



**Burch-Schneider™
Reinforcement
Cage**



An advanced original

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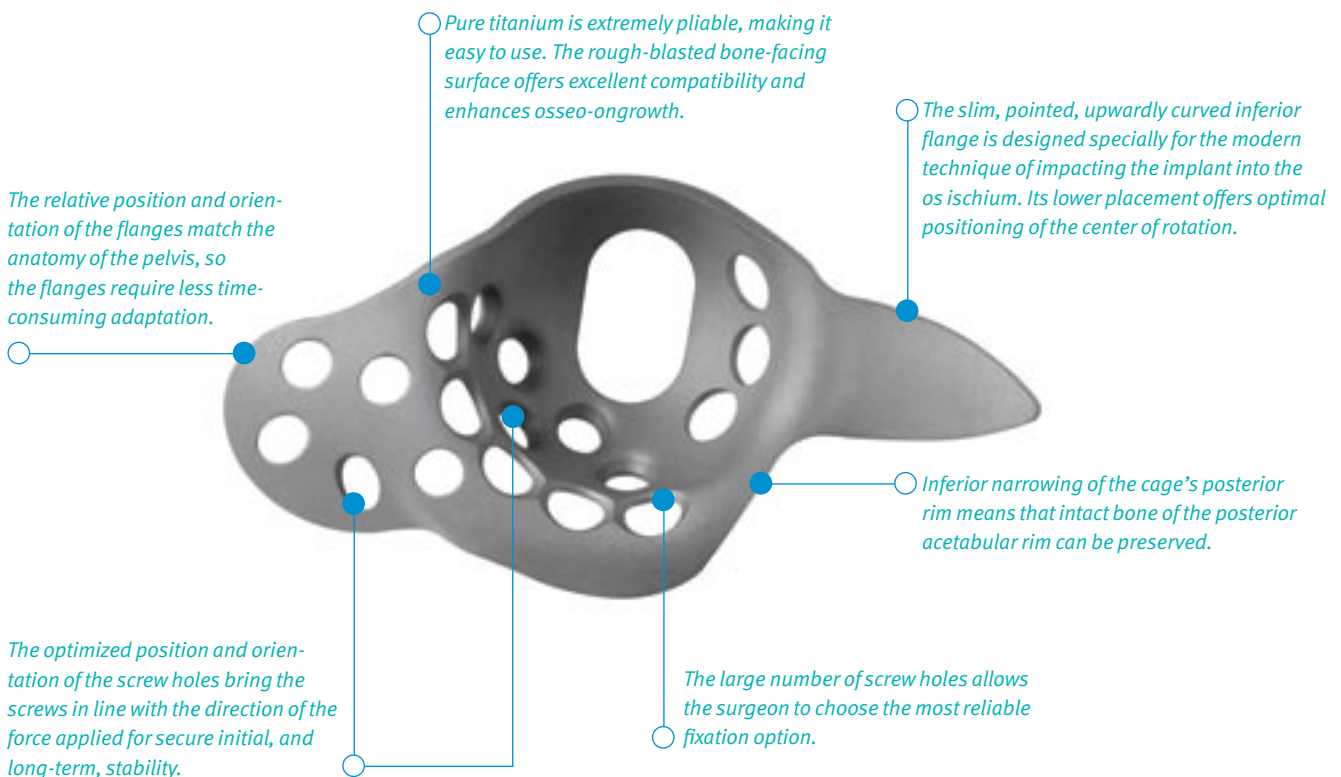
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Focused on Success

The advanced Burch-Schneider Cage is the perfect partner for state-of-the-art total hip revision operations. Its shape meets the specific needs of impacting into the os ischium. This technique already has proven itself as a means of reducing operating time and complexity significantly, to offer convincing results. Every design detail is dedicated to facilitating efficient and safe operations that bring long-lasting patient satisfaction.



Anatomically Appropriate Design

Commitment to producing an anatomically optimized cage for modern operation methods was the major driving force in the development of the advanced original.

Best Practice

The new *Burch-Schneider* Cage incorporates the experience gained by surgeons all over the world who have used it successfully for years. Results from numerous international clinical publications on the original cage influenced the design to express the principle of best clinical practice.

In the Words of M. Wagner, MD, Prof., Zeisigwaldkliniken Bethanien, Chemnitz, Germany

“I have been a satisfied user of the *Burch-Schneider* Cage for over 15 years. A very low revision rate distinguishes this tried and tested implant. The new design facilitates the implantation considerably.”



Cup loosening with extensive osteolysis and perforation of the acetabular floor.

Clinical Publications

A multitude of clinical studies have tested and confirmed the benefits of the *Burch-Schneider* Cage. Here is a small selection.

Year	Author	Journal	No. of Cases	Follow-up in Years
1992	Berry and Müller	J Bone Joint Surg 74-B: 711–715	42	2–11 (5)
1992	Rosson and Schatzker	J Bone Surg 74-B: 716–720	20	5
1998	Gill, Sledge and Müller	J Bone Joint Surg 80-B: 946–953	63	5–18 (8.5)
2000	Wachtl, Jung et al	J Arthroplasty 15: 959–963	18	8–21 (12)
2001	Winter et al	J Bone Surg 83-A: 862–867	38	4.2–9.4 (7.3)
2001	van der Linde and Torino	Acta Orthop Scand 72: 221–227	16	6–16 (10)
2002	van Koeveringe, Ochsner	Int Orthop (SIOT) 26: 291–295	28	5
2003	Weise, Winter	Int Orthop 27/1 (Supp): 29–36	41	4.2–9.4 (7.3)



Implantation of a new Burch-Schneider Cage. None of the flanges had to be adapted.

