

Surgical Technique  
**TigerTrack<sup>®</sup>**

Self-compressive,  
Snap-off and  
Weil Screws



**SynchroMedical**

*The interphalangeal reference*

# Product description

## TigerTrack®

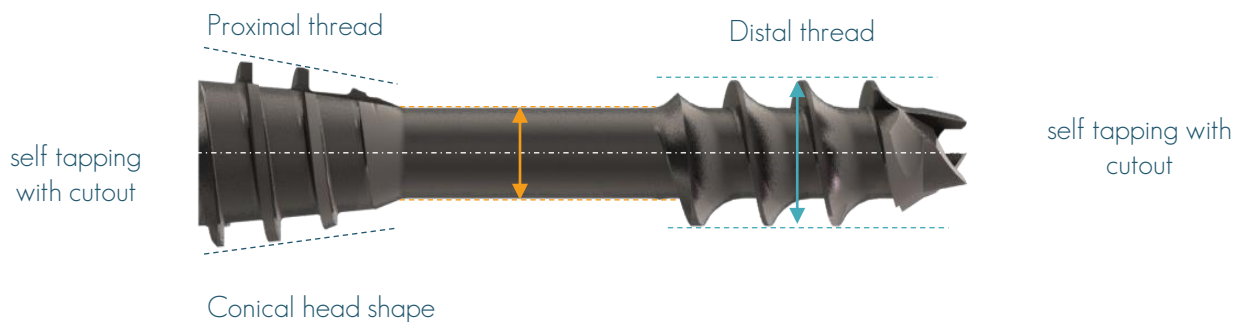
### TigerTrack® - Product family

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.

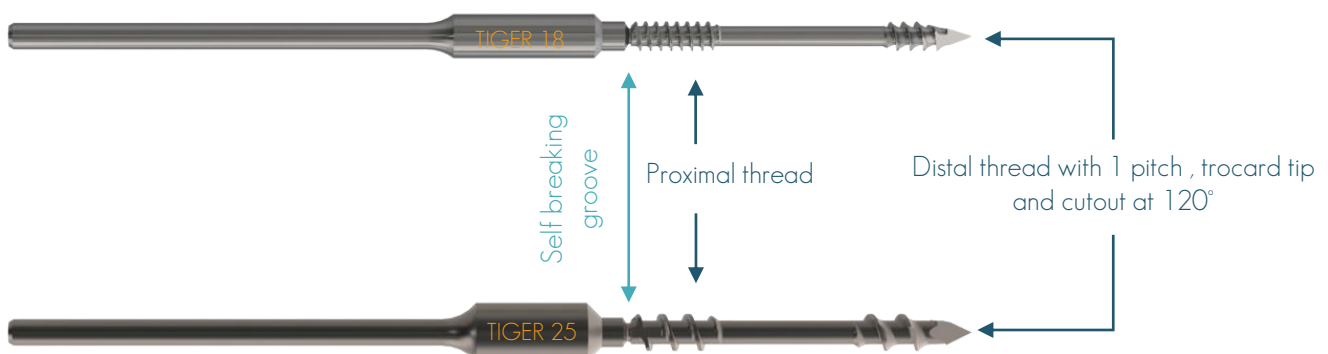
TIGER22	Major Diameter 2.2	9mm - 21mm in 2mm steps
TIGER29	Major Diameter 2.9	13mm - 45mm in 2mm steps
TIGER35	Major Diameter 3.5	on request
TIGER45	Major Diameter 4.5	on request



