

V-TEK™ IVP System 2.7 / 3.5

Surgical Technique



The following general Surgical Technique Guide is for illustrative purposes only. As with all surgical procedures, the technique used in each case will depend on the surgeon's medical judgment as to the best treatment for each patient. Only those individuals with specialized training and experience in Foot & Ankle surgery should attempt to use the V-TEK™ IVP System 2.7 / 3.5. Detailed preoperative clinical and diagnostic evaluation followed by carefully executed surgical technique is essential.

Zimmer Biomet does not practice medicine. Each physician should exercise his or her own independent judgment in the diagnosis and treatment of an individual patient, and this information does not purport to replace the comprehensive training physicians have received.

Refer to the package insert for a complete list of prescribing information, including indications, contraindications, warnings, precautions, potential adverse effects, and patient counseling information.

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Surgical Technique

Patient Positioning

The patient is positioned according to the operating surgeon's technique and preference based upon the patient's landmarks.

Surgical Technique

General Remarks

Only use appropriate saw blades designed for small bone surgery.

Avoid thermal necrosis by using appropriate irrigation during sawing, drilling and countersinking.

Surgical Approach

Select the appropriate surgical approach based on the patient's anatomy:

Hallux Valgus Deformity

Subcapital Osteotomy MT 1 - for IM angle $\leq 14^\circ$ and stable TMT 1 joint.

Base Osteotomy MT 1 - for IM angle 14° - 20° and stable TMT 1 joint.

Base Osteotomy with (Opening) Lapidus osteotomy on MT 1 and Cuneiforme mediale - for IM angle $>18^\circ$ and unstable TMT 1 joint.

Tailors Bunion Deformity

Subcapital Osteotomy MT 5.

Incision and Soft Tissue Preparation

Remove cartilaginous surfaces according to the surgeon's preferred method.

Removal of cartilage and bone preparation are carried out in the usual manner. Use chisels, burrs, curettes, and osteotomes (such as chisels or special osteotomes for joint surface preparation) to decorticate the involved joint surfaces until subchondral bone is fully exposed on each side.

In case of pseudarthrosis and/or osteotomy, removal of scar tissue or fibroses may be required.

Define bone and joint line using image intensifier and expose joint surfaces with appropriate bone spreaders.

Subcapital Osteotomy MT 1

Make a medial incision for access to the 1st MPJ.

Prepare and open the joint capsule.

The metatarsal head is presented and the pseudoexostosis removed.

Open the lateral capsule and resect the adductor tendon at the base.

Gain subcapital exposure of the metaphysis of the MT 1 with careful protection of the vascular bundle using Hohmann-type retractors.

Base Osteotomy MT 1

Base Osteotomy MT1 with (Opening) Lapidus Osteotomy

Make a medial incision to gain access to the 1st MPJ, continuing proximally towards the 1st TMT joint.

Prepare and open the joint capsule.

The metatarsal head is presented and the pseudoexostosis removed.

Subcapital Osteotomy MT 5

Make a lateral incision for access to the 5th MPJ.

Prepare and open the joint capsule.

Remove the pseudoexostosis.

Gain subcapital exposure of the metaphysis of the 5th MT with careful protection of the vascular bundle using Hohmann-type retractors.

Osteotomy and Bone Reposition

Subcapital Osteotomy MT 1

Perform a subcapital osteotomy proximal to the vascular bundle, perpendicular to the shaft axis of the 1st MT.

Mobilize the distal fragment using a small chisel (ca. 6 mm), which is led through the osteotomy.

Align the mobile metatarsal head in 3 dimensions - lateral, plantar and rotation into varus, improving the joint angles.

Base Osteotomy MT 1

Identify the 1st TMT joint by palpation and moving of the first ray.

Create a slightly V-Shaped osteotomy, 20 mm distal to the 1st TMT joint.

Mobilize the distal fragment using a small chisel (ca. 6 mm), which is led through the osteotomy.

Align the mobile distal fragment of MT 1 in 3 dimensions - lateral, plantar and rotation into varus, improving the joint angle.

Possible pronation malrotation of the toe may be corrected by derotation.

Base Osteotomy with (Opening) Lapidus Osteotomy

Identify the 1st TMT joint by palpation and moving of the first ray.

Open the 1st TMT joint capsule, protecting the tibialis anterior tendon.

Decorticate the joint surfaces according to the Lapidus osteotomy, using sharp chisels. Refresh the arthrodesis surfaces by perforation.

Create a slightly V-Shaped osteotomy, 20 mm distal to the 1st TMT joint.

Mobilize the distal fragment using a small chisel (ca. 6 mm), which is led through the osteotomy.

