemisphere for rim friction fit designed to enhance immediate cup stability
- Deep Profile (DPx) shells with variable, progressive lateralization that increases with shell size to provide proper medial defect fill in a graduated proportional manner
- Multiple superiorly 6.5 mm clustered dome screw holes for precise bone screw positioning into the best quality host bone
- Eight 5.0 mm peripheral screw holes for fixation while complementing the natural compressive loading of the acetabulum



GRIFTION® Porous Coating

GRIFTION® Porous Coating is specifically engineered to maintain mechanical integrity under shear, compression, torsion and tension forces.

This advanced, three-dimensional fixation is designed to maximize initial stability, which contributes to long-term biologic fixation.¹ GRIFTION Porous Coating further enhances the solid foundation of DePuy Synthes POROCOAT® Porous Coating, which has more than 30 years of clinical heritage.



Options for Modularity & Biomechanics:

Intraoperative Flexibility to Match Your Patient's Need

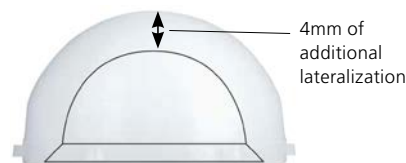
Neutral ALTRX® ALTRA-LINK® Polyethylene Liners

are designed to optimize the range of motion by its wide face chamfer while keeping the femoral heads center of rotation concentric with the outer diameter of the shell.



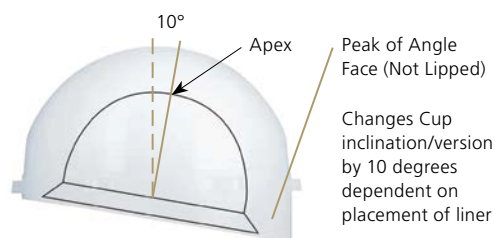
+4 Neutral ALTRX ALTRA-LINK Polyethylene Liners

are designed to enhance hip stability, by lateralizing the femoral head's center of rotation by 4 mm.



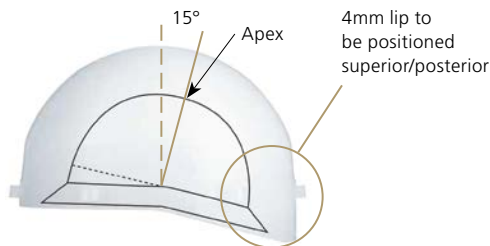
+4 10 Degree (Face-Changing ALTRX ALTRA-LINK Polyethylene Liners

are designed to re-direct the available range of motion and optimize positioning to allow the cup, screw holes and GRIPTION Porous Coating to come into contact with the most optimal surface area of the acetabulum. This liner lateralizes the femoral head 4 mm, and a 10 degree face-change alters inclination/version dependent upon placement of the liner.



Lipped ALTRX ALTRA-LINK Polyethylene Liners

are designed to provide a high wall along one side of the liner to increase the jump distance in the specific area that the head must travel before dislocation can occur. It adds a 4mm build-up for stability and also features 15 degrees of face-change.



PINNACLE DPx Shells

Providing the ability to reproduce the correct center of rotation

The ability to reproduce the center of rotation is further enhanced with the deep profile cup. The Deep Profile cups allow the surgeon to address soft tissue laxity through a proportionally variable offset DPx cup.

DPx Cup Size (mm)	Lateralization (mm)
54-58	4
60-66	5
68-72	6



Standard Profile



Deep Profile

Enhanced Stability Liners

DePuy Synthes PINNACLE Hip Solutions are designed with a wide range of acetabular cup options, biological and mechanical fixation alternatives and advanced bearing technologies. The PINNACLE ESC® Constrained Liner System addresses hip instability and dislocation through dislocation resistance and high range of motion with simple, reproducible insertion instruments.

