ACTIV ANKLE
DISTAL TIBIA PLATES

NEWCLIP-TECHNICS

Indications : The implants of the Activ Ankle range are intended for the fixation of fractures, osteotomies and pseudarthroses of the distal and diaphyseal fibula, the distal tibia and for the syndesmotic repair in adults.

Contraindications:
- Serious vascular deterioration, bone devitalization,
- Pregnancy.
- Acute or chronic local or systemic infections.
- Lack of musculo-cutaneous cover, severe vascular deficiency affecting the concerned area.
- Insufficient bone quality preventing a good fixation of the implants into the bone,
- Muscular deficit, neurological deficiency or behavioral disorders, which could submit the implant to abnormal mechanical strains.
- Allergy to one of the materials used or sensitivity to foreign bodies.
- Serious problems of non-compliance, mental or neurological disorders, failure to follow post-operative care recommendations.
- Unstable physical and/or mental condition.

TECHNICAL FEATURES

DISTAL TIBIA STANDARD AND HOOK PLATES

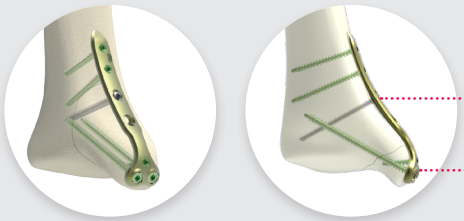
- Anatomical implants for the fixation of distal tibia.
- 3 plates :
  - **2 standard** plates (size 0 and size 1) with 2 upward screws for rigid fixation.
  - **Hook plate** with 1 upward screw for a low profile.
- Implants adapted to vertical and transverse fractures.

STANDARD PLATE SIZE 0 | STANDARD PLATE SIZE 1 | HOOK PLATE

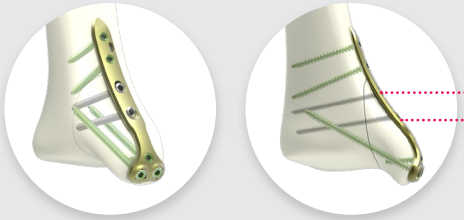
FIXATION

STANDARD PLATES

Fixation for transverse fractures



Fixation for vertical fractures



Ramp oblong hole for compression

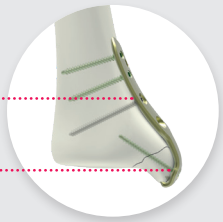
Upward screws through the fracture line

Ramp oblong hole (without compression)

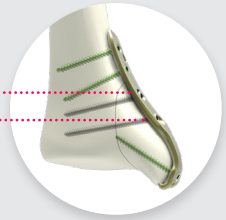
Pre-angulated compression hole

HOOK PLATE

Fixation for transverse fractures



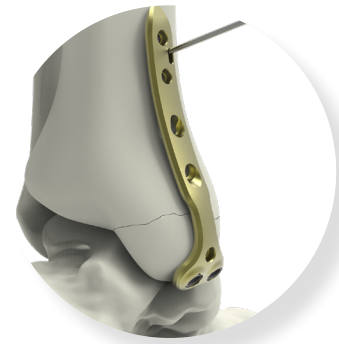
Fixation for vertical fractures



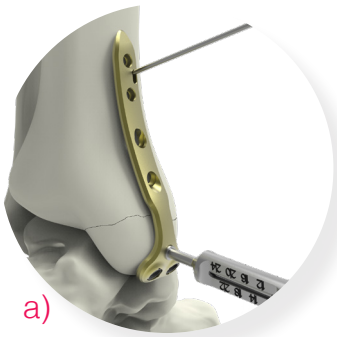
SURGICAL TECHNIQUE

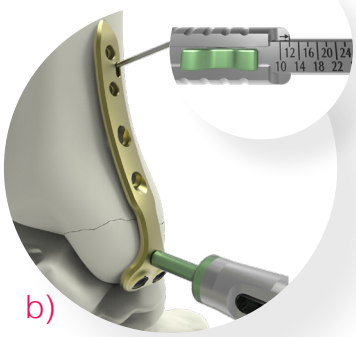
CASE 1: TRANSVERSE FRACTURE REDUCTION USING STANDARD PLATE

