Surgical Technique

TigerTrack®

Self-compressive, Snap-off and Weil Screws

SynchroMedical

The interphalangeal reference

Product description

TigerTrack®

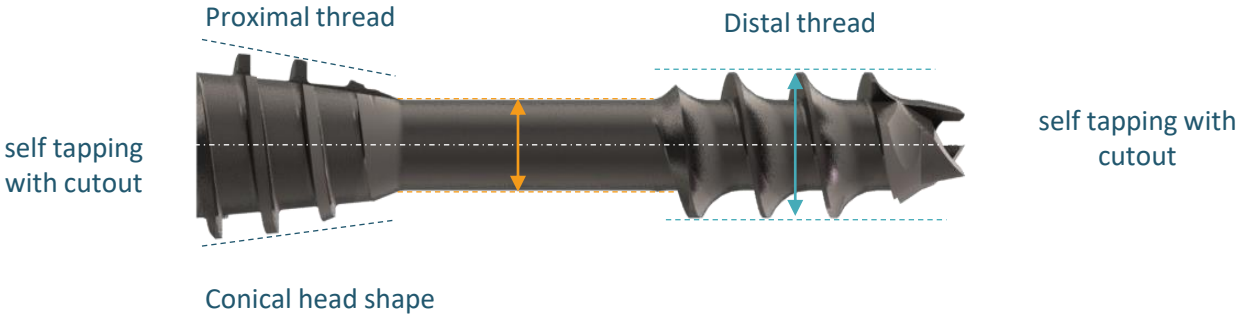
TigerTrack® - Product family

TigerTrack® range is delivered sterile packed includes broad portfolio of screws with a hexalobe screw head.

TigerTrack® self-compressive headless screws

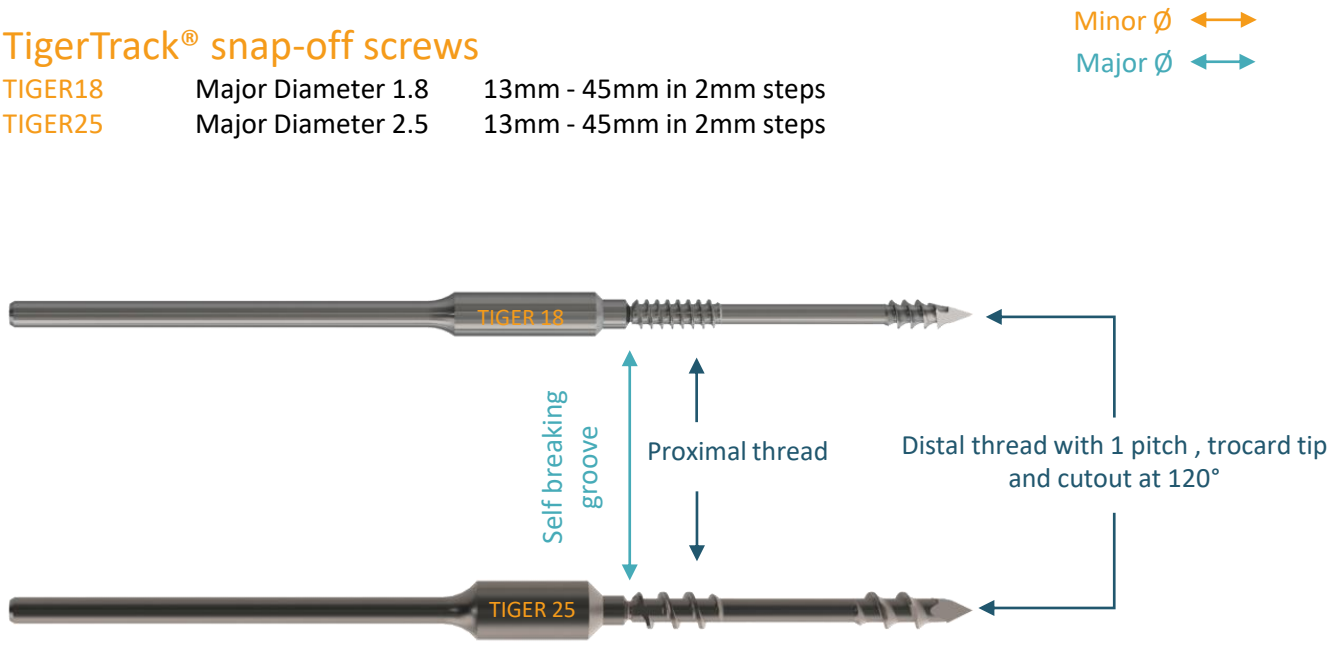
These self-compressive headless screws are available in several diameters and lengths. The minor diameter is prepared with a drill. The major diameter describes the device and the outer diameter of the thread.