Our unique approach to modularity gives you many ways to bring together components and materials for optimized performance. The ESC Liner uniquely addresses these concerns by maximizing the head size for each shell size, offering the patient enhanced range of motion,

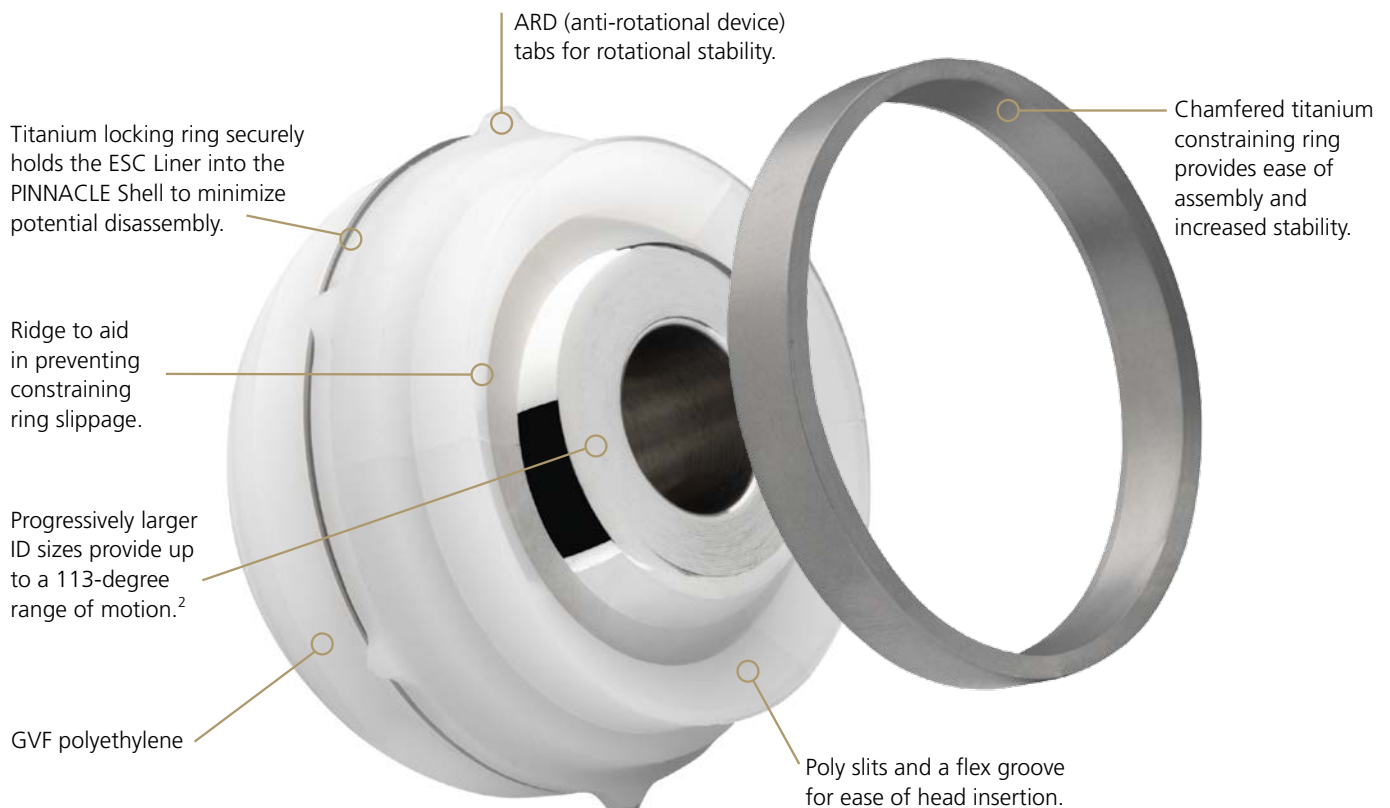
while maintaining polyethylene thickness for implant durability. The large femoral head coupled with the titanium constraining ring help to minimize potential lever out.

Additional features of the ESC Liner includes:

- High strength head capture
- +4 Neutral and +4 10° options
- Up to 113° range of motion²
- GVF polyethylene



The ESC Liner provides another option with the PINNACLE Revision Cup System.



