Discover universality – Discover individuality
The choice is yours: The implantation options vary in the degree of guidance and stabilization and in this way allow you to choose appropriate the treatment depending on the condition of the Ligaments. Bone defects are accommodated by tibial plates, tibial stem extensions, and meniscal components. Columbus Implants are available as cementless with a micro-porous Plasmapore coating as well as cemented with cement pockets.
The high degree of compatibility facilitates the intraoperative decision between a rotating (RP) and a fixed (CR DD, UC, PS) knee prosthesis as well as a PCL retaining (RP, CR DD) and PCL sacrificing (UC, PS) prosthesis. The appropriate implant size can be used for both femur as well as tibia because many size combinations are possible. The best possible care for each patient can be achieved through the individualized adaptability of Columbus.
One world –
One knee

Discover compatibility
Discover mobility – Discover stability
Harmonized femur radii enable homogeneous extension and flexion movement. A wide range of flexion of up to 140° is achieved through a slope of 3° in the meniscal components as well as shorter dorsal femur condyles. Enlarged femoral-tibial contact zones produce optimal stability as well as reduction of the maximum stress in the polyethylene. The PE wear of the Columbus gliding surface is only 2.2 mg/million cycles. The outstanding kinematic characteristics of the Columbus have been demonstrated in numerous studies.

The Columbus Knee System achieves optimal patella tracking and ensures release of the knee extensors through the following design features:

- Retropositioning of the trochlea for deep patella tracking
- 7° lateralization of the trochlea for anatomical patella tracking
- Extension of the trochlea for femoral-patellar contact up to flexion of 110°
- Lateral elevation of the trochlea for safe prevention of patella subluxation
Discover standards – Discover innovations
Oxidation values can be minimized through an optimized sterilization process, potentially extending the life expectancy of the PE meniscal components.11, 12, 13, 14

Oxidation conventional gamma versus beta sterilization

Proven for over 23 years, the Plasmapore coating of the cementless implant improves the growth of bone tissue into the implant and therefore ensures an anchor between the bone and implant that is rotationally stable.15, 16, 17, 18

Microporous Plasmapore surface

AS Coating
AS coated Columbus prostheses offer a novel solution for patients who are allergic to metal. Thanks to the multi-layer coating, the release of metal ions is safely prevented without the risk of mechanical flaking. The wear behavior of the Columbus Prostheses can be improved by up to 60% with AS coating.19, 20, 21

Discover quality


14 B. Braun Aesculap brochure O36802 The Premium Knee System.


18 B. Braun Aesculap brochure O51001 Plasmapore μ-CaP.


The OrthoPilot Navigation System
The OrthoPilot Navigation System is a proven aid for precise knee prosthesis implantation. The simple and interactive simulation of femur and tibia sections, taking into consideration the individual ligament conditions, facilitates an optimal implantation outcome.22 - 26

Discover accuracy

The Columbus range of instruments offers you versatile options in surgical technique.

- Navigated
- Femur First
- Conventional
- Optional Accessory Instruments
- Manual
- Tibia First
- MIOS Minimally Invasive Orthopedic Solutions
- Easy Pack solution for optimal OR workflow