

## Compatibility matrix based on screw diameter

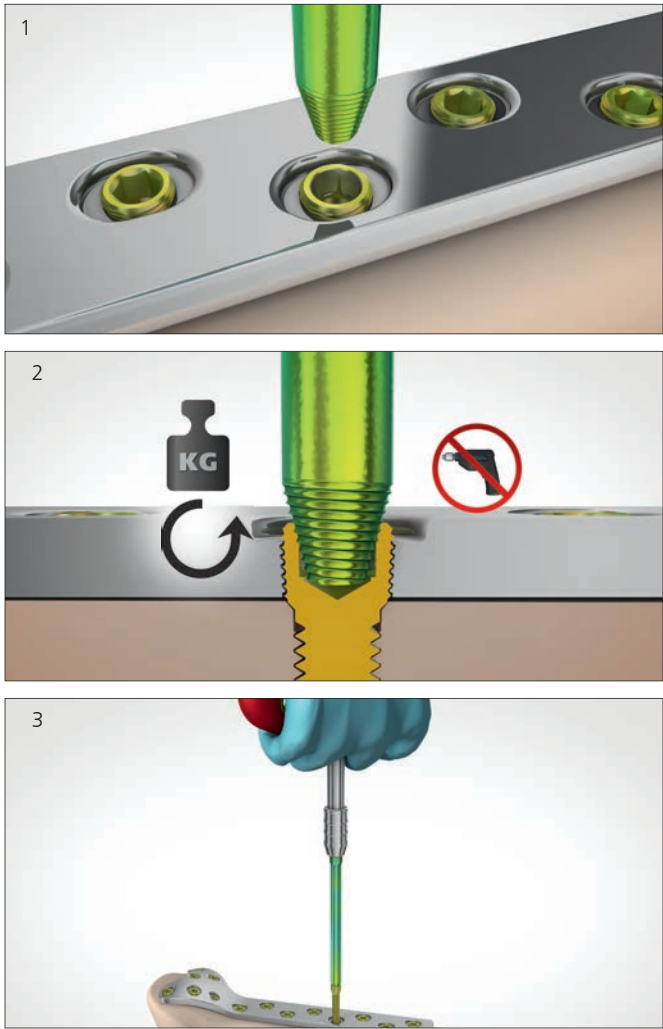
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- |   |   |
|---|---|
| ○ | HEX 1.3, HEX 1.5, HEX 1.8, HEX 2.0, HEX 2.5,<br>HEX 3.0, HEX 3.5, HEX 4.0, HEX <sup>3/4</sup> in (4.7), HEX 5.0 |
| ⊗ | T4, T5, T6, T7, T8, T9, T10, T15, T20, T25, T30, T40  |
| ◐ | SQR 0.7, SQR 1.0, SQR 1.2, SQR 1.5, SQR 1.8,<br>SQR 2.2, SQR 2.3  |
| ⊕ | CR 0.3, CR 0.4, CR 0.5, CR 0.6, CR 0.8, CR 1.0  |
| ◑ | SL 0.3, SL 0.4, SL 0.5, SL 0.6, SL 0.8, SL 1.0  |
| ⊕ | PH1   |

- Most commonly used screw recess
- Other possible screw recesses






- Blows and bending loads should be avoided since they can lead to instrument breakage.
- The use of incorrect sizes leads to improper functioning and an increased risk of instrument breakage.

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


1. Select extraction screw of the appropriate size matched to the screw drive according to Table 2.
2. Lock extraction screw in the handle coupling.
3. Start **turning** the extraction screw **to the left, counterclockwise**, in the same axis as the screw to be removed.
4. Continue turning, applying constant pressure, until the conical left-handed thread is securely seated in the damaged recess and until sufficient torque is applied to unscrew the screw.
5. Then unscrew the screw, turning to the left.




 mm				OPERACE REF	Extraction screw 
1.5 – 3.2	Hex 1.5	T6, T7	SQR 1.0, 1.2, 1.5	80018	1.6
2.0 – 4.3	Hex 1.8, 2.0	T8, T9	SQR 1.8	80170	2.0
2.3 – 6.0	Hex 2.5, 3.0	T10, T15	SQR 1.8, 2.2	80020	2.6
3.5 – 8.0	Hex 3.5, 4.0	T20, T25	SQR 2.3	80022	3.5

1. Select extraction drill bit of the appropriate size according to the Table 3.
2. Position the drill bit in the screw recess and start **turning** the drill bit matching the screw diameter **to the right, clockwise**, in the same axis as the screw to be removed and applying **very little pressure**.
3. Only drill down until the underside of the implant plate is reached. This either loosens the screw head from the shaft or else weakens it sufficiently to cause it to break off when the plate is lifted.
4. Remove the plate.
5. Remove the screws according to procedure 4.

Ø	OPERACE REF