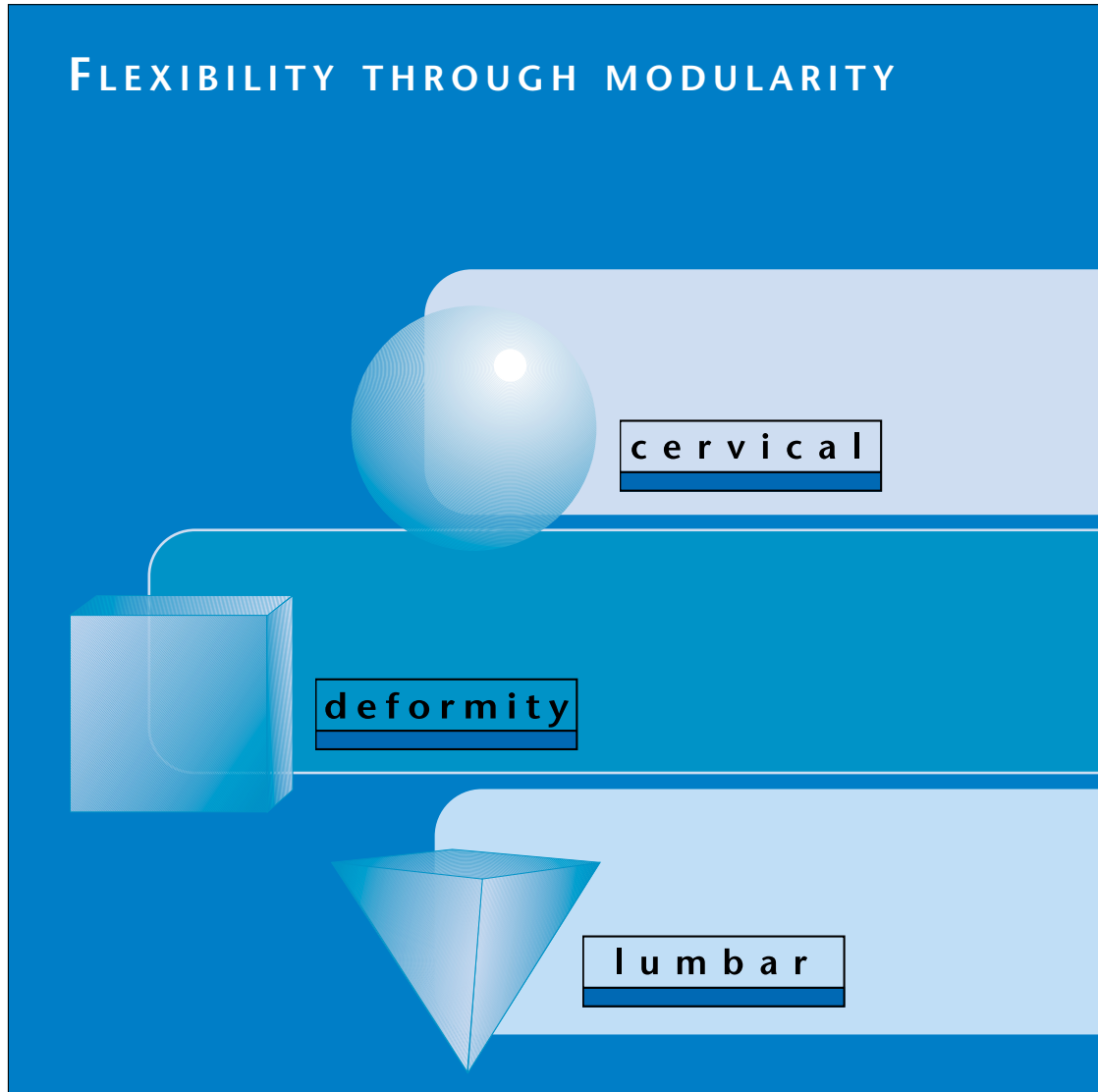




FLEXIBILITY THROUGH MODULARITY



SSE 
SPINE SYSTEM Evolution



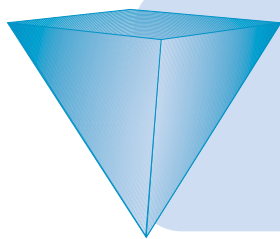
SSE – IT'S TIME FOR A NEW APPROACH

SSE 
SPINE SYSTEM Evolution

KEEP YOUR OPTIONS OPEN SSE IS SIMPLE, QUICK AND VERSATILE

Greater flexibility in the treatment of spinal conditions makes life easier for the surgeon – and, more importantly, for the patient. The SSE range from Aesculap has been developed with precisely this principle in mind. The innovative system is based around just three key components that can be applied to a broad range of spinal fixation procedures, simply and effectively.