#### TigerTrack® snap-off screws

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

Minor Ø ↔  
Major Ø ↔



# 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®

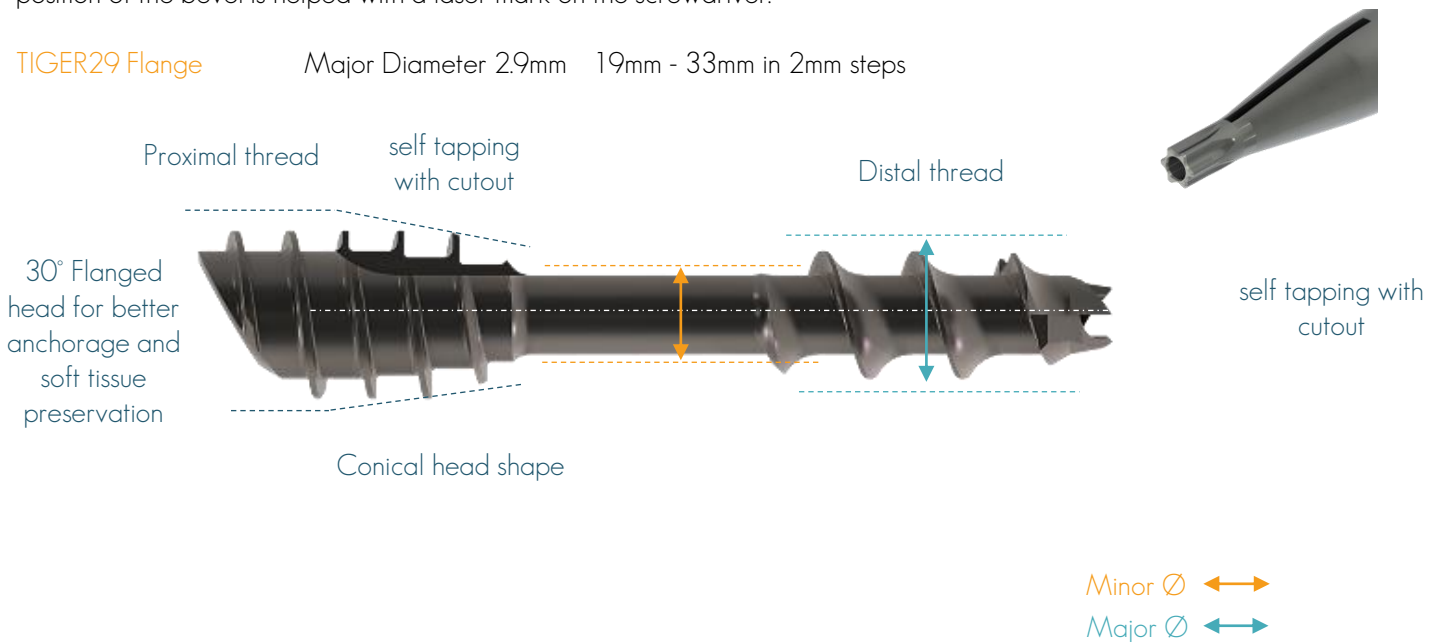
### TigerTrack® - Product family

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.

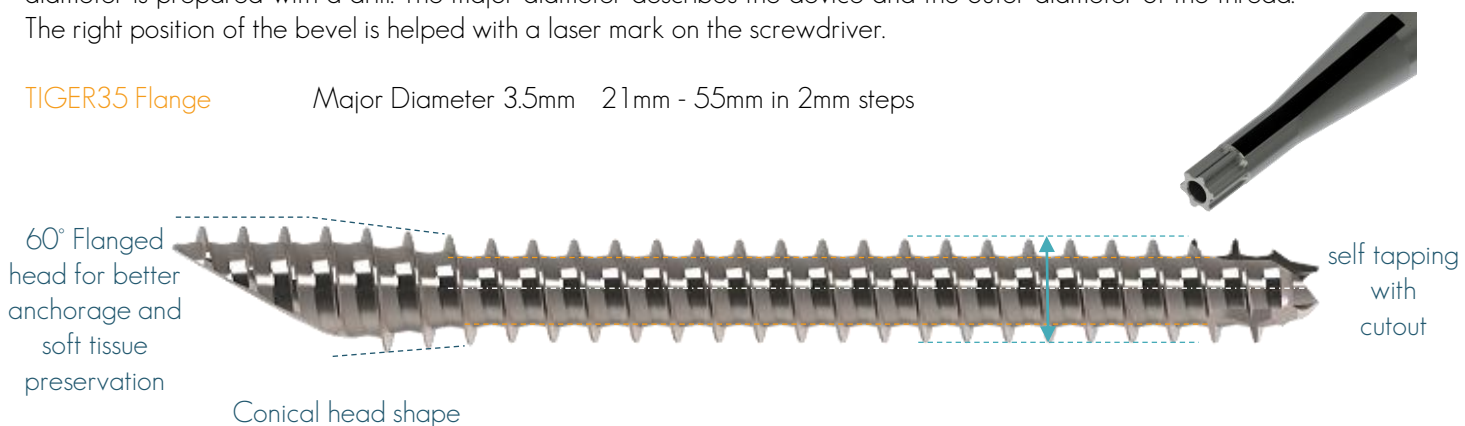
**TIGER29 Flange** Major Diameter 2,9mm 19mm - 33mm in 2mm steps



