

Aesculap[®] Quintex[®]

Hybrid All-In-One Anterior Cervical Plating System
Surgical Technique



Aesculap Spine

Aesculap® Quintex®



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System Overview

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.

System Features

- 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

System Overview

Quintex® 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

■ Strong Tactile Feel

Very firm connection between screw and screwdriver

■ One Intuitive Instrument Set

Easy preparation and implant 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.

Indications

Surgical implants serve to support normal healing processes. They are not intended to either replace normal structures of the human body or permanently bear the loads they would be subjected to in cases of incomplete healing.

Use for the following indications:

- Degenerative disc disease
- Trauma (including fractures or dislocation)
- Post-traumatic kyphosis or lordosis
- Tumors
- Spondylolisthesis

- Spinal Stenosis
- Deformity (Scoliosis, Kyphosis, and / or Lordosis)
- Pseudarthrosis following an unsuccessful spinal operation
- Symptomatic cervical spondylosis
- Instability following surgical intervention due to the indications listed above
- Reoperations necessitated by prior fusion failure

For these indications, screws can be fixated in the region C2 to T1.

Note:

For further information please see instructions for use TA013366 Quintex® Implants and TA013377 Quintex® Instruments

Dynamic Plate



Hybrid Plate



Dynamic Plate from lateral



System Overview

Implant Information

The Quintex® cervical plating system is used for the anterior mono- and multisegmental stabilization of the cervical spine.

Specific instruments are available and must be used for implanting these components.

It consists of the following components:

■ Bone Plates

- hybrid cervical plate (constrained and semi-constrained)
- dynamic cervical plate (dynamic and semi-dynamic)

■ Screws

- constrained bone screw (10-18 mm, diameter 4.0 mm / 11-19 mm, diameter 4.5 mm)
- semi-constrained bone screw (10-18 mm, diameter 4.0 mm / 11-19 mm, diameter 4.5 mm)
- dynamic bone screw (10-18 mm, diameter 4.0 mm / 11-19 mm, diameter 4.5 mm)

Hybrid Plate



Constrained

- Screws will block polyaxiality
- Screws will not translate

Hybrid Plate



Semi-Constrained

- Screws offer polyaxial motion until fusion occurs
- Screws will not translate

Dynamic Plate



Semi-Dynamic

- Screws retain polyaxial motion until fusion occurs
- Screws will translate with resistance until fusion occurs

Dynamic Plate



Dynamic

- Screws retain polyaxial motion until fusion occurs
- Screws are free to translate without resistance until fusion occurs

The four Quintex® construct options



The Quintex® cervical plating system offers four plating options:

- Blue plates + blue screws:
Fully-Constrained
- Blue plate + green screws:
Semi-Constrained
- Gold plate + green screws:
Semi-Dynamic
- Gold plate + gold screws:
Fully-Dynamic

Constructs may be 'dynamized' from fully constrained to fully dynamic. The surgeon has the full choice – taking patient-specific clinical and anatomical aspects into consideration. Moreover, a tailored approach with hybrid constructs is possible in which each level of the patient's cervical spine can be individually addressed.





Fig. 1

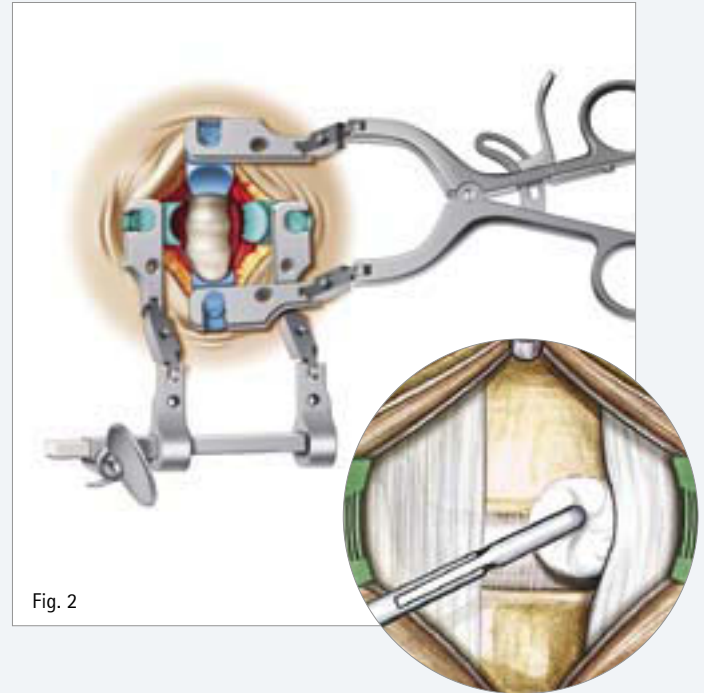


Fig. 2

Patient Positioning (Fig. 1)

- The patient is placed in the supine position with the head slightly reclined and resting in a headrest or ring.

Once the lordotic spine has been supported, the interscapular region may be bolstered to emphasize the reclination of the cervical spine (Fig. 1).

- The arms are fixed along the sides of the body. Using the arm fixations, draw the shoulders down far enough to remove them from the radiation path of the segment to be fused.

Exposure of the Intervertebral Space (Fig. 2)

- After the skin incision and preparation, the CASPAR Cervical Retractor is applied (Fig. 2). The blades are available in PEEK and Titanium. A counter retractor can be used. The subcutaneous tissue is separated from the platysma cranially, caudally and medially, and the platysma is also separated following the direction of its fibers. The margins of the platysma can be held apart with the retractor or with two surgical forceps.
- Now the medial edge of the sternocleidomastoid muscle is located and prepared with the index finger in the connective tissue space over the ventral surface of the cervical spine and under lateralization of the vascular nerve bundle and medialization of the trachea, esophagus and thyroid gland.
- After the Langenbeck hooks have been inserted, the ventral surface of the cervical spine, still covered by a thin prevertebral layer of connective tissue, is revealed. This layer can now be exposed by either a blunt scissor or alternatively through bipolar coagulation in order to expand the tissue cranially and caudally using a swab. A k-wire can be set under X-ray monitoring to mark the intervertebral disc space.