→ PLATE POSITIONING



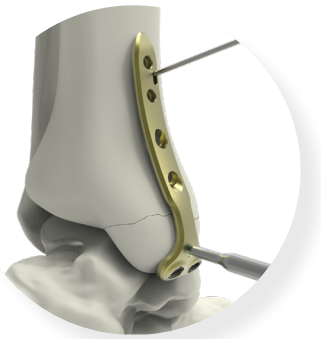
1. Perform an antero medial approach and temporarily reduce the fracture using a bone reduction forceps or using two parallel pins.
Position the plate and stabilize it temporarily using a Ø1.3 mm pin (33.0213.120) in the most proximal part of the pin oblong hole.





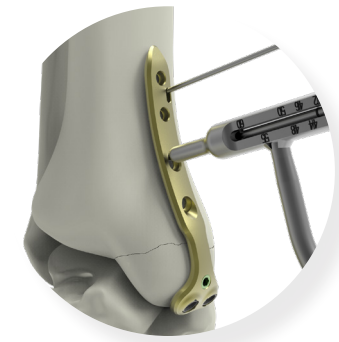
2. a) Lock the Ø2.0 mm short threaded guide gauge (ANC268C) in the most distal monoaxial hole and drill using the Ø2.0 mm short drill bit (ANC088C). The drilling depth can be read directly on the short threaded guide gauge (ANC268C).
b) The drilling depth can be read directly on the length gauge (ANC689).

⚠ **The screw must be short enough to avoid its insertion into the tibiotalar joint.**



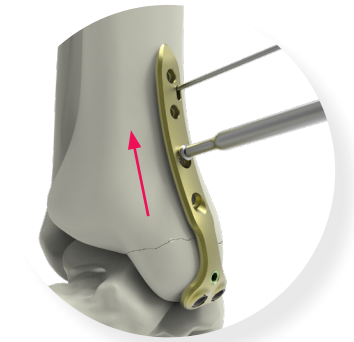
3. Insert a Ø2.8 mm locking screw (SDT2.8Lxx) using the screwdriver (ANC082E).

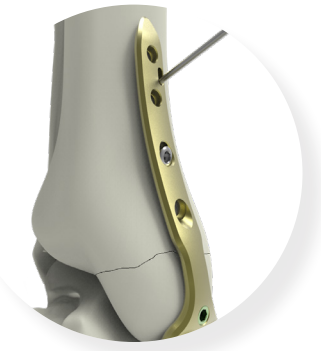
→ COMPRESSION USING THE RAMP OBLONG HOLE



4. **In the most proximal part of the ramp oblong** hole, drill using Ø2.0 mm drill bit (ANC690). The drilling depth can be read on the bent non threaded guide gauge (ANC692). 2 mm must be removed from the depth measurement.

⚠ **1. The screw must be short enough to avoid its insertion into the tibio fibular joint.**
2. If the compression is not required, the drilling is performed in the distal part of the ramp oblong hole and the drilling depth is read directly on the bent non threaded guide gauge (ANC692).

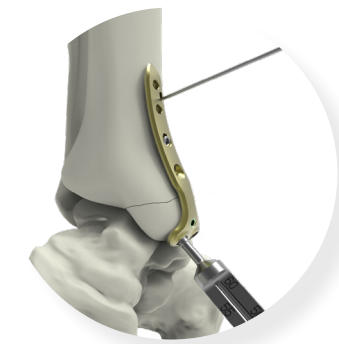




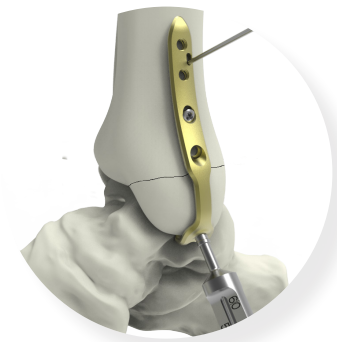
5. Insert a Ø2.8 mm cortical screw (CT2.8Lxx) and then perform the compression using the screwdriver (ANC082E).

