

SURGICAL CASSETTE TRR

instructions for use

For implant systems: **ROOTT** 



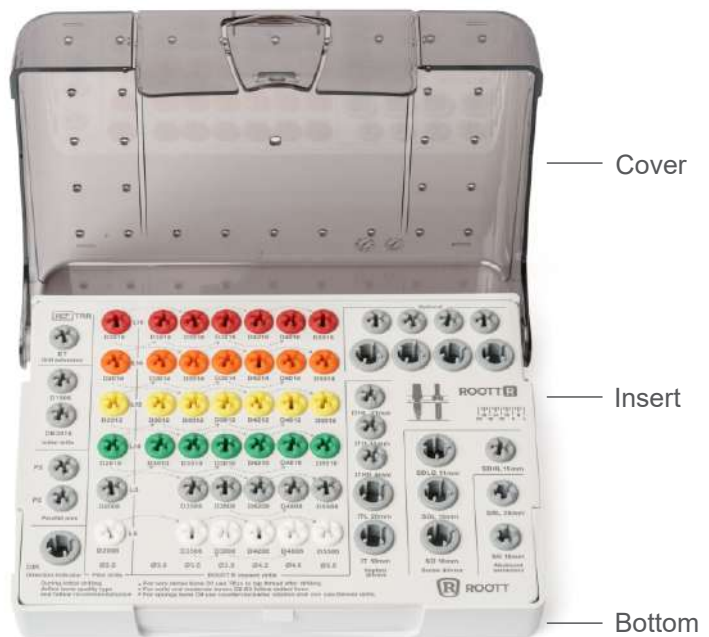
- Easy opening cover
- Laser markings on the tray
- Stable-fitted tools for safe transportation
- Convenient bundle of tools
- Color-coded for better recognition
- Drills arranged from left to right in order of increasing diameter
- Short drilling protocol
- Drill length check

Description

TRR cassette consists of two layers:

- insert, which is designed to hold drills, implant drivers, screwdrivers and some other instruments;
- bottom layer, which is designed to hold long instruments.

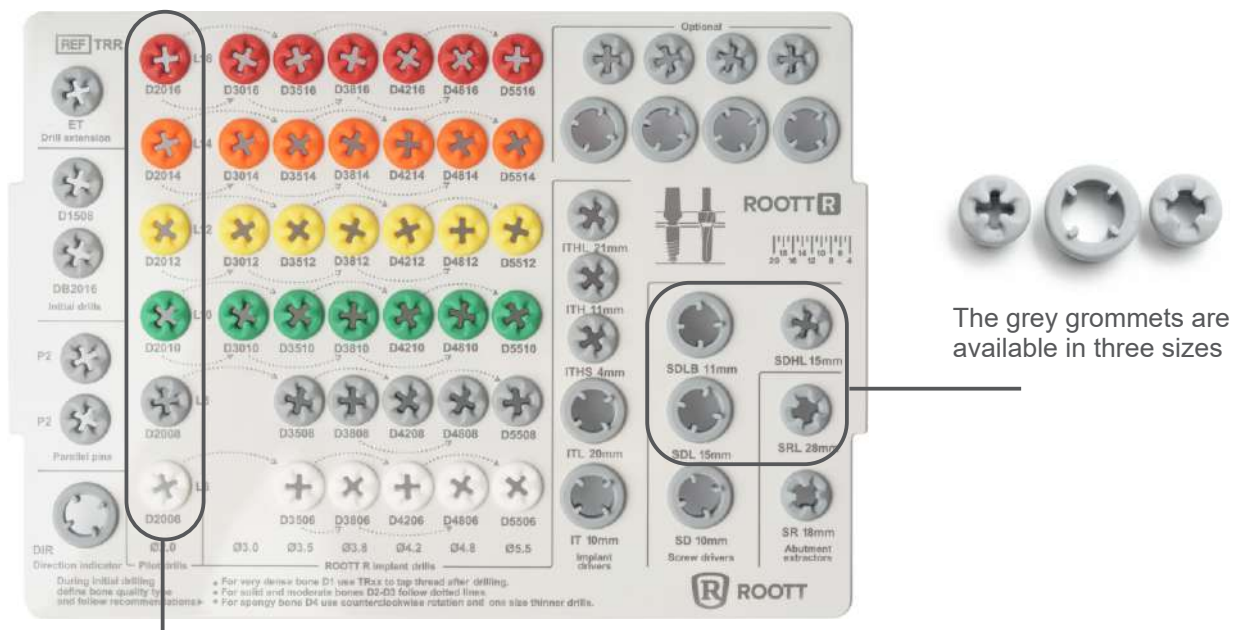
The cover is transparent.