The modular nature of the implant system allows correction of diverse and even serious injuries or degenerative conditions in the cervical and lumbar spine, as well as marked deformities. Even for complex indications, this unique instrumentation system allows surgeons to choose from a number of alternative methods of fixation during the actual operation.

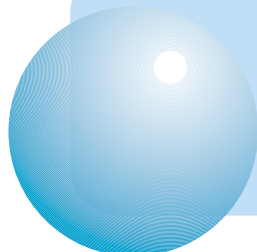


SSE – THE THREE AREAS OF APPLICATION

l u m b a r



d e f o r m i t y



c e r v i c a l



SSE

SPINE SYSTEM Evolution



l u m b a r

All good things come in threes: The system employs just a screw, a rod and a nut for secure fixation in the lumbar spine.



d e f o r m i t y

The unique design of the self-stabilizing clamp makes it an ideal solution for spinal deformity.



SSE – SUCCESS THROUGH SIMPLICITY

The versatility of SSE allows surgeons to treat each condition and patient individually.

This state-of-the-art implant system is the result of our commitment to innovation, our experience and our expertise.

SSE is a simple yet effective approach, based on three components: the screw, the nut and the rod.

GREATER FLEXIBILITY WITH FEWER IMPLANTS? SSE'S MODULAR DESIGN HAS ALL THE ANSWERS.

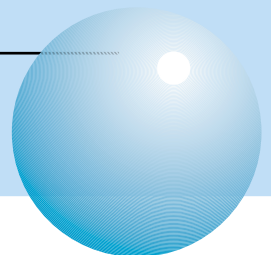
Three-point fixation achieves higher stability – and thanks to its innovative design, SSE is remarkably easy to use. Tightening the nut is sufficient to secure all the other elements. This modular system includes a selection of specially developed implants for the cervical and lumbar regions of the spine, as well as for severe deformity. This allows the surgical technique to be adapted to each patient's specific requirements.

If the patient's bone structure is too weak to support standard or polyaxial screws, alternative components, such as clamps and sacral plates are also available. Whatever the spinal indication, there is an ideal solution.



cervical

All types of injury and degenerative condition in the cervical region of the spine, from the occiput to C7, can be stabilized with just two different types of occipital plate or rods.





SSE

SPINE SYSTEM Evolution



Three-point fixation

Three-point fixation with rods, screws and conical nuts, increases biomechanical stability, for deformities and for lumbar spine conditions.

SSE – A STATE-OF-THE-ART SOLUTION



self-stabilizing clamps

The design of these self-stabilizing clamps offers twin advantages: They allow both derotation and translation – techniques that are not normally possible without additional specialty instrumentation.

UNIVERSAL OR SPECIALTY INSTRUMENTATION? ACHIEVE MORE WITH FEWER COMPONENTS.

The modular nature of the instrumentation and the design of the system offer a number of significant advantages. Three elements are connected at a single point.

The design of the self-stabilizing clamps lends the system additional versatility. They provide maximum stability in the upper thoracic and cervical regions of the spine.

The system also saves time during preoperative preparation. For the cervical spine, it is possible to match the asymmetric or symmetric occipital plates to the patient's anatomy before surgery. This enables optimum fixation to the occiput.



The three basic components – screws, rods and nuts – are the key to effective treatment of deformity and conditions of the lumbar spine. These elements of the modular instrumentation system are complemented by polyaxial screws, self-stabilizing clamps, hooks, sacral plates, cross plates and asymmetric and symmetric occipital plates. This array of different implants allows even the most complex and serious conditions to be treated more simply and flexibly than ever.



SSE **Lumbar**

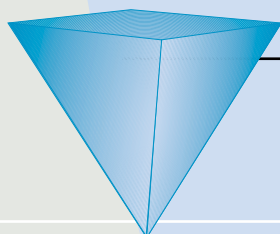
SPINE SYSTEM Evolution

RAPID AND SIMPLE ASSEMBLY.