The Foundations of Excellence



1974 (prototype)



1986

A Heritage of Success

The *Burch-Schneider Cage* is an implant that looks back on more than 30 years of proven excellence. During these three decades, it has achieved an impressive track record consisting of over 130,000 successful implantations, many in extremely challenging cases. The number of patients undergoing acetabular revisions, and therefore the need for a reliable, easy-to-use implant that facilitates excellent long-term results, are increasing.

A Classic in the Making

Swiss orthopedic surgeon, Dr. Hans-Beat Burch, created the cage in 1974, when he was treating an elderly patient with an unhealed acetabular fracture. A prototype was developed and successfully

implanted by Dr. Burch. The implant effectively bridged the fractured acetabular floor, complicated by bone defects of the posterior wall. Successfully bridging the defect provided secure support for the acetabular cup to enhance osseointegration.

Dr. Robert Schneider, from Biel in Switzerland, continued the development of the original idea in collaboration with Zimmer, formerly Protek. He focused on the need for proximal screw fixation of the implant in the direction of the iliosacral joint and proposed impaction of the distal flange into the ischial bone. The result was the *Burch-Schneider Cage* and the foundations for industrial production were laid.

A Solution for Demanding Cases

A key advantage of the *Burch-Schneider Cage* is the possibility to fix it firmly to the intact bone of the os ilium and os ischium. This allows the cage to be placed close to the acetabular floor in order to restore the original center of rotation.

As the polyethylene cup can be cemented into the cage relatively independently of the position of the already securely fixed cage, the surgeon can choose optimal inclination and anteversion, without compromising the stability of either component. Furthermore, the cementing locks the screws firmly and provides angular stability.



1999



2006

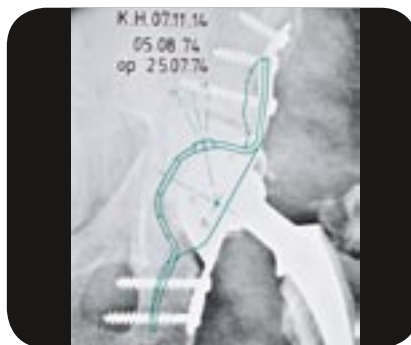
Combining Proven with Improved

Case studies confirm the strong foundations of the advanced cage and reveal better clinical outcomes with the modern surgical technique of impacting the inferior flange into the os ischium compared to the

fixation with screws of the inferior flange onto the ischial ramus. The improved results are attributed to the higher rotational stability of the cage and the anatomic restoration of the center of rotation.



Preoperative radiograph of a historical case: Dislocation of a cemented polyethylene cup 10 weeks after implantation and the attempt to correct an unsuccessful treatment of a coxofemoral fracture with dislocation by osteosynthesis.



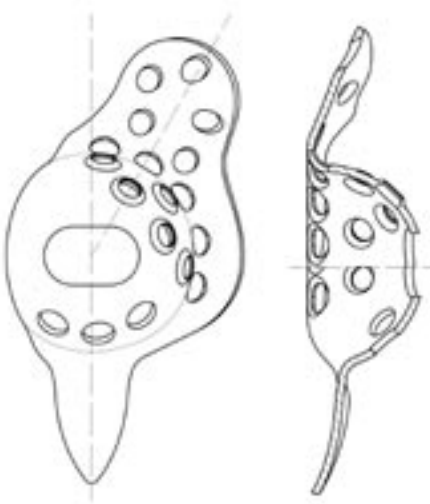
Implantation of the first prototype in 1974: The defect was bridged by the cage and the acetabular floor defect reconstructed with cement. The illustration in green demonstrates the favorable position of the cage, which could be achieved with the new design and modern surgical technique.



20 years later (13 May 1994): The radiograph shows that the position of the cage is unchanged. The last follow-up examination revealed excellent walking ability.

Designed to Perform

Leading surgeons worldwide implanted the advanced Burch-Schneider Cage prior to its global introduction. These operations produced excellent results and confirmed the qualities of this “advanced original.”



**B. Fink, MD, Prof.,
Orthopaedic Clinic
of Markgröningen, Germany**

“In the first cases, in which we used the advanced *Burch-Schneider* Cage, the advantages of this new version could clearly be identified. All cases had Paprosky 3A and 3B bone defects and one discontinuity was included. I did not have to change the orientation of the flanges, I did not have to remove bone from the posterior acetabular rim, and the hammering of the inferior flange into the os ischium was extremely easy. Also, the effective positioning of the screws in the direction of the load transmission was facilitated by the specific orientation of the holes in the superior flange.”

**A. Halder, MD, PD,
Hellmuth-Ulrich-Kliniken,
Sommerfeld, Germany**

“The new *Burch-Schneider* Cage is extremely easy to use, as it requires hardly any adaptation to the individual pelvis intraoperatively. It is also very safe as it is not necessary to remove bone to insert the inferior flange into the ischium. Like its predecessor, it allows reliable stabilization of the cup, even in the presence of extensive bone defects.”



Reduced need for complex adaptation of the flanges.



Effective screw fixation withstands the forces acting on the cage.



Flexibility to place screws into host bone securely.

**P.E. Ochsner, MD, Prof.,
Kantonsspital Liestal, Switzerland**

“To date, we have used the *Burch-Schneider* Cage in situations of acetabular defects of Paprosky type 2B and 3, where other implants would probably have failed. With the help of auto- and allografts, sometimes in combination with additional plates to bridge trans-acetabular nonunions, we were able to stabilize even the most difficult defects we encountered. The new shape of the cage will shorten the learning curve for beginners and the implantation time in the hands of experienced orthopedic surgeons.”

- A 100% original implant
- Simplified operative technique
- Increased efficiency



Preservation of valuable bone of the posterior rim.



Simplified impaction into the os ischium and optimized positioning of the center of rotation.

Contact your Zimmer representative or visit us at www.zimmer.com