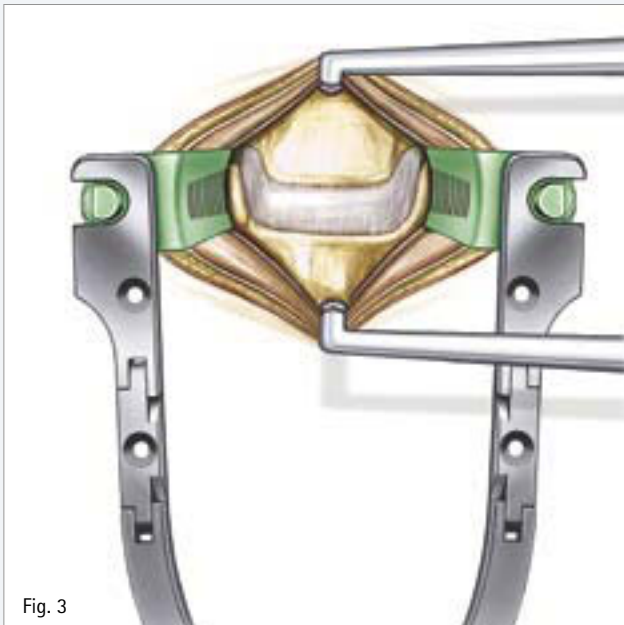


Fig. 3

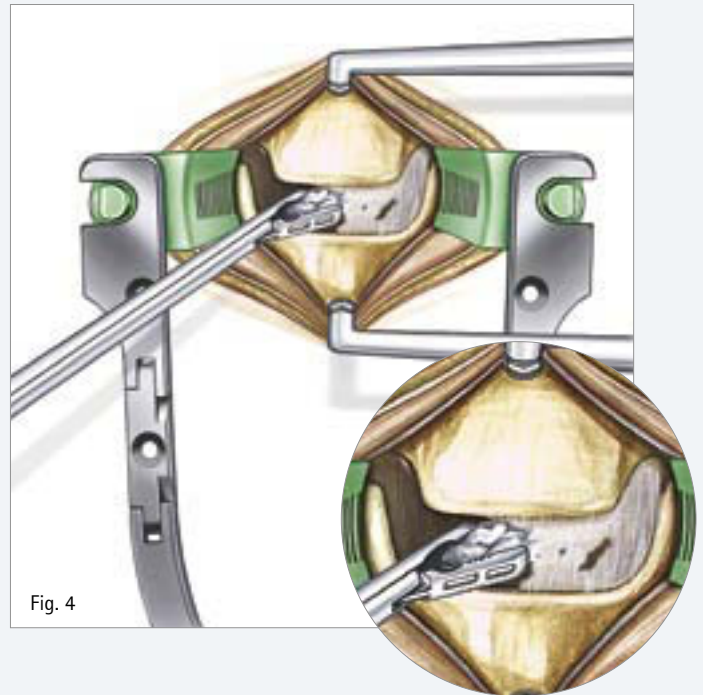


Fig. 4

Distraction/Discectomy/Preparation of the Endplates (Fig. 3-4)

- The distraction screws are placed in position and the CASPAR distractor is applied following the CASPAR technique (Fig. 3).
- Complete discectomy is performed using various rongeurs, box curettes and bone curettes (Fig. 4). While using a high speed drill to remove dorsal osteophytes, care must be taken to avoid damaging the vertebral body endplates.

Note: Excessive preparation of the endplates may weaken the construct and cause subsidence of the interbody device.

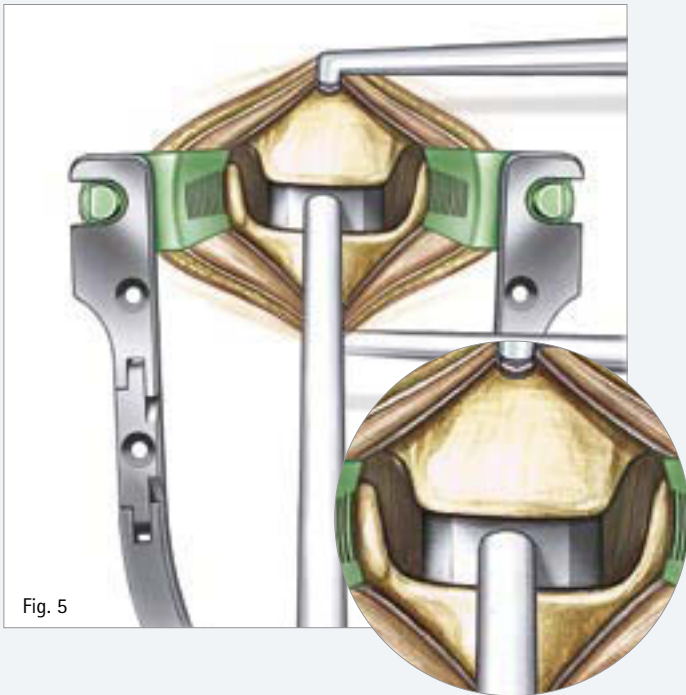


Fig. 5

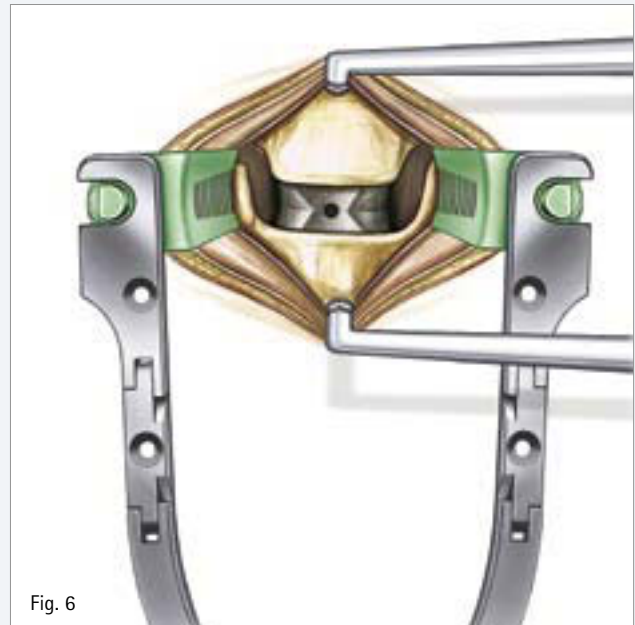


Fig. 6

Insertion of Interbody Device (Fig. 5-6)

- Bone graft or interbody devices made of Titanium, PEEK or titanium coated PEEK spacers can be used, e.g. CeSPACE^{®XP}.
- The correct size of CeSPACE[®] can be determined using the trial implants (Fig. 5).
- CeSPACE[®] has different implant shapes. Therefore different trials are available for the respective system. Laser markings on the handle as well as the trial itself indicate the cranial and caudal side of the trial.

Determination of implant size of CeSPACE[®] Titanium

The height of the CeSPACE[®] Titanium trials corresponds with the height of the final implant and is inclusive of the fixation crown.

Determination of implant size of CeSPACE[®] PEEK and CeSPACE^{®XP}

The CeSPACE[®] PEEK and CeSPACE^{®XP} trials mimic the anatomical shape of the corresponding anatomically shaped implant.

- The CeSPACE[®] implant should be inserted centrally in AP direction leaving a distance of approximately 1-2 mm to both the anterior and posterior rim (Fig. 6).

Surgical Technique

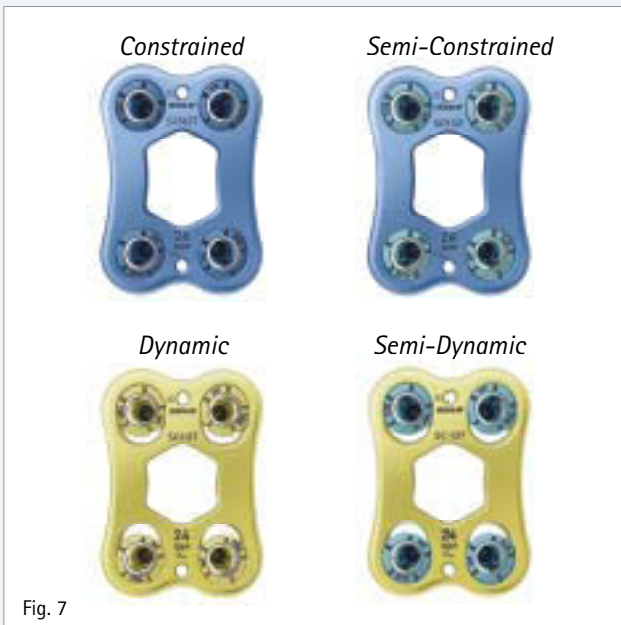


Fig. 7



Fig. 8

Plate Selection and Length Verification (Fig. 7–8)

The Quintex® system is designed with the patient and surgeon in mind. Its constrained, semi-constrained, semi-dynamic and dynamic construct options offer intraoperative versatility and accommodate a wide range of anatomical considerations (Fig. 7).

- Each Quintex® construct features different properties. It is important to understand the performance characteristics of these implant combinations when determining the appropriate construct for the patient.
- Both the Quintex® hybrid and Quintex® dynamic plates allow the surgeon to vary screw selection by each level, enabling to form a patient specific construct with different polyaxial and translational properties.
- Once the desired plating construct has been selected, the Caliper (SC421R) may be used to provide a linear measurement of the plate length (Fig. 8).

Note: Hybrid plates should be sized to encompass the desired area of fixation. Dynamic plates should be sized considering space needed to accommodate translational settling.

