HDC | HEALTH DEVELOPMENT COMPANY

SPIDER SCREW®

THE MOST COMPLETE SYSTEM FOR SKELETAL ANCHORAGE

GROUNDBREAKER IN SKELETAL ANCHORAGE

CE 0425

HDC | HEALTH DEVELOPMENT COMPANY

Vision:

"Our aim is to improve the quality of people's health through comparison with the top exponents of the medical sector. Our products enhance smiles and personal certainties. We're the Health Development Company."

Mission:

"We are a modern and innovative proposal in the field of medical devices. Our know-how, combined with digital technologies, allows us to create products that help industry experts to be more effective and efficient, guaranteeing unique and customized solutions."

SPIDER SCREW

Index

SPIDER SCREW ®

THE MOST COMPLETE SYSTEM FOR ORTHODONTIC ANCHORAGE

The HDC skeletal anchorage system was born from over twenty years of studies and collaborations with international major experts in orthodontics and can without a doubt be defined as the most complete anchorage system on the market. It includes interradicular, palatal and infra-zygomatic mini-screws, all the components needed for the design and development of palatal devices, ready-to-use preformed plates, kits and dedicated insertion tools.

In the last few years, thanks to the development in digital technology, HDC has introduced a patented skeletal anchorage planning model called MAPA. The MAPA Miniscrew-Insertion-Guide is an easy, precise and predictable procedure, making every user effective. HDC has developed tools and accessories for the application of this protocol.

Spider Screw is a non-osseointegrable device designed to provide a flexible immediate loading anchorage, thus reducing treatment time. Applicable forces can vary from 50 to 300 grams depending on the bone quality and the sought orthodontic treatment. It can easily be inserted in the most varied anatomical sites, both of the upper jaw and mandible, even where the available bone thickness is very limited. **The self-tapping thread of the screw endosseal part has been specifically designed to make Spider Screw generally applicable without pre-drilling.**

Suitable for both symmetrical and asymmetrical anchoring conditions, **Spider Screw allows you to successfully solve orthodontic treatments in a short time in both adults and adolescents without patient compliance.**

Spider Screw is available in different versions thus allowing the specialist to have the right screw for each individual case. The differentiated transmucosal collar allows an optimal adaptation to the different thicknesses of the intraoral mucous membranes, guaranteeing maximum biomantenibilty.

1.

TRANSMUCOSAL PORTION (1, 2)

The **conical shape** of the transmucosal portion of the screw and its **special polishing** allow the easy removal of dental plaque, reducing the risks of inflammation and irritation of surrounding tissues. This helps the screw stability throughout the duration of the orthodontic treatment.

2.

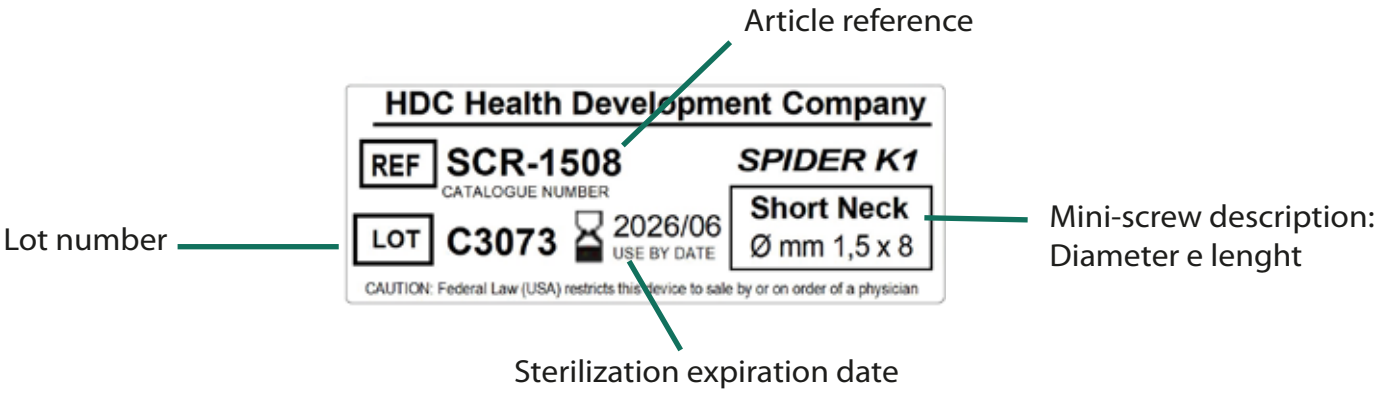
INTRABONY PORTION (3)

3.

Spider Screw's **asymmetrical profile thread** facilitates the insertion of the screw and ensures its stability, guaranteeing a maximum resistance to tensile forces. The intrabony portion of the **Spider Screw** screws is available in two versions: tapered thread (self-drilling and self-tapping) and cylindrical thread (self-tapping). The self-tapping thread does not need pre-drilling when the cortical thickness does not exceed approximately 2 mm.

Spider Screw is made of grade 5 Titanium. It is supplied clean, decontaminated and sterile in a double packaging. Inside the package there are three adhesive labels that can be applied to the patient card for easy traceability of the device. The reported data are: the name of the device, its reference number, its lot number and other useful information for the user.

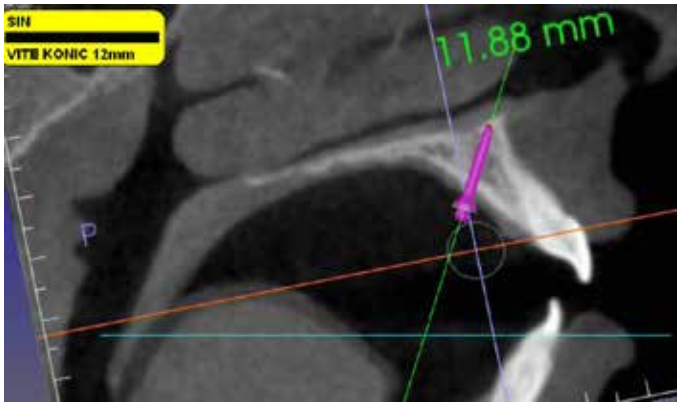
INTERNAL LABEL LEGEND:



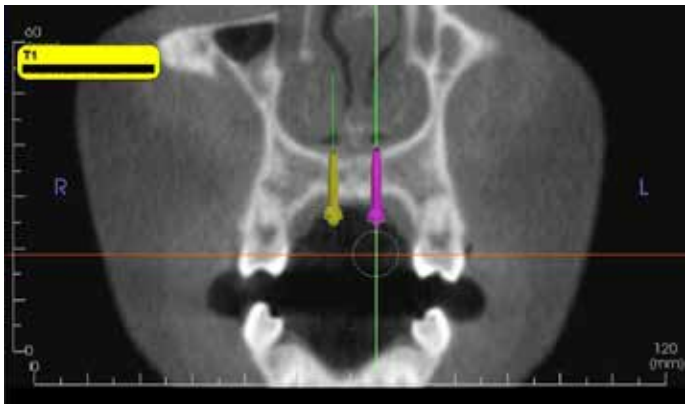
DIGITAL PLANNING AND GUIDED SPIDER SCREW INSERTION