#### 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
- Fusion 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

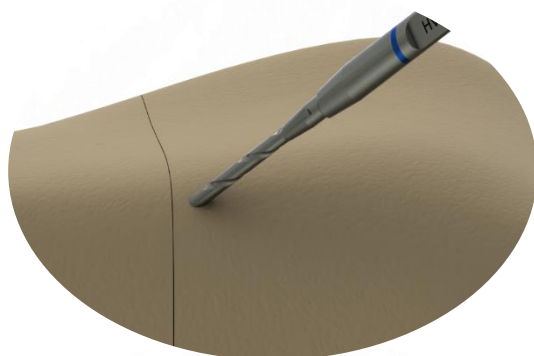


- 1 Kirschner wire insertion (Ref: KW10100TR) as stabilization for bone osteotomy and as guide for instruments and implants insertion.

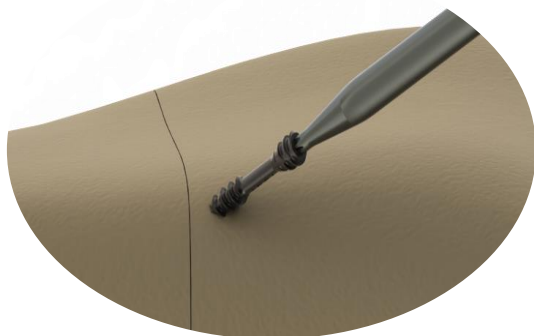


- 2 Measurement of the screw length on Kirschner wire thanks to gauge length instrument (Ref: HV9005).

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



- 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)

### 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.



*TIGER self-compressive screw implanted*

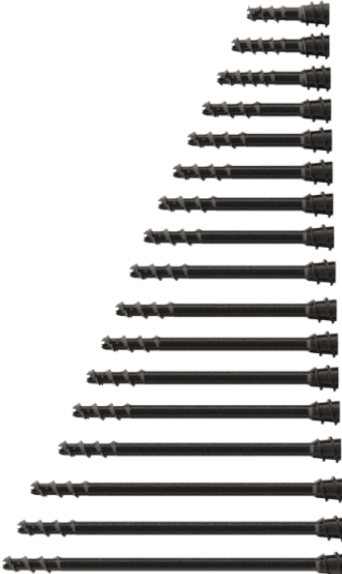
# Product List

## 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)

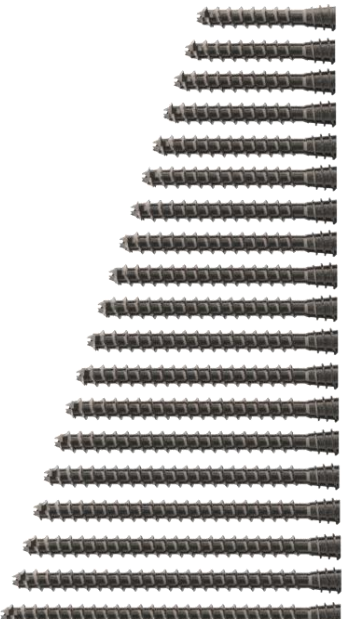
REFERENCE	Ø	Length
HV4525	4.5	25
HV4527		27
HV4529		29
HV4531		31
HV4533		33
HV4535		35
HV4537		37
HV4539		39
HV4541		41
HV4543		43
HV4545		45
HV4547		47
HV4549		49
HV4551		51
HV4553		53
HV4555		55
HV4557	57	
HV4559	59	
HV4561	61	