Note:

- For a successful treatment the proper selection of implant size, shape and design should be considered. Quintex® system implants are not intended to either replace normal structures of the human body or permanently bear the loads they would be subjected to in case of incomplete healing. The indication of a cervical plate therefore is combined with an indication of an interbody fusion or vertebral body replacement device.
- Intraoperative contamination with blood, secretions or other fluids may render the contaminated component unsuitable for resterilization!



Plate Contouring (Fig. 9a and 9b)

Quintex® plates are pre-contoured to approximate cervical lordotic anatomy. If additional contouring is required, the plate bender (SC420R) should be used. The bending zone is the area between the pairs of holes within the bone graft window (window in the plate).

Adding Lordosis:

- To increase the lordosis, place the Quintex® plate with the bending zone positioned centrally between the two upper rolls of the plate bender (Fig. 9a).

Decreasing Lordosis:

- To decrease the lordosis, place the bending wedge over the bending zone (Fig. 9b).

Note: The area on the instrument on which the lordosis of the plate can be reduced is labeled 'STRAIGHTEN PLATE HERE'.

Note: In order to prevent excessive or insufficient lordosis, the long Quintex® plates should be bent in steps (one bending zone after another on multi-level plates).

Caution:

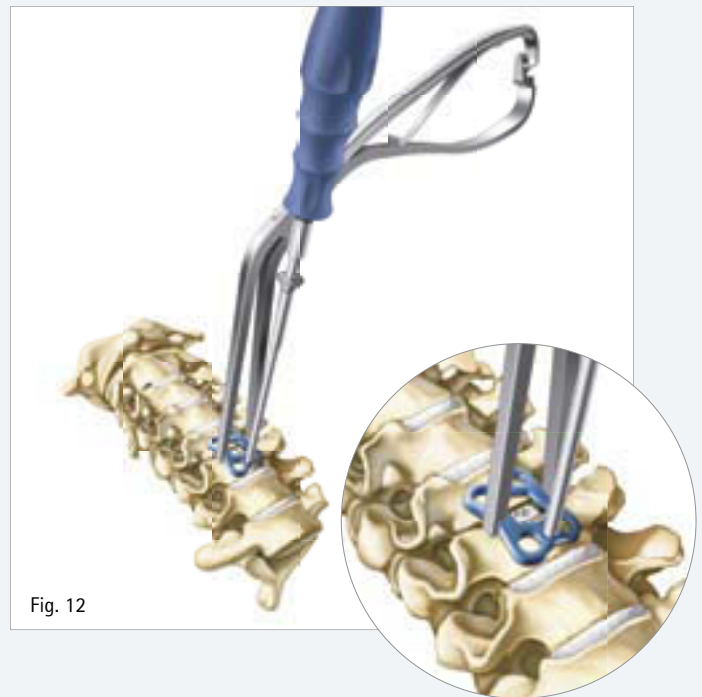
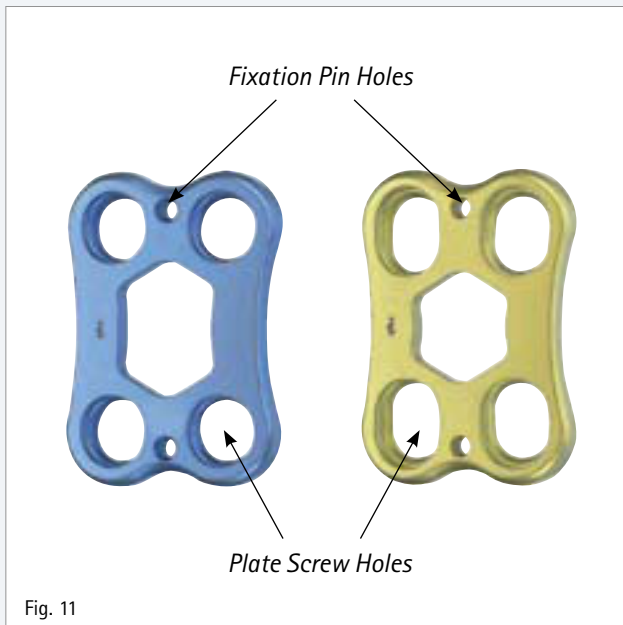
- Contouring of the plate should be minimized as excessive contouring can fatigue implant materials.
- Always bend the Quintex® plate in one direction only. Do not bend back the Quintex® plate.
- Always bend the plate only in the zone where the graft window is located. Never bend the plate close to or over the screw holes.

Plate Insertion (Fig. 10)

The Quintex® system features a plate holder (SC434R) to facilitate handling.

- Use the plate holder forceps to grasp the Quintex® plate by the outer edge, see Fig. 10.
- Compress the handles of the plate holding forceps to activate the lock. The plate holding forceps now holds the Quintex® plate without further pressure required on the handles.
- As soon as the Quintex® plate is correctly positioned, fix the plate with fixation pins and further press the handles of the plate holding forceps to release the lock.

Surgical Technique



Temporary Plate Fixation (Fig. 11-12)

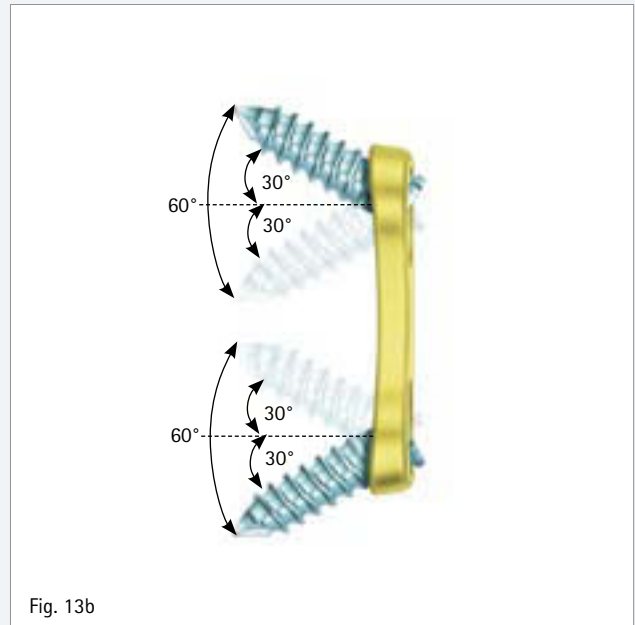
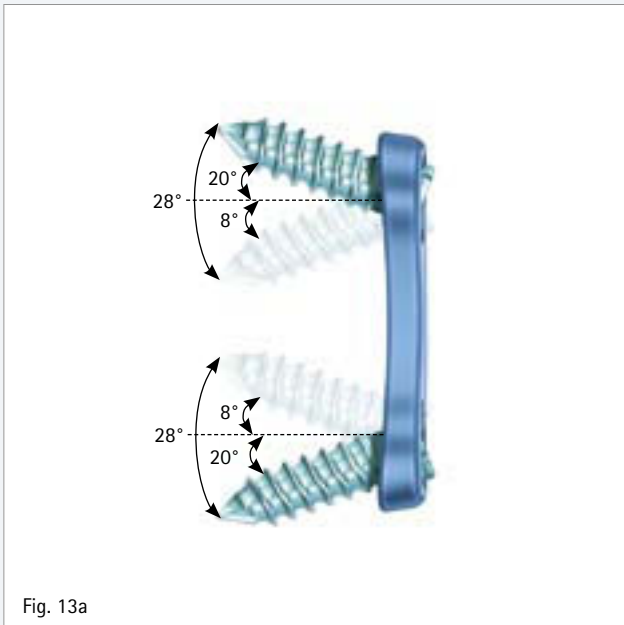
Inserting the Plate Fixation Pins:

- Fixation pins must be used to provide temporary fixation of Quintex® plates to the vertebral bodies. Temporary fixation prevents unintended repositioning of the plate during screw hole preparation and screw placement.
- Load one fixation pin (FJ833RS) into the fixation pin instrument (SC422R). To do this, pull back the outer sleeve of the instrument and insert the fixation pin. To secure the fixation pin in the instrument release outer sleeve. The outer sleeve is then pushed forward by a spring.
- Place the plate in the desired position and insert the fixation pin into the vertebral body through the pin hole (Fig. 11) by gently advancing the instrument until the pin is fully seated.
- To release the fixation pin from the instrument pull back outer sleeve fully and remove the instrument from the pin.
- Repeat this process for each level where fixation pin placement is desired. At a minimum, the most cranial and caudal fixation pin holes of the plate are utilized for temporary fixation of the plate (Fig. 12).