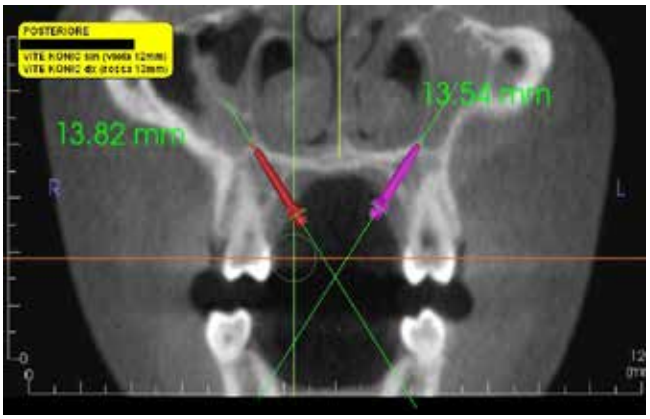
The development of digital technology allows us today a much easier skeletal anchorage approach. Thanks to Digital Planning techniques and the possibility of performing a guided mini-screw insertion, it is possible, even for the less experienced, to reach the desired result with extreme precision and maximum reliability.

The MAPA Miniscrew-Insertion-Guide is a precise and reliable procedure that has been valid for several years already, designed for the safety of the clinician and the patient. Developed by Dr. Maino Giuliano and Odt. Paoletto Emanuele of Orthomodul.



Each palate is unique. Therefore, planning a guided mini-screws insertion in the palatal vault is important to exploit safely the maximum amount of available bone, without the risk of breaking into nearby anatomical structures. This method of insertion also ensures to reach an excellent parallelism between the mini-screws.

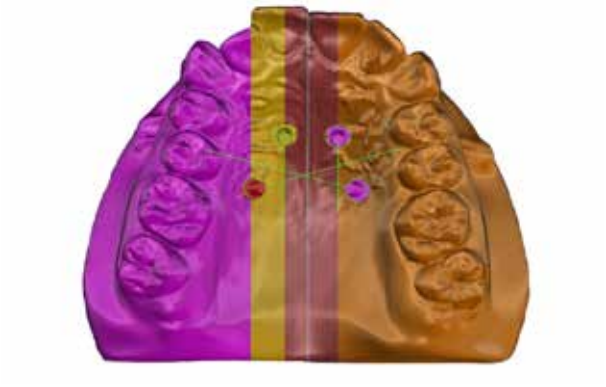




In order to program the correct positioning of the mini-screws into the palate, the CBCT scan is the diagnostic test that can guarantee the most accurate information. If CBCT is not available, a lateral-lateral teleradiography can be used as well.

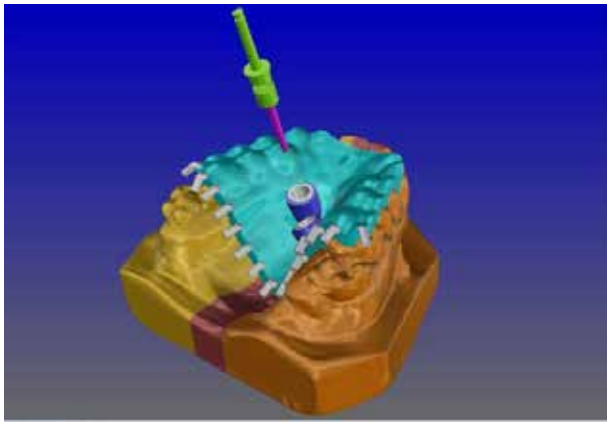
A digital file of the patient upper arch, obtained from the patient's model or intraoral scan, is also required.

The STL file of the model shows the ideal mini-screws insertion points. After that, the STL files of the mini-screws are virtually inserted into the palate: at this point, it is possible to perform a planning review and check the length and parallelism of the screws.



The use of the STL files of the mini-screws and of the Pick Up driver during the design of the surgical guide allows to faithfully replicate the size and dimension of the transmucosal portion of the mini-screw.

The two stainless steel tubes included in the surgical guide provide both the right mini-screws insertion direction and the insertion depth stop; in fact, when the screw has reached the deepest part of the stainless steel cylinder, it will not screw any further.



MINI-SCREWS INSERTION

After local anaesthesia in the desired palatal site, apply the tooth supported surgical guide - it should be placed on the occlusal surfaces of the posterior teeth. To increase its stability, it is sufficient to temporarily attach it to the occlusal surface of the first premolars with a small amount of photopolymerising resin or glass- ionomer cement.

Insert the appropriate drill into the surgical guide stainless steel tubes and pre-drill the insertion site.

Pick up the planned Spider Screw Konic from its support with the Driver Pick-Up.

Proceed with the screw insertion in the pre-established site. The surgical guide acts as a mini-screw mechanical stop and, once the screw reaches the programmed depth, it stops screwing. The insertion should be stopped when the Pick-Up Stop reaches the stainless steel tubes, otherwise the risk of sinking too much the mini-screw compared to the previous planning occurs.

Hdc, together with its partners and opinion leaders, is a pioneer in the Digital Planning field and is able to provide accurate and highly accurate plannings.

Courtesy of Dr. B.G. Maino and E.Paoletto

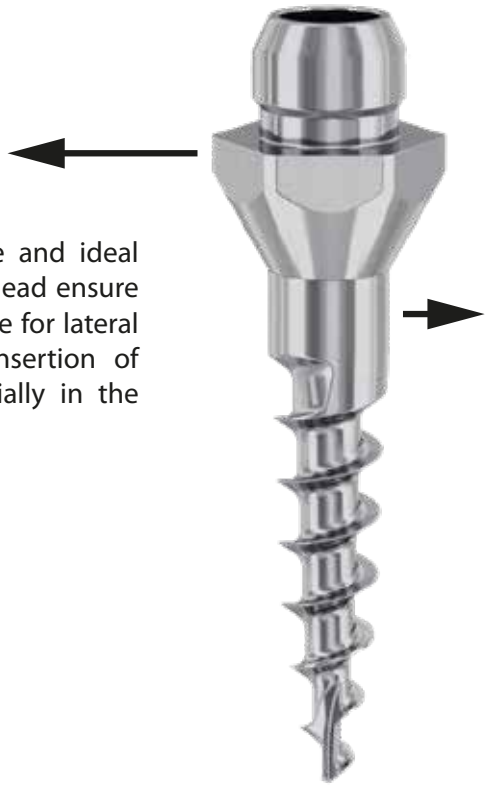
SPIDER SCREW
REGULAR PLUS KONIC

Spider Screw RP Konic is specially designed for orthodontic skeletal anchorage in the palatal vault. Additional devices can be fitted to its head.