TIGER22	Major Diameter 2.2	9mm – 21mm in 2mm steps
TIGER29	Major Diameter 2.9	13mm - 45mm in 2mm steps
TIGER35	Major Diameter 3.5	on request
TIGER45	Major Diameter 4.5	on request



TigerTrack® snap-off screws

TIGER18	Major Diameter 1.8	13mm - 45mm in 2mm steps
TIGER25	Major Diameter 2.5	13mm - 45mm in 2mm steps



Product description

TigerTrack®

TigerTrack® - Product family

TigerTrack® range is delivered sterile packed and includes broad portfolio of screws sizes

TigerTrack® Weil

These Weil screws are provided in 2.2mm diameter and are in lengths from 9mm to 21mm in 2mm steps.
The head connector can be broken off. The screw head has a hexalobe T7 print hidden under self breaking part.

TigerTrack® screws are manufactured in Ti-6Al-4V ELI titanium as per standard ISO 5832-3 / ASTM F136. With the exception of the TIGER18 which is manufactured in a chrome-cobalt alloy as per ISO 5832-7 (phynox).

Product description

TigerTrack®

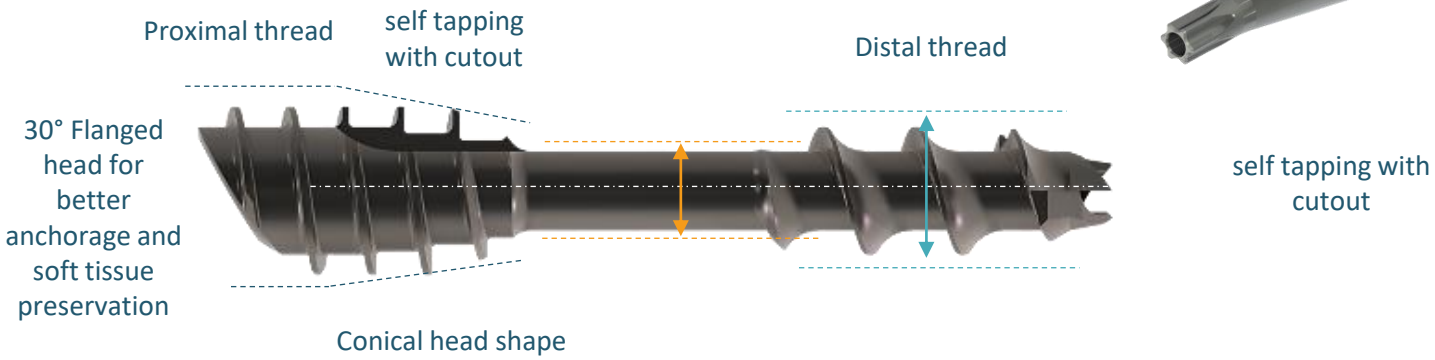
TigerTrack® - Product family

TigerTrack® range is delivered sterile packed includes broad portfolio of screws with a hexalobe screw head.

TigerTrack® self-compressive headless screws, 30° flange

These self-compressive headless screws are available in diameter 2,9mm and several lengths. The minor diameter is prepared with a drill. The major diameter describes the device and the outer diameter of the thread. The right position of the bevel is helped with a laser mark on the screwdriver.

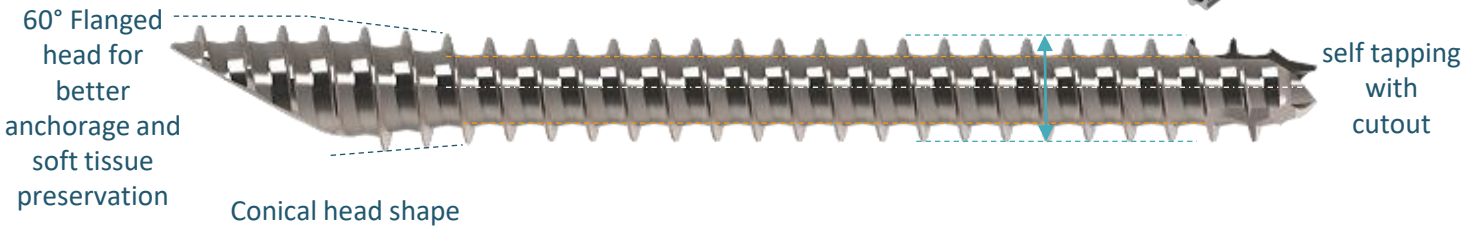
TIGER29 Flange Major Diameter 2.9mm 19mm - 33mm in 2mm steps



TigerTrack® non-compressive headless screws, 60° flange

These non-compressive headless screws are available in diameter 3,5mm and several lengths. The minor diameter is prepared with a drill. The major diameter describes the device and the outer diameter of the thread. The right position of the bevel is helped with a laser mark on the screwdriver.