Note: At least two fixation pins must be inserted for a secure fixation of the Quintex® plate. Use the instrument for fixation pins (SC422R) for inserting and removing the pins!

Removing the Plate Fixation Pins:

- Fixation pins are removed after screw placement
- The instrument for fixation pins (SC422R) is also used for pin removal
- Attach the instrument onto the fixation pin
- To do this, pull back the outer sleeve of the instrument
- To secure the fixation pin release the outer sleeve of the instrument
- The outer sleeve is then pushed forward by a spring mechanism
- Pull the fixation pin out of the vertebral body
- To release the fixation pin from the instrument pull back the outer sleeve fully and take out the fixation pin from the instrument



Angulation (Fig. 13a and 13b)

The screw insertion angle can be adjusted in a cranial-caudal direction and in a medial-lateral direction when using a single drill guide or cortical center punch.

- The Quintex® hybrid plate has a maximum angulation of up to +20°/-8° in the distal holes (Fig. 13a) and +15°/-15° in the medial holes of the multilevel plate.
- The Quintex® dynamic plate has a maximum angulation of up to +30°/-30° in all slots of the plate (Fig. 13b).
- All Quintex® plates have a medial/lateral angulation of up to +6°/-6° in all holes and slots of the plate.



Opening the Cortex (Fig. 14 and Fig. 15)

Quintex® provides three possibilities to open up the cortical bone layer of the vertebral body. The holes for the self-drilling and self-tapping Quintex® screws are prepared using either the self-centering cortical punch, cortical punch through drill guide or the drill in combination with a drill guide. Commonly, the screw can be screwed in without drilling.

- Gently pierce the anterior cortex of the vertebral body by advancing the cortical punch into bone until stop is met. The cortical punch features a positive stop at a depth of 6 mm.
- Repeat for the contralateral side and any remaining screw holes.

Cortical Punch with Self-Centring Sleeve (Fig. 14)

The cortical punch (SC428R) can be used as a stand-alone instrument. If used without guide the instrument must be assembled with the self-centring sleeve for appropriate pilot hole placement.

- Position the cortical punch with sleeve to the desired angle and visually confirm that the trajectory is within the system's specified angulation.

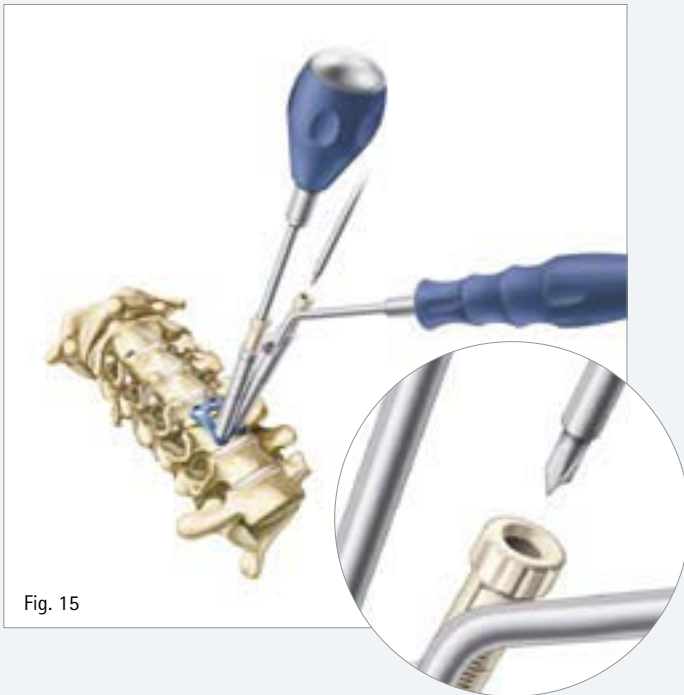


Fig. 15

Cortical Punch with Drill Guide (Fig. 15)

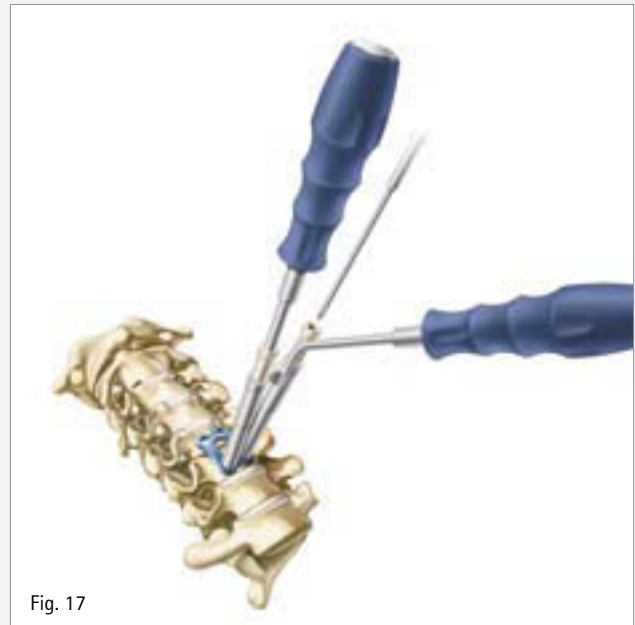
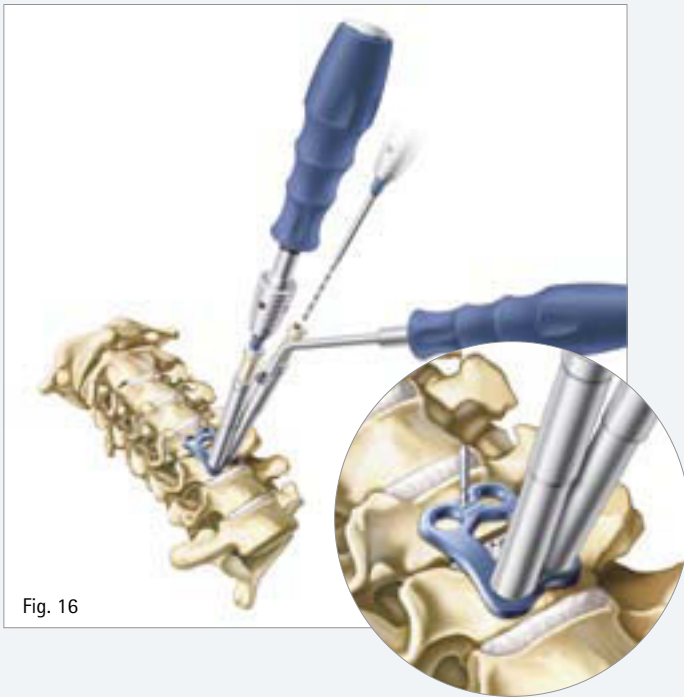
The cortical punch can be used without outersleeve in combination with a drill guide:

- Turn threaded cap counterclockwise to remove the outer sleeve from the threaded cap. Remove the self-centring outer sleeve of the cortical punch.
- Insert the cortical punch (without outer sleeve) into the drill guide.
- Position the drill guide to the desired angle on the pre-fixated plate and check visually that the trajectory is within the system's specified angulation.

Note: Use of a cortical punch in combination with drill guide or self-centring sleeve is required to achieve appropriate placement of the screw holes.

The maximum penetration depth of the cortical punch with mounted outer sleeve is 6 mm.

The maximum penetration depth of the cortical punch through the drill guide is 6 mm to the shoulder between distal tip with trocar and the shaft. This shoulder will act as a stop on the cortical bone.



Drilling and Tapping (optional Fig. 16 and Fig. 17)

The Quintex® system offers several drill guides to facilitate screw hole preparation and screw placement.

