PROTOCOL
OSTEOTOM AND BONE EXPANSION KIT

Information:
The osteotomy and bone expansion kit is delivered with its surgical mallet.
All the components of the osteotomy and bone expansion kit can be sold individually.

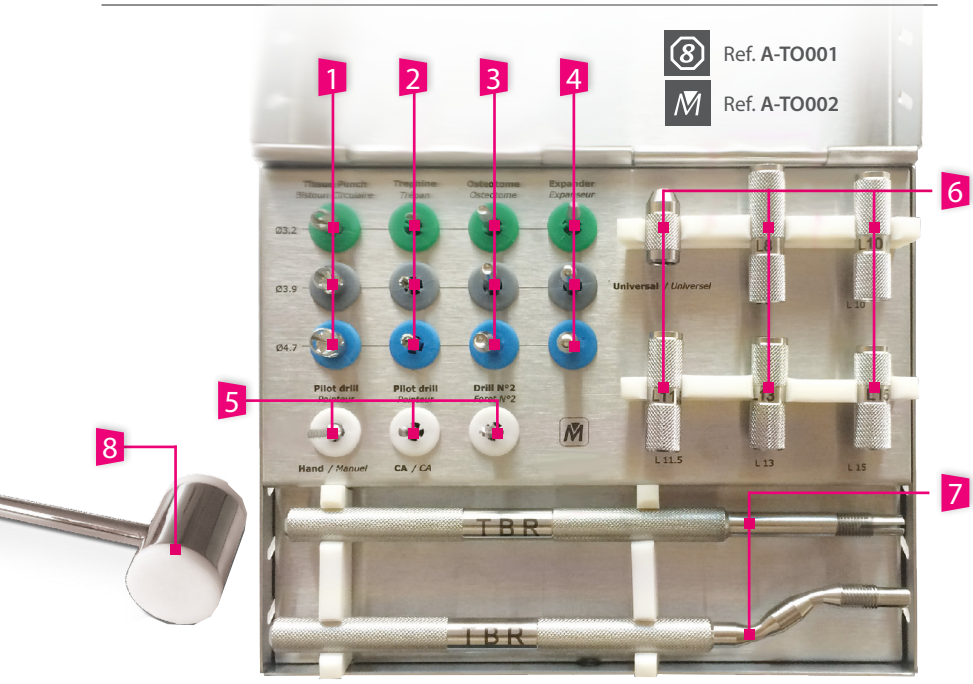
Description and Benefits

Osteotomes are surgical instruments that condense and shift the bone during surgical procedures that require bone remodelling.

The indications of the kit for osteotomy and bone expansion are multiple: condensation of a spongy bone, type III or IV, expansion of thin or deformed crests, crestal approach sinus lift, sinus floor elevation with grafting, or preparation of the future implant site.

- **AUTOCLAVABLE:** the surgical stainless steel box and all the components are sterilisable.
- **ERGONOMY:** the different osteotomy and expansion tips can be easily set and removed from the straight or curved handles. The kit is complete and very compact.
- **SAFETY:** thanks to the different stoppers and laser markings on the tips, the work depth is always under control.

Osteotomy and bone expansion kit in details



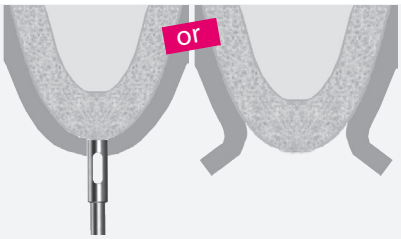
1	Tissue punch	Øint 3.5	A-BC350	
		Øint 4	A-BC400	
		Øint 5	A-BC500	
2	Trephine	Øint 1.15	A-TRE115	
		Øint 1.49	A-TRE149	
		Øint 2.16	A-TRE216	
3	Concave tip for osteotom	Ø3.5	A-OEC300	
		Ø4	A-OEC400	
		Ø5	A-OEC500	
4	Convex tip for expander	Ø3.5	A-OEL300	
		Ø4	A-OEL400	
		Ø5	A-OEL500	
5	Manual pointer tip		A-OEP380-8	
			A-OEP380-M	
	Drill N°2		A-FCX200	
			A-FMX200	
	Pointer for CA		A-FPT310	
6	Straight handle		A-OMD100	
	Curved handle		A-OMC100	