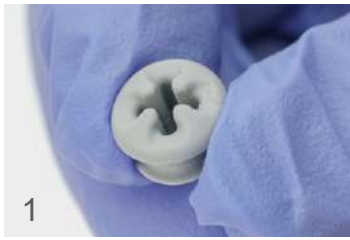
Maintenance and cleaning

- Cassettes are not supplied in sterile condition and must be cleaned before each use.
- Remove the eventually silicone grommets and pulling them carefully out of the cavity.
- Reinsert the eventually silicone grommets by pressing the part into the cavity.
- Prior to sterilization, visually inspect the product for any impairments.
- Check all product markings for visibility and readability by examining them with the naked eye.

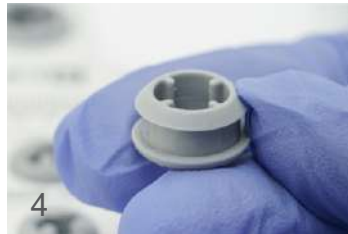
Assembling and disassembling



The grommets are available in 6 different colors



1, 2 photo. Top part of the grommets is raised or has "spikes".



3, 4 photo. Bottom part of the grommets is even.



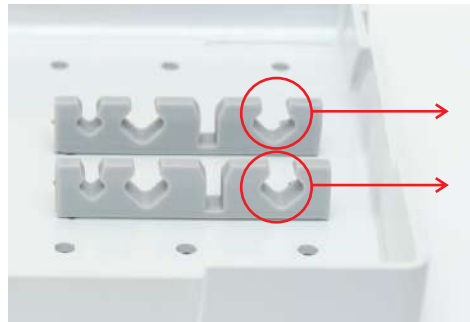
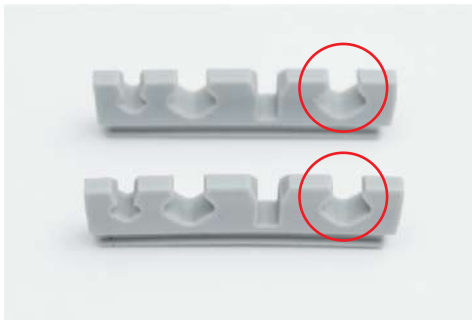
5, 6 photo. Carefully insert the grommet to its place.



Both grommets are the same



Place the grommet directly into the corresponding holes, ensuring a distinct 'click' is both heard and felt. Insert both grommets from the same side for proper alignment.



Both grommets should be inserted by the same side - biggest hole should be directed to right box side.



Cover goes straight on bottom by 90°. Carefully apply cover until “click”.

Disassembling



Gently remove grommets from their place.



Gently pull and remove grommets from their place.



Carefully pull up cover and remove.

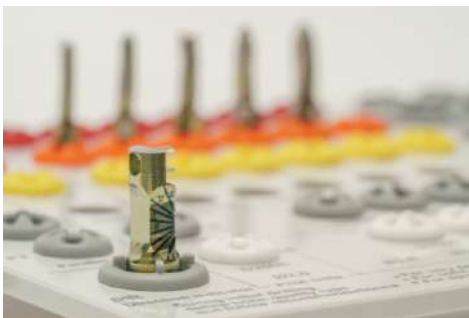
Assembling instruments



All drills and handpiece instruments are inserted by shank down.



Ratchet instruments are inserted by ratchet head down.



Other instruments are inserted by the working part upside down. DIR can be inserted by both sides.