TIGER35 Flange Major Diameter 3.5mm 21mm - 55mm in 2mm steps



Indications and Contraindications

TigerTrack® screws are designed to relieve pain and disability of the forefoot by attaching and stabilizing bone segments in elective osteotomies on metatarsal bones and phalanges of the foot, in order to optimize the correct bone fusion of the segments concerned. These devices are only intended for use in the forefoot of a mature skeleton.

Indications:
The TigerTrack® screw system is indicated as an attachment system for small bone fractures or minor bone reconstruction in skeletally mature in the following cases:

- Monocortical or bicortical osteotomy of the foot or hand
- Metatarsal or distal or proximal metacarpal osteotomy
- Musion of the first metatarsophalangeal and interphalangeal joint
- Attachment in the case of treatment of Hallux Valgus (e.g. scarf osteotomy, chevron osteotomy, etc.)
- Akin osteotomy
- Weil osteotomy (Weil's snap-off screw only)

CAUTION: to be used by or on the order of a surgeon. The surgeon must take note of the documents accompanying the device. No specific training is required for the understanding and use of the device. The surgeon's qualifications and the reading of the accompanying documents are enough.

Contraindications:

A non-exhaustive list of contraindications is as follows:

1. Any sign of generalized or local infection

2. Pathological obesity

3. Pregnancy

4. Any other medical or surgical condition that may compromise the success of surgery with instruments, such as the presence of malignant tumors, or serious congenital anomalies, an increase in sedimentation rates that cannot be attributed to other diseases, an increase in the number of white blood cells or a downward trend in such blood cells

5. Suspected or known allergy or intolerance to the implant's component materials

6. Any situation requiring the use of different materials

7. Any case not listed in the indications

8. Any patient who is not willing to follow the postoperative instructions

9. Any patient in whom use of the implant may interfere with anatomical organs or some expected physiological function

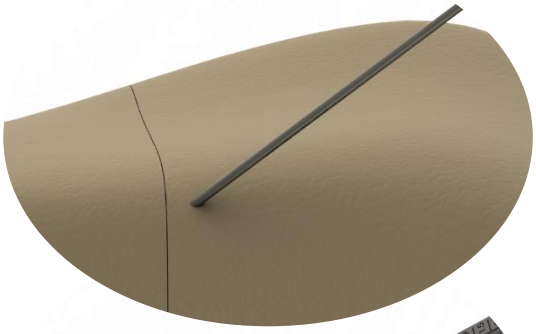
10. Any dental treatment that could affect the passivation layer of metal implants (such as fluoride treatment)

The contraindications pertaining to these devices are similar to those pertaining to other osteosynthesis instruments. These instruments have not been designed for, intended or sold for any use other than those indicated

→ **For more information please refer to TigerTrack® instruction for use reference SUP_ 7.017**

Surgical Technique

TIGER 22/29/35/45

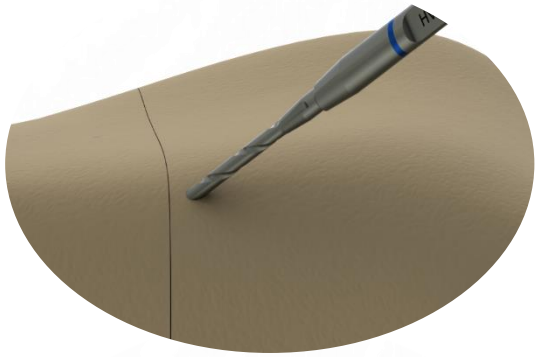


1 Kirschner wire insertion (Ref: KW10100TR) as stabilization for bone osteotomy and as guide for instruments and implants insertion.

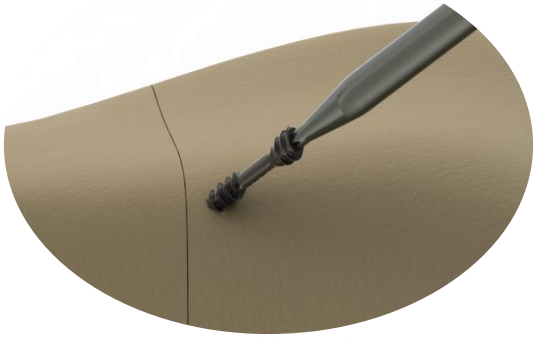
2 Measurement of the screw length on Kirschner wire thanks to gauge length instrument (Ref: HV9005).

Note: for bicortical operation, perform the length measurement with the depth gauge instrument (Ref: HV9020).