7	Stoppers	A-OB080-8	A-OB105-8	A-OB115-8	A-OB130-8	A-OB155-8
		A-OB080-M	A-OB100-M	A-OB115-M	A-OB130-M	A-OB150-M
	Universal stopper	A-OBU100				
8	Surgical mallet	MT620				

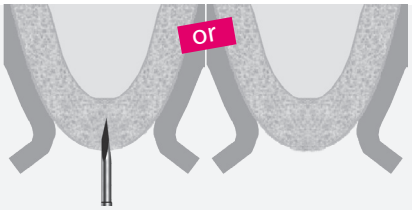
OSTEOTOMY protocol - Manual/ Mechanical trepanation

	1	2		3	4		6
Ø Implants	Tissue punch	Manual pointer or Pointer for CA		Trephine	Stoppers	Concave tip	Classical instrument sequence for a TBR implant
Ø3.2/3.5	A-BC350	A-OEP380	A-FTP310	A-TRE115	A-OBU100 (plain) or A-OBxxx*	A-OEC300	See surgical protocol for the placement of TBR implants
Ø3.9/4	A-BC400	A-OEP380		A-TRE149	A-OBU100 (plain) or A-OBxxx*	A-OEC400	
Ø4.7/5	A-BC500	A-OEP380		A-TRE216	A-OBU100 (plain) or A-OBxxx*	A-OEC500	

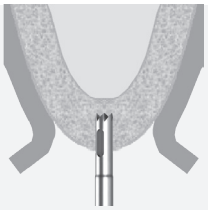
**related to the length of the implant to be placed.*



1 Punch the gingiva with the tissue punch adapted to the diameter of the implant to be set at 300 to 500 rpm or make a crestal incision with a surgical knife (by avoiding the anatomical obstacles: sinus, nerves and pedicles) and then detach the flaps.



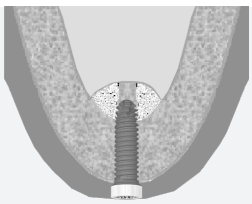
2 Point at 1200 rpm on 1 to 3 mm with the pilot drill for surgical contra-angle or with the manual pointer [mounted on the osteotomy handle].
Warning: Regardless of the used technique, the pointing must leave at least a bone height of 1 to 2 mm before reaching the septum of the sinus.



3 Trepan the implant site with a speed from 800 to 1000 rpm thanks to the trephine adapted to the diameter of the implant to be set.
Warning: Regardless of the used technique, the trepanation must leave at least 1 to 2 mm before reaching the septum of the sinus.

4 Mount on the chosen osteotome handle the concave tip for osteotomy matching the diameter of the implant to be set thanks to the chosen stopper. By using the Teflon mallet, impact the tip mounted on the handle until it reaches the stopper adapted to the implant length or until it reaches the laser marking matching the implant length in case of using the universal stopper.

5 Possibly fill with autograft bone or a bone substitute (Graftek® or similar substitute by referring to the user's instructions from the manufacturer), through the hole by pushing the bone filling material inside the cavity created by the last tip used.

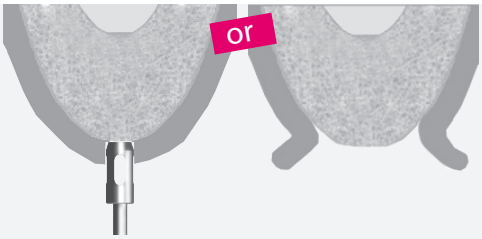


6 Place the TBR implant according to the surgical protocol for TBR implants placement.

BONE EXPANSION protocol - Bone condensation

	1	2	3		4
Ø Implants	Tissue punch	Drilling sequence and convex tips of expansion to be used	Stoppers	Convex tips	TBR implant placement
Ø3.2/3.5	A-BC350	Pilot drill (1200 rpm) then drill #1 (1200 rpm) then drill #2 (1000 rpm) then convex tip for expansion #3	A-OBU100 (plain) or A-OBxxx*	A-OEL300	
Ø3.9/4	A-BC400	Pilot drill (1200 rpm) then drill #1 (1200 rpm) then drill #2 (1000 rpm), then drill #3 (800 rpm) then convex tip for expansion #4	A-OBU100 (plain) or A-OBxxx*	A-OEL400	
Ø4.7/5	A-BC500	Pilot drill (1200 rpm) then drill #1 (1200 rpm) then drill #2 (1000 rpm), then drill #3 (800 rpm) then drill #4 (600 rpm) then convex tip for expansion #5	A-OBU100 (plain) or A-OBxxx*	A-OEL500	

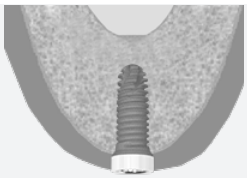
** in accordance with the length of the implant to be set*



1 Punch the gingiva with the tissue punch adapted to the diameter of the implant to be set at 300 to 500 rpm or make a crestal incision with a surgical knife (by avoiding the anatomical obstacles: sinus, nerves and pedicles) and then detach the flaps.