Note: Use of a drill guide or self centering sleeve is required to achieve appropriate placement of the screw holes.

Guide Selection

- The adjustable single drill guide (SC423R) and adjustable double drill guide (SC424R) accommodate all of the screw hole preparation instruments with a variable depth setting.
- The fixed single drill guide (SC425R) and fixed double drill guide (SC426R) accommodate all of the screw hole preparation instruments with a fixed depth of 14 mm.
- The Cortical Punch (SC428R) without self centering sleeve can be used through all of these drill guides.

Note: The fixed single drill guide and the fixed double drill guide are labeled '14 mm' on the sleeve for easier identification. The adjustable drill guides are equipped with adjustable depth stops. With every half turn (= depth adjustment by 0.5 mm) you will hear and feel the guide sleeve clicking into position. The thread in the drill guide is a left-hand thread.

Drilling (optional Fig. 16)

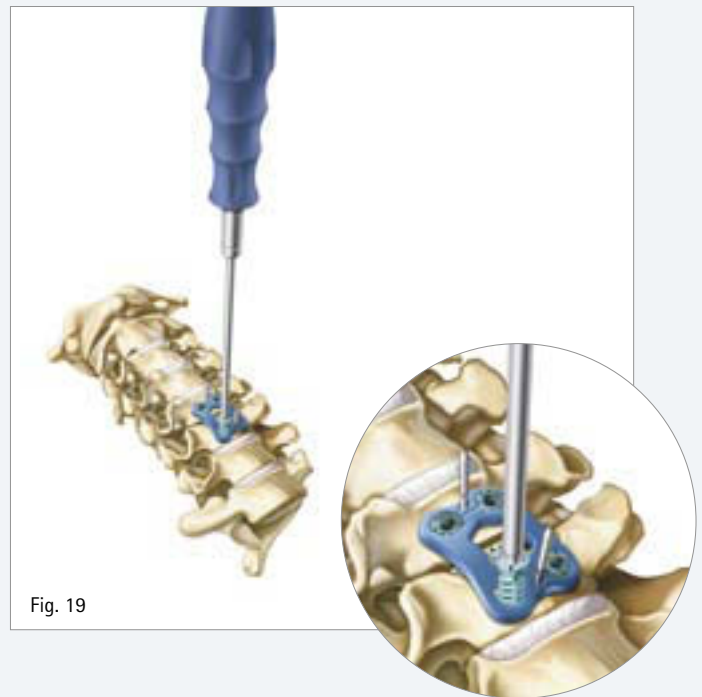
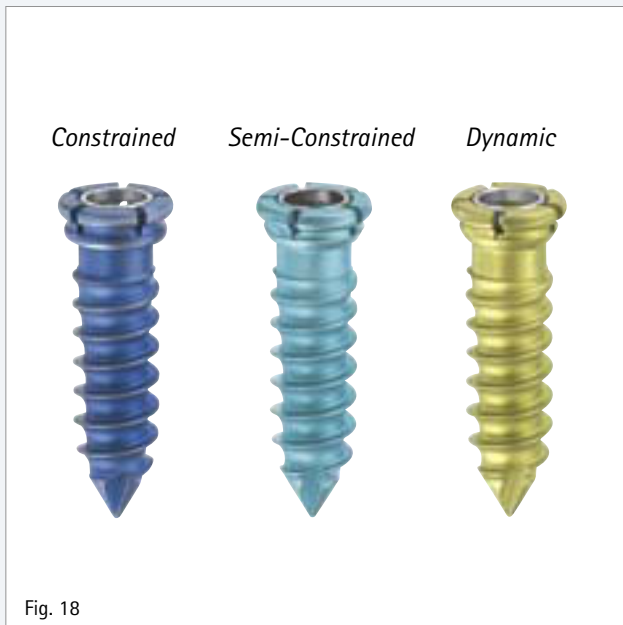
- Attach the drill bit (SC430R) to the drill handle (SC429R or SC436R).
- Alternatively attach the drill bit to a powered intra-handpiece (e.g. Aesculap® micro-Line handpiece GD450M / GD456M).
- Select the desired guide and, if necessary, set the depth by rotating the adjustable stop(s) to the desired depth.
- Insert the drill into the drill guide and check depth with caliper or ruler (e.g. 14 mm).
- Position the drill guide to the desired angle on the pre-fixated plate and check visually that the trajectory is within the system's specified angulation.
- Slowly advance the drill bit through the lumen of the guide until the stop is reached.
- Repeat for the contralateral side and any remaining screw holes.

Tapping (optional Fig. 17)

- Slowly advance the Tap (SC431R) through the lumen of the guide until the desired depth is tapped and / or the stop is reached.
- Repeat for the contralateral side and any remaining screw holes.

Note: The Quintex® system screws are self-drilling and drilling is commonly not required if a cortical punch is used. Quintex® system screws are self-tapping and manual tapping is commonly not required. For hard bone always use the Quintex® drill and the Quintex® tap.

Surgical Technique



Screw Selection (Fig. 18)

- Construct selection will determine the bone screw styles required to achieve the desired performance characteristics (please refer to plate selection on page 12). Quintex® screws are available in 3 styles:
 - Constrained screws (blue) for use in the hybrid plate only
 - Semi-constrained screws (green) for use in the hybrid or dynamic plate
 - Dynamic screws (gold) for use in the dynamic plate only
- The screws are color-coded (Fig. 18) and organized in the respective sterilization tray according to compatible plate choices. (See set proposals on page 24-35).
- The screw length can be verified by the measuring scale at the caddy.

Screw Placement (Fig. 19)

- The Quintex® screws are loaded from the screw caddy.
- Load the desired screw onto the screwdriver (SC432R) by inserting the working end of the screwdriver into the head of the screw. Ensure that the screwdriver is fully seated into the screw then apply axial downward pressure to load the screw (Fig. 20).
 - Make sure that the screwdriver holds the screw (self-holding feature).
 - Align the tip of the screw with the screw hole on the vertebral body and angle the screw / driver assembly at the desired trajectory. Visually confirm that the trajectory is within the system's specified angulation. If the hole has been pre-drilled, approximate the pre-drilled trajectory.
 - Gently but firmly advance the screw into the vertebral body by applying mild axial pressure with the screwdriver while rotating clockwise until resistance is met and the screw head fully engages in the hole or slot.
 - Remove the screwdriver from the screw head.
 - Repeat for the contralateral side and any remaining screw holes.



Fig. 20

Caution:

- The Quintex® plate and/or Quintex® screw may be damaged when screwing in the plate if the screwdriver is applied incorrectly!
- Insert the working end of the screwdriver fully into the hexalobe (receptive part) of the screw.
- When screwing in the screw, maintain a mild axial pressure on the screw.
- Applying the screwdriver at a slant or tilted would result in damage to the locking ring or locking mechanism of the Quintex® screw, or may destruct the working end of the screwdriver.
- Always align the screwdriver with the axis of the screw.
- The Quintex® screw may be damaged or insufficiently locked if it is not correctly engaged in the hold or slot of the Quintex® plate.
- Ensure that the Quintex® screw correctly engages in the hole or slot of the Quintex® plate.
- The Quintex® screw must not be screwed in too deep.