### 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

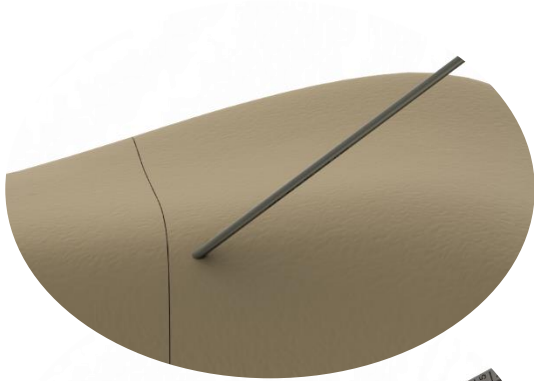
Self-compressive cannulated screw

REFERENCE		Ø	Length
HV3523			23
HV3525			25
HV3527			27
HV3529			29
HV3531			31
HV3533			33
HV3535			35
HV3537			37
HV3539			39
HV3541		3,5	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).



- 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)

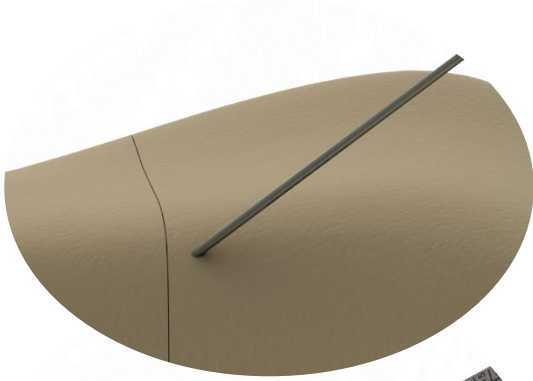
### REMOVAL / REVISION

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.

*TIGER self-compressive screw implanted*

# 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).

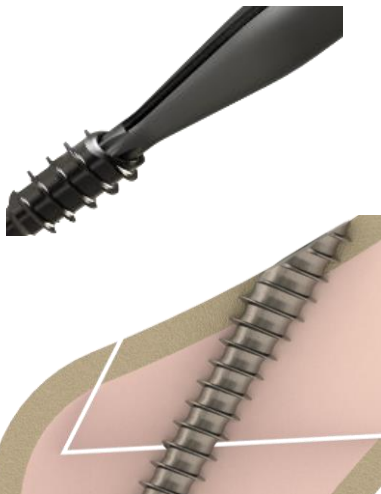
**Note:** for bicortical operation, perform the length measurement with the depth gauge instrument (Ref: HV9020).



- 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.