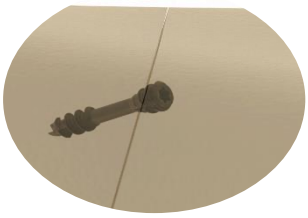
HV9020 – Depth gauge



3 Drill the bone over the Kirschner wire with the adapted step drill if the drill is cannulated. In case of sclerotic bone, we recommend preparing the screw entry with a stepped drill.



4 Insert the screw over the Kirschner wire with the screwdriver.
(Ref: HV9003)



TIGER self-compressive screw implanted

REMOVAL / REVISION

Should removal or revision of the implant be required: Use the screwdriver (Ref HV9023 or HV9034). Connect the screwdriver to the AO handle (Ref: HV9010). Unscrew properly and directly the TIGER screw and it will be removed.

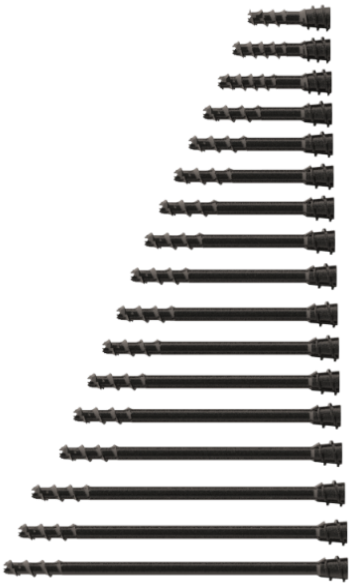
Product List

TIGER 22, 29, 45

TIGER 22

Self-compressive cannulated screw

REFERENCE	Ø	Length
HV2211	2,2	11
HV2213		13
HV2215		15
HV2217		17
HV2219		19
HV2221		21
HV2223		23
HV2225		25
HV2227		27
HV2229		29
HV2231		31
HV2233		33
HV2235		35
HV2237		37
HV2239		39
HV2241		41
HV2243		43
HV2245		45



TIGER 29

Self compressive cannulated screw

REFERENCE	Ø	Length
HV2911	2,9	11
HV2913		13
HV2915		15
HV2917		17
HV2919		19
HV2921		21
HV2923		23
HV2925		25
HV2927		27
HV2929		29
HV2931		31
HV2933		33
HV2935		35
HV2937		37
HV2939		39
HV2941		41
HV2943		43
HV2945		45

TIGER 45

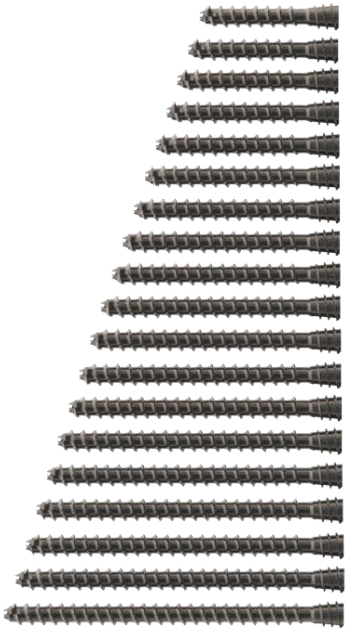
Self-compressive cannulated screw *(on request)*

REFERENCE	Ø	Length
HV4525	4,5	25
HV4527		27
HV4529		29
HV4531		31
HV4533		33
HV4535		35
HV4537		37
HV4539		39
HV4541		41
HV4543		43
HV4545		45
HV4547		47
HV4549		49
HV4551		51
HV4553		53
HV4555		55
HV4557		57
HV4559		59
HV4561		61

TIGER 45

Self-compressive, continuous thread, cannulated screw *(on request)*

REFERENCE	Ø	Length
CT4525	4,5	25
CT4527		27
CT4529		29
CT4531		31
CT4533		33
CT4535		35
CT4537		37
CT4539		39
CT4541		41
CT4543		43
CT4545		45
CT4547		47
CT4549		49
CT4551		51
CT4553		53
CT4555		55
CT4557		57
CT4559		59
CT4561		61



Product List

TIGER 35

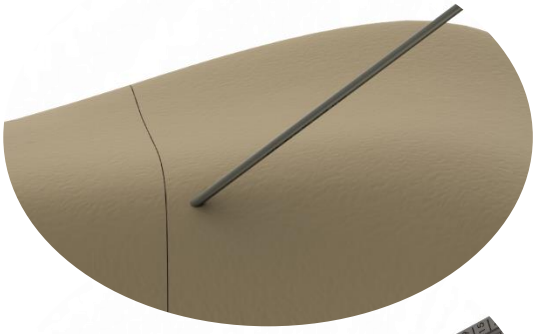
TIGER 35

Self-compressive cannulated screw

REFERENCE		Ø	Length
HV3523		3,5	23
HV3525			25
HV3527			27
HV3529			29
HV3531			31
HV3533			33
HV3535			35
HV3537			37
HV3539			39
HV3541			41
HV3543			43
HV3545			45
HV3547			47
HV3549			49
HV3551			51
HV3553			53
HV3555			55
HV3557			57
HV3559			59
HV3561			61