Fig. 21

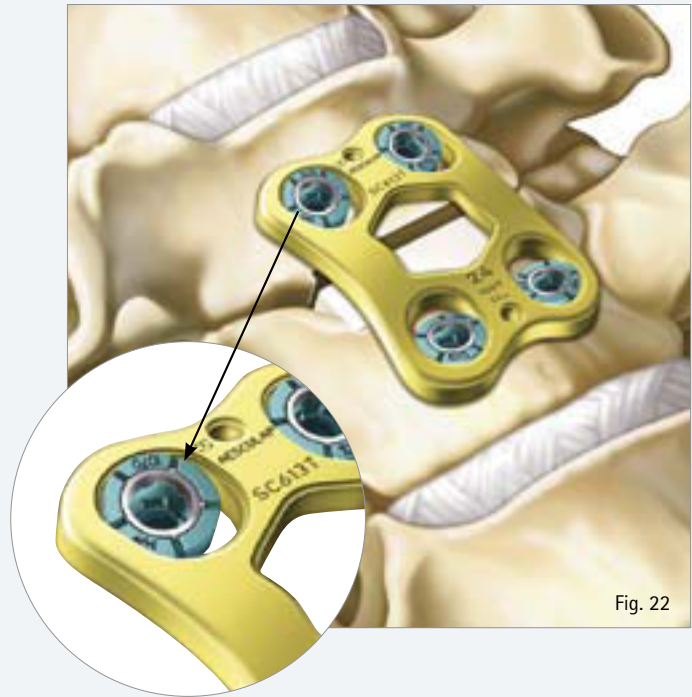


Fig. 22

Screw Locking Confirmation (Fig. 21–22)

Make sure that the Quintex® screw is securely locked in the Quintex® plate.

- After removing the screwdriver, the locking ring of the screw must be flush with the screw head.
- Visually confirm screw / plate engagement by verifying that at least 3 petals of the screw head are located below the ventral surface of the plate's hole or slot and that the lateral aspects of the screw are contained in the holes/slots of the plate (Fig. 21 and Fig. 22).
- Visually confirm lock engagement for all screws in the same manner by visually noting that the locking ring is flush with the screw head.

Note: The screw is securely locked when at least 3 of the 5 petals of the screw head are positioned in the hole/slotted hole of the Quintex® plate under the plate surface and both sides of the screw head are positioned in the hole or slotted hole underneath the plate surface from a lateral perspective.

Practical tip: Check if the Quintex® screw is correctly seated in the hole or slot of the Quintex® plate:

If the Quintex® screw has not been fully screwed into the plate hole or slot, screw the screw in deeper by 1/4 to 1/2 turns clockwise.

If the Quintex® screw has been screwed in too deep, turn the screw by 1/4 to 1/2 turns counterclockwise.

Final Steps

- Remove all fixation pins as described on page 14.
- It is recommended to confirm acceptable implant placement using fluoroscopy or intraoperative radiographs.



Fig. 23

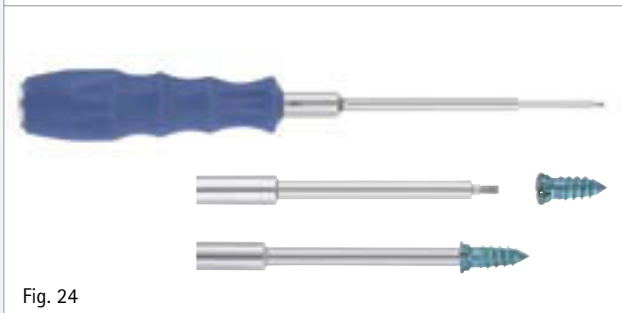


Fig. 24

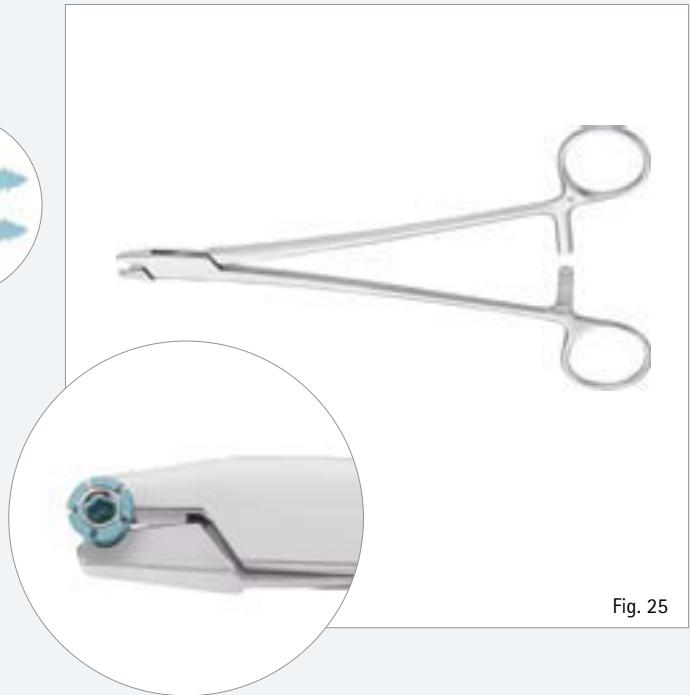


Fig. 25

Implant Removal (Fig. 23, Fig. 24, Fig. 25)

If necessary, Quintex® screws and plates can be removed.

- Carefully clear the anterior surface of the plate and screw head of any tissue overgrowth.
- Remove all screws with the screwdriver or in case of free spinning screws with the screw removal tool.
- Once all screws are removed, the plate can be removed.

Screw Removal with the Screwdriver

Try the regular screwdriver (SC432R, Fig. 23) to remove the screw.

- To remove an implanted Quintex® screw, insert the tip of the screwdriver fully into the screw head.
- When unscrewing the Quintex® screw with the screwdriver maintain a mild axial pressure on the screw.
- Turn the screwdriver counterclockwise to release the Quintex® screw.

Removal of Free-spinning Screws with the Screw Removal Tool

If the screw head of the free turning Quintex® screw does not automatically snap out of the hole or slot in the Quintex® plate use the screw removal tool (SC433R, Fig. 24) instead of screwdriver.

- Insert the screw removal tool as deep as possible into the screw head (Fig. 24).
- Turn the left-hand thread on the tip of the screw removal tool counterclockwise into the screw head as far as possible (The screw head has an internal threaded portion).
- Quintex® screw is removed from the hole or slot of the Quintex® plate by pulling and turning the instrument counterclockwise at the same time.
- If you encounter difficulties removing the Quintex® screw from the screw removal tool use the holding forceps (FW076R, Fig. 25) as a counter torque.

Note: Using the screw removal tool damages the screw's locking ring. Implants removed using the screw removal tool should not be reused. The thread on the tip of the screw extraction instrument is a left-hand.

Revision Tips

- 4.5 mm screws are provided to accommodate revisiting a previously used screw hole.
- Do not reuse explanted implants.

Implant Overview and Sets

Quintex® Hybrid Set 1-3 Level

Implants



1-level Hybrid Plate			2-level Hybrid Plate			3-level Hybrid Plate		
Art. no.	Length	Recommended	Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC510T	18 mm	2 pc.	SC521T	34 mm	2 pc.	SC532T	49 mm	2 pc.
SC511T	20 mm	2 pc.	SC522T	37 mm	2 pc.	SC533T	52 mm	2 pc.
SC512T	22 mm	2 pc.	SC523T	40 mm	2 pc.	SC534T	55 mm	2 pc.
SC513T	24 mm	2 pc.	SC524T	43 mm	2 pc.	SC535T	58 mm	2 pc.
SC514T	26 mm	2 pc.	SC525T	46 mm	2 pc.	SC536T	61 mm	2 pc.
SC515T	28 mm	2 pc.	SC526T	49 mm	2 pc.	SC537T	64 mm	2 pc.
SC516T	30 mm	2 pc.	SC527T	52 mm	2 pc.	SC538T	67 mm	2 pc.
SC517T	32 mm	2 pc.	SC528T	55 mm	2 pc.			
SC518T	34 mm	2 pc.	SC529T	58 mm	2 pc.			

Note: 4-5 Level Hybrid Plates can be found on page 32.



Constrained Screw, \varnothing 4.0 mm



Constrained Rescue Screw, \varnothing 4.5 mm

Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC400T	10 mm	6 pc.	SC490T	11 mm	2 pc.
SC401T	12 mm	10 pc.	SC491T	13 mm	4 pc.
SC402T	14 mm	12 pc.	SC492T	15 mm	4 pc.
SC403T	16 mm	10 pc.	SC493T	17 mm	3 pc.
SC404T	18 mm	6 pc.			