Only three components are required to stabilize the lumbar spine: screws, nuts and rods.

SSE guarantees rapid and straightforward surgical procedures, and, highly stable fixation. A single nut holds all three components together – and its low-profile, conical design ensures excellent biomechanical stability.

The various standard screw lengths ensure perfect anchorage in all situations. In addition, the polyaxial screw opens up new ways of treating degenerative conditions and deformities. The polyaxial screw is fixed using the nut, and the angle of the pedicle screw set independently.



SSE LUMBAR

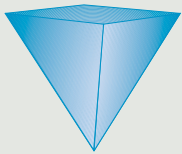
Three components are all you need for stability, ease of handling and a wide variety of applications. The polyaxial screws provide additional versatility, and are suitable for practically all spinal conditions.



SSE –
THE STRENGTH OF SIMPLICITY



LUMBAR INSTRUMENT TRAY



FW598:	SSE Lumbar Instruments	6mm	6mm
FW608	SSE Lumbar Instruments	5.2mm	5.2mm
		in set included	optional
FW618P	SSE Lumbar Instruments Tray	1	1
FG280R	Centre punch	1	1
FG281R	Trocar diam. 3.5mm for 6mm screw	1	1
FG268R	Universal trocar	1	1
FW144R	Pedicle marker, unsterile	1	1
FW145R	Pedicle marker, unsterile	1	1
FW024R	Three point rod bender	1	1
FW021R	Compression forceps	1	1
FW022R	Distraction forceps	1	1
FW023R	Distraction forceps small	1	1
FW012R	Derotation forceps	2	2
FW516R	Bending template	1	1
FW018R	Rod stabilizer	1	1
FW154R	Marnaylever	1	1
FW633R	Screw driver	1	
FW631R	Nutdriver	1	
FW634R	Screw driver		1
FW632R	Nutdriver		1
FW506R	Nutdriver with square end	1	
FW623R	Nutdriver with square end		1
FW542R	Torque wrench		1
FW501R	Rod stabilizer for torque wrench	1	
FW502R	Rod stabilizer for torque wrench		1
FW507R	Centralizer	4	
FW624R	Centralizer		4
FW503R	Short T-handle	1	
FW509R	Ratchet handle straight		1
FW513R	Rodpusher		1
FW517R	Holding sleeve for polyaxial screw	1	
FW626R	Holding sleeve for polyaxial screw		1
FW539R	Screw driver	1	
FW627R	Screw driver		1
FG313R	Palm handle		1
FW146R	Pedicle probe, straight		1
FW147R	Pedicle probe, curved		1
FW515R	Derotation hex wrench	1	1
FW525R	Screw driver 3.5mm	1	1
FW635R	Tap for 5mm screws		1
FW636R	Tap for 6mm screws		1
FW637R	Tap for 7mm screws		1
FW638R	Tap for 8mm screws		1

LUMBAR IMPLANT TRAY

Set Recommendation

Implant materials:

Titanium alloy (TiAl6V4/ISO 5832-3)