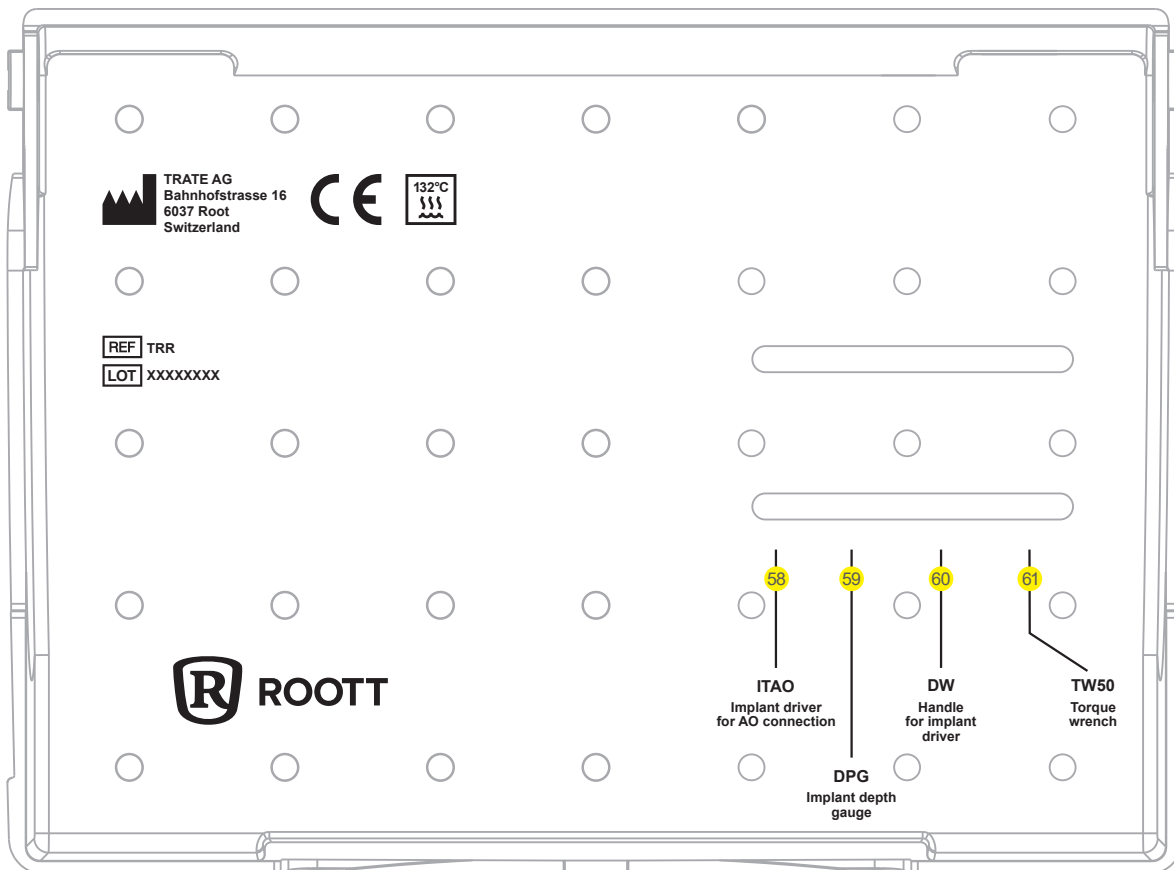
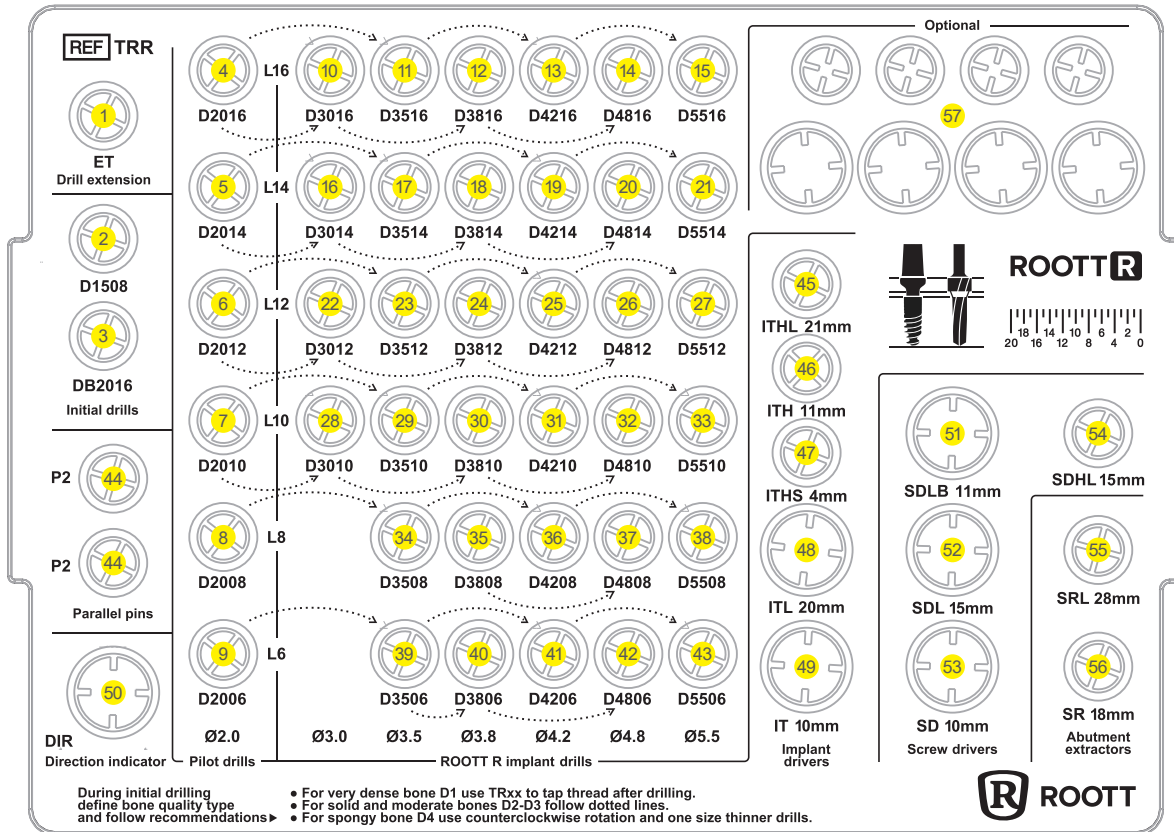
Instruments in bottom layer are fixed in grommets.