NB: During this step the screw leans against the plate in the ramp oblong hole allowing the compression of the fracture site.

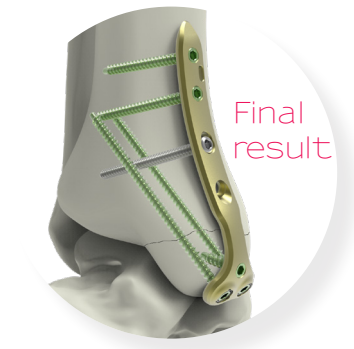
→ PLATE FIXATION FINALIZATION



6. a) In case of standard plate fixation
In the two distal polyaxial holes, insert the threaded guide gauge (ANC691), and angulate it in the desired direction in order to be perpendicular to the fracture site. Drill (ANC690), then read the drilling depth directly on the long threaded guide gauge (ANC691) or use the length gauge (ANC689).



6. b) In case of hook plate fixation
In the distal hole, drill (ANC690) using the long threaded guide gauge (ANC691). Then read the drilling depth directly on the long threaded guide gauge or use the length gauge (ANC689).

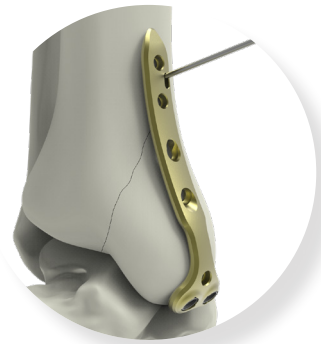


7. Insert the Ø2.8 mm locking screws (SDT2.8Lxx) using the screwdriver (ANC082E). Complete inserting the two Ø2.8 mm locking screws (SDT2.8Lxx) in the two remaining proximal holes.

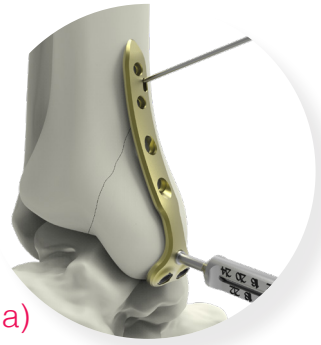
SURGICAL TECHNIQUE

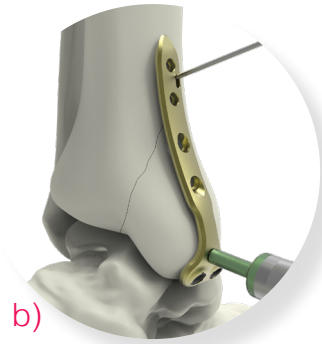
CASE 2: VERTICAL FRACTURE REDUCTION USING STANDARD PLATE

→ PLATE POSITIONING



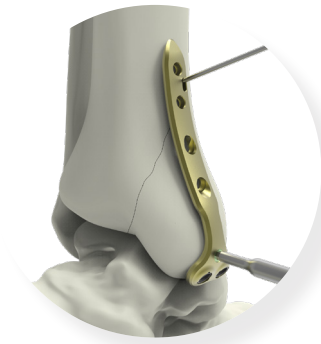
1. Perform an anteromedial approach and temporarily reduce the fracture using a reduction forceps or using two parallel pins.
Position the plate and stabilize it temporarily using a Ø1.3 mm pin (33.0213.120).





