

*"Changes in this anatomy may produce abnormal kinematics by malpositioning the joint line and by moving the instant center of rotation."*

—Boileau, et al, 1997

*"Anatomic replacement of the head size and position should produce the most accurate restoration of normal biomechanics."*

—Pearl, 2005

*"...alterations of joint geometry predispose the joint to complications following shoulder arthroplasty."*

—Gerber, et al, 2004

*"Prosthetic adaptability, a new concept in shoulder arthroplasty, allows the correct placement of the prosthetic head, with the restoration of normal glenohumeral anatomy and kinematics."*

—Boileau, P et al, 1997

*"...the shape of the proximal humerus is more important than its dimensions, because of its variable orientation (inclination and retroversion) and its variable medial and posterior offset."*

—Boileau, et al, 1997

*"As with retroversion, head inclination was not correlated with other proximal humeral parameters; thus, its reconstruction must be tailored to the individual."*

—Bigliani, et al, 2000

*"Anatomical reconstruction of the joint is mandatory to restore normal kinematics and kinetics of the shoulder joint."*

—Gerber, et al, 2001"

*"In order for a prosthetic system to replicate normal anatomy, it must be able to do so in three dimensions."*

—Pearl, et al, 1999

*"This third-generation shoulder prosthesis is not only modular but also adaptable to the individual bone anatomy."*

—Boileau, et al, 1997

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## Aequalis® Shoulder System



*Leading the way with  
a proven design*

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Aequalis Shoulder Prosthesis & Aequalis Press-Fit Shoulder Prosthesis are covered by US patent 6,626,946.

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**TORNIER**   
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Pioneered on the philosophy of anatomical restoration of the shoulder, the Aequalis Shoulder Series is the first 3rd generation shoulder system with over 50,000 stems implanted worldwide.

“The Tornier Aequalis prosthesis is the first third generation shoulder prosthesis. It is not only modular but also adaptable to allow restoration of the patient's healthy anatomy and maintain the normal superior profile.”  
—Boileau P, Walch G, 1995

Designed to reproduce the anatomy and maintain the center of rotation thus restoring correct biomechanics and kinematics of the glenohumeral joint.

- Four **inclination** neck angles of 125°, 130°, 135° and 140° allow the humeral implant to better adapt to the humeral resection surface at the anatomic neck.
- Constant **medial offset** preserves rotator cuff function.
- Retroversion** is restored and defined by each patient's anatomic neck.
- Humeral heads offer eight different dialing options to maximize coverage and restore **posterior offset**.

Studies have shown that the proximal humeral anatomy is highly variable. Restoring each individual patient's anatomy requires utilizing a prosthesis which takes into account the normal spherical shape of the humeral head along with the variability of anatomical neck inclinations, retroversion, and combined medial and posterior offsets of the humeral head replacement.

—P. Boileau, G. Walch, 1995

### Cemented Stem

Cobalt Chrome stem for cemented applications with over 15 years of favorable clinical results.

### Press-Fit Stem

Grit blasted Titanium surface and unique stair-step metaphyseal geometry allow for strong primary and long term fixation while minimizing late subsidence.

### Humeral Heads

12 Cobalt Chrome humeral heads that reflect the linear relationship between depth and diameter and reproduce the posterior offset of the articular surface by means of an original dial system.

### Glenoid Components

- Anatomic pear shape design.
- Constant peg distribution pattern and keel size allow for simplicity and intraoperative sizing flexibility.
- Optimal glenohumeral mismatch provides increased translation, range of motion and decreased edge loading.