Align the mobile distal fragment of MT 1 in 3 dimensions - lateral, plantar and rotation into varus, improving the joint angle.

Subcapital Osteotomy MT 5

Create a subcapital osteotomy, perpendicular to the shaft axis of the 5th MT. Alternatively, the osteotomy cut is made slightly more proximal, at the point of most severe deformity prominence.

Finalize the osteotomy using a chisel, mobilizing the metatarsal head.

Align the mobile metatarsal head in 3 dimensions - medial, plantar and rotation into valgus, improving the joint angles.

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V-TEK Titanium IVP Plate Selection

Select the appropriate anatomical plate size, according to the surgical approach, desired correction (off-set) and patient's anatomy:

Subcapital Osteotomy MT 1

- 28.10.107 S, 0 mm Off-Set, L-Shape, Right, System 2.7
- 28.10.108 S, 0 mm Off-Set, L-Shape, Left, System 2.7
- 28.10.109 S, 2 mm Off-Set, L-Shape, Right, System 2.7
- 28.10.110 S, 2 mm Off-Set, L-Shape, Left, System 2.7
- 28.10.111 S, 4 mm Off-Set, L-Shape, Right, System 2.7
- 28.10.112 S, 4 mm Off-Set, L-Shape, Left, System 2.7
- 28.10.003 S, Straight, System 2.7

Base Osteotomy MT 1

- 28.10.201 M, 2 mm Off-Set, Straight, System 3.5
- 28.10.202 M, 4 mm Off-Set, Straight, System 3.5
- 28.10.203 M, 6 mm Off-Set, Straight, System 3.5
- 28.10.005 M, T-Shape, System 2.7

Base Osteotomy with (Opening) Lapidus Osteotomy

- 28.10.310 L, 0 mm Off-Set, T-Shape, System 2.7 / 3.5
- 28.10.313 L, 3 mm Off-Set, T-Shape, System 2.7 / 3.5
- 28.10.315 L, 5 mm Off-Set, T-Shape, System 2.7 / 3.5
- 28.10.317 L, 7 mm Off-Set, T-Shape, System 2.7 / 3.5
- 28.10.007 L, T-Shape, System 2.7


Subcapital Osteotomy MT 5

- 28.10.113 XS, 0 mm Off-Set, Straight, System 2.7
- 28.10.114 XS, 2 mm Off-Set, Straight, System 2.7
- 28.10.003 S, Straight, System 2.7



 **Note:** The V-TEK IVP Plates must not be bent.

Overview – V-TEK IVP Plates and Corresponding Instruments

Plate	Chisel	Targeting Device	Drills and Drill Guides	
V-TEK IVP XS 2.7  Proximal Distal		 28.10.019 with 28.10.022	distal locking holes 22.25.020  502015211 or 502015212	proximal intramedullary holes 28.10.029  502015634 or 502015636
V-TEK IVP S 2.7  Proximal Distal	28.10.015 or 28.10.016 	 28.10.019 with 28.10.022	distal locking holes 22.25.020  502015211 or 502015212	proximal intramedullary holes 28.10.029  502015634 or 502015636
V-TEK IVP S, L-Shape 2.7  Proximal Distal	28.10.015 or 28.10.016 	 28.10.130 with 28.10.022	distal locking holes 22.25.020  502015211 or 502015212	proximal intramedullary holes 28.10.029  502015634 or 502015636
V-TEK IVP M 3.5  Proximal Distal	28.10.027 	 28.10.140 with 28.10.122	distal locking holes 22.25.030  502015216 or 502015218	proximal intramedullary holes / proximal locking hole 28.10.029  502015637 or 502015638
V-TEK IVP M 2.7  Proximal Distal	28.10.015 or 28.10.016 	 28.10.021 with 28.10.022	distal locking holes 22.25.020  502015211 or 502015212	proximal intramedullary holes 28.10.029  502015634 or 502015636
V-TEK IVP L 2.7 / 3.5  Proximal Distal	28.10.028 	 28.10.150 with 28.10.022	distal locking holes 22.25.020  502015211 or 502015212	proximal intramedullary holes 28.10.029  502015637 or 502015638
V-TEK IVP L 2.7  Proximal Distal	28.10.015 or 28.10.016 	 28.10.021 with 28.10.022	distal locking holes 22.25.020  502015211 or 502015212	proximal intramedullary holes 28.10.029  502015634 or 502015636

The following surgical steps must be carried out with the corresponding instruments of the selected plate type.

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Medullary Bone Preparation with IVP chisel

Use the appropriate IVP preparation chisel (according to overview chart, page 5) to prepare the bone for intramedullary proximal plate placement. If necessary, use the mallet for impaction, but care must be taken to avoid heavy impaction, which might cause (micro) fractures.