Ordering Information

Acetabular Cup Style

Cat. No.	Outer Diameter (mm)	Acetabular Liner Size Required (mm)	Dome Screw Hole Qty.	Peripheral Screw Hole Qty.
GRIPTION Multi-hole II (38–46 are Bantam)				
1217-30-038	38	38	5	0
1217-30-040	40	40	6	0
1217-30-042	42	42	6	0
1217-30-044	44	44	6	0
1217-30-046	46	46	6	0
1217-30-048	48	48	8	0
1217-30-050	50	50	10	0
1217-30-052	52	52	10	0
1217-30-054	54	54	12	0
1217-30-056	56	56	12	0
1217-30-058	58	58	12	0
1217-30-060	60	60	12	0
1217-30-062	62	62	12	0
1217-30-064	64	64	12	0
1217-30-066	66	66	12	0
1217-30-068	68	68	12	0
1217-30-070	70	70	12	0
1217-30-072	72	72	12	0

GRIPTION Standard Profile

1217-16-054	54	48	5	8
1217-16-056	56	50	5	8
1217-16-058	58	52	5	8
1217-16-060	60	54	5	8
1217-16-062	62	56	5	8
1217-16-064	64	58	9	8
1217-16-066	66	60	9	8
1217-16-068	68	62	9	8
1217-16-070	70	64	9	8
1217-16-072	72	66	9	8
1217-16-074	74	70	9	8
1217-16-076	76	72	9	8
1217-16-078	78	74	9	8
1217-16-080	80	76	9	8

GRIPTION Deep Profile DPx

1217-17-054	54	48	5	8
1217-17-056	56	50	5	8
1217-17-058	58	52	5	8
1217-17-060	60	54	5	8
1217-17-062	62	56	5	8
1217-17-064	64	58	9	8
1217-17-066	66	60	9	8
1217-17-068	68	62	9	8
1217-17-070	70	64	9	8
1217-17-072	72	66	9	8

ESC Constrained Liner

Cat. No.	Description	Cat. No.	Description
Neutral+4			
1218-28-648	28ID 48OD		
1218-28-650	28ID 50OD		
1218-32-652	32ID 52OD		
1218-32-654	32ID 54OD		
1218-32-656	32ID 56OD		
1218-32-658	32ID 58OD		
1218-32-660	32ID 60OD		
1218-32-662	32ID 62OD		
1218-32-664	32ID 64OD		
1218-32-666	32ID 66OD		
1218-32-668	32ID 68OD		
1218-32-670	32ID 70OD		
1218-32-672	32ID 72OD		
1218-36-656	36ID 56OD		
1218-36-658	36ID 58OD		
1218-36-660	36ID 60OD		
1218-40-662	40ID 62OD		
1218-40-664	40ID 64OD		
1218-40-666	40ID 66OD		
1218-40-668	40ID 68OD		
10 Degree+4			
1218-28-748	28ID 48OD		
1218-28-750	28ID 50OD		
1218-32-752	32ID 52OD		
1218-32-754	32ID 54OD		
1218-36-756	36ID 56OD		
1218-36-758	36ID 58OD		
1218-36-760	36ID 60OD		
1218-40-762	40ID 62OD		
1218-40-764	40ID 64OD		
1218-40-766	40ID 66OD		
1218-40-768	40ID 68OD		

5.0 mm Peripheral Cortical Bone Screw

Cat. No.	Length (mm)
1257-25-000	25
1257-30-000	30
1257-35-000	35
1257-40-000	40
1257-45-000	45
1257-50-000	50
1257-55-000	55
1257-60-000	60
1257-65-000	65

6.5 mm Cancellous Dome Screw

Cat. No.	Length (mm)
1217-08-500	8
1217-15-500	15
1217-20-500	20
1217-25-500	25
1217-30-500	30
1217-35-500	35
1217-40-500	40
1217-45-500	45
1217-50-500	50
1217-55-500	55
1217-60-500	60
1217-65-500	65
1217-70-500	70

References

1. Jasty M, et al. "In Vivo Skeletal Responses to Porous-Surfaced Implants Subjected to Small Induced Motions." J Bone Joint Surg Am. 1997;79(5):707-714.
2. PINNACLE® Constrained Liner ROM Analysis 452-407-013-RCK-014-R

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Some devices listed in this surgical technique may not have been licensed in accordance with Canadian law and may not be for sale in Canada. Please contact your sales consultant for items approved for sale in Canada.

Not all products may currently be available in all markets.



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