*HV9020 - Depth gauge*



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

### 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.

*TIGER self-compressive screw implanted*

# Product List

## TIGER 29 Flange

## TIGER 35 Flange

### TIGER 29 Flange

30° Flanged, self-compressive cannulated screw

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



### TIGER 35 Flange

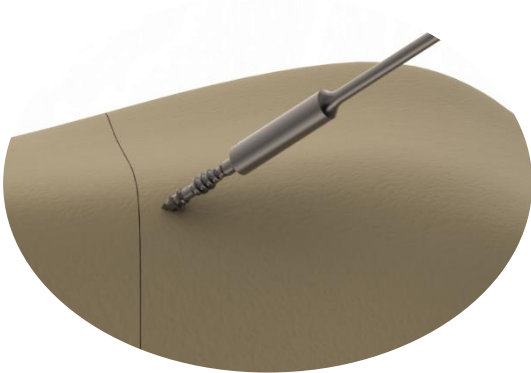
60° Flanged, cannulated screw

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



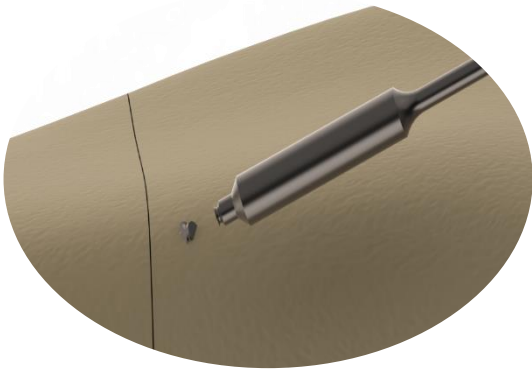
# Surgical Technique

## TIGER 18/25



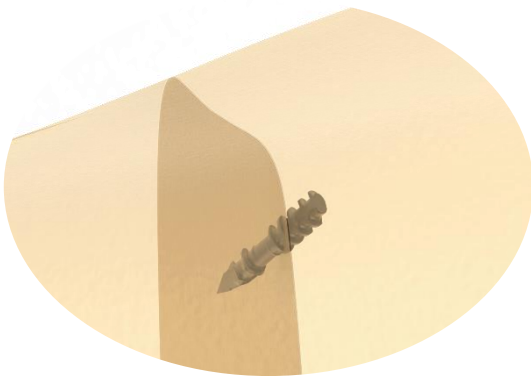
1

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)

### REMOVAL / REVISION

Should removal or revision of the implant be required:

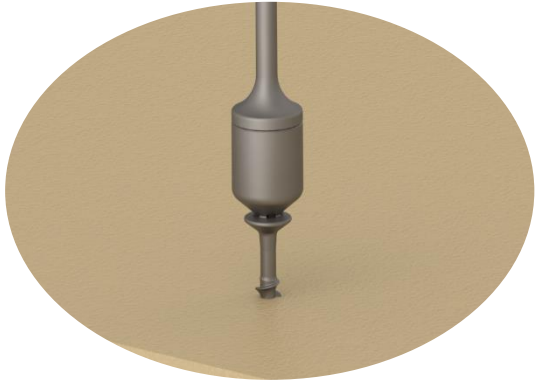
Use the screw extractor (Ref HV9016). Connect the screw extractor to the AO handle (Ref: HV9010). Place the screw extractor over the TIGER snap-off threaded pin implanted and unscrew properly. First, the teeth of the screw extractor will rasp the bone. The screw extractor is left threaded instrument.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




*HV9016 - Screw extractor*

# Surgical Technique

## TIGER W

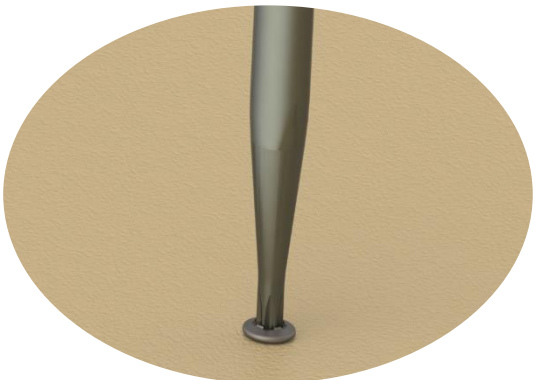


- 1 Kirschner wire insertion (Ref: KW10100TR) as stabilization for bone osteotomy and as guide for instruments and implants insertion.

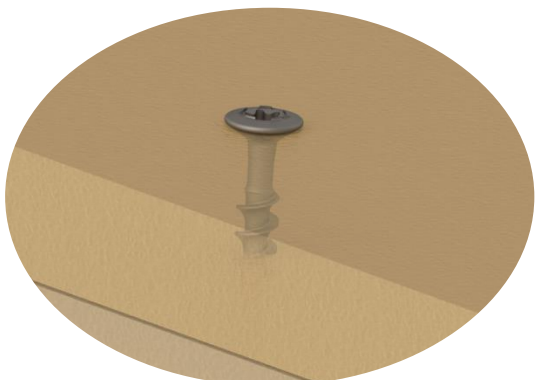
 The wire coupling of the screw must be pushed in alongside the chuck of the surgical motor so that the screw breaks well at the level of the self-breaking groove.



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



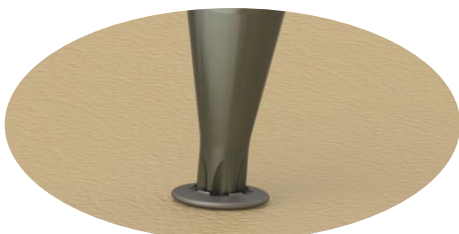
- 3 If it is necessary, it is possible to end screwing the TIGER W screw with the screwdriver (Ref: HV9023).