Sterilization

The cassettes can withstand 300 sterilization cycles. The user must comply with the parameters defined for the main standard autoclave cycles without exceeding the maximum values set: sterilization with a fractionated vacuum process (Pre-vacuum Steam) at least 4 minutes at 132°C (270°F), drying time 20 minutes.

Cassette does not include instruments, these are sold separately.

CONTENT



Drill extension

Drill extension used for distal areas.

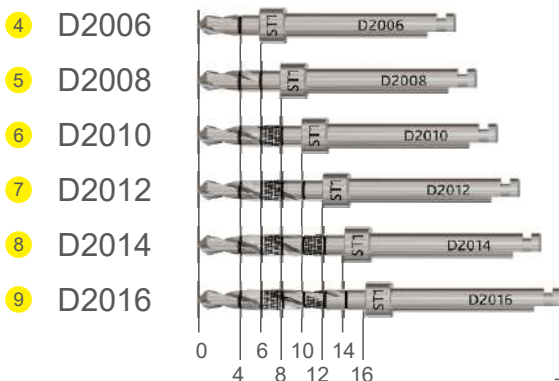


Drills

Lance drills D1508 and DB2016 can be used for initial drilling by setting the drilling axis before using twist and form drills. Drill DB2016 has laser markings every 2 mm from 6 mm to 16 mm.



Twist drills D2006, D2008, D2010, D2012, D2014, D2016 are used as pilot drills. These drills have a stopper, which stops the drill from making a deeper hole than needed. Have laser markings from 4 mm each 2 mm.



Form drills are used to widen cavity to the planned diameter. Drills can form hole on uneven bone surfaces which does not required additional corrections for placing ROOTT R implant and healing abutment. Lower forces for implant insertions. Drill end have healing abutments contour. Laser markings at implant length+0.5 mm and implant length+1.5 mm.



Alignment pin

Check the orientation of the initial osteotomy using an Alignment Pin.

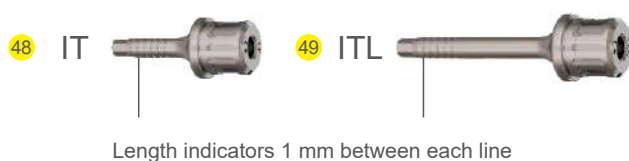


Implant drivers

For internal platform
For handpiece



For ratchet
Have length indicators.



For AO connection



Alignment bar

Used for approximate measurement of abutment angle in relation to abutment next to it.



Screwdrivers

For all ROOTT R dental implant system screws.
Long screwdriver is suitable for all superstructures.

Ball screwdriver for screwing by angulation, up to 20°. For ratchet.



Conical tip of the hex helps to grab screw.
For ratchet.



For handpiece.



Abutment extractor

For easy superstructure removal in case of conical connection hold tight a part inside of ROOTT R implant.



Optional place

For additional drills, handpiece instruments, ratchet instruments.

Implant depth gauge

Used to verify the depth of the holes before placing implant. Have length indicators each 2 mm from 4 mm to 14 mm, on both sides.



Handle

For supporting implant drivers, that are used with a wrench.

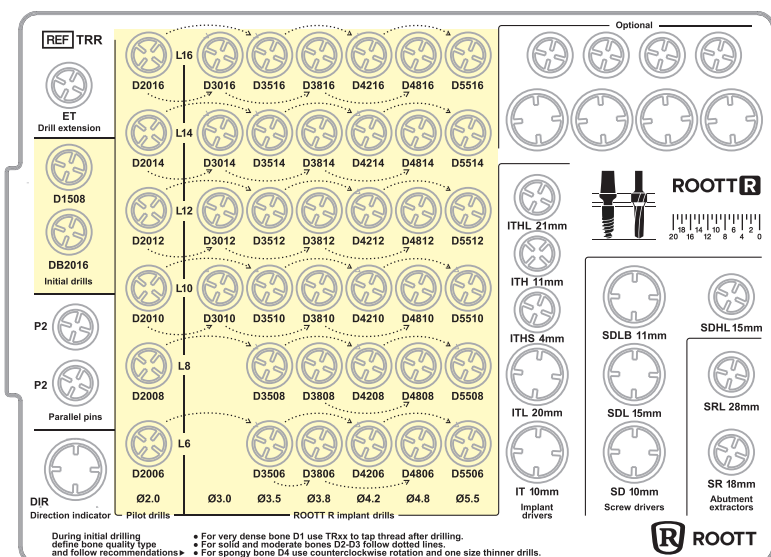


Torque wrench

Suitable for all instruments with head for ratchet. Maximal torque is 50 Ncm.