It is available in a **wide range of sizes** so to fit each planning.

ORTHODONTIC HEAD

The cylindric-conical shape and ideal height of the orthodontic head ensure an adequate bearing surface for lateral loads and facilitate the insertion of customised devices, especially in the case of disparallelism.



TRANSMUCOSAL PORTION

Smooth and conical to ensure optimal mucosal adhesion and to avoid tisssue irritation.

AVAILABLE IN THE FOLLOWING LENGHTS AND DIAMETERS:

SSP-2007N Regular Plus Konic Ø 2 x 7 mm
SSP-2008N Regular Plus Konic Ø 2 x 8 mm
SSP-2009N Regular Plus Konic Ø 2 x 9 mm
SSP-2010N Regular Plus Konic Ø 2 x 10 mm
SSP-2011N Regular Plus Konic Ø 2 x 11 mm
SSP-2012N Regular Plus Konic Ø 2 x 12 mm
SSP-2013N Regular Plus Konic Ø 2 x 13 mm
SSP-2014N Regular Plus Konic Ø 2 x 14 mm
SSP-2015N Regular Plus Konic Ø 2 x 15 mm

SSP-2307N Regular Plus Konic Ø 2,3 x 7 mm
SSP-2308N Regular Plus Konic Ø 2,3 x 8 mm
SSP-2309N Regular Plus Konic Ø 2,3 x 9 mm
SSP-2310N Regular Plus Konic Ø 2,3 x 10 mm
SSP-2311N Regular Plus Konic Ø 2,3 x 11 mm
SSP-2312N Regular Plus Konic Ø 2,3 x 12 mm
SSP-2313N Regular Plus Konic Ø 2,3 x 13 mm
SSP-2314N Regular Plus Konic Ø 2,3 x 14 mrn
SSP-2315N Regular Plus Konic Ø 2,3 x 15 mm

Spider Screw Regular Plus Konic Ø 2,3 mm is indicated when the patient's anatomical condition allows it or when a Spider Screw Regular Plus Konic Ø 2 mm mini-screw is lost. The lost mini-screw can be replaced in the same insertion site by one with a diameter Ø 2,3 mm which, **thanks to the larger diameter**, guarantees primary stability.

SPIDER SCREW REGULAR PLUS KONIC N3

Spider Screw RP Konic has been designed also with a lowered orthodontic head to facilitate the insertion of the dedicated devices in particular anatomical situations.

Spider Screw RP Konic N3 in fact, has a 1,3 mm high orthodontic head.

Spider Screw RP Konic N3 is produced in the **following diameters and lenghts:**

SSP-2007N3 Regular Plus Konic Ø 2 x 7 mm
SSP-2008N3 Regular Plus Konic Ø 2 x 8 mm
SSP-2009N3 Regular Plus Konic Ø 2 x 9 mm
SSP-2010N3 Regular Plus Konic Ø 2 x 10 mm
SSP-2011N3 Regular Plus Konic Ø 2 x 11 mm
SSP-2012N3 Regular Plus Konic Ø 2 x 12 mm
SSP-2013N3 Regular Plus Konic Ø 2 x 13 mm
SSP-2014N3 Regular Plus Konic Ø 2 x 14 mm
SSP-2015N3 Regular Plus Konic Ø 2 x 15 mm

SSP-2307N3 Regular Plus Konic Ø 2,3 x 7 mm
SSP-2308N3 Regular Plus Konic Ø 2,3 x 8 mm
SSP-2309N3 Regular Plus Konic Ø 2,3 x 9 mm
SSP-2310N3 Regular Plus Konic Ø 2,3 x 10 mm
SSP-2311N3 Regular Plus Konic Ø 2,3 x 11 mm
SSP-2312N3 Regular Plus Konic Ø 2,3 x 12 mm
SSP-2313N3 Regular Plus Konic Ø 2,3 x 13 mm
SSP-2314N3 Regular Plus Konic Ø 2,3 x 14 mrn
SSP-2315N3 Regular Plus Konic Ø 2,3 x 15 mm

SPIDER SCREW RP KONIC AND RP KONIC N3 TOOL KIT SET

CSS-7006
Spider Screw RP Konic Organizer

	**FSC-1307G**	SHORT DRILL Ø 1,3 mm - L. 7 mm for Spider Screw RP Konic Ø 2 mm
	**FSC-1309G**	DRILL Ø 1,3 mm - L. 9 mm for Spider Screw RP Konic Ø 2 mm
	**FSC-1312G**	LONG DRILL Ø 1,3 mm - L. 12 mm for Spider Screw RP Konic Ø 2 mm
	**DPQ-3825**	CONTRA ANGLE PICK-UP DRIVER
	**DPQ-3831**	CONTRA ANGLE LONG PICK-UP DRIVER
	**DPM-3075**	CONTRA ANGLE DRIVER for abutment fixation screw
	**DSQ-2507**	MANUAL DRIVER for abutment fixation screw

Available separately:

	**PRL-3513**	DRILL EXTENSION
	**FSC-1609G**	DRILL Ø 1,6 mm - L. 9 mm for Spider Screw RP Konic Ø 2,3 mm

SPIDER SCREW RP KONIC COMPONENTS

ANR-3812 LAB ANALOG

PMA-3850 STAINLESS STEEL ABUTMENT

* Each PMA-3850 comes with its VRS-1645Q

PSRP-2001N PLATE

* Each PSRP-2001N comes with its VRS-1650Q

PSRP-1001N WIRE SUPPORT RING

* Each PSRP-1001N comes with its VRS-1650Q Each

SPIDER SCREW RP KONIC N3 COMPONENTS

ANR-3812N3 LAB ANALOG

PMA-3840 STAINLESS STEEL ABUTMENT

* Each PMA-3840 comes with its VRS-1645Q

PSRP-2001N3 PLATE

* Each PSRP-2001N3 comes with its VRS-1650Q Each

PSRP-1001N3 WIRE SUPPORT RING

* Each PSRP-1001N3 comes with its VRS-1650Q Each

PRINTING AND LAB COMPONENTS

SCB-4010 SCANBODY 10 mm

SCB-4005 SHORT SCANBODY 5mm

CTS-6000 TRANSFER

BGU-6050 SURGICAL GUIDE TUBE

SRP-3850 NiTi SPRING 500 g

VRS-1645Q FIXATION SCREW for abutment

* Tighten max 10N/cm

VRS-1650Q FIXATION SCREW for plate and ring

* Tighten max 10N/cm

TUB-1023 REVERSE TUBE with hook

TUB-1022 REVERSE TUBE without hook

TUB-1001 MESIAL TUBE with hook

TUB-1003 MESIAL TUBE without hook

STT-3016G SPRING STOP with hook

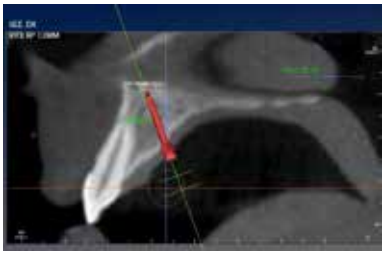
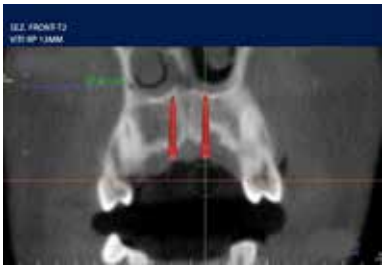
STT-3016 SPRING STOP without hook

CAM-2000 is a **manual contra-angle for the fine adjustment of the vertical dimension** of all models of Spider Screw mini-screws. Thanks to the 1:1 ratio, CAM-2000 facilitates the positioning of the screw head, so to quickly reach its desired position.