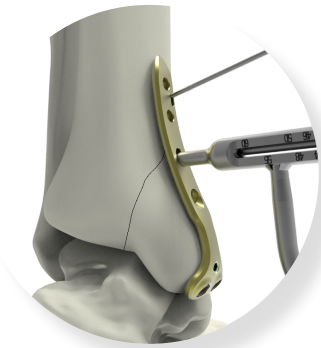
2.a) Lock the Ø2.0 mm short threaded guide gauge (ANC268C) in the most distal monoaxial hole and drill using the Ø2.0 mm short drill bit (ANC088C). The drilling depth can be directly read on the threaded guide gauge (ANC268C).
b) The drilling depth can be also directly read using the length gauge (ANC689).

⚠ **The screw must be short enough to avoid its insertion into the tibiotalar joint.**



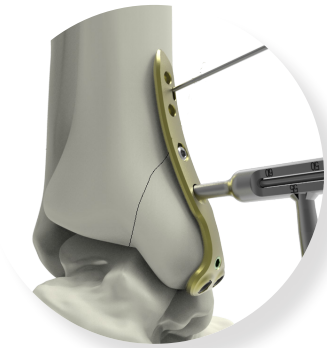
3. Then insert a Ø2.8 mm locking screw (SDT2.8Lxx), using the screwdriver (ANC082E).

→ COMPRESSION USING THE COMPRESSION HOLES

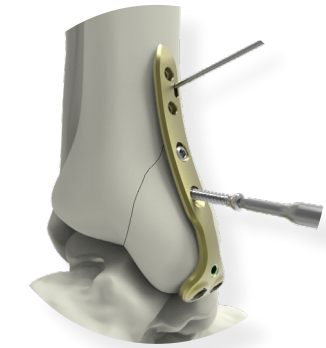


4. **In the most distal part of the ramp oblong hole**, angulate the non threaded bent guide gauge (ANC692) in the desired direction in order to be perpendicular to the fracture site. Drill (ANC690), and read the drilling depth directly on the non threaded bent guide gauge (ANC692).
NB: In case of bi-cortical screw, the screw length can be read on the length gauge (ANC689).

Insert a Ø2.8 mm cortical screw (CT2.8Lxx) using the screwdriver (ANC082E).
NB: . During that step the ramp oblong hole is not used to perform the compression.

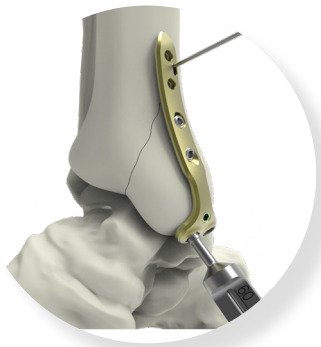


5. In the standard hole, angulate the non threaded bent guide gauge (ANC692) in the desired direction in order to be perpendicular to the fracture site. Drill (ANC690), and read the drilling depth directly on the guide gauge.

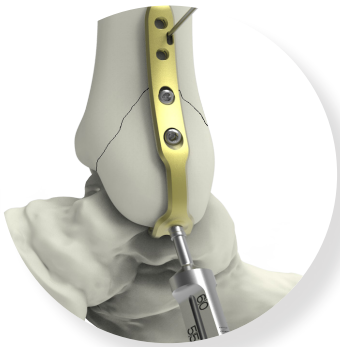


6. Insert the Ø2.8 mm standard cortical screws (CT2.8Lxx) using the screwdriver (ANC082E).

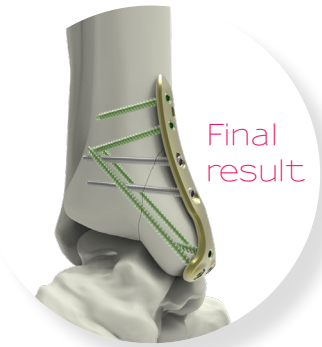
→ PLATE FIXATION FINALIZATION



7. a) In case of standard plate fixation
In the two polyaxial distal holes, insert the threaded guide gauge (ANC691) and angulate it in the desired direction. Drill (ANC690), and read the drilling depth directly on the long threaded guide gauge (ANC691) or on the length gauge (ANC689). Insert two Ø2.8 mm locking screws (SDT2.8Lxx) using the screwdriver (ANC082E).