Surgical Technique

TIGER 29 Flange

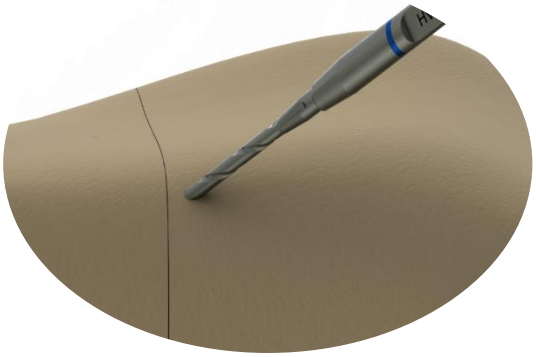


1 Kirschner wire insertion (Ref: KW10100TR) as stabilization for bone osteotomy and as guide for instruments and implants insertion.

2 Measurement of the screw length on Kirschner wire thanks to gauge length instrument (Ref: HV9005).

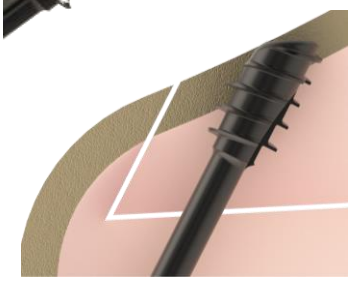
Note: for bicortical operation, perform the length measurement with the depth gauge instrument (Ref: HV9020).

HV9020 – Depth gauge



3 Drill the bone over the Kirschner wire with the adapted step drill if the drill is cannulated. In case of sclerotic bone, we recommend preparing the screw entry with a stepped drill.

4 Insert the screw over the Kirschner wire with the screwdriver.
(Ref: HVT7F)



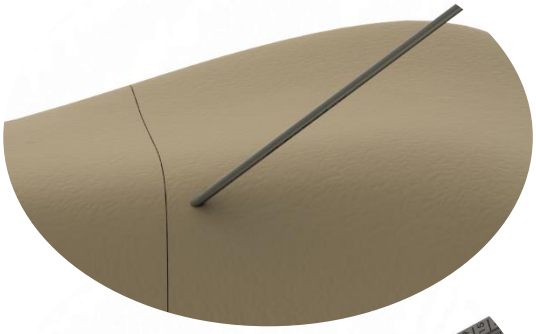
TIGER self-compressive screw implanted

REMOVAL / REVISION

Should removal or revision of the implant be required: Use the screwdriver (Ref HVT7F or HV9023). Connect the screwdriver to the AO handle (Ref: HV9010). Unscrew properly and directly the TIGER screw and it will be removed.

Surgical Technique

TIGER 35 Flange

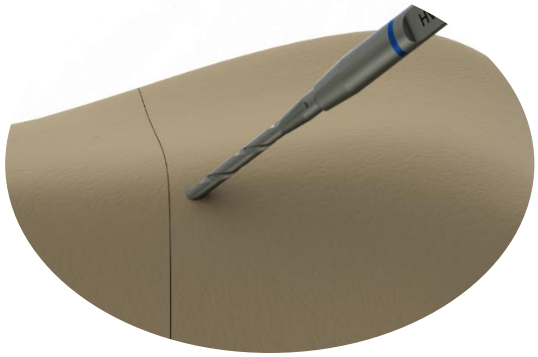


1 Kirschner wire insertion (Ref: KW12150TR) as stabilization for bone osteotomy and as guide for instruments and implants insertion.

2 Measurement of the screw length on Kirschner wire thanks to gauge length instrument (Ref: HV9005).

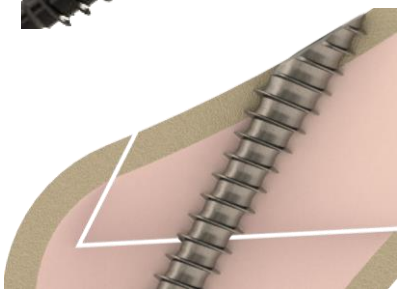
Note: for bicortical operation, perform the length measurement with the depth gauge instrument (Ref: HV9020).

HV9020 – Depth gauge



3 Drill the bone over the Kirschner wire with the adapted step drill if the drill is cannulated. In case of sclerotic bone, we recommend preparing the screw entry with a stepped drill.