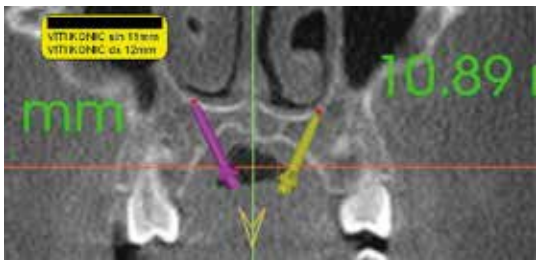
CAM-2000
MANUAL CONTRA-ANGLE 1:1

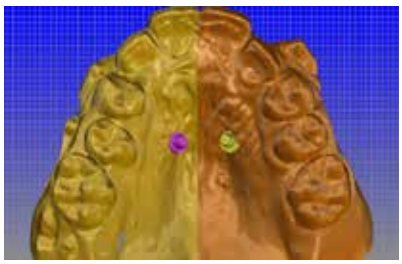
RP KONIC APPLICATION EXAMPLES

SKELETAL DISTAL-JET

1. 
2. 
3. 
4. 
5. 

RPE - CLASS III MALOCCLUSION CORRECTION

1. 

2. 
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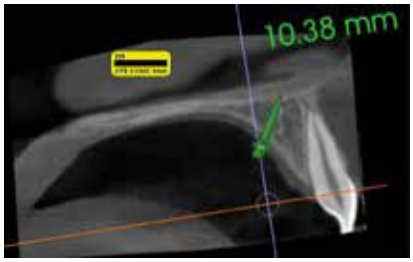
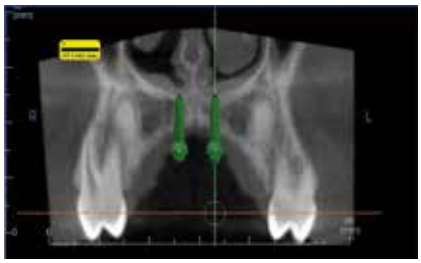
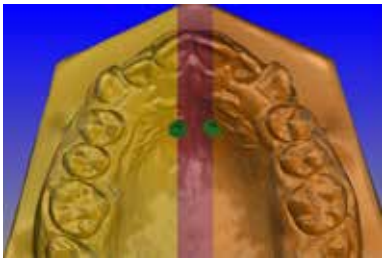
COMBINATION OF DISTAL-JET AND DISTALIZER

1. 

2. 

3. 

4. 

5. 

6. 

HYBRID RPE WITH PENDULUM

1. 

2. 

3. 

4. 

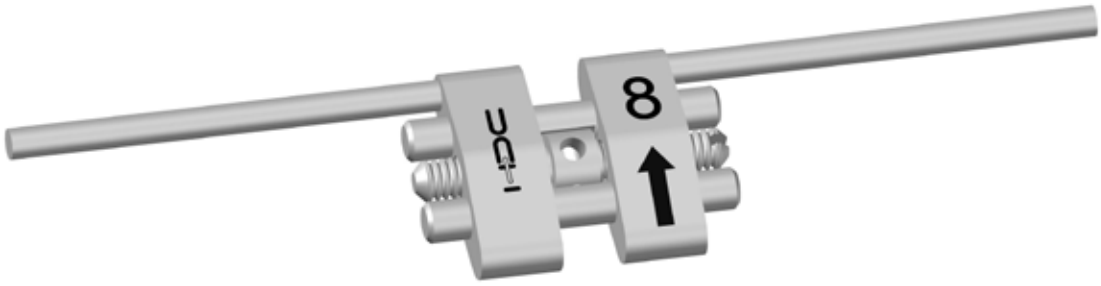
Courtesy of Dr. B.G. Maino and E. Paoletto

HDC PALATAL EXPANDERS

For a complete range of products, HDC created a line of **palatal expander** specifically designed to be used with the **Spider Screws Regular Plus Konic**. They are available in two models:

SPIDER EXPANDER

- Medical stainless steel.
- 2 or 4 straight retention legs that can be adapted to the patient's anatomy.
- The greater mechanical strength given by the geometry of the expansion mechanism allows the application of high forces needed in palatal disjunction therapies, even in adult patients.

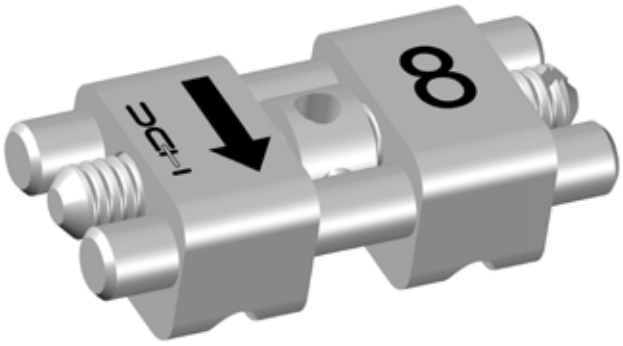


REF.			arms Ø		maximum expansion	expansion each turn (4 activations)
ADP-1008-2B	11 mm	4 mm	1,5 mm	12 mm	8 mm	0,8 mm
ADP-1010-2B	11 mm	4 mm	1,5 mm	14 mm	10 mm	0,8 mm
ADP-1012-2B	11 mm	4 mm	1,5 mm	16 mm	12 mm	0,8 mm
ADP-1014-2B	11 mm	4 mm	1,5 mm	18 mm	14 mm	0,8 mm

Courtesy of laboratory Servizi Ortodontici

SPIDER EXPANDER DIGITAL

- Anatomical expander specifically designed for the CAD CAM procedure. The two longitudinal slots allow the welding of digitally designed and sintered structures.
- Small body size, medical stainless steel, reinforced expansion mechanism created for Tads use.