Position the osteotomy to achieve axial correction in three dimensions.

Insert the chisel into the medullary bone of the proximal fragment(s), along the cortex:

- In MT I (for Lapidus procedures also cuneiform I) subcortically to the medial cortex.
- In MT V subcortically to the lateral cortex.

Perform insertion based on selected plate and patient's anatomy, according to the operating surgeon's judgement.



Note: For plates of sizes XS no preparation with chisel is required. These plates are directly impacted into the medullary bone using the targeting device (28.10.019) and secured with the fixation screw (28.10.022) - see the following steps.



Plate Attachment to Targeting Device

Attach the selected IVP plate to the appropriate IVP targeting device and secure it with the appropriate fixation wrench tightly (according to overview chart, page 5).

Plate Impaction and Placement

Insert the plate into the medullary bone of the proximal fragment(s), along the cortex:

- In MT I (for Lapidus procedures also cuneiform I) subcortically to the medial cortex.
- In MT V subcortically to the lateral cortex.

Perform insertion based on selected plate and patient's anatomy, according to the operating surgeon's judgement.

If necessary, use the mallet.

Care must be taken to avoid heavy impaction, which might cause (micro) fractures. Check correct plate placement with image intensifier.



Drilling of Proximal Holes for Intramedullary Plate Fixation

Note: The proximal intramedullary screws are applied first, and only after fixation of all proximal screws, the distal locking screws will be applied. Start with the most distal of the proximal screws for intramedullary fixation and perform all steps including screw insertion before continuing with drilling the next screw hole.

Determine the appropriate step drill and drill guide (according to overview chart, page 5).

Insert the appropriate drill guide into the IVP targeting device. Then drill the first screw hole bicortically.

Care must be taken that the countersink part of the step drill is completely inserted into the cortex, so the screw head can be fully sunk into the bone.

Warning: Avoid thermal necrosis by using appropriate irrigation during drilling.

Length Measurement


To measure the length of the screw, insert the tip of the depth gauge (REF 503004115) through the targeting device and position the depth gauge on the drill hole flush with the cortical bone.

Insert the probe into the pre-drilled hole. If the drill hole reaches through the cortical bone on the opposite side, pull back the measuring gauge until the tip of the gauge catches the bone crest.

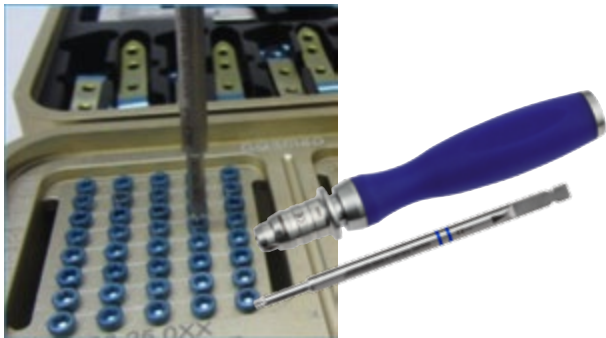
Determine the appropriate screw length directly from the scale on the gauge. The reading on the scale is to be understood as the length of the whole screw.

Warning: If for any reason the drill hole does not reach through the cortical bone on the opposite side, 1 mm is to be deducted from the read result.

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Screw Selection Fixation of Plates Systems 2.7:		▶ DISTAL Locking Screw holes	Locking Screw 2.7	
		▶ PROXIMAL Intramedullary screw holes	Fully Threaded Screw 2.7	
Fixation of Plates Systems 2.7 / 3.5:		▶ DISTAL Locking Screw holes	Locking Screw 2.7	
		▶ PROXIMAL Intramedullary screw holes	Fully Threaded Screw 3.5	
Fixation of Plates Systems 3.5:		▶ DISTAL Locking Screw holes	Locking Screw 3.5	
		▶ PROXIMAL Intramedullary screw holes	Locking Screw 3.5 (top hole)	
			Fully Threaded Screw 3.5 (lower 2 holes)	

System 2.7



System 3.5



Proximal Screw Application

ⓘ **Note:** Only use the appropriate color-coded screwdriver. AO-style connection screwdriver blades and handles are provided in the instrument set. Inserting the screws with inappropriate instruments may damage the screws. The screws may become unusable. Damaged screws must no longer be used and must be replaced.

Attach the screwdriver blade to the handle by pulling the coupling piece backwards while introducing the blade into the shaft. Once the blade reaches the end of the shaft, release the coupling piece to lock the blade in the handle. Ensure the proper connection of all components.