SSE Lumbar Implant Tray	SX505P	Quantities
SSE nut	5.2mm 6.0mm SX004TSX005T	12
Pedicle screws		
Pedicle screw 5 x 30mm	SX250TSX850T	4
Pedicle screw 5 x 35mm	SX251TSX851T	4
Pedicle screw 5 x 40mm	SX252TSX852T	4
Pedicle screw 5 x 45mm	SX253TSX853T	4
Pedicle screw 6 x 35mm	SX261TSX861T	8
Pedicle screw 6 x 40mm	SX262TSX862T	8
Pedicle screw 6 x 45mm	SX263TSX863T	8
Pedicle screw 6 x 50mm	SX264TSX864T	8
Pedicle screw 6 x 55mm	SX265TSX865T	2
Pedicle screw 7 x 35mm	SX071TSX671T	4
Pedicle screw 7 x 40mm	SX072TSX672T	4
Pedicle screw 7 x 45mm	SX073TSX673T	4
Pedicle screw 7 x 50mm	SX074TSX674T	2
Polyaxial screws		
Polyaxial screw 6 x 35mm	SX291TSX891T	2
Polyaxial screw 6 x 40mm	SX292TSX892T	4
Polyaxial screw 6 x 45mm	SX293TSX893T	4
Polyaxial screw 6 x 50mm	SX294TSX894T	2
Polyaxial screw 7 x 35mm	-- SX901T	--
Polyaxial screw 7 x 40mm	-- SX902T	--
Polyaxial screw 7 x 45mm	-- SX903T	--
Polyaxial screw 7 x 50mm	-- SX904T	--
Connect. screw for Poly	SX100TSX101T	8
Polyaxial head	SX099TSX699T	4
Note: Polyaxial screw diam. 7 are only available for polyaxial heads SX699T (6mm system)		
Rods		
Rod 40mm	SX104TSX704T	2
Rod 50mm	SX105TSX705T	2
Rod 60mm	SX106TSX706T	2
Rod 70mm	SX107TSX707T	2
Rod 80mm	SX108TSX708T	2
Rod 90mm	SX109TSX709T	2
Rod 100mm	SX110TSX710T	4
Rod 120mm	SX112TSX712T	2
Rod 150mm	SX115TSX715T	2
Cross plates		
Cross plate, L 50mm	SX170TSX770T	2
Cross plate, L 60mm	SX172TSX772T	2
Cross plate, L 70mm	SX174TSX774T	2
Cross plate, L 80mm	SX176TSX776T	2
Clamp for cross plate, L 50mm	SX015TSX016T	4



SSE **deformity**

SPINE SYSTEM Evolution

MADE-TO-MEASURE SOLUTIONS.

Additional implants mean additional choices. SSE enables a wide variety of approaches to treating patients, keeping your options open even during actual surgery. With SSE self-stabilizing clamps, there is no need for temporary instruments or further preoperative preparation.

The sacral plate is ideal in the case of osteoporosis and for additional stabilization in the sacrum. With three screws and a hook, this implant can be anchored in four positions and in three axes. And for thoracic procedures, too, the decision remains yours: screws or clamps. All in all, this system delivers unparalleled flexibility and choice in the treatment of deformities – even in theater.



SSE DEFORMITY

The right implants for the task in hand: clamps, screws and sacral plates. They give you the options you need to correct deformities for as many vertebrae as required.



SSE –

PERFECT ALIGNMENT



DEFORMITY INSTRUMENTS



FW609:	SSE Deformity Instruments	5.2mm	
FW599:	SSE Deformity Instruments		6mm
FW619P	SSE Deformity Instruments Tray	1	1
FW151R	Pedicle preparator	1	1
FW152R	Lamina preparator	1	1
FG288R	Distraction/Compression device	2	2
FG286R	Threaded distractor, short	2	2
FG287R	Threaded distractor, long	2	2
FG294R	Retention plate for reposition lever	2	2
FW518C	Socket key	1	1
FW519R	Tightening tube	4	
FW625R	Tightening tube		4
FW521R	Pin holder	1	1
FW522R	Holding forceps for counter hook	1	1
FW543R	Introduction clamp for SX316T	1	
FW544R	Introduction clamp for SX316T		1
FW523R	Distraction forceps for clamp	1	1
FW524R	Hook pusher	1	1
FW545R	Screw driver for locking screw SX316T	1	1

Note: Please order additionally SSE Lumbar Instrument Tray FW598 or FW608 (see set configuration on page 10)