REF.				body width	maximum expansion	expansion each turn (4 activations)
ADP-2008	6,7 mm	4,5 mm	1,5x1,5 mm	12 mm	8 mm	0,8 mm
ADP-2010	6,7 mm	4,5 mm	1,5x1,5 mm	14 mm	10 mm	0,8 mm
ADP-2012	6,7 mm	4,5 mm	1,5x1,5 mm	16 mm	12 mm	0,8 mm
ADP-2014	6,7 mm	4,5 mm	1,5x1,5 mm	18 mm	14 mm	0,8 mm

Courtesy of laboratory Servizi Ortodontici

SPIDER SCREW SELF-LIGATING

Spider Screw SL is the only screw in the international market with a self-ligating mechanism. Its special internal device allows to fix a round or rectangular wire with a simple 45° turn of the slot placed in the head of the screw. **Protected by an international patent**, Spider Screw SL can be used alone or integrated with Preformed Plates (**Spider Link**) which allow to perform different symmetrical and asymmetrical dental movements: distalization, intrusion, etc.

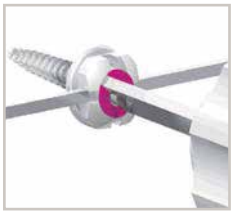
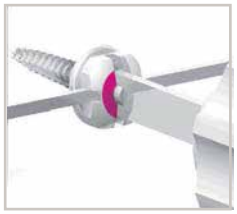
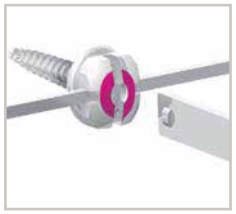
SPIDER SCREW SL K1

Ø1,5 mm

Tapered Thread (Self-drilling/Self-tapping)
Available in lenghts 6,5 - 8 - 10 mm.

In case of very compact bone pre-drilling is recomended (Ø 1, 1 mm drill).

SXL-1506	Ø 1,5 x 6,5 mm
SXL-1508	Ø 1,5 x 8 mm
SXL-1510	Ø 1,5 x 10 mm

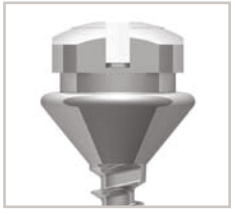
SPIDER SCREW SL K2

Ø1,9 mm

Tapered Thread (Self-drilling/Self-tapping)
Available in lenghts 6 - 7 - 9 - 11 mm.

In case of very compact bone pre-drilling is recomended (Ø 1, 3 mm drill).

SXL-1906	Ø 1,9 x 6 mm
SXL-1907	Ø 1,9 x 7 mm
SXL-1909	Ø 1,9 x 9 mm
SXL-1911	Ø 1,9 x 11 mm




CSS-6008
Spider Screw SL Organizer

	**FSC-1108**	DRILL Ø 1,1 mm for Spider Screw K1
	**FSC-1309**	DRILL Ø 1,3 mm for Spider Screw K2
	**DPQ-3420**	CONTRA ANGLE PICK-UP DRIVER
	**DXL-2820**	MANUAL FIXING MECHANISM UTILITY DRIVER
	**DSQ-3424**	SQUARE DRIVER
	**DSP-5652S**	PICK-UP SHAFT for DSX-1690S and DST-1600
	**DSX-1690S**	SCREWDRIVER BODY

Available separately:

	**DPQ-3425**	CONTRA ANGLE LONG PICK-UP DRIVER
	**DLM-3134**	CONTRA ANGLE FIXING MECHANISM UTILITY DRIVER
	**ANSS-3410**	LAB ANALOG

SPIDER LINK

System of pre-shaped plates and mini screws for orthodontic anchorage

Spider Link is a skeletal anchorage system consisting of Spider Screw Self Ligating mini-screws and **pre-shaped stainless steel** Power Plate.

The combined use of Self Ligating mini-screws with an orthodontic anchorage attachment (Power Plates) allows to apply forces to the desired teeth.
Digital Planning and guided miniscrews insertion is recomended.

PSLV-0003
V-FORM

PSLV-0004
V-FORM

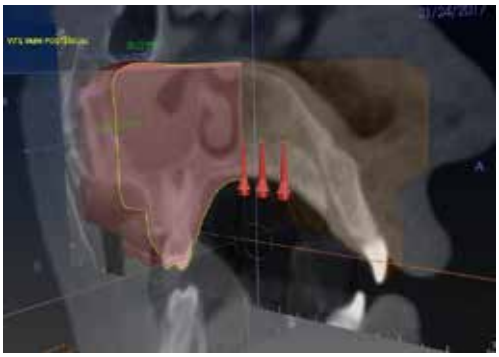
PSLH-0005
H-FORM

PSLH-0001
H-FORM

SPIDER LINK APPLICATION EXAMPLES

SPIDER LINK DISTALIZER

1.



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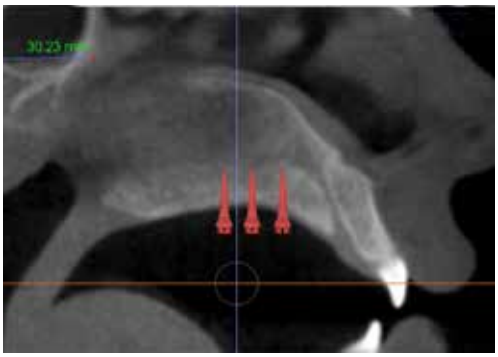

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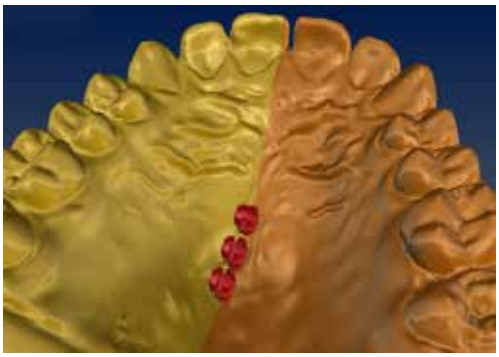

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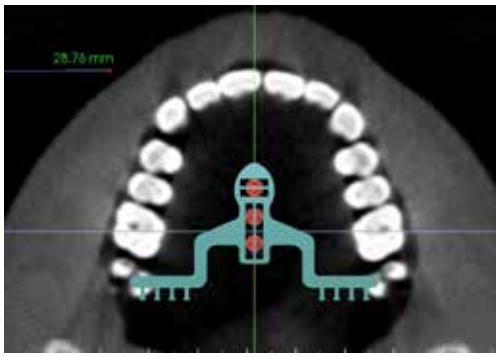
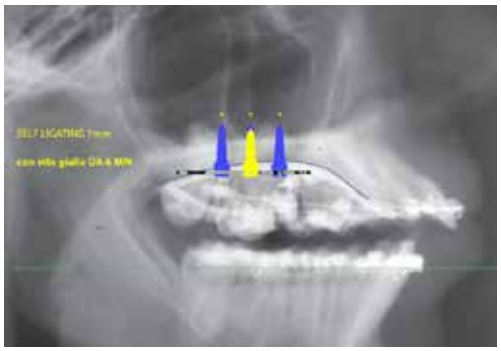


6.