7. b) In case of hook plate fixation
In the distal hole, drill Ø2.0 mm (ANC690) using the threaded guide gauge (ANC691). Then read the drilling depth directly on the threaded guide gauge (ANC691) or on the length gauge (ANC689). Insert one Ø2.8 mm locking screws (SDT2.8Lxx) using the screwdriver (ANC082E).



8. Finalize the fixation by inserting the two Ø2.8 mm locking screws (SDT2.8Lxx) in the two remaining proximal holes.

IMPLANTS REFERENCES

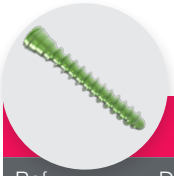
PLATES

Ref.	Description
RITSM0	Standard plate for distal tibia - Size 0
RITSM1	Standard plate for distal tibia - Size 1
RITSMH1	Hook plate for distal tibia - Size 1

Remark:

Please note that all implants are also available in sterile packaging. An '-ST' code is added at the end of the reference.

Ex. : « SDT2.8L30-ST »



LOCKING SCREWS*

Ref.	Description
SDT2.8L10	Locking screw - Ø2.8 mm - L 10 mm
SDT2.8L12	Locking screw - Ø2.8 mm - L 12 mm
SDT2.8L14	Locking screw - Ø2.8 mm - L 14 mm
SDT2.8L16	Locking screw - Ø2.8 mm - L 16 mm
SDT2.8L18	Locking screw - Ø2.8 mm - L 18 mm
SDT2.8L20	Locking screw - Ø2.8 mm - L 20 mm
SDT2.8L22	Locking screw - Ø2.8 mm - L 22 mm
SDT2.8L24	Locking screw - Ø2.8 mm - L 24 mm

* Green anodized

STERILE LOCKING SCREWS*

Ref.	Description
SDT2.8L30-STI	Locking screw - Ø2.8 mm - L 30 mm - STERILE
SDT2.8L32-STI	Locking screw - Ø2.8 mm - L 32 mm - STERILE
SDT2.8L34-STI	Locking screw - Ø2.8 mm - L 34 mm - STERILE
SDT2.8L36-STI	Locking screw - Ø2.8 mm - L 36 mm - STERILE
SDT2.8L38-STI	Locking screw - Ø2.8 mm - L 38 mm - STERILE
SDT2.8L40-STI	Locking screw - Ø2.8 mm - L 40 mm - STERILE
SDT2.8L42-STI	Locking screw - Ø2.8 mm - L 42 mm - STERILE
SDT2.8L44-STI	Locking screw - Ø2.8 mm - L 44 mm - STERILE
SDT2.8L46-STI	Locking screw - Ø2.8 mm - L 46 mm - STERILE
SDT2.8L48-STI	Locking screw - Ø2.8 mm - L 48 mm - STERILE
SDT2.8L50-STI	Locking screw - Ø2.8 mm - L 50 mm - STERILE
SDT2.8L55-STI	Locking screw - Ø2.8 mm - L 55 mm - STERILE
SDT2.8L60-STI	Locking screw - Ø2.8 mm - L 60 mm - STERILE