SSE DEFORMITY

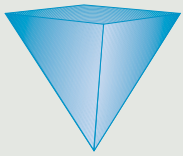
Detailed
Set Recommendation



SX505P	SSE Lumbar Implant Tray	Rod diam.	Rod diam.	Recomm. Quantity
	Nut	5.2mm	6.0mm	20
	Pedicle screws			
	Pedicle screw 4.2x30mm	SX400T	SX405T	4
	Pedicle screw 4.2x35mm	SX401T	SX406T	4
	Pedicle screw 4.2x40mm	SX402T	SX407T	4
	Pedicle screw 5x30mm	SX250T	SX850T	4
	Pedicle screw 5x35mm	SX251T	SX851T	4
	Pedicle screw 5x40mm	SX252T	SX852T	4
	Pedicle screw 5x45mm	SX253T	SX853T	4
	Pedicle screw 6x35mm	SX261T	SX861T	4
	Pedicle screw 6x40mm	SX262T	SX862T	8
	Pedicle screw 6x45mm	SX263T	SX863T	8
	Pedicle screw 6x50mm	SX264T	SX864T	8
	Pedicle screw 6x55mm	SX265T	SX865T	2
	Pedicle screw 7x35mm	SX071T	SX671T	4
	Pedicle screw 7x40mm	SX072T	SX672T	4
	Pedicle screw 7x45mm	SX073T	SX673T	4
	Pedicle screw 7x50mm	SX074T	SX674T	2
	Polyaxial screws			
	Polyaxial screw 6x35mm	SX290T	SX891T	2
	Polyaxial screw 6x40mm	SX291T	SX892T	4
	Polyaxial screw 6x45mm	SX292T	SX893T	4
	Polyaxial screw 6x50mm	SX293T	SX894T	2
	Polyaxial screw 7x35mm	--	SX901T	2
	Polyaxial screw 7x40mm	--	SX902T	2
	Polyaxial screw 7x45mm	--	SX903T	2
	Polyaxial screw 7x50mm	--	SX904T	2
	Connecting screw for polyaxial screw	SX099T	SX101T	8
	Polyaxial head	SX100T	SX699T	4



LUMBAR IMPLANT TRAY



Rods	Rod diam.	Rod diam.	Specs
	5.2mm	6.0mm	
Rod 40mm	SX104T	SX704T	2
Rod 50mm	SX105T	SX705T	2
Rod 60mm	SX106T	SX706T	2
Rod 70mm	SX107T	SX707T	2
Rod 80mm	SX108T	SX708T	2
Rod 90mm	SX109T	SX709T	2
Rod 100mm	SX110T	SX710T	2
Rod 120mm	SX112T	SX712T	2
Rod 150mm	SX115T	SX715T	2
Rod 180mm	SX180T	SX718T	2
Rod 200mm	SX120T	SX720T	2
Rod 250mm	SX125T	SX725T	2
Rod 300mm	SX130T	SX730T	2
Rod 350mm	SX135T	SX735T	2
Rod 400mm	SX140T	SX740T	2
Rod 500mm	SX150T	SX750T	2
Cross plates and clamps for crossplates			
Cross plate, L 45mm	SX169T	SX769T	--
Cross plate, L 50mm	SX170T	SX770T	2
Cross plate, L 55mm	SX171T	SX771T	2
Cross plate, L 60mm	SX172T	SX772T	2
Cross plate, L 65mm	SX173T	SX773T	2
Cross plate, L 70mm	SX174T	SX774T	2
Cross plate, L 75mm	SX175T	SX775T	2
Cross plate, L 80mm	SX176T	SX776T	2
Cross plate, L 85mm	SX177T	SX777T	2
Cross plate, L 90mm	SX178T	SX778T	2
Cross plate, L 95mm	SX179T	SX779T	2
Cross plate, L 100mm	SX180T	SX780T	2
Clamp for cross plate	SX015T	SX016T	8

DEFORMITY IMPLANT TRAY



SSE Deformity Implant Tray	SX506P	Rod. diam	Rod. diam
Rod connectors		5,2	6,0
Rod connector	SX011T		4
Lateral connectors			
Lateral connector, "S"	SX045T	SX645T	2
Lateral connector, "M"	SX046T	SX646T	2
Lateral connector, "L"	SX047T	SX647T	2
Hooks			
Counter hooks			
Counter hook, small		SX320T	6
Counter hook, medium		SX325T	6
Counter hook angled, right		SX344T	4
Counter hook angled, left		SX364T	4
Lamina hook right	SX304T	SX305T	6
Lamina hook left	SX334T	SX335T	6
Pedicle hook, right, rod	SX298T	SX299T	6
Pedicle hook, left, rod	SX328T	SX329T	6
Thoracic hook, right, rod	SX308T	SX309T	4
Thoracic hook, left, rod	SX338T	SX339T	4
Offset-Hook, right	--	SX348T	--
Offset-Hook, left	--	SX368T	--
Connecting pins			
Connecting Pin, 25mm	SX375T	SX375T	--
Connecting Pin, 30mm	SX380T	SX380T	--
Connecting Pin, 35mm	SX385T	SX385T	2
Connecting Pin, 40mm	SX390T	SX390T	4
Connecting Pin, 45mm	SX395T	SX395T	4
Connecting Pin, 50mm	SX396T	SX396T	4
Connecting Pin, 55mm	SX397T	SX397T	2
Connecting Pin, 60mm	SX398T	SX398T	2
Locking Screw for connecting pin	SX316T	SX316T	15