SPIDER LINK INTRUDER

1.



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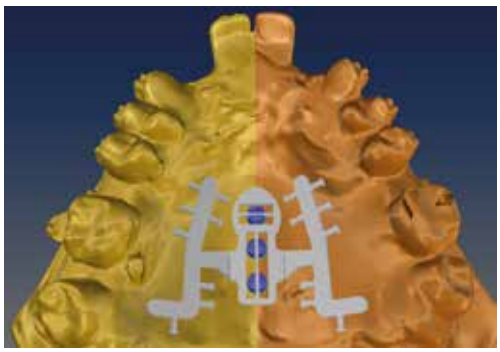
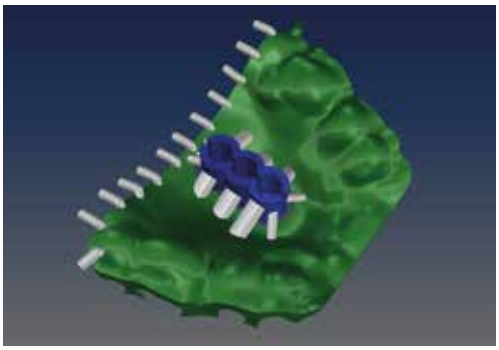
3.



4.



5.

Courtesy of Dr. B.G. Maino

SPIDER SCREW
K1 - K2 - Z - SL - PIN

Insertion Sites:

MAXILLA

Infrazygomatic crest

Edentulous ridges

Palate

Tuberosity

Interradicular areas

MANDIBULA

Edentulous ridges

Retromolar region

Mandibular ramus

Interradicular areas

Synfisis

DIRECTIONS

Spider Screw Anchorage System allows sagittal and vertical movements of all teeth (intrusion, extrusion, distalization and mesalization) and can be used for treating the following:

> Borderline cases
> Anchorage recovery
> Situations of edentulism
> Anchorage reinforcement
> Asymmetrical cases management
> Deep bite and open bite conditions
> Uprighting of upper and lower molars
> Pre-prosthetic orthodontic treatments
> Correction of over erupted teeth (molar, premolar, incisors)

GENERAL INFORMATION

Spider Screw requires experience and a specific anatomical knowledge. Therefore, it is essential that the screw insertion is carried out by specialized personnel such as orthodontists, dentists or oral surgeons.
Each case must be individually evaluated and, before proceeding with the application of any **Spider Screw** screw, an effective and complete screening of the patient must be carried out. **A very thorough examination is needed, as well as anatomical reference for the evaluation of bone quantity and quality** (Long Cone Endoral Radiograph, Orthopantograph, Teleradiography, and Computerized Tomography).

Read carefully the instructions for use inside the package before placing the device. **Each screw is single use only**. For placing the screws use only the instruments mentioned in this catalog, making sure that they are all sterile and fully working.

It is suggested to disinfect the insertion area and give local anesthesia as needed. It is recommended that the clinitian attends a training course to get a complete overview of all the possible screws applications, as this catalogue describes only some of them.

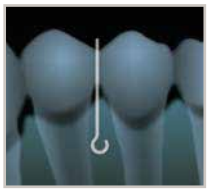
INTER-RADICULAR INSERTION OF SPIDER SCREW K1 - K2 - SL

1. 

If a Spider Screw has to be inserted in an edentulous area where there is bone availability, references from a panoramic x-ray can be sufficient.

1. In areas close to delicate anatomical structures, such as interadicular spaces, a **x-ray cone-beam CT (CBCT) is recommended.**

2. 

3. 

4. 

5. 

6. 

5. a 

6. a 

2. A surgical splint can be made with orthodontic wire, fix it to the teeth with acrylic or thermoplastic resin. The orthodontic wire is inserted in the acrylic resin and appropiately bent so that its tip corresponds to the point of insertion of the **Spider Screw.**

3. Use a new periapical radiograph (by using the long-cone parallel technique) to verify the correct placement of the orthodontic wire.

4. Where the gum is adherent, the insertion site can be marked with a pressure tool. Where the mucosa is mobile, it is advisable to keep the surgical indicator in place throughout the whole procedure until the screw insertion.

5. After disinfecting the choosen site (chlorexidine 0. 2%), insert the **Spider Screw K1 – K2** using the **pick-up shaft DSP-5052S** and the **Spider Screw SL** using the **pick-up shaft DSP-5652S**. Depending on the insertion area, it is also possible to use the **contra-angle pick-up driver at low low speed 25/30 rpm** (**DPQ-2820** for **Spider Screw K1 – K2** and **DPQ-3420** for **Spider Screw SL**). During the insertion, in order to avoid excessive screwing torque (which could lead to excessive bone compression and consequent reabsorption or fracture of the screw), it is advisable to proceed alternately with screwing and unscrewing phases.

6. In case of very compact bone, predrilling it is recomended: **FSC-1108** drill for **Spider Screw K1 - SL K1** or **FSC-1309** drill for the **Spider Screw K2 - SL K2**. Then proceed with the insertion of the screw.

INTER-RADICULAR INSERTION OF SPIDER PIN

Follow the steps from 1 to 4 described above.

5.a While drilling it is advisable to irrigate the site with cold physiological solution or sterile water (5° C/41° F). Use the Ø 0, 9 mm drill for the insertion **Spider Pin**.

6.a Insert the **Spider Pin** by choosing between manual or mechanical insertion. For manual insertion use the **manual pick-up driver DSP-2352S** Ø 1,3 mm. For the mechanical insertion use the **pick-up DPQ-2352S** Ø 1,3 mm on a contra-angle handpiece set at low speed (25-30 rpm). Where possible complete the screwing with the manual driver.

INDICATIONS FOR THE PATIENT

Apply a 0,3% Chlorexidine gel 2 – 3 times a day for the first 7 days. Then perform the normal oral hygiene procedures by brushing the screw as if it was a tooth.

SPIDER SCREW REMOVAL

The Spider Screw removal can also be performed without local anaesthesia. In the front and side areas it is advisable to use the manual pick-up driver, while in the back of the mouth it is advisable to unscrew the screw with the pick-up driver on a contra-angle handpiece set at low speed.

If the screw does not unscrew easily, in order to avoid excessive torque, it is recommended to proceed by alternating screwing at unscrewing phases. Soft tissues will heal within a few days.

SPIDER SCREW K1 - K2 - Z

Many features in just few millimetres make the orthodontic head of the K1 – K2 mini-screws an unique anchoring system (protected by international patent) with many advantages.
The only system with the **transmucosal collar coming in two different heights.**

1.

2.