ⓘ **Note:** The screwdriver blade can be used to facilitate removal of the screws from the tray by pushing the tip of the blade firmly into the screw head in a vertical direction to achieve a secure grip.



Manually insert the appropriate fully threaded screw through the drill guides of the targeting device, achieving bicortical fixation.

Remove the drill guide from the targeting device and repeat all steps from drilling over length measurement and screw selection until proximal screw application for all remaining intramedullary proximal screw holes.

Special Procedure for Plates M 3.5

Note: The plates M of System 3.5 used for base osteotomy of MT I have a threaded screw hole for fixation in the proximal bone fragment. It must be used with a locking screw, as described above in section Screw Selection.

Use the step drill (REF 502015637, dental shaft or REF 502015638, AO-style Shaft) and drill bi-cortically. Advance the countersink of the step drill down to the plate.



Position of V-TEK IVP plate M 3.5.
The red circle indicates the area of medial bone removal at the proximal fragment of MT I.

Perform length measurement as described above, but place the depth gauge (REF 503004115) flush to the plate to determine the correct screw length.

Manually insert the appropriate locking screw through the drill guide of the targeting device, achieving cortical fixation.

Remove the targeting device.

To avoid irritation, remove medial bone of proximal MT I fragment, according to the surgeon's judgment.

Surgical Technique

Removal of Targeting Device

After proximal plate fixation, the targeting device is removed. The fixation wrench is turned counterclockwise to release the plate.

Reposition and Alignment

Align the distal plate portion and the distal metatarsal bone fragment.

Use the image intensifier to confirm correct plate and bone alignment.

No temporary fixation of the plate is necessary.

Distal Screw Application

Note: Perform all steps subsequently for one distal screw before starting with application of the next distal screw.

The appropriate drill depth measuring gauge and drill (according to overview chart, page 5) must be used to avoid damage of the threads and to ensure the correct drill direction for the locking screws.

The selected drill bit is to be inserted through the drill depth measuring gauge's canal. Bicortical drilling through both cortices must be achieved.



The appropriate length of the screw is measured in the same surgical step. Determine the length directly from the scale on the drill depth measuring gauge (REF 22.25.020 for System 2.7 and REF 22.25.030 for System 3.5). The reading on the scale is to be understood as the length of the whole screw. Verify by image intensifier if drill depth or length measurement is unclear or choose alternative depth measurement.

Alternative Depth Measurement

The standard depth gauge (REF 503004115) must be used if the surgeon chooses not to utilize the drill depth measuring gauges.

To measure the length of the screw, position the depth gauge on the plate hole. Then insert the probe into the pre-drilled intramedullary canal.

If the drill hole reaches through the cortical bone on the opposite side, pull back the measuring gauge until the tip of the gauge catches the bone crest.

Determine the appropriate screw length directly from the scale on the gauge.

The reading on the scale is to be understood as the length of the whole screw.

Warning: If for any reason, the drill hole does not reach through the cortical bone on the opposite side, 1 mm is to be deducted from the read result.



Manually insert the appropriate screw through the appropriate plate hole. Fix it flush to the plate surface, achieving bi-cortical fixation.

For secure fixation of the plate, use as many locking screws as necessary to achieve sufficient stability.

- **Warning:** Avoid thermal necrosis by using appropriate irrigation during drilling.
- **Warning:** The screwdriver blade has to be removed from the screwdriver handle before the instruments are passed on to sterilization.
- ⊞ **Note:** Please refer to section Proximal Screw Application for further information on screw insertion.

Wound Closure

Remove protruding dorsal and medial bone using a micro saw or bone pliers.

Prior to wound closure, remove any temporary fixation. Check implant placement with two dimensional image intensifier. The incision is closed according to the operating surgeon's preferred technique.

Postoperative Treatment

Sterile wound dressing, stabilization (e.g. cast, brace, etc.) and postoperative protocol are carried out according to the operating surgeon's instruction. A postoperative shoe is not required. Stable osteosynthesis allows immediate weightbearing for Base Osteotomy and combined Opening Lapidus and Base Osteotomy.

Implant Removal

V-TEK IVP 2.7 / 3.5 Plates with Locking and Fully Threaded 2.7 / 3.5 Screws:

There is no need to routinely remove the implant or any screws once bony consolidation is confirmed. If the hardware is causing tendon or soft tissue irritation, then removal may be carried out, but care must be taken to confirm that the underlying osteosynthesis is completely consolidated with bone. This step may require a CT scan. If there is no irritation, then the plate and screws should remain in the bone indefinitely.