4 Insert the screw over the Kirschner wire with the screwdriver.
(Ref: HVT9F)



TIGER self-compressive screw implanted

REMOVAL / REVISION

Should removal or revision of the implant be required: Use the screwdriver (Ref HVT9F). Connect the screwdriver to the AO handle (Ref: HV9010). Unscrew properly and directly the TIGER screw and it will be removed.

Product List

TIGER 29 Flange

TIGER 35 Flange

TIGER 29 Flange

30° Flanged, self-compressive cannulated screw

REFERENCE	Ø	Lengt h
HV3F2919	2,9	19
HV3F2921		21
HV3F2923		23
HV3F2925		25
HV3F2927		27
HV3F2929		29
HV3F2931		31
HV3F2933		33

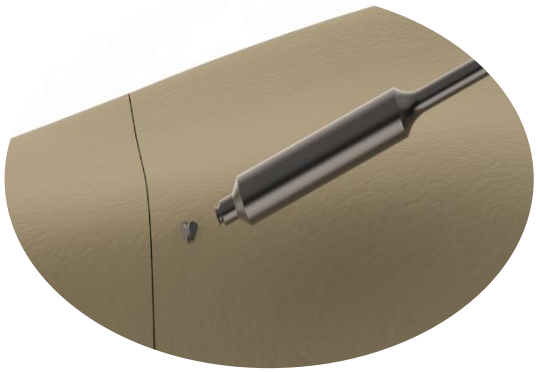
TIGER 35 Flange

60° Flanged, cannulated screw

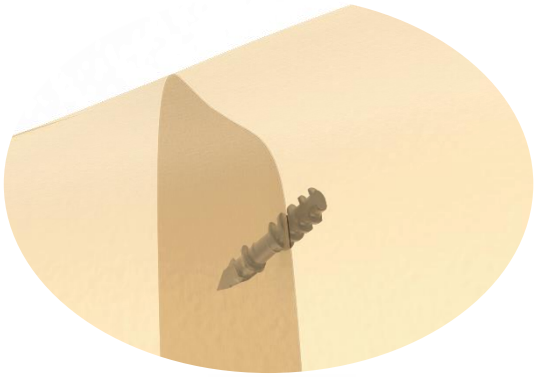
REFERENCE	Ø	Length
HV6F3521	3,5	21
HV6F3523		23
HV6F3525		25
HV6F3527		27
HV6F3529		29
HV6F3531		31
HV6F3533		33
HV6F3535		35
HV6F3537		37
HV6F3539		39
HV6F3541		41
HV6F3543		43
HV6F3545		45
HV6F3547		47
HV6F3549		49
HV6F3551		51
HV6F3553		53
HV6F3555		55

Surgical Technique
TIGER 18/25

1 After osteotomy stabilization, Insert the TIGER snap-off threaded pin with surgical power tool.



2 Break the TIGER snap-off threaded pin flush to the bone surface.



3 TIGER snap-off threaded pin implanted.
If necessary, to tighten the screw further or to remove it, use the 1.5mm hollow hexagonal bit (Ref HV9004)

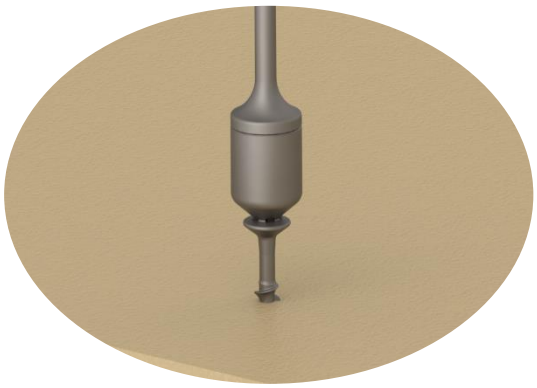
HV9016 – Screw extractor

REMOVAL / REVISION

Should removal or revision of the implant be required:

Use the screw extractor (Ref HV9016). Connect the screw extractor to the AO handle (Ref: HV9010). Place the screw extractor over the TIGER snap-off threaded pin implanted and unscrew properly. First, the teeth of the screw extractor will rasp the bone. The screw extractor is left threaded instrument. Therefore, keep unscrewing and the TIGER pin will be removed.