* Not anodized

STERILE CORTICAL SCREWS*

Ref.	Description
CT2.8L10-ST	Standard cortical screw - Ø2.8 mm - L10 mm - STERILE
CT2.8L12-ST	Standard cortical screw - Ø2.8 mm - L12 mm - STERILE
CT2.8L14-ST	Standard cortical screw - Ø2.8 mm - L14 mm - STERILE
CT2.8L16-ST	Standard cortical screw - Ø2.8 mm - L16 mm - STERILE
CT2.8L18-ST	Standard cortical screw - Ø2.8 mm - L18 mm - STERILE
CT2.8L20-ST	Standard cortical screw - Ø2.8 mm - L20 mm - STERILE
CT2.8L22-ST	Standard cortical screw - Ø2.8 mm - L22 mm - STERILE
CT2.8L24-ST	Standard cortical screw - Ø2.8 mm - L24 mm - STERILE
CT2.8L26-ST	Standard cortical screw - Ø2.8 mm - L26 mm - STERILE
CT2.8L28-ST	Standard cortical screw - Ø2.8 mm - L28 mm - STERILE
CT2.8L30-ST	Standard cortical screw - Ø2.8 mm - L30 mm - STERILE
CT2.8L32-ST	Standard cortical screw - Ø2.8 mm - L32 mm - STERILE
CT2.8L34-ST	Standard cortical screw - Ø2.8 mm - L34 mm - STERILE
CT2.8L36-ST	Standard cortical screw - Ø2.8 mm - L36 mm - STERILE
CT2.8L38-ST	Standard cortical screw - Ø2.8 mm - L38 mm - STERILE
CT2.8L40-ST	Standard cortical screw - Ø2.8 mm - L40 mm - STERILE
CT2.8L42-ST	Standard cortical screw - Ø2.8 mm - L42 mm - STERILE
CT2.8L44-ST	Standard cortical screw - Ø2.8 mm - L44 mm - STERILE
CT2.8L46-ST	Standard cortical screw - Ø2.8 mm - L46 mm - STERILE
CT2.8L48-ST	Standard cortical screw - Ø2.8 mm - L48 mm - STERILE
CT2.8L50-ST	Standard cortical screw - Ø2.8 mm - L50 mm - STERILE
CT2.8L55-ST	Standard cortical screw - Ø2.8 mm - L55 mm - STERILE
CT2.8L60-ST	Standard cortical screw - Ø2.8 mm - L60 mm - STERILE

* Not anodized.

INSTRUMENTATION REFERENCES

INSTRUMENTS

Ref.	Description	Qty
ANC082E	2.0 mm quick coupling hexagonal prehensor screwdriver	1
ANC088C	Ø2.0 mm quick coupling drill bit - L125 mm	2
ANC103	2.0 mm hexagonal non prehensor screwdriver	1
ANC268C	Ø2.0 mm threaded guide gauge for Ø2.8 mm screws	2
ANC349	15 cm verbrugge forceps	2
ANC350	Ø4.5 mm AO quick coupling handle - Size 1	2
ANC452	Bending iron	2
ANC503	150 mm Reduction forceps	1
ANC504	150 mm pointed reduction forceps	1
ANC689	Length gauge for Ø2.8 mm screw - Measures 10 - 60 mm	1
ANC690	Ø2.0 mm quick coupling drill bit - L 180 mm	1
ANC691	Ø2.0 mm threaded long guide gauge for Ø2.8 mm screws	1
ANC692	Ø2.0 mm non threaded bent guide gauge for Ø2.8 mm screws	1
33.0213.120	Pin Ø1.3 mm - L 120 mm	6

INSTRUMENTS

Ref.	Description	Qty
ANC042	Alians instrumentation set (Mini box)	1
ANC042/CB	Mini box - Cambered top	1

BENDABLE PLATES

Some plates from ACTIV ANKLE range offer bending areas. It is possible to bend the plate with the bending irons (ANC452)* following the instructions below:

> Bending is only possible in the areas intended for this purpose,

> A bendable area should be bent only once and in one direction,

> Bending should not be performed excessively,

> The holes must be protected so as to avoid damaging of the fixation. There is a risk of distortion of the holes when bending the plate.

Brochure EN - Activ Ankle Tibia distal - Ed5 - 05/2020 - Medical device EC: class IIb - CE1639 SGS BE - US Class: II - Read labeling and instructions before use.

NEWCLIP TECHNICS
PA de la Lande Saint Martin - 45 rue des Garottières
44115 Haute Goulaine (France)
Tél. : +33 (0)2 28 21 23 25 - Fax : +33 (0)2 40 63 68 37
orders@newcliptechnics.com - www.newcliptechnics.com