- 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

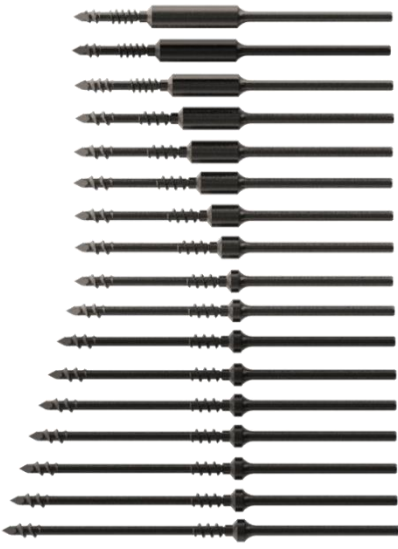
REFERENCE	$\varnothing$	Length
HV1813	1,8	13
HV1815		15
HV1817		17
HV1819		19
HV1821		21
HV1823		23
HV1825		25
HV1827		27
HV1829		29
HV1831		31
HV1833		33
HV1835		35
HV1837		37
HV1839		39
HV1841		41
HV1843		43
HV1845		45



### TIGER 25

Snap-off threaded pin

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



### TIGER W

Snap-off Weil screw

REFERENCE	$\varnothing$	Length
WE0009	2,2	09
WE0010		10
WE0011		11
WE0012		12
WE0013		13
WE0014		14
WE0015		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



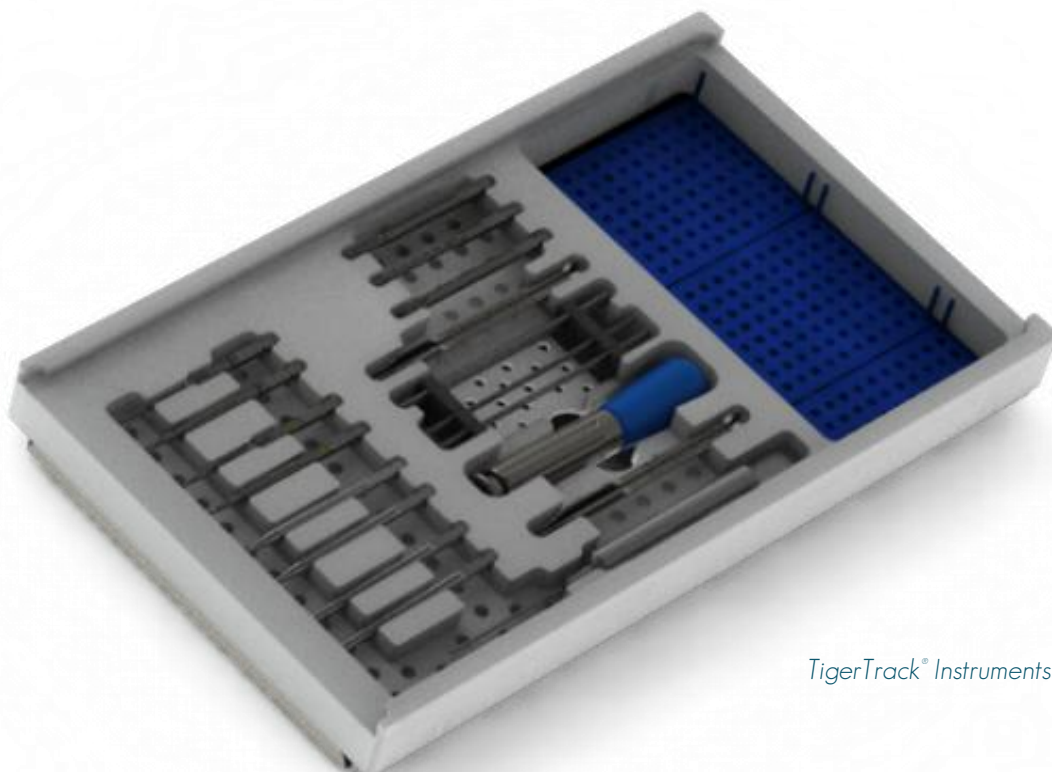
HV9008

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