Example:
 ROOTT R implant
 Ø 3.5 mm
 Length 12 mm



- Step 1** Take a lance drill D1508 or DB2016 to make the first mark on the bone. During initial drilling define bone quality type and follow recommendations.
- Step 2** Take a twist pilot D20xx* drill to define the direction of the implant and to enlarge the diameter of the hole. Use the same length drill as the implant. Stopper will not allow drilling deeper.
- Step 3** Take a form drill DXXxx* to enlarge the diameter of the hole. Use the same diameter and length drill as the implant.

Follow recommendations:

- For D1 bone use the same diameter drill as the implant and use TRXXxx to tap thread after drilling. Drill deeper, till the lasering mark at xx*+1.5.
- For D2-D3 bone follow dotted lines (or see attached table with drilling protocol) and use the same diameter drill as the implant. Drill till the lasering mark at xx*+0.5.
- For D4 bone use counterclockwise rotation and one size thinner drill than implant. Drill till the lasering mark at xx*+0.5.

*XX is diameter, xx is length, mm

		 
Implant	D4 BONE	D2-D3 BONE D1 BONE
Ø 3.0 mm	D1508/DB2016 D20xx	D1508/DB2016 D20xx D30xx
Ø 3.5 mm	D1508/DB2016 D20xx D30xx ↺	D1508/DB2016 D20xx D35xx
Ø 3.8 mm	D1508/DB2016 D20xx D35xx ↺	D1508/DB2016 D20xx D30xx D35xx
Ø 4.2 mm	D1508/DB2016 D20xx D30xx D38xx ↺	D1508/DB2016 D20xx D35xx D42xx
Ø 4.8 mm	D1508/DB2016 D20xx D35xx D42xx ↺	D1508/DB2016 D20xx D30xx D38xx D48xx
Ø 5.5 mm	D1508/DB2016 D20xx D30xx D38xx D48xx ↺	D1508/DB2016 D20xx D35xx D42xx D55xx

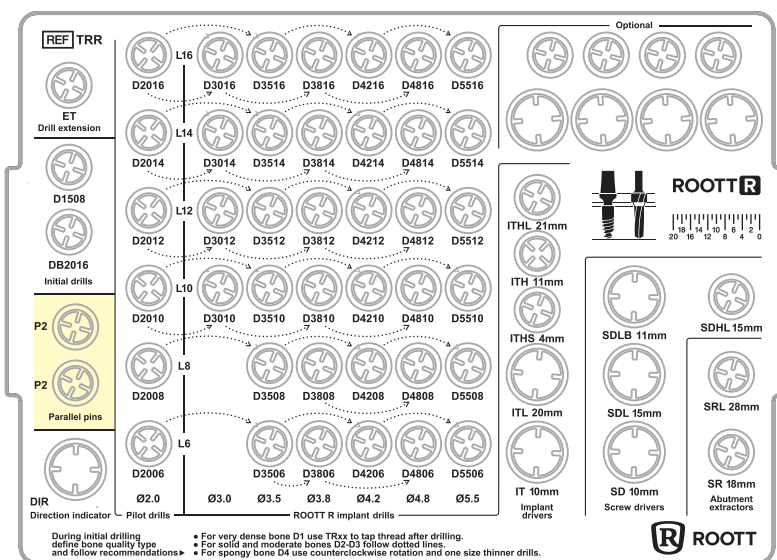
Example:
ROOTT R implant
Ø 3.5 mm
Length 12 mm



R3512



P2



Use alignment pins to check the insertion axis of the implants.
Has a hole for security, for dental floss, easier to take it out.

Step 1 Take an alignment pin and carefully insert it to the hole.

Step 2 Check the insertion axis.



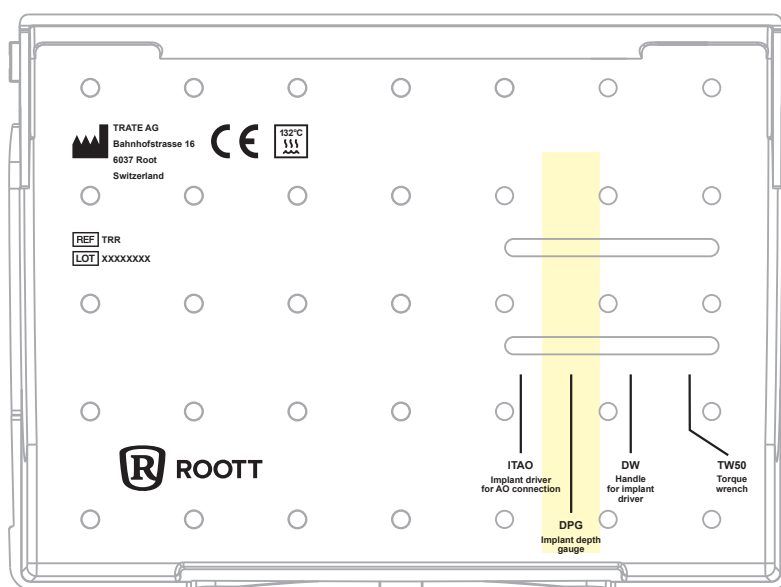
Example:
ROOTT R implant
Ø 3.5 mm
Length 12 mm