Semi-Constrained Screw, \varnothing 4.0 mm



Semi-Constrained Rescue Screw, \varnothing 4.5 mm

Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC500T	10 mm	6 pc.	SC590T	11 mm	2 pc.
SC501T	12 mm	10 pc.	SC591T	13 mm	4 pc.
SC502T	14 mm	12 pc.	SC592T	15 mm	4 pc.
SC503T	16 mm	10 pc.	SC593T	17 mm	3 pc.
SC504T	18 mm	6 pc.			

Implant Overview and Sets

Quintex® Hybrid Set 1-3 Level

Trays and Caddies (Implants not included)

Art. no.	Description	Recommended
SC455R	Quintex® hybrid implant tray 1-3 level	1 pc.
JH217R	1/1 size wide perf. basket lid 489 x 257 mm	1 pc.
ME250P	Quintex® screw caddy lid constrained D 4.0 mm	1 pc.
ME251P	Quintex® screw caddy lid constrained D 4.5 mm	1 pc.
ME544P	Quintex® constrained screw caddy base	1 pc.
ME254P	Quintex® screw caddy lid semi-constrained D 4.0 mm	1 pc.
ME255P	Quintex® screw caddy lid semi-constrained D 4.5 mm	1 pc.
ME543P	Quintex® semi-constrained screw caddy base	1 pc.
ME263P	Quintex® hybrid plate caddy lid 1-level	1 pc.
ME264P	Quintex® hybrid plate caddy lid 2-level	1 pc.
ME265P	Quintex® hybrid plate caddy lid 3-level	1 pc.
ME538P	Quintex® hybrid plate caddy base 1-level	1 pc.
ME539P	Quintex® hybrid plate caddy base 2-level	1 pc.
ME540P	Quintex® hybrid plate caddy base 3-level	1 pc.
TF054	Packing stencil for SC455R	1 pc.
JK442	Container	1 pc.
JK489	Container lid	1 pc.

Hybrid Implant Tray and Caddies (Implants not included)



Upper level tray



Lower level tray

Implant Overview and Sets

Quintex® Dynamic Set 1-3 Level

Implants



1-level Dynamic Plate			2-level Dynamic Plate			3-level Dynamic Plate		
Art. no.	Length	Recommended	Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC611T	20 mm	2 pc.	SC621T	34 mm	2 pc.	SC632T	49 mm	2 pc.
SC612T	22 mm	2 pc.	SC622T	37 mm	2 pc.	SC633T	52 mm	2 pc.
SC613T	24 mm	2 pc.	SC623T	40 mm	2 pc.	SC634T	55 mm	2 pc.
SC614T	26 mm	2 pc.	SC624T	43 mm	2 pc.	SC635T	58 mm	2 pc.
SC615T	28 mm	2 pc.	SC625T	46 mm	2 pc.	SC636T	61 mm	2 pc.
SC616T	30 mm	2 pc.	SC626T	49 mm	2 pc.	SC637T	64 mm	2 pc.
SC617T	32 mm	2 pc.	SC627T	52 mm	2 pc.	SC638T	67 mm	2 pc.
SC618T	34 mm	2 pc.	SC628T	55 mm	2 pc.			
			SC629T	58 mm	2 pc.			

Note: 4-5 Level Dynamic Plates can be found on page 33.



Dynamic Screw, ø 4.0 mm



Dynamic Rescue Screw, ø 4.5 mm

Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC600T	10 mm	6 pc.	SC690T	11 mm	2 pc.
SC601T	12 mm	10 pc.	SC691T	13 mm	4 pc.
SC602T	14 mm	12 pc.	SC692T	15 mm	4 pc.
SC603T	16 mm	10 pc.	SC693T	17 mm	3 pc.
SC604T	18 mm	6 pc.			



Semi-Constrained Screw, ø 4.0 mm



Semi-Constrained Rescue Screw, ø 4.5 mm

Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC500T	10 mm	6 pc.	SC590T	11 mm	2 pc.
SC501T	12 mm	10 pc.	SC591T	13 mm	4 pc.
SC502T	14 mm	12 pc.	SC592T	15 mm	4 pc.
SC503T	16 mm	10 pc.	SC593T	17 mm	3 pc.
SC504T	18 mm	6 pc.			

Implant Overview and Sets

Quintex® Dynamic Set 1-3 Level

Trays and Caddies (Implants not included)

Art. no.	Description	Recommended
SC453R	Quintex® dynamic implant tray 1-3 level	1 pc.
JH217R	1/1 size wide perf. basket lid 489 x 257 mm	1 pc.
ME252P	Quintex® screw caddy lid dynamic D 4.0 mm	1 pc.
ME253P	Quintex® screw caddy lid dynamic D 4.5 mm	1 pc.
ME545P	Quintex® dynamic screw caddy base	1 pc.
ME254P	Quintex® screw caddy lid semi-constrained D 4.0 mm	1 pc.
ME255P	Quintex® screw caddy lid semi-constrained D 4.5 mm	1 pc.
ME543P	Quintex® semi-constrained screw caddy base	1 pc.
ME256P	Quintex® dynamic plate caddy lid 1-level	1 pc.
ME257P	Quintex® dynamic plate caddy lid 2-level	1 pc.
ME258P	Quintex® dynamic plate caddy lid 3-level	1 pc.
ME530P	Quintex® dynamic plate caddy base 1-level	1 pc.
ME531P	Quintex® dynamic plate caddy base 2-level	1 pc.
ME532P	Quintex® dynamic plate caddy base 3-level	1 pc.
TF052	Packing stencil for SC453R	1 pc.
JK442	Container	1 pc.
JK489	Container lid	1 pc.

Dynamic Implant Tray and Caddies (Implants not included)



Upper level tray

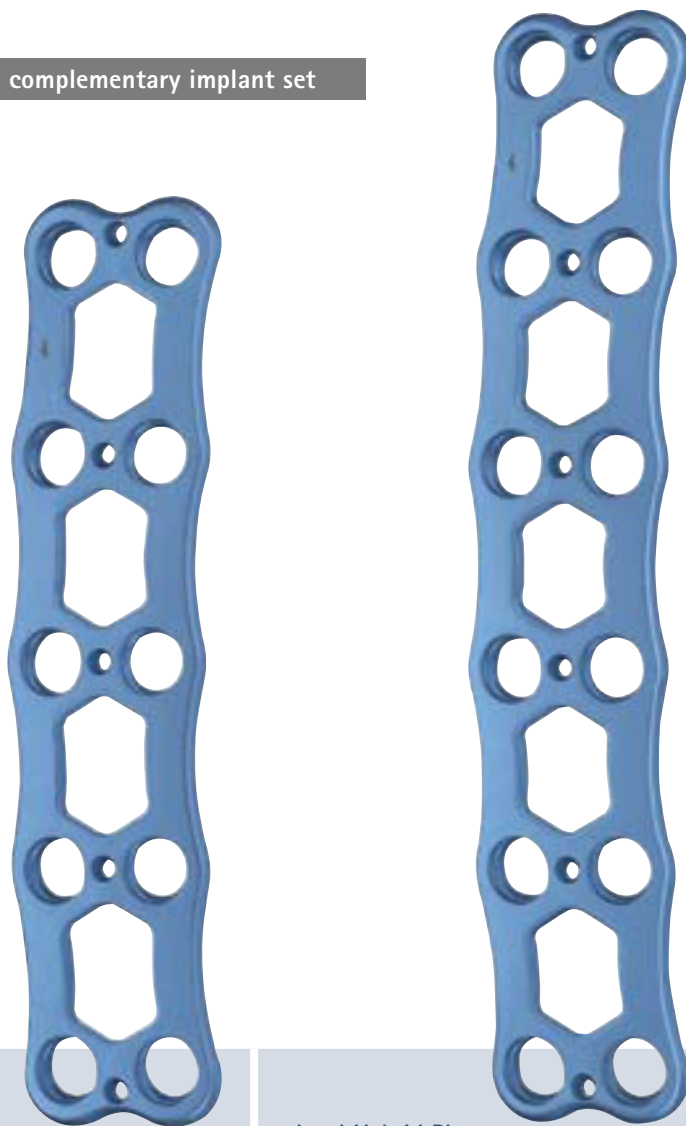


Lower level tray

Implant Overview and Sets

Quintex® 4-5 Level complementary implant set

Implants



4-level Hybrid Plate

5-level Hybrid Plate

Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC541T	67 mm	2 pc.	SC550T	82 mm	2 pc.
SC542T	70 mm	2 pc.	SC551T	85 mm	2 pc.
SC543T	73 mm	2 pc.	SC552T	88 mm	2 pc.
SC544T	76 mm	2 pc.	SC553T	91 mm	2 pc.
SC545T	79 mm	2 pc.	SC554T	94 mm	2 pc.
SC546T	82 mm	2 pc.	SC555T	97 mm	2 pc.
SC547T	85 mm	2 pc.	SC556T	100 mm	2 pc.
			SC557T	103 mm	2 pc.



