Before undertaking any extraction operations of a screw, try to use an old seized contra-angle and a round bur to grip the fragment screw, in reverse mode.

After all extraction operations of a screw or an implant, analyze the problem source (occlusal efforts, prosthetic passivity, bruxism, improper prosthetic choice, contraindicated implant placement...).

CAUTION: Small instruments may fracture under inadequate or excessive constraints.

I. Removal of a blocked abutment in the implant

Step 1
1. Remove the fixation screw from the abutment.
2. Screw manually the abutment extractor in the abutment threaded part.
3. Screw the extractor at the bottom of the implant.
   **Be careful**: cut the top of the abutment if it abuts on the head of the extractor.
4. Mount the ratchet on the extractor to finish the screwing and break away the abutment from the implant.
5. Extract the abutment with the extractor.

II. Removal of a broken screw in the implant

Step 1
1. Seat the drilling guide onto the implant.
   **Caution**: adapt the guide to the implant.
2. Insert the drill into the contra-angle.
3. Select the «reverse» mode on the motor, with a 400 rpm speed.
4. Use irrigation to avoid heating the drill.
5. Once the pre-hole is done (±1 mm deep), remove the guide.
6. Set the motor speed at 1200 rpm, always in «reverse» mode.
7. Unscrew the broken piece with the drill inserted in the pre-hole with a light pressure.

Step 2
The fractured screw cannot be unscrewed with the drill: use the extractor for screw
1. Insert the extractor into the pre-hole that you have achieved.
2. Turn counterclockwise to grasp the screw applying a light pressure on it. Keep on unscrewing to remove the screw with the extractor.
INSTRUCTIONS FOR CLEANING AND DECONTAMINATION OF EXTRACTION KITS

DECONTAMINATION
- Immediately after being used, the multiple-element instruments (clickwrench, torquewrench) should be dismantled and all the instruments should be immersed in an appropriate disinfection bath (the instructions provided by the manufacturer with regard to proportioning, exposure time and temperature shall be respected).

CLEANING
- Clean the stainless steel holders (and instruments) in enzymatic cleaner or potable water and with thermal disinfectant manufacturers recommended solutions. A flexible nylon brush can be used for instruments cleaning.
- After cleaning, rinse thoroughly with distilled water to remove detergent and/or particles.
- The kit plates have silicon supports that support any type of decontamination and cleaning.
- It is important to ensure complete drying before sterilization.
- The multiple-element instruments are reassembled before sterilization and the instruments are either put in the surgical kit, in the silicone inserts or in a sterilization bag.

STERILIZATION
- After cleaning, make sure that all debris have been removed from the products during cleaning.
- Pack the surgical kit and the instruments it contains in a sterilization bag.
- Sterilization must be done by autoclave. The 134° C-18 minutes cycle has been validated for all Euroteknika ranges and allows to reach sterility.
- Follow the manufacturers instructions for sterilizer operation. Make sure the process has been validated.

RECOMMENDATIONS
The cut efficiency of the drills and the trephines decrease after each use. It is therefore recommended to change them every 10 to 15 uses.

II. Removal of a broken screw in the implant - continuation

Step 3

If the implant thread is damaged (after step 1 or step 2).
1. Lubricate the tap with food grade lubricant.
2. Hand-screw the tap in the axis of the part without forcing.
3. Remove the tap manually by unscrewing at the first effort.
4. Clean the thread and remove the formed chips.
5. Repeat these operations until the end of the thread.
6. Try a new screw (screw without effort).

III. Removal of an implant

Step 1

Use the implant extractor.
1. Insert the extractor into the connection of the implant to be removed.
2. Turn counterclockwise to grip the implant by applying pressure thereon.
3. Use counterclockwise the click-wrench on the extractor head to unscrew the implant.
4. Once the thread is taken in the material, unscrew the implant to break it away from the site.
5. Extract the implant by unscrewing it with the extractor.

Step 2

If the extractor implant did not work (after step 1).
1. Choose the trephine according to the implant diameter (see table 1).
2. Place the trephine on the contra-angle.
3. Adjust the motor speed according to the trephine diameter (see table 2).
4. Grind around the implant, taking into account the working length that should be inferior to the implant length.
5. Extract the implant with dental forceps with twisting and bending movements.

1. Trephine choice

<table>
<thead>
<tr>
<th>Ø TREPHINE (inside Ø / outside Ø)</th>
<th>ø 3.5</th>
<th>ø 4.1</th>
<th>ø 4.8</th>
<th>ø 6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naturactis 3.8/4.4</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naturall+ 3.5</td>
<td>4</td>
<td>4.5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Natea+ 3.6</td>
<td>4.1</td>
<td>4.8</td>
<td>6</td>
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<tr>
<td>Aesthetica+ 3.6/neck 4.2/neck 4.8/neck 6.5</td>
<td>4.1/neck 4.8</td>
<td>4.8/neck 4.8</td>
<td>6</td>
<td></td>
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<tr>
<td>Uneva+ 3.6/neck 4.2/neck 4.8</td>
<td>3.6</td>
<td>4.8</td>
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<tr>
<td>Naturex 3</td>
<td>3.6</td>
<td>4.1</td>
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<td>6</td>
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</table>

2. Motor setting

<table>
<thead>
<tr>
<th>Ø OF TREPHINES</th>
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<tr>
<td>ø 3.8</td>
<td>400 rpm</td>
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<tr>
<td>ø 4.6</td>
<td>300 rpm</td>
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<tr>
<td>ø 5.3</td>
<td>190 rpm</td>
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<tr>
<td>ø 6.7</td>
<td>140 rpm</td>
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