R3512



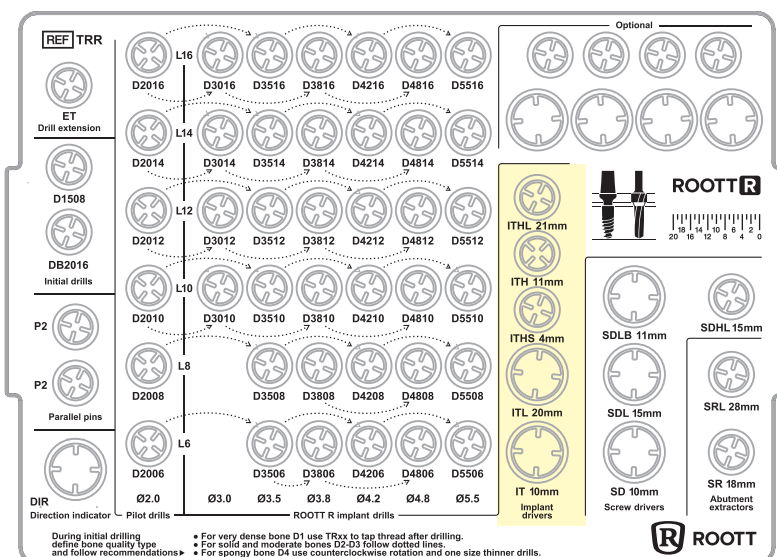
DPG



Used to verify the depth of the holes. The thin side is intended to be used for checking the relative depth of the prepared implant bed after pilot drilling to identify the length for the implant to be inserted. The wide side intended to be used for checking the depth gap between the implant and the soft tissue to know exactly what abutment or a healing need to be selected.

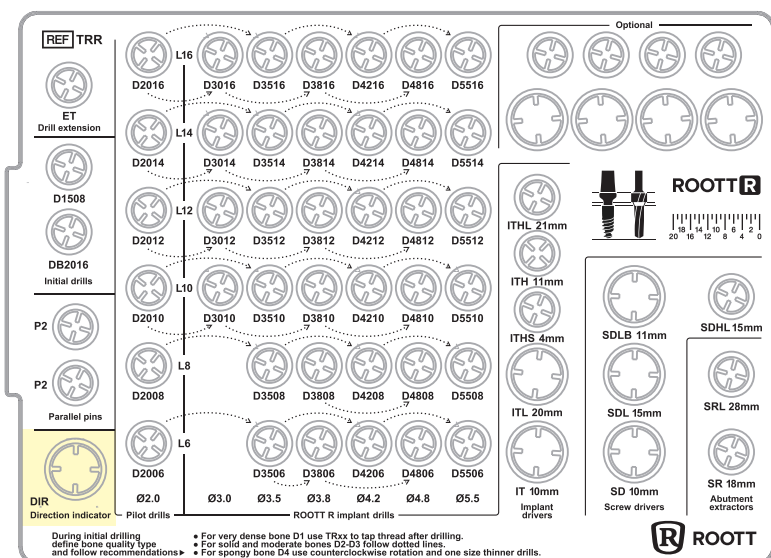
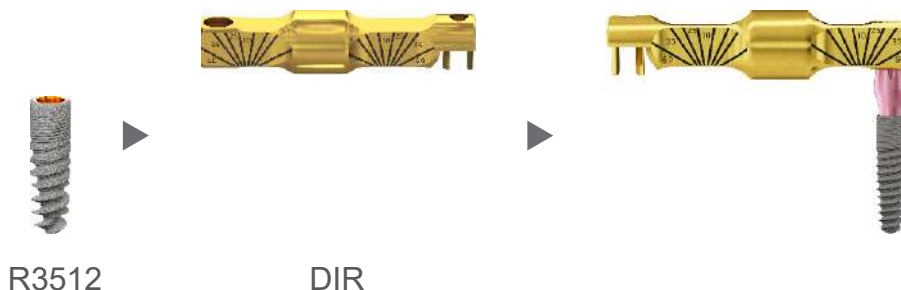


Example:
 ROOTT R implant
 Ø 3.5 mm
 Length 12 mm



- Step 1** Take an implant driver for internal platform IT /ITL/ITHS/ITH/ITHL/ITAO for inserting ROOTT R implants.
- Step 2** Use torque wrench TW50 for IT/ITL, contra-angle handpiece for ITHS/ITH/ITHL, ETAO handle for ITAO and insert implant to the prepared hole.