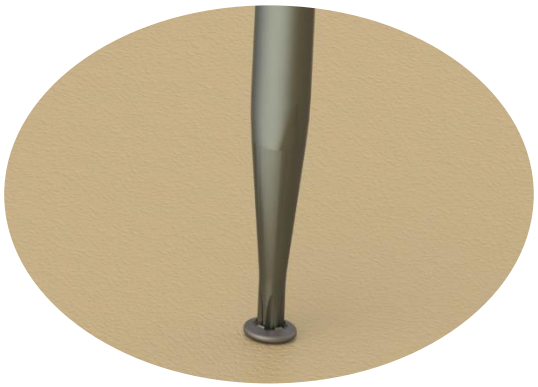
Surgical Technique
TIGER W



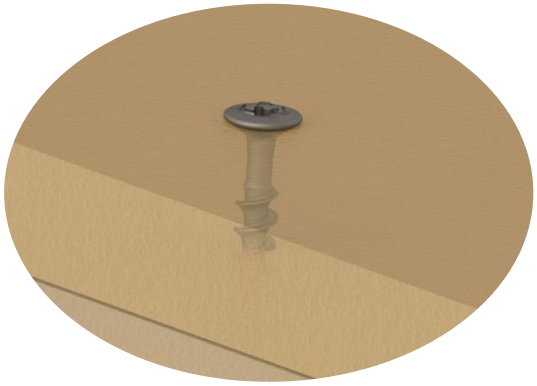
1 Kirschner wire insertion (Ref: KW10100TR) as stabilization for bone osteotomy and as guide for instruments and implants insertion.

⚠ The wire coupling of the screw must be pushed in alongside the chuck of the surgical motor so that the screw breaks well at the level of the self-breaking groove.

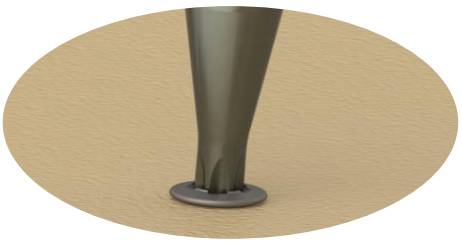
2 Break the TIGER snap-off threaded pin flush to the bone surface.



3 If it is necessary, it is possible to end screwing the TIGER W screw with the screwdriver (Ref: HV9023).



4 TIGER W screw is implanted.



REMOVAL / REVISION

Should removal or revision of the implant be required: Use the screwdriver (Ref HV9023). Connect the screwdriver to the AO handle (Ref: HV9010). Unscrew properly and directly the TIGER screw and it will be removed.

Product List

TIGER 18, 25, W

TIGER 18

Snap-off threaded pin

REFERENCE		Ø	Length
HV1813			13
HV1815			15
HV1817			17
HV1819			19
HV1821			21
HV1823			23
HV1825			25
HV1827			27
HV1829		1,8	29
HV1831			31
HV1833			33
HV1835			35
HV1837			37
HV1839			39
HV1841			41
HV1843			43
HV1845			45

TIGER 25

Snap-off threaded pin

REFERENCE		Ø	Length
HV2513			13
HV2515			15
HV2517			17
HV2519			19
HV2521			21
HV2523			23
HV2525			25
HV2527			27
HV2529		2,5	29
HV2531			31
HV2533			33
HV2535			35
HV2537			37
HV2539			39
HV2541			41
HV2543			43
HV2545			45

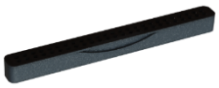
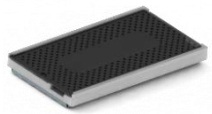
TIGER W

Snap-off Weil screw

REFERENCE		Ø	Length
WE0009			09
WE0010			10
WE0011			11
WE0012			12
WE0013			13
WE0014			14
WE0015		2,2	15
WE0016			16
WE0017			17
WE0018			18
WE0019			19
WE0020			20
WE0021			21

