DJO Surgical Shoulder Solutions

Reaching Higher by Design
At DJO Surgical, our end goal is to help patients reach their greatest potential. We strive to achieve this through innovation, proven results, and clinical heritage. Our approach is to partner with surgeon experts in the field to design shoulder systems that ultimately provide shoulder solutions. DJO Surgical Shoulder Solutions are anatomic designs engineered to provide optimized function, enhanced fixation, and flexibility and versatility to manage differing patient needs. Our aim is to reach new heights by providing clinicians solutions to help their patients reach higher.
Anatomic Designs with Optimized Function

Whether it is total or reverse shoulder arthroplasty, DJO Surgical has a shoulder solution designed with the natural anatomy in mind. The goals are to restore patient anatomy, optimize joint stability, and improve range of motion.

Dial In to Motion

Turon™ is the first total shoulder system to incorporate the IMIN™ neck technology; a patented clocking feature that provides the ability to dial in the correct neck position. This, combined with neutral and eccentric humeral head sizing options, helps achieve the best implant fit with the optimal neck position and offset.

A Forward-Thinking Reverse

The Reverse Shoulder Prosthesis (RSP®) was the first reverse shoulder design to successfully incorporate a center of rotation (COR) lateral to the glenoid. It is also the only reverse shoulder to feature an anatomic humeral neck-shaft angle that through biomechanical testing has shown to help reduce the potential for inferior scapular notching.¹

Morse taper allows for intra-operative dialing to the correct neck position

15° of variability

Lateral COR

• Larger Range of Motion

• A lateral COR maximizes range of motion while reducing the potential for inferior scapular notching.

Medial COR

• Smaller Range of Motion

• A medial COR reduces range of motion and creates the potential for inferior scapular notching.

Inferior scapular notching has been associated with poor clinical outcomes.²
Enhanced Fixation

A design philosophy of DJO Surgical Shoulder Solutions is for successful bony ingrowth, a stable interface between the bone and the prosthetic device is required during initial healing.

In the instance of the total shoulder, the Turon humeral stem features a tapered proximal body, anterior and posterior fins, in addition to, a proximal plasma spray to provide a locking and rotationally stable metaphyseal fit. The Turon pegged glenoid features a compression peg design to impart initial bony fixation.

2000N of compression
Micromotion < 150 µm

6.5mm lag screw

4 peripheral screws for resistance to shear and torsional forces

Bony ingrowth facilitated by 3DMatrix® and HA coating on a contoured ingrowth surface

In the instance of the reverse shoulder, the design of the RSP baseplate provides 2000N of compression at the prosthesis-bone interface, leading to stable initial fixation as well as ideal conditions for bony ingrowth for long-term fixation.

Reduced lateral border avoids tuberosity interference

Anterior and Posterior fins promote rotational stability

Proximal plasma spray provides a 0.5 mm press-fit

Collar minimizes the risk of subsidence

Central Compression Peg
### Flexibility and Versatility

Both the Turon and RSP offer a wide variety of intra-operative options that help to manage complex anatomies and to achieve the best surgical outcomes.

The Turon shoulder features a wide variety of humeral stem, neck, head and glenoid options to provide intra-operative flexibility to suit different patient demands.

<table>
<thead>
<tr>
<th>Stems</th>
<th>Necks</th>
<th>Heads</th>
<th>Glenoids</th>
</tr>
</thead>
<tbody>
<tr>
<td>standard and revision (long)</td>
<td>angled neck –15° of variability neutral neck</td>
<td>13 neutral and 12 offset (in 4mm) sizes</td>
<td>5 pegged and 5 keeled sizes</td>
</tr>
</tbody>
</table>

The RSP® Monoblock humeral stem builds on the foundation of the RSP. Designed to address proximal humeral fractures, the RSP Monoblock captures the advantages of the traditional RSP and has the benefit of expanded indications.

- **Seven Glenospheres** with a distinct center of rotation in each size
- **5 Diameter Sizes** Standard and revision lengths (175mm and 220mm)
- **+4mm Socket Insert** Available in 32, 36, 40 and 44mm in standard and semi-constrained
- **8mm Spacer** Provides 8mm of humeral prosthesis build-up

The RSP system offers unmatched versatility, in size and offset, of glenospheres to manage complex anatomy and surgical outcomes for rotator-cuff-deficient shoulders.
Putting it all Together

DJO shoulder systems are designed to provide a complete and seamless shoulder solutions platform. Conversion Modules minimize the potential challenges of removing a well-fixed humeral stem by allowing conversion of a primary total shoulder to a reverse shoulder and a reverse shoulder to a hemi-arthroplasty prosthesis.
Proven Results

The Turon™ shoulder is benchmarked off of the design and principles of the Charles Neer shoulder prosthesis; and RSP is one of the most, well-published reverse shoulders on the market with over forty peer reviewed journal publications.

*Abbreviated bibliography, complete bibliography on file at DJO Surgical.

References