Example:
 ROOTT R implant
 Ø 3.5 mm
 Length 12 mm



The implants can be relatively parallel or not parallel. Most dental implants systems require parallelism within approximately 10 degrees to function properly. Non-parallel implant placement may preclude the use of anatomical abutments. For such cases angled abutments can be used.

Step 1 Take an alignment bar.

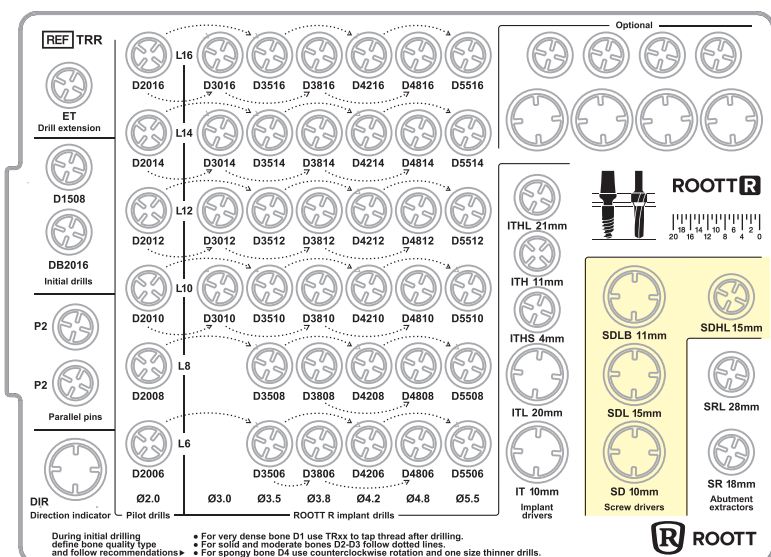
Step 2 Mount on implant with CRE.

Step 3 Check angulation between two implants. It allows to pre-plan the use of the angled abutments to achieve maximum parallelism. If angle between two ROOTT R implants is:

- a) 10° use two ROOTT R anatomical or telescopic abutments;
- b) 25° use ROOTT R anatomical or telescopic and 15° angled telescopic abutment;
- c) 35° use ROOTT R anatomical or telescopic and straight multi-unit abutment.
- d) if angle is greater than mentioned above, angled abutments should be used.



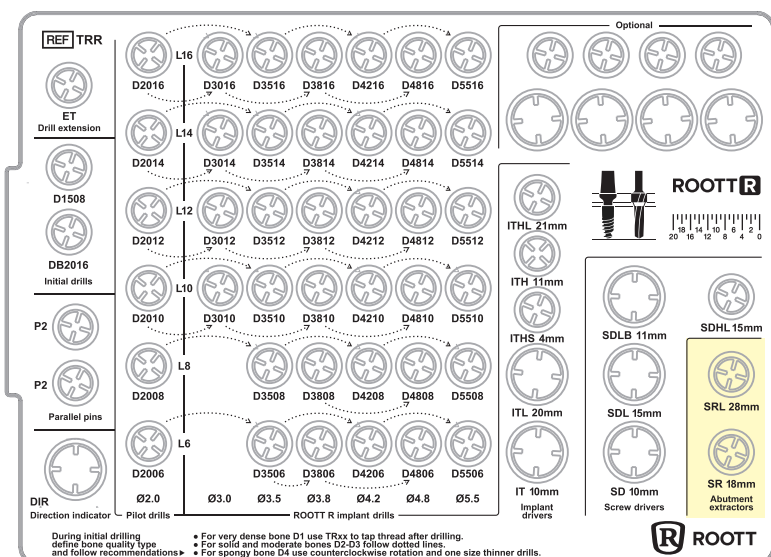
Example:
 ROOTT R implant
 Ø 3.5 mm
 Length 12 mm



Screwdriver SDLB for screwing by angulation, for titanium base. Angulation 20°. Screwdrivers SD/SDL for all ROOTT R dental implant system screws, for torque wrench TW50. Max torque for screws 15 Ncm. Screwdriver SDHL for all ROOTT R dental implant system screws, for handpiece.