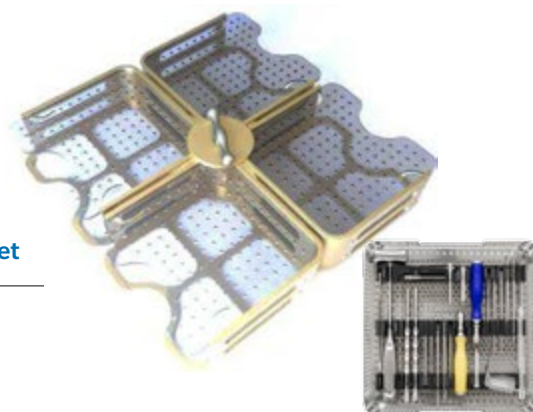
However, should removal become necessary, use small bone pliers to remove the bone from the screw head. Remember to remove all soft tissue from the socket of the screw so the screwdriver drive prongs can be fully engaged.

In case of implant removal, use the V-TEK IVP System 2.7 / 3.5 or the Easy Explant System to remove the screws and plates manually.

Ordering Information

V-TEK IVP 2.7/ 3.5 Instruments

Cat.No.	Description	Basic Set
508001200	Quad-paq tray for V-TEK IVP 2.7/3.5 system, w/o instruments	1
508002000	Quad-paq tray for implant modules with 4 lids, w/o implant modules	1
508003007	Quad-paq screw tray 2.7/3.5 locking screws 8-26 mm, headless screws, 8-20 mm, w/o implants	1
508004007	Quad-paq V-TEK IVP micro plates tray 2.7 system, w/o implants	1
508004008	Quad-paq V-TEK IVP M/L plates tray 2.7 system, w/o implants	1
508004009	Quad-paq V-TEK IVP L-shape plates tray 2.7 system, w/o implants	1
508005009	Quad-paq V-TEK IVP plates tray 3.5 system, w/o implants	1
508007004	Quad-paq V-TEK IVP plates tray 2.7/3.5 system, w/o implants	1
503004115	Depth gauge 30 mm, 21.5 cm	1
22.25.020	Drill depth measuring gauge system 2.7, 40 mm measuring depth	1
22.25.030	Drill depth measuring gauge system 3.5, 40 mm measuring depth	1
503004250	Titanium plate and screw holding forceps, angled, 15 cm	1
502015211	Twist drill 2.0 x 125 mm, Stryker-style shaft 50 mm for 2.7 mm screws	1
502015212	Twist drill 2.0 x 120 mm, AO-style Shaft 50 mm for 2.7 mm screws	1
502015216	Twist drill 2.5 x 120 mm, AO-style Shaft, 30 mm for 3.5 mm screws	1
502015218	Twist drill 2.5 x 125 mm, Stryker-style shaft, 30 mm for 3.5 mm screws	1
502015634	V-TEK IVP step drill 2.0 - 3.4 x 124 mm stop 16 mm, contra-angle	1
502015636	V-TEK IVP step drill 2.0 - 3.4 x 124 mm stop 16 mm, AO-style Shaft	1
502015637	V-TEK IVP step drill 2.5 - 3.9 x 124 mm stop 16 mm, contra-angle	1
502015638	V-TEK IVP step drill 2.5 - 3.9 x 124 mm stop 16 mm, AO-style Shaft	1
503004632	Silicone screwdriver handle, blue cannulated, 12 cm, AO-style connection	1



Ordering Information

V-TEK IVP 2.7/ 3.5 Instruments

Cat.No.	Description	Basic Set
503004288	Screwdriver blade TX8, 90 mm AO-style Shaft	1
503004634	Silicone screwdriver handle, yellow cannulated, 12 cm, AO-style connection	1
503004298	Screwdriver blade hexagon 90 mm AO-style Shaft	1
28.10.015	V-TEK IVP preparation chisel 90°	1
28.10.016	V-TEK IVP preparation chisel with AO-style Shaft	1
28.10.027	V-TEK IVP preparation chisel system 3.5, straight	1
28.10.028	V-TEK IVP preparation chisel system 2.7/3.5, curved	1
20.50.680	Hajek Hammer 27 mm, 22 cm	1
28.10.019	V-TEK IVP targeting guide for plate S	1
28.10.021	V-TEK IVP targeting guide for plates M+L	1
28.10.130	V-TEK IVP targeting guide for plates 2.7 size small, L-shape	1
28.10.140	V-TEK IVP targeting guide for plates 3.5, straight	1
28.10.150	V-TEK IVP targeting guide for plates 2.7/3.5, straight, only	1
28.10.022	V-TEK IVP plate fixation wrench 2.7 system, 60 mm	1
28.10.122	V-TEK IVP plate fixation wrench 3.5 system, 60 mm	1
28.10.029	V-TEK IVP guiding sheath for targeting guide, 60 mm for drill/screwdriver	1