ORTHODONTIC HEAD (fig.1, 2)

The bracket-shaped head makes the system extremely versatile for orthodontic treatments. The two **Rectangular Slots on the outside** (.022", Fig. 1) allow the direct housing of orthodontic wires. The **inner Rectangular Slot**, (.022" x .025", Fig. 2) ensures that the fastening devices (elastic threads, chains, metal ties, etc.) do not come off the mini-screws and, at the same time, do not slip against the soft tissues causing anchorage loss. The two **Round through-hole** (.027") shape facilitate the insertion of wires, metal ties, hooks, etc. The **Spider Screw** screws head size has been designed to ensure maximum patient comfort.

SPIDER SCREW K1

Ø1,5 mm

Tapered Thread (Self-drilling/Self-tapping)
Available in lenghts 6,5 - 8 - 10 mm.

Spider Screw K1 - no pre-drill hole preparation is required. The conical shape of its infraosseous portion allows the screw insertion without predrilling. In case the cortical is very thick it is advisable to make a pre-hole using the Ø 1,1 mm drill.

Available with two transmucosal heights:
Long Neck, increased neck height (2 mm) for thick soft tissues (back and side areas).
Short Neck, standard neck height (1 mm) for thin tissues (front and side areas).

SCL-1506	Long Neck Ø 1,5 x 6,5 mm
SCL-1508	Long Neck Ø 1,5 x 8 mm
SCL-1510	Long Neck Ø 1,5 x 10 mm

SCR-1506	Short Neck Ø 1,5 x 6,5 mm
SCR-1508	Short Neck Ø 1,5 x 8 mm
SCR-1510	Short Neck Ø 1,5 x 10 mm

SPIDER SCREW K2

Ø1,9 mm

Tapered Thread (Self-drilling/Self-tapping)
Available in lenghts 6 - 7 - 9 - 11 mm.

Spider Screw K2 - no pre-drill hole preparation is required. The conical shape of its infraosseous portion allows the screw insertion without predrilling. In case the cortical is very thick it is advisable to make a pre-hole using the Ø 1,3 mm drill.

Available with two transmucosal heights:
Long Neck, increased neck height (2 mm) for thick soft tissues (back and side areas).
Short Neck, standard neck height (1 mm) for thin tissues (front and side areas).

SCL-1906	Long Neck Ø 1,9 x 6 mm
SCL-1907	Long Neck Ø 1,9 x 7 mm
SCL-1909	Long Neck Ø 1,9 x 9 mm
SCL-1911	Long Neck Ø 1,9 x 11 mm

SCR-1906	Short Neck Ø 1,9 x 6 mm
SCR-1907	Short Neck Ø 1,9 x 7 mm
SCR-1909	Short Neck Ø 1,9 x 9 mm
SCR-1911	Short Neck Ø 1,9 x 11 mm

SPIDER SCREW ZYGOMATIC

Ø 2 mm

Tapered Thread (Self-drilling/Self-tapping)
The size of the transmucous part is fixed, while the length of the thread varies, available in lengths 6 - 8 - 10 -12 mm..

Spider Screw Zygomatic is designed to be placed in specific sites, such as the infra-zygomatic crest and the buccal shelf. The shape of the screw head is rounded and without rectangular slots to protect the soft tissues. The groove between the screw head and its transmucosal portion is thought to help the usage of elastic chains.
Giving the length of this kind of screws predrilling is reccomended Ø 1,3

	Thread length	Neck length
SCL-2006Z	Ø 2 x 6 mm	6 mm
SCL-2008Z	Ø 2 x 8 mm	6 mm
SCL-2010Z	Ø 2 x 10 mm	6 mm
SCL-2012Z	Ø 2 x 12 mm	6 mm

CSS-4009
Spider Screw K1 - K2 - Z Organizer

	**FSC-1108**	DRILL Ø 1,1 mm for Spider Screw K1
	**FSC-1309**	DRILL Ø 1,3 mm for Spider Screw K2 and Z
	**DPQ-2820**	CONTRA ANGLE PICK-UP DRIVER
	**DSQ-2824**	SQUARE DRIVER
	**DSX-2852S**	CROSS DRIVER SHAFT for DSX-1690S and DST-1600
	**DSP-5052S**	PICK-UP SHAFT for DSX-1690S and DST-1600
	**DSX-1690S**	SCREWDRIVER BODY

Available separately:

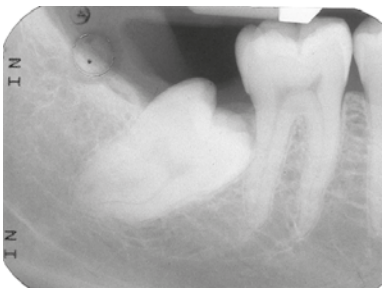
	**DPQ-2825**	CONTRA ANGLE LONG PICK-UP DRIVER
	**DPX-2830**	CONTRA ANGLE CROSS DRIVER
	**DPH-2824**	SQUARE PICK UP DRIVER

SPIDER SCREW K1 - K2 APPLICATION EXAMPLES

Molar Uprighting

1.

2.



3.

4.

5.

6.

7.

SPIDER SCREW SL INTER-RADICULAR APPLICATION EXAMPLES

Courtesy of Dr. B.G. Maino

SUMODIS

Simultaneous Upper Molar Distalizing System

Sumodis is a system for distalizing simultaneously the upper molars in presence of second molars in non-extractive class II treatment without co-operation.

Sumodis is a combination of sliding mechanics using **Spider Screw** as anchorage resource. The system distalizes the molars **independently** and **simultaneously**, avoiding tipping and shortening treatment times.

Sumodis is made from two distalizing components: one active against the first molar and the other one active against the second molar, working simultaneously.

One **Sumodis kit** contains:

- Stailess steel tempered wire .016x.022
- Neosentalloy wire .018x.025 with stop
- Elastomer tubing
- Neosentalloy open coil spring 200g
- Double tube
- Crimpable stop
- Preshaped palatal bar Ø 1 mm

SUM-5004
Kit Sumodis

SUMODIS APPLICATION EXAMPLES

1.


2.

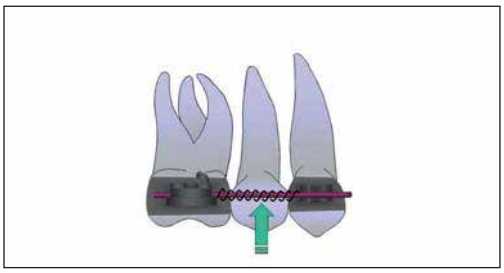

3.


4.

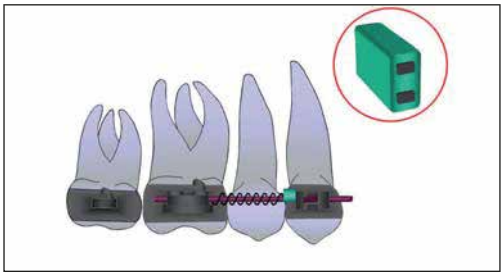

5.


6.