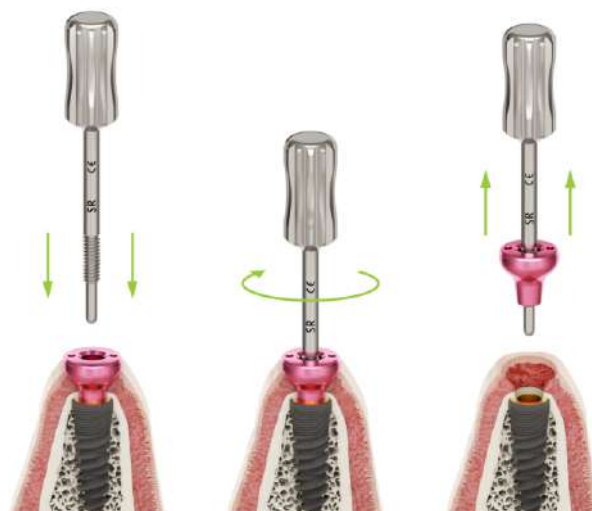


Example:
 ROOTT R implant
 Ø 3.5 mm
 Length 12 mm



Due to tight seal of the internal conical connection in a ROOTT dental implant system has to be used in a special way for easy superstructure removal.

Can be used for all ROOTT R superstructures.



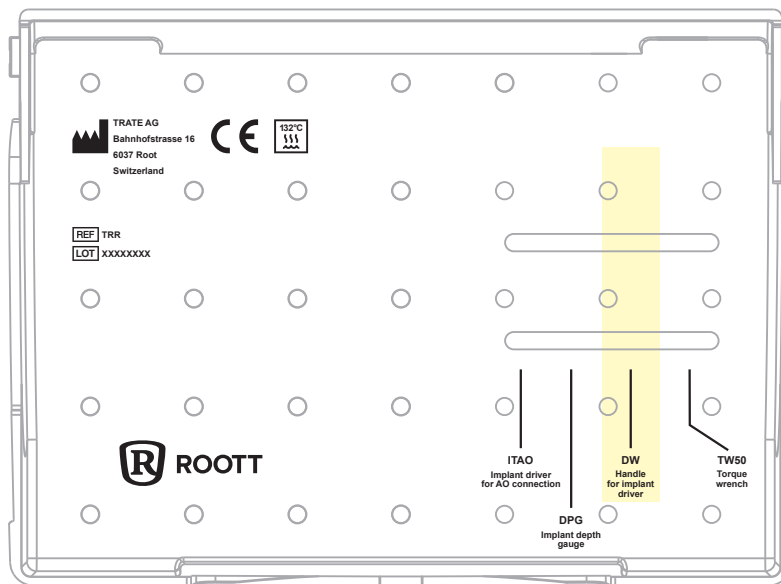
Example:
 ROOTT R implant
 Ø 3.5 mm
 Length 12 mm



R3512



DW



The device is used for supporting implant drivers that are used with a torque wrench TW50. More precise implant insertion procedure. Less chance for insertion tool to slip from an implant. No chance to grab gloves, while using the implant driver. No need to hold the ratchet with your finger, nothing obstructs the view, especially in distal areas.



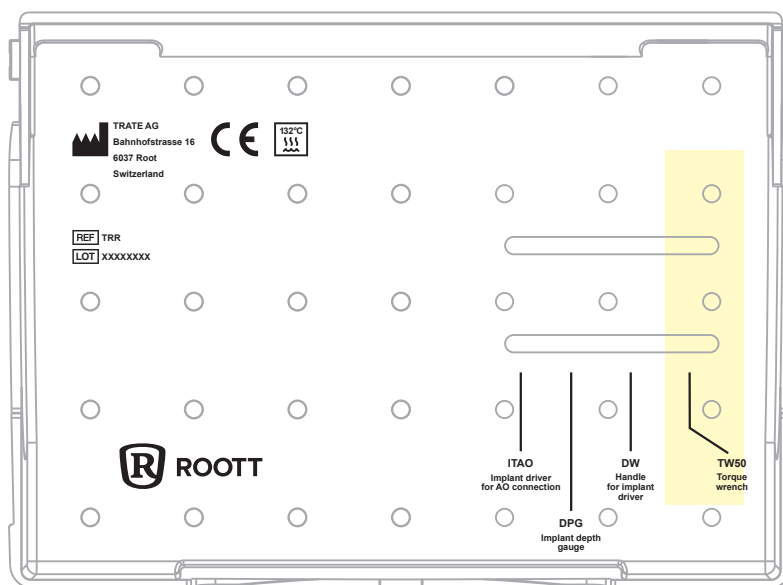
Example:
 ROOTT R implant
 Ø 3.5 mm
 Length 12 mm



R3512



TW50



Torque wrench TW50 is used for instruments with a head for ratchet.

When the set torque is reached,
 the scale sleeve snaps around
 the axis in the ratchet head.
 The release can be heard and felt.



Do not continue to use the wrench after the torque is achieved.
 The wrench or dental components could be damaged.



ROOTT

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TRATE

Medical devices under these instructions are in compliance with established in EU regulatory requirements.



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