SACRAL PLATE



Sacral plate	Rod diam.	
	5.2mm	6.0mm
Sacral plate, right	SX200T	SX202T
Sacral plate, left	SX201T	SX203T
Sacral screw L 24mm		SX161T
Sacral screw L 28mm		SX162T
Sacral screw L 32mm		SX163T
Sacral screw L 36mm		SX164T
Sacral screw L 40mm		SX165T
Sacral screw L 44mm		SX166T
Sacral screw L 48mm		SX167T
Sacral screw L 52mm		SX168T

UNIVERSAL HOOK



Universal hook	Rod diam.	Rod diam.
	5.2mm	6.0mm
Universal hook, short	SX025T	--
Universal hook, long	SX026T	--



SSE cervical

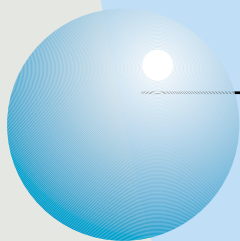
SPINE SYSTEM Evolution

THE ANCHORAGE TECHNIQUE OF YOUR CHOICE.



Stability is based on the right implants and the right anchorage. And with SSE cervical, you have a wide variety of possibilities. The formation of sturdy constructs at C1 and C2 is as simple as connecting the hooks. And for the occipital-cervical junction, you can choose between asymmetrical and symmetrical occipital plates.

No matter what your preferred approach to anchorage, you can be sure of a stable construct in the cervical spine for both occipital-cervical and other posterior cervical procedures. The implant range includes self-stabilizing clamps and individual hooks and polyaxial screws. The choice is yours.



SSE CERVICAL

The asymmetrical and symmetrical occipital plates are perfect for achieving stability in the cervical spine, and offer a choice of anchorage procedures.



SSE –
STABILITY AND VERSATILITY



C1/C2 INSTRUMENTS



	SSE Cervical C1/C2 Instruments	Quantity
FW480	SSE Cervical C1/C2 Instruments	
FW490R	SSE cervical tray	1
FW508R	T-handle, short	1
FW528R	Cervical hook holding forceps	1
FW529R	Cervical road holding forceps	1
FW530R	Cervical wrench	1
FW532R	Cervical wire cutting pliers	1
FW533R	Cervical reposition lever	2
FW537R	Cervical rod stabilizer	1
FW545R	Wrench for connecting screw SX316T	1
FW521R	Pin holder	1
FW523R	Distraction forceps	1



	SSE Cervical Instruments	Quantity
FW482	SSE Cervical Instruments	
FW492R	SSE Cervical tray for instruments	1
FW421R	Cervical lamina preparator	1
FW422R	Holding forceps for hooks	1
FW423R	Holding forceps for counter hooks	1
FW428R	Distraction Forceps	1
FW534R	Alignment tower	1

POLYAXIAL SET



FW484	SSE Cervical Polyaxial	Quantity
FW494R	Tray for instruments	1
FW525R	Screw driver 3.5mm	1
FW965R	Caspar depth gauge	1
FW420R	Offset T-handle	1
FW424R	Bending lever right	1
FW425R	Bending lever left	1
FW426R	Screw driver Long	1
FW531R	Three point bender	1
FW535R	Rod bending template	1
FW538R	Holding sleeve for polyaxial head	1
FW546R	Drill guide	1
FW547R	Tap	1
FW548R	Drill 2mm	1
FW549R	Drill 2.5mm	1



C1/C2 Hooks

Set Recommendation

SSE Cervical C1 Hooks	Recommended Quantity
SX490R SSE Cervical Implant Tray empty	
SX036T C1-hook, 40mm	2
SX037T C1-hook, 45mm	2
SX038T C1-hook, 50mm	2
SX039T Hook, right	2
SX040T Hook, left	2
SX182T Cross plate, L 40mm	1
SX183T Cross plate, L 45mm	1
SX184T Cross plate, L 50mm	1
SX185T Cross plate, L 55mm	1
SX316T Locking screw for connecting pin	4
SX003T Nut	4