Ordering Information

V-TEK IVP Titanium Plates

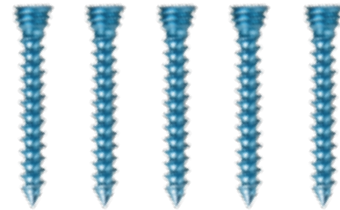
Cat.No.	Description	Basic Set
28.10.003	V-TEK IVP Titanium Plate S, 2.7 System	2
28.10.005	V-TEK IVP Titanium Plate M, 2.7 System	2
28.10.007	V-TEK IVP Titanium Plate L, 2.7 System	2
28.10.113	V-TEK IVP Titanium Plate Micro XS, 0 mm Off-Set, Straight, 2.7 System	2
28.10.114	V-TEK IVP Titanium Plate Micro XS, 2 mm Off-Set, Straight, 2.7 System	2
28.10.107	V-TEK IVP Titanium Plate S, 0 mm Off-Set, L-Shape, Right, 2.7 System	2
28.10.108	V-TEK IVP Titanium Plate S, 0 mm Off-Set, L-Shape, Left, 2.7 System	2
28.10.109	V-TEK IVP Titanium Plate S, 2 mm Off-Set, L-Shape, Right, 2.7 System	2
28.10.110	V-TEK IVP Titanium Plate S, 2 mm Off-Set, L-Shape, Left, 2.7 System	2
28.10.111	V-TEK IVP Titanium Plate S, 4 mm Off-Set, L-Shape, Right, 2.7 System	2
28.10.112	V-TEK IVP Titanium Plate S, 4 mm Off-Set, L-Shape, Left, 2.7 System	2
28.10.201	V-TEK IVP Titanium Plate M, 2 mm Off-Set, Straight, 3.5 System	2
28.10.202	V-TEK IVP Titanium Plate M, 4 mm Off-Set, Straight, 3.5 System	2
28.10.203	V-TEK IVP Titanium Plate M, 6 mm Off-Set, Straight, 3.5 System	2
28.10.310	V-TEK IVP Titanium Plate L, 0 mm Off-Set, 2.7 / 3.5 System	2
28.10.313	V-TEK IVP Titanium Plate L, 3 mm Off-Set, 2.7 / 3.5 System	2
28.10.315	V-TEK IVP Titanium Plate L, 5 mm Off-Set, 2.7 / 3.5 System	2
28.10.317	V-TEK IVP Titanium Plate L, 7 mm Off-Set, 2.7 / 3.5 System	2



Ordering Information

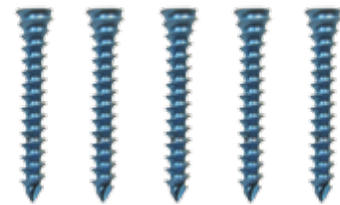
Locking Screws 2.7 mm 5/set

Cat.No.	Description
28.25.008	Titanium screw, threaded head, 2.7 x 8 mm, TX8
28.25.010	Titanium screw, threaded head, 2.7 x 10 mm, TX8
28.25.012	Titanium screw, threaded head, 2.7 x 12 mm, TX8
28.25.014	Titanium screw, threaded head, 2.7 x 14 mm, TX8
28.25.016	Titanium screw, threaded head, 2.7 x 16 mm, TX8
28.25.018	Titanium screw, threaded head, 2.7 x 18 mm, TX8
28.25.020	Titanium screw, threaded head, 2.7 x 20 mm, TX8
28.25.022	Titanium screw, threaded head, 2.7 x 22 mm, TX8
28.25.024	Titanium screw, threaded head, 2.7 x 24 mm, TX8
28.25.026	Titanium screw, threaded head, 2.7 x 26 mm, TX8



Fully Threaded Screws 2.7 mm 5/set

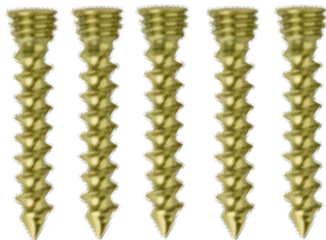
Cat.No.	Description
28.25.408	Titanium screw, fully threaded headless, 2.7 x 8 mm, TX8
28.25.410	Titanium screw, fully threaded headless, 2.7 x 10 mm, TX8
28.25.412	Titanium screw, fully threaded headless, 2.7 x 12 mm, TX8
28.25.414	Titanium screw, fully threaded headless, 2.7 x 14 mm, TX8
28.25.416	Titanium screw, fully threaded headless, 2.7 x 16 mm, TX8
28.25.418	Titanium screw, fully threaded headless, 2.7 x 18 mm, TX8
28.25.420	Titanium screw, fully threaded headless, 2.7 x 20 mm, TX8