4-level Dynamic Plate

5-level Dynamic Plate

Art. no.	Length	Recommended	Art. no.	Length	Recommended
SC641T	67 mm	2 pc.	SC650T	82 mm	2 pc.
SC642T	70 mm	2 pc.	SC651T	85 mm	2 pc.
SC643T	73 mm	2 pc.	SC652T	88 mm	2 pc.
SC644T	76 mm	2 pc.	SC653T	91 mm	2 pc.
SC645T	79 mm	2 pc.	SC654T	94 mm	2 pc.
SC646T	82 mm	2 pc.	SC655T	97 mm	2 pc.
SC647T	85 mm	2 pc.	SC656T	100 mm	2 pc.
			SC657T	103 mm	2 pc.

Implant Overview and Sets

Quintex® 4-5 Level complementary implant trays

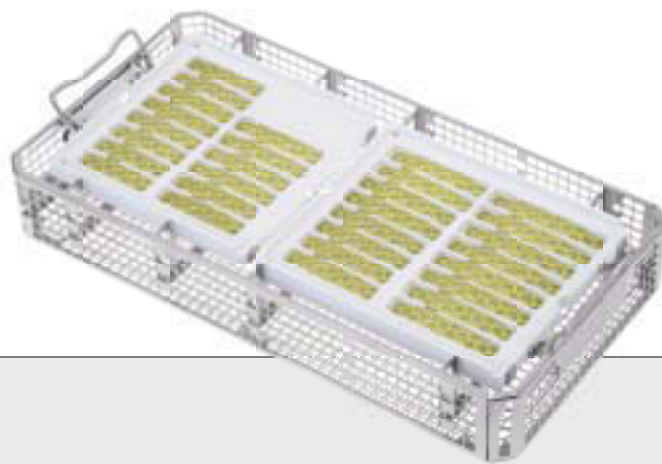
Trays and Caddies (Implants not included)

Art. no.	Description	Recommended
SC454R	Quintex® implant tray 4-5 level	2 pc.
JH217R	1/1 size wide perf. basket lid 489 x 257 mm	2 pc.
ME259P	Quintex® dynamic plate caddy lid 4-level	1 pc.
ME260P	Quintex® dynamic plate caddy lid 5-level	1 pc.
ME533P	Quintex® dynamic plate caddy base 4-level	1 pc.
ME534P	Quintex® dynamic plate caddy base 5-level	1 pc.
ME266P	Quintex® hybrid plate caddy lid 4-level	1 pc.
ME267P	Quintex® hybrid plate caddy lid 5-level	1 pc.
ME541P	Quintex® hybrid plate caddy base 4-level	1 pc.
ME542P	Quintex® hybrid plate caddy base 5-level	1 pc.
TF053	Packing stencil for SC454R	1 pc.
JK444	Container	1 pc.
JK489	Container lid	1 pc.
JK440	Container	2 pc. (alternatively to JK444)
JK489	Container lid	2 pc. (alternatively for 2 pc. JK440)

4-5 Level complementary implant trays (Implants not included)












Hybrid 4-5 level tray











Dynamic 4-5 level tray

Instrument Overview and Set

Instruments

	Art. no.	Description	Recommended	Optional
	SC420R	Quintex® plate bender	1 pc.	
	SC421R	Quintex® caliper	1 pc.	
	SC422R	Quintex® fixation pin instrument	1 pc.	
	FJ833RS	ABC and Quintex® plate fixation pin single sterile	6 pc.	
	SC423R	Quintex® adjustable single drill guide	1 pc.	
	SC424R	Quintex® adjustable double drill guide	1 pc.	
	SC428R	Quintex® cortical punch D 2.7 x 6 mm	1 pc.	
	SC429R	Quintex® drill handle	1 pc.	
	SC436R	Quintex® drill handle tear drop style		1 pc.

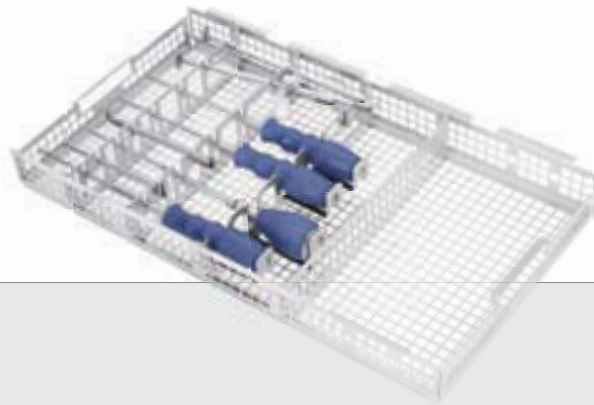
	Art. no.	Description	Recommended	Optional
	SC430R	Quintex® drill bit D 2.9 mm nonsterile	2 pc.	
	SC431R	Quintex® tap D 4.0 mm	1 pc.	
	SC432R	Quintex® screwdriver	2 pc.	
	SC433R	Quintex® screw removal tool	1 pc.	
	SC434R	Quintex® plate holder	1 pc.	
	FW076R	S4°C rod holding forceps to remove screw from removal tool	1 pc.	
	SC425R	Quintex® fixed single drill guide 14 mm		1 pc.
	SC426R	Quintex® fixed double drill guide 14 mm		1 pc.

Instrument Overview and Set

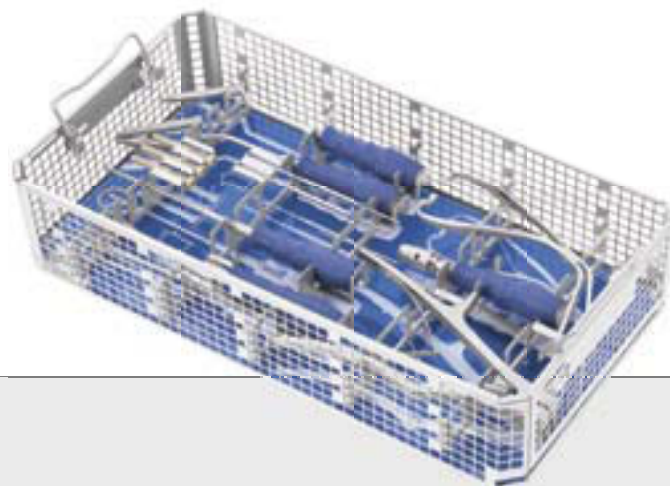
Instrument Tray (Instruments not included)

Art. no.	Description	Recommended
SC451R	Quintex® instrument tray	1 pc.
JH217R	1/1 size wide perf. basket lid 489 x 257 mm	1 pc.
TF050	Graphic template for SC451R	1 pc.
TF051	Packing stencil for SC451R	1 pc.
JK442	Container	1 pc.
JK489	Container lid	1 pc.

Instrument Tray (Instruments not included)



Upper level tray



Lower level tray