Product List

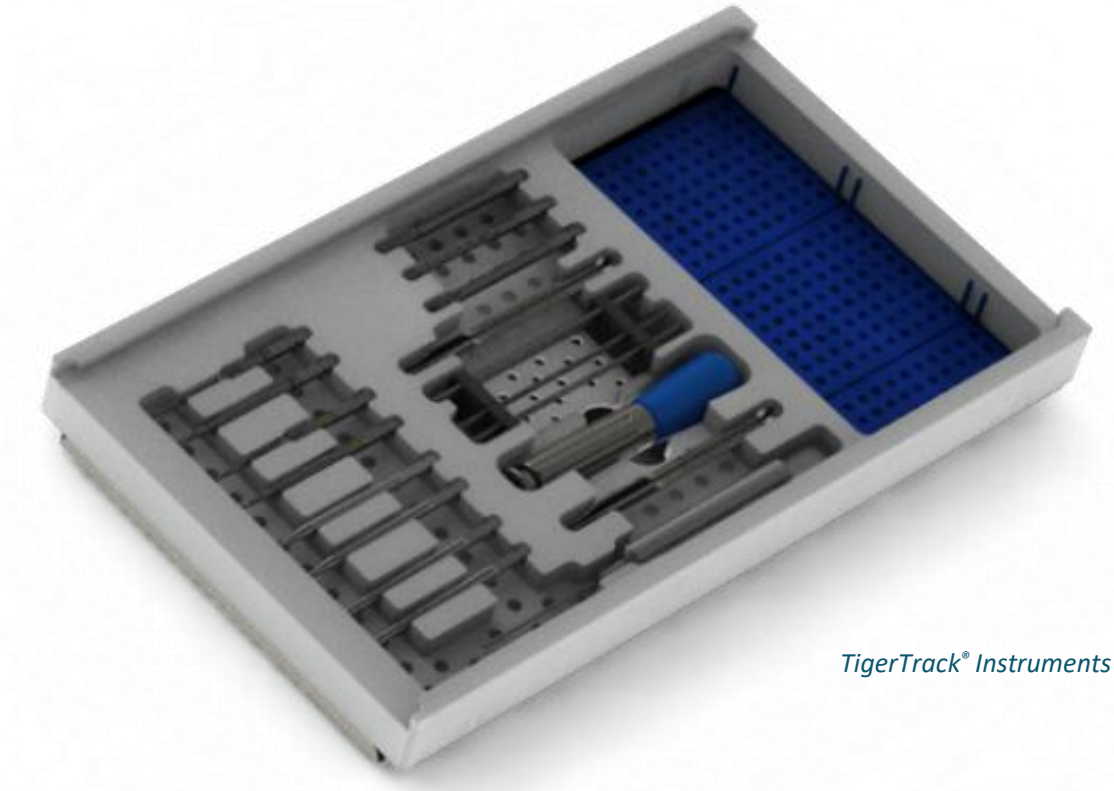
Instrumentation KIT

	HV9010	AO HANDLE
	HV9003	T7 CANNULATED SCREWDRIVER
	HV9004	1,5MM HOLLOW HEXAGONAL SCREWDRIVER
	HV9023	SOLID T7 SCREWDRIVER
	HVT7F	T7 CANNULATED SCREWDRIVER FOR FLANGED SCREWS
	HVT9F	T9 CANNULATED SCREWDRIVER FOR FLANGED SCREWS
	HV9005	GAUGE LENGTH
	HV9011-1	K-WIRE CASE
	HV9016	SCREW EXTRACTOR
	HV9024	SHORT STEP DRILL
	HV9026	LONG STEP DRILL
	HV9025	CANNULATED SHORT STEP DRILL
	HV9027	CANNULATED LONG STEP DRILL
	HV93523C	CANNULATED SHORT STEP DRILL
	HV93523L	CANNULATED LONG STEP DRILL
	KW10100TR KW08100TR	KIRSCHNER WIRE WITH TROCAR TIP
	HV9015	TIGERTRACK® INSTRUMENT TRAY
	HV9020	DEPTH GAUGE

Product List

Instrumentation KIT

	HV9006-A	LONG STEP DRILL
	HV9034	T9 CANNULATED SCREWDRIVER
	HV9035	GAUGE LENGTH
	HV9032	CANNULATED SHORT STEP DRILL
	HV9033	CANNULATED LONG STEP DRILL
	HV9008	CANNULATED MILLING TOOL
	HV9009	CANNULATED MILLING TOOL



TigerTrack® Instruments kit

Legal and regulatory disclaimers

This material is intended for health care professionals. Distribution to any other recipient is prohibited. For product information, including indications, contraindications, warnings, precautions, potential adverse effects and patient counseling information, see the package insert. Check for country product clearances and reference product-specific instructions for use (SUP_7.017). This is intended for professionals authorized to perform lower limb surgery. Each surgeon should exercise his or her own independent judgment in the diagnosis and treatment of an individual patient. As with all surgical procedures, the technique used in each case will depend on the surgeon's medical judgment as the best treatment for each patient. Results will vary based on health, weight, activity and other variables. Not all patients are candidates for this product and/or procedure.

Caution: Federal (USA) law restricts this device to sale by or on the order of a surgeon.

Availability of these products might vary from a given country or region to another, as a result of specific local regulatory approval or clearance requirements for sale in such country or region. The manufacturer reserves the right, without prior notice, to modify the products in order to improve their quality.

TigerTrack® is registered trademarks of ADSM.

TigerTrack® screws are manufactured in Ti-6Al-4V ELI titanium according to Standard ISO 5832-3 / ASTM F 136. With the exception of the TIGER18 which is manufactured in a chrome-cobalt alloy according to ISO 5832-7.

MEDICAL DEVICES:

- TigerTrack® implants Class IIb
- TigerTrack® instruments Class IIa
- TigerTrack ® instruments Class Ir
- TigerTrack ® instruments Class I

ADSM
7b rue Lavoisier
F-69680 CHASSIEU
France

Tel : +33 (0)4 28 71 03 10
Fax : +33 (0)4 28 71 03 20
www.synchromedical.com

CE 0197 UKCA 2571