Ordering Information

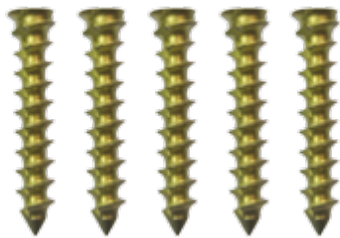
Locking Screws 3.5 mm 5/set

Cat.No.	Description
28.20.008	Titanium screw, threaded head, 3.5 x 8 mm, HEX
28.20.010	Titanium screw, threaded head, 3.5 x 10 mm, HEX
28.20.012	Titanium screw, threaded head, 3.5 x 12 mm, HEX
28.20.014	Titanium screw, threaded head, 3.5 x 14 mm, HEX
28.20.016	Titanium screw, threaded head, 3.5 x 16 mm, HEX
28.20.018	Titanium screw, threaded head, 3.5 x 18 mm, HEX
28.20.020	Titanium screw, threaded head, 3.5 x 20 mm, HEX
28.20.022	Titanium screw, threaded head, 3.5 x 22 mm, HEX
28.20.024	Titanium screw, threaded head, 3.5 x 24 mm, HEX
28.20.026	Titanium screw, threaded head, 3.5 x 26 mm, HEX



Fully Threaded Screws 3.5 mm 5/set

Cat.No.	Description
28.20.408	Titanium screw, fully threaded headless, 3.5 x 8 mm, HEX
28.20.410	Titanium screw, fully threaded headless, 3.5 x 10 mm, HEX
28.20.412	Titanium screw, fully threaded headless, 3.5 x 12 mm, HEX
28.20.414	Titanium screw, fully threaded headless, 3.5 x 14 mm, HEX
28.20.416	Titanium screw, fully threaded headless, 3.5 x 16 mm, HEX
28.20.418	Titanium screw, fully threaded headless, 3.5 x 18 mm, HEX
28.20.420	Titanium screw, fully threaded headless, 3.5 x 20 mm, HEX



Indications

The RECON System consists of various system components and it is indicated for the treatment of fracture fixation, non-unions, joint decompression and fusion, osteotomies, reconstruction or arthrodeses of small bones. The system can be used in both adult and pediatric patients.

The V-TEK IVP System 2.7 / 3.5, as part of the RECON System, is indicated for the correction of Hallux Valgus Deformities and Tailor's Bunions.

Please find below the indications for each plate type:

V-TEK IVP Micro XS Plate 2.7

Plate in combination with Locking Screws 2.7 and Headless Screws 2.7 indicated for correction of:

Tailor's Bunions, using subcapital osteotomy on MT 5.

Off-set plate 2 mm allows additional medial correction of distal fragment.



V-TEK IVP S Plate 2.7

Plate in combination with Locking Screws 2.7 and Headless Screws 2.7 indicated for correction of:

Hallux Valgus with IM angle $\leq 14^\circ$ and stable TMT 1 joint, using subcapital osteotomy MT 1.

Tailor's Bunions, using subcapital osteotomy on MT 5.

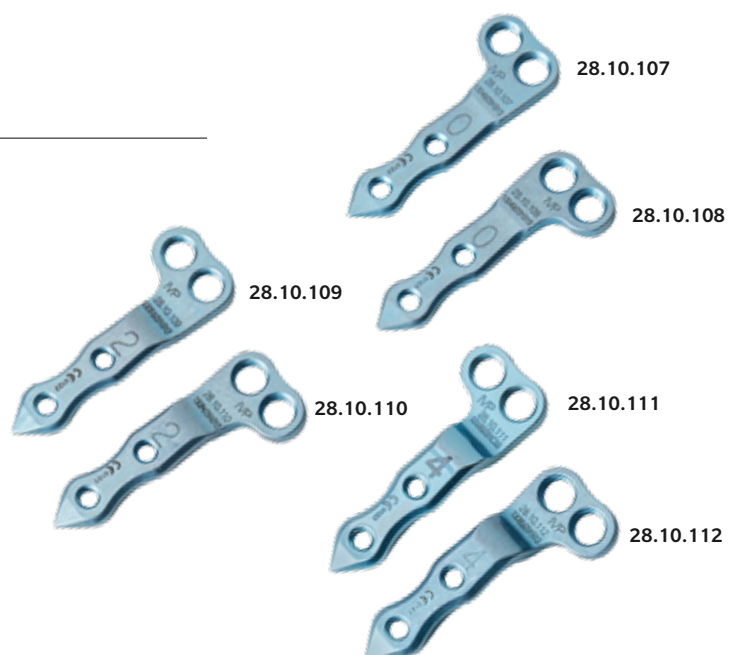


V-TEK IVP S, L-Shape Plate 2.7

Plate in combination with Locking Screws 2.7 and Headless Screws 2.7 indicated for correction of:

Hallux Valgus, especially Hallux Valgus Limitus and Hallux Valgus Rigidus, with IM angle $\leq 14^\circ$ and stable TMT 1 joint, using subcapital osteotomy MT 1.