Note: Set SSE Cervical Instrument Set FW480 is necessary, see Page 22





CERVICAL IMPLANTS



SX490P	SSE Cervical Implant Tray	Recommended Quantity
Occiput plates		
SX189T	Occiput-plate, right	2
SX191T	Occiput-plate, left, right asymmetric	2
SX193T	Occiput-plate, left	2
Screws for Occiput plates		
SX244T	Self-retaining screw, 8mm	6
SX245T	Self-retaining screw, 10mm	
SX246T	Self-retaining screw, 12mm	6
SX247T	Self-retaining screw, 14mm	6
SX248T	Self-retaining screw, 16mm	6
Rods		
SX242T	Rod 3.5x150mm	2
SSE nut		
SX003T	Nut	12
Polyaxial screws		
SX216T	Polyaxial head	8
SX217T	Polyaxial locking screw	12
SX220T	Polyaxial screw, 10mm	6
SX221T	Polyaxial screw, 12mm	6
SX222T	Polyaxial screw, 14mm	6
SX223T	Polyaxial screw, 16mm	6
SX224T	Polyaxial screw, 18mm	6
SX225T	Polyaxial screw, 20mm	4
SX226T	Polyaxial screw, 22mm	4
SX227T	Polyaxial screw, 24mm	4
SX228T	Polyaxial screw, 26mm	2
SX229T	Polyaxial screw, 28mm	2
Cervical clamp		
SX032T	Hook, right	6
SX034T	Hook, left	6
SX041T	Counter hook	4
SX320T	Counter hook, small	2
SX344T	Counter hook angled, right	2
SX364T	Counter hook angled, left	2
SX375T	Connecting pins, 25mm	4
SX380T	Connecting pins, 30mm	4
SX385T	Connecting pins, 35mm	4
SX390T	Connecting pins, 40mm	4
SX316T	Locking screw for connecting pin	10



Cervical hooks

SX030T Hook, right

SX031T Hook, left

SX042T C2 hook, right

SX043T C2 hook, left

Cross plates

SX014T Clamp for cross plate

SX282T Cross plate, straight 40mm

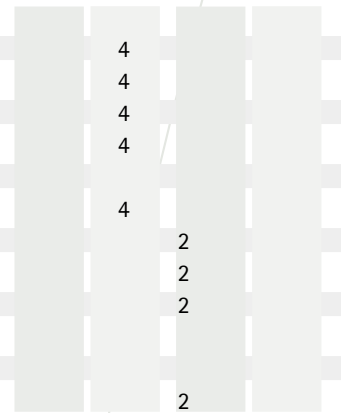
SX283T Cross plate, straight 45mm

SX284T Cross plate, straight 50mm

SX285T Cross plate, straight 55mm

Rod connector

SX013T Rod connector 3,5/5,2mm





PROSPACE

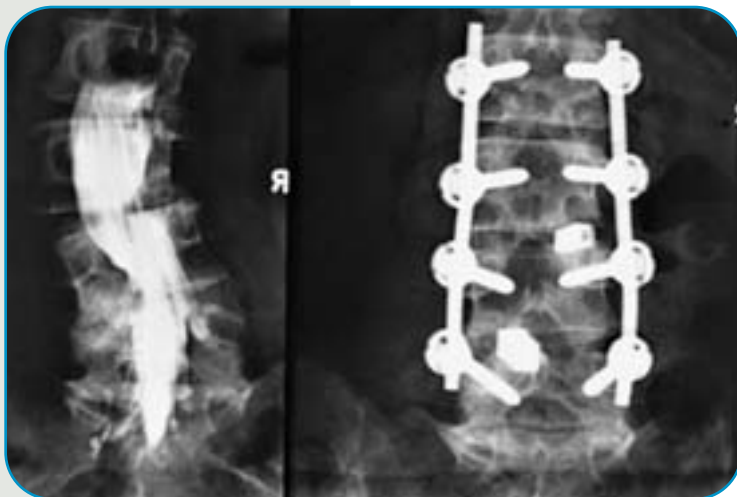


The parallel and lordotic shapes of the PROSPACE implants guarantee maximum contact between implant and vertebral endplate for minimum implant dimensions.