2 Respect the rotary instrument sequence adapted to the diameter of the implant to be set as it is described in the user's instructions for the implant, except that the final drill will be switched with the bone expansion tip matching the implant diameter.

3 Mount on the chosen osteotome handle the convex tip for expander matching the diameter of the implant to be set thanks to the chosen stopper. By using the Teflon mallet, impact the tip mounted on the handle until it reaches the stopper adapted to the implant length or until it reaches the laser marking matching the implant length in case of using the universal stopper.



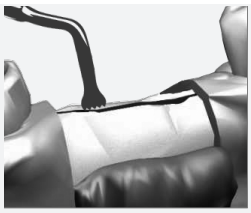
4 Place the TBR implant according to the surgical protocol for TBR implants placement.

BONE EXPANSION protocol - Bone-splitting

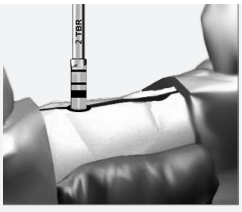
	1	2	3	4		5
Ø Implants	Surgical knife [crestal incision + detach the flaps]	Insert for bone surgery or crown-saw [span of the crestal bone]	Drilling sequence and convex tips of expansion to be used	Molettes	Embout convexe	Classical instrument sequence for a TBR implant
Ø3.2/3.5			Crown-saw (1000 rpm) then pilot drill (1200 rpm) then drill #1 (1000 rpm) then drill #2 (800 rpm) then convex tip for expansion #3	A-OBU100 (plain) or A-OBxxx*	A-OEL300	See surgical protocol for TBR implants placement
Ø3.9/4			Identical to implant Ø3.5 & 3.2 then convex tip for expansion #4	A-OBU100 (plain) or A-OBxxx*	A-OEL400	
Ø4.7/5			Identical to implant Ø3.5 & 3.2 then convex tip for expansion #4 then #5	A-OBU100 (plain) or A-OBxxx*	A-OEL500	

**in accordance with the implant to be set.*

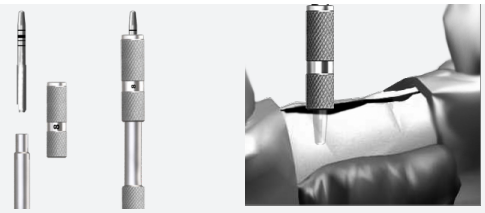
1 Make a crestal incision with a surgical knife (by avoiding the anatomical obstacles: sinus, nerves and pedicles) and then detach the flaps.



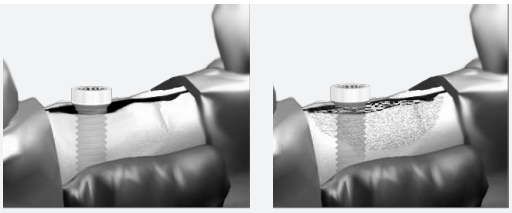
2 Make a span of the crestal bone with an insert for bone surgery or crown-saw. (Sometimes, it will be essential to flatten the ridge of the crest if it is too thin).



3 Respect the rotary instrument sequence adapted to the diameter 3.2/3.5 mm of the implant to be set as it is described in the user's instructions for the implant, except that the final drill will be switched with the bone expansion tip #3. If you would like to expand more the crest, expansion tips 3.9/4 and 4.7/5 are available in the kit but make sure to preserve a sufficient thickness for the crestal walls.



4 Mount on the chosen osteotome handle the convex tip for expander matching the diameter of the implant to be set thanks to the chosen stopper. By using the Teflon mallet, impact the tip mounted on the handle until it reaches the stopper adapted to the implant length or until it reaches the laser marking matching the implant length in case of using the universal stopper.



5 Possibly fill with autograft bone or a bone substitute (Graftek® or similar substitute by referring to the user's instructions from the manufacturer), through the hole by pushing the bone filling material inside the cavity created by the last tip used.