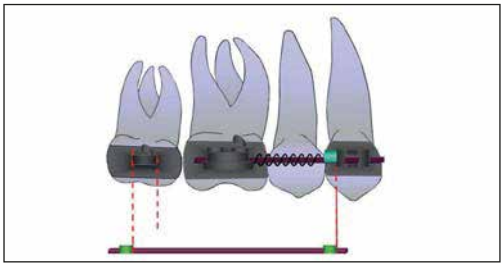

Courtesy of Dr. B.G. Maino



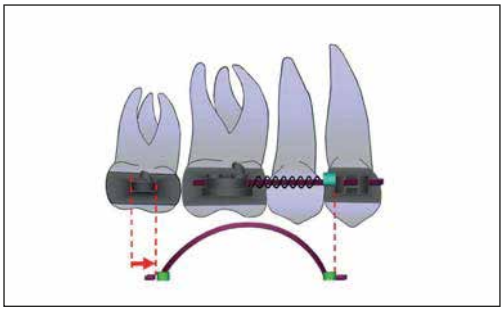
First distalizing component. Insert a 200 g Neosentalloy open spring in the sectional wire .016x.022 between the sixth and the first premolar.



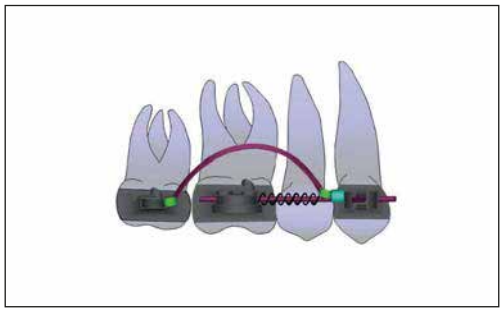
After inserting the spring and before tying the sectional .016x.022 at the bracket of the premolar, insert the double tube, using the lower hole next to the bracket of the first premolar.



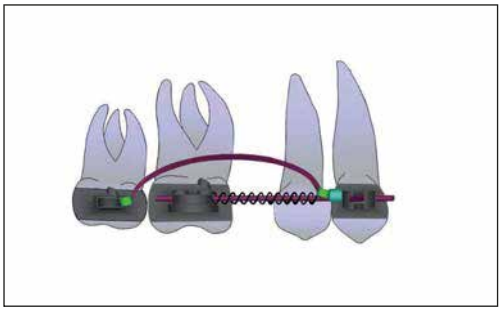
Second distalizing component. Prepare the Neosentalloy sectional .018x.025 (already provided with a stop) by adding another stop to a distance approximately 6 mm longer than the distance between the second molar tube distal wall and the distal part of the double tube inserted in the sectional wire.



Once introduced the Neosentalloy wire into the the second molar tube, the system is automatically activated.



In this phase, both the distalizing components are simoultaneosly activated.



End of the first MBGM system phase.
Molar distalization done.

SPIDER SCREW PIN

Ø 1,3 mm

Cylindrical Thread (Self-tapping)
Available in lenghts 8 - 10 mm.

Spider PIN - **pre-drilling** using the Ø 0,9 mm drill **is required**.

- Simplified head design, perfect for NiTi closed coil spring attachments or elastic chains
- Ideal for narrow interproximal spaces

SCL-1308	Ø 1,3 x 8 mm
SCL-1310	Ø 1,3 x 10 mm

CSS-3006
Spider Pin Organizer

	**FSC-0910**	DRILL Ø 9 mm for Spider Screw Pin
	**DPQ-2322**	CONTRA ANGLE PICK-UP DRIVER
	**DSQ-2324**	MANUAL DRIVER
	**DSP-2352S**	PICK-UP SHAFT for DSX-1690S and DST-1600
	**DSX-1690S**	SCREWDRIVER BODY

TORQUE DRIVER

6 - 10 N/cm

10 - 15 N/cm

15 - 20 N/cm

DST-1600 TORQUE DRIVER

- Dynamometric screwdriver for monitoring the insertion force
- Insertion force control from 6 to 20 N/cm
- Compatible with all the Spider Screw system shafts
- Fully metal body for easy cleaning and sterilization

SPIDER PIN APPLICATION EXAMPLES

Incisor Intrusion

1. 
2. 
3. 

Distalization

1. 
2. 
3. 

Courtesy of Dr. B.G. Maino

SPIDER SCREW K2 REGULAR PLUS

Ø 2 mm

Tapered Thread (Self-drilling/Self-tapping)
Available in lenghts 6 - 7 - 9 - 11 - 13 - 15 mm.

Spider Screw Regular Plus allows additional application possibilities thanks to the internal threaded portion. This allows the attachment of additional devices, such as acrylic resin abutments, stainless steel abutment, pre-shaped abutments or lab-made orthodontic appliances.

Spider Screw Regular Plus can be a great temporary solution for edentulism.

For the insertion of **Spider Screw Regular Plus** the **CSS-4009 Kit** is needed.

SSP-2006	Regular Plus Ø 2 x 6 mm
SSP-2007	Regular Plus Ø 2 x 7 mm
SSP-2009	Regular Plus Ø 2 x 9 mm
SSP-2011	Regular Plus Ø 2 x 11 mm
SSP-2013	Regular Plus Ø 2 x 13 mm
SSP-2015	Regular Plus Ø 2 x 15 mm

CSS-4009
Spider Screw K1 - K2 - Z Organizer
See instruments on page 24

SPECIFIC SPIDER SCREW K2 REGULAR PLUS CPMPONENTS

	**PMA-5008**	ACRYLIC RESIN ABUTMENT * Each PMA-5008 comes with its VRS-1645Q
	**PMA-4050R**	STAINLESS STEEL ABUTMENT * Each PMA-4050R comes with its VRS-1645Q
	**PMA-5006R**	UTILITY ABUTMENT * Each PMA-5006R comes with its VRS-1645Q
	**VRS-1645Q**	ABUTMENT FIXATION SCREW * Tighten max 10N/cm
	**CTS-5000**	IMPRESSION COPING
	**ANR-4012**	LAB ANALOG

SPIDER SCREW REGULAR PLUS APPLICATION EXAMPLES



Courtesy of Dr. B.G. Maino

K1 - K2 - Z -RP KONIC TOOL KIT SET

CSS-7014

Spider Screw Organizer
K1 - K2 - Z + RP Konic

A unique kit that includes both the instrumentation for the insertion of vestibular and zygomatic miniscrews (**Spider Screw K1-K2-Z-Regular Plus**) and that for the insertion of palatal miniscrews (**Spider Screw RP Konic**).
The two systems are identifiable by the different colour of the grommets.

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NOTES

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rev. Maggio 2023

CERTIFICATIONS

HDC S.r.l. obtained CE marking and ISO 13485, which proves that our product has been assessed and meets EU safety, healt and environmental protetction requirements, as well as the requirements for a comprehensive quality management system for the design and manufacture of medical devices.