Stability
Balance
Long Term Reduction
...are the results of this well thought out design.

Primary stability is ensured by optimal bone contact and additional posterior stabilisation with the SSE System. The Plasmapore® coating provides bone ingrowth around and into the surface of the implant. Thus PROSPACE and SSE System together with their special instrumentation present an innovative solution for a successful interbody fusion.

PROSPACE - THE SMART ART OF STABILISATION



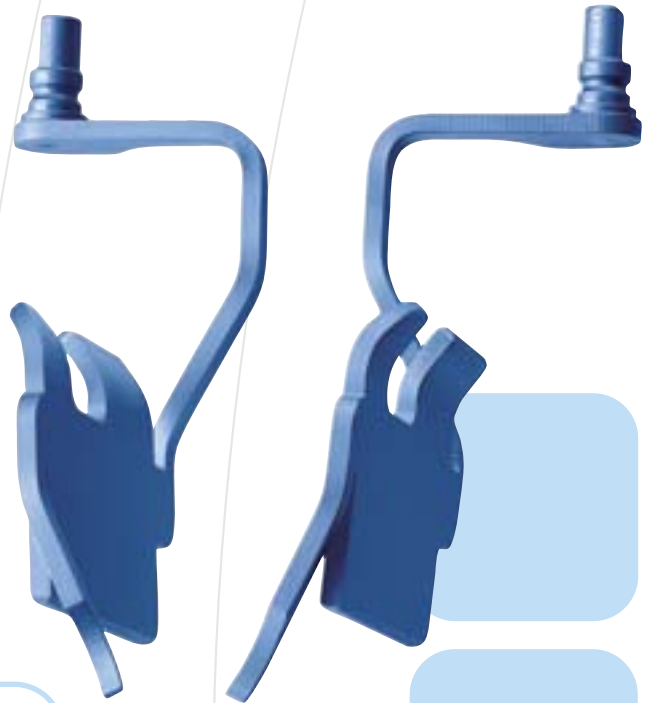
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The PROSPACE PLIF implant is a solid titanium block used for posterior lumbar interbody fusion coated with Plasmapore®, a proven pure titanium powder coating.

SLR - SUBCUTANEOUS LUMBAR RETRACTOR SYSTEM

Tissue Protection

- subcutaneous placement
minimal skin stretching
- a-traumatic retraction no
injury of muscle tissue
reduced haematomes and
reduced postoperative
wound pain

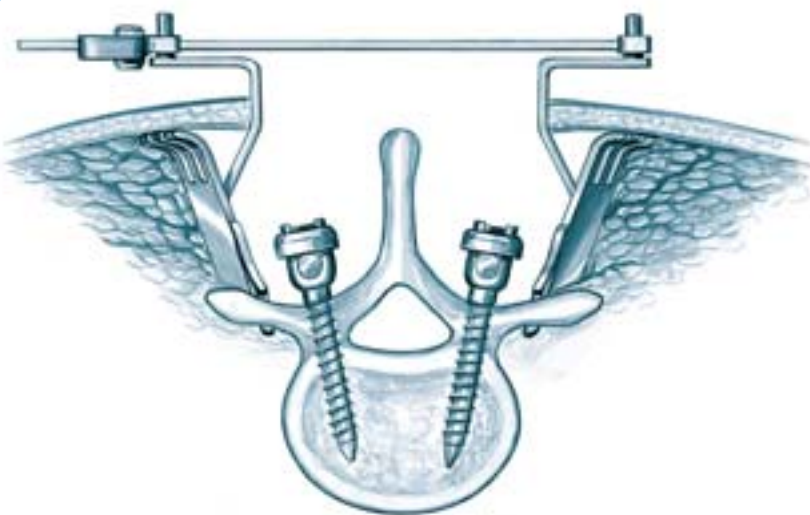


Smaller Skin Incision

- reduced operative trauma
less postoperative wound
pain

Manufactured out of Titanium

- semi-radiolucent to x-ray
- light weight
- color coded



Secure Anchorage

- attachment to the trans-
verse process: no intra-
operative re-adjustment
or re-positioning necessary
- side loading blade –
retractor connection
easy blades insertion and
fast retractor assembly

B | BRAUN

AESULAP

AESULAP AG & CO. KG

Am Aesculap-Platz
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