

Aesculap[®] Quintex[®]

Hybrid All-In-One Anterior Cervical Plating System



Aesculap Spine

Aesculap® Quintex®

5 Implants – One System

Semi-Constrained screw

(10-18 mm, diameter 4.0 mm /
11-19mm, diameter 4.5 mm)



Dynamic screw

(10-18 mm, diameter 4.0 mm /
11-19 mm, diameter 4.5 mm)



Constrained screw

(10-18 mm, diameter 4.0 mm /
11-19 mm, diameter 4.5 mm)



Quin
All in

tex[®]
One

■ Dynamic cervical plate
(dynamic and semi-dynamic)



■ Hybrid cervical plate
(constrained and semi-constrained)



Aesculap® Quintex®

All in One

System Features



The Quintex® cervical plating system offers four distinct implant combinations. Constructs may be 'dynamized' or 'hybridized' to accommodate patient-specific clinical and anatomical considerations. With only one instrument set all construct options can be formed according to the course of disease. Applying hybrid constructs addressing each level of the patient's cervical spine individually is possible.

- 4 construct options from constrained to fully dynamic
- All plates with generous graft window
- Low profile plate (2 mm)
- Self-drilling and self-tapping screws
- Fully automatic locking mechanism
- Color coded implants
- Intuitive instruments

Fully-Constrained



Blue plate + blue screws

Semi-Constrained



Blue plate + green screws

Semi-Dynamic



Gold plate + green screws

Fully-Dynamic



Gold plate + gold screws

More Rigid

More Dynamic

Implant Design Advantages



- **Built on Clinical Experience**

The dynamic design is based on clinical evidence collected in a multi-centric, randomized, controlled study, investigating Aesculap's ABC Anterior Cervical Plating System.¹

- **High Variability**

Two plates and three screw styles offer distinct implant combinations

- **Thin Plate Design**

2 mm low profile implant

- **Excellent Visibility**

The graft window helps to control the interbody fusion device

- **Automatic Locking**

Integrated screw locking mechanism

- **Self-drilling and Self-tapping Screws**

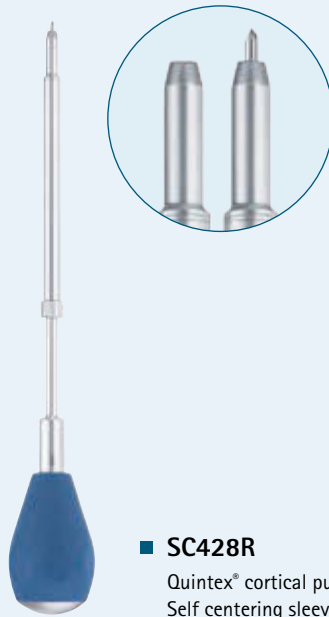
Improved screw tip and thread configuration for easy start and insertion

¹ Pitzen TR, Jiri Chrobok J, Štulík J, Ruffing S, Drumm J, MD, Sova L, Kučera R, Vyskočil T, Steudel W. Implant Complications, Fusion, Loss of Lordosis, and Outcome After Anterior Cervical Plating With Dynamic or Rigid Plates: Two-Year Results of a Multi-Centric, Randomized, Controlled Study. SPINE: Volumen 34, Number 7, pp 641-646.

Thought-out Instruments



■ **SC432R**
Quintex® screwdriver
Self holding screwdriver



■ **SC428R**
Quintex® cortical punch
Self centering sleeve



■ **SC421R**
Quintex® caliper
Adjustable trial implant

■ **One Intuitive Instrument Set**

Easy preparation and implant insertion

■ **Strong Tactile Feel**

Firm connection between screw and screwdriver

■ **Clearly Arranged**

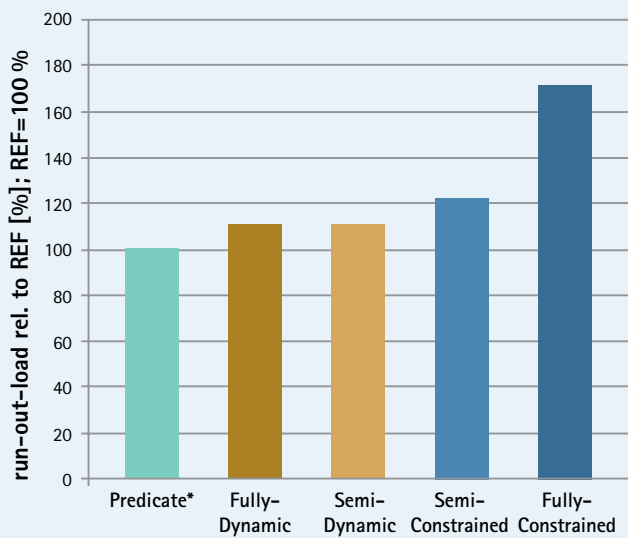
Top level tray includes all instruments for standard applications, optional instruments underneath

■ **Reliable**

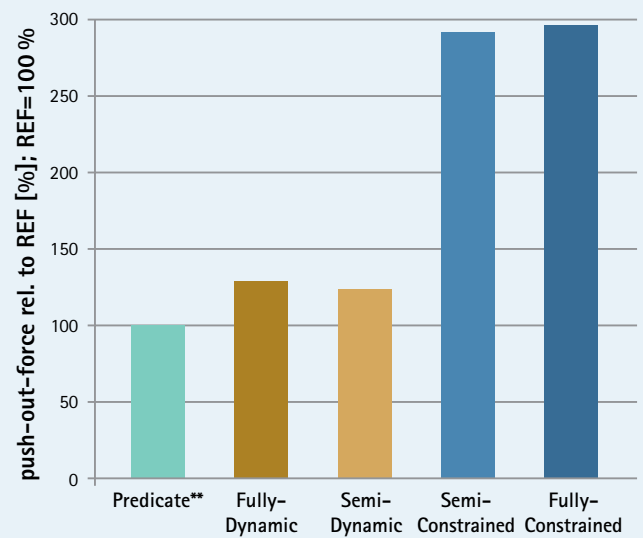
Over 30 years experience in cervical plating



Evidence Based Implant Design



* Predicate = State of the art of Aesculap dynamic and semirigid plates



** Predicate = State of the art of Aesculap dynamic plates

■ ASTM F1717² - "Plate fatigue strength"

The implant fatigue compression bending strength was determined using a corpectomy model in accordance with the ASTM F1717-09 standard. The fatigue strength is measured as the maximum load that can be cyclically applied to an implant assembly for 5 million cycles without failure, representing 2 years of human activity.

■ Conclusion

All Quintex[®] constructs are stronger in fatigue compression bending than the predicate constructs. The constrained / semi-constrained constructs provide significantly higher fatigue strength than dynamic plates. The dynamic plate is comparable to existing ones.

■ ASTM F1798³ - "Locking performance"

Static push-through strength was tested to assess the locking mechanism strength. The push-through strength is measured as the load needed to force the screw to disengage from the plate. Bone screws were assembled and locked into each plate. The plate was then assembled into a testing fixture and a compressive load was applied along the longitudinal axis of each bone screw.

■ Conclusion

The Quintex[®] system has a higher push-through value than the predicate system, providing greater resistance to screw back-out. A significantly higher push through resistance can be achieved by the screws in semi-constrained and constrained constructs.

² Aesculap internal report # Mar501-0054 and # Mar501-0056

³ Aesculap internal report # ER09-0007