Off-set plates 2 mm / 4 mm allow additional lateral correction of distal fragment.



Indications

V-TEK IVP M Plate 2.7

Plate in combination with Locking Screws 2.7 and Head-less Screws 2.7 indicated for correction of:

Hallux Valgus, with IM angle 14° - 20° and stable TMT 1 joint, using base osteotomy MT 1.



28.10.005

V-TEK IVP M Plate 3.5

Plate in combination with Locking Screws 3.5 and Head-less Screws 3.5 indicated for correction of:

Hallux Valgus, with IM angle 14° - 20° and stable TMT 1 joint, using base osteotomy MT 1.

Off-set plates 2 mm / 4 mm / 6 mm allow additional lateral correction of distal fragment.



28.10.201



28.10.202



28.10.203

V-TEK IVP L Plate 2.7

Plate in combination with Locking Screws 2.7 and Head-less Screws 2.7 indicated for correction of:

Hallux Valgus with IM angle $>18^{\circ}$ and unstable TMT 1 joint of all grades, using combined Base osteotomy with (Opening) Lapidus osteotomy on MT 1 and Cuneiforme mediale.



28.10.007

V-TEK IVP L Plate 2.7 / 3.5

Plate in combination with Locking Screws 2.7 and Head-less Screws 3.5 indicated for:

Hallux Valgus with IM angle $>18^{\circ}$ and unstable TMT 1 joint of all grades, using combined Base osteotomy with (Opening) Lapidus osteotomy on MT 1 and Cuneiforme mediale.

Off-set plates 3 mm / 5 mm / 7 mm allow additional lateral correction of distal fragment.



28.10.310



28.10.313



28.10.315



28.10.317

Hallux Valgus Deformities



Subcapital Osteotomy

Small Plates (S):

- IM-angle $\leq 14^\circ$
- Stable TMT 1 Joint



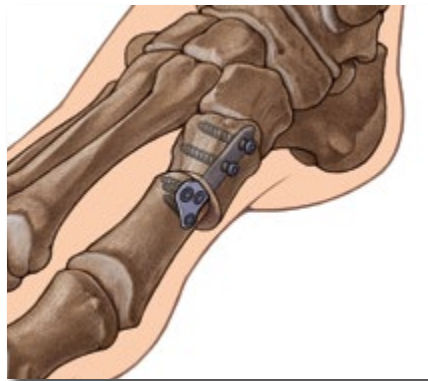
The subcapital osteotomy is a simple, straight osteotomy, making a variety of corrections possible. The small IVP plates are designed to provide rigid fixation while minimizing the potential for unintended shortening of the first metatarsal. A minimally invasive technique can be used with a skin incision of 25mm.



Base Osteotomy

Medium Plates (M):

- IM-angle 14° - 20°
- Stable TMT 1 Joint



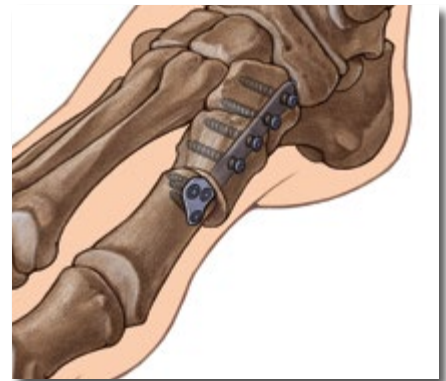
The base osteotomy is designed to allow lateralization, derotation, plantarization, and PASA improvement. Therefore no unintended elevation or shortening should occur. The medium IVP plates aim to provide solid plate fixation for immediate weightbearing.



Opening Lapidus and Base Osteotomy

Large Plates (L):

- IM-angle $> 18^\circ$
- Unstable TMT 1 Joint of all grades



With the IVP-Lapidus technique, there should be no more danger of shortening due to the “Opening Lapidus”. The combination of a Lapidus osteotomy and a base osteotomy aims to be able to correct every malposition while avoiding elevation. The large IVP plates aim to provide solid plate fixation for immediate weightbearing and ambulation. Thus, bilateral surgery should be feasible without postoperative restrictions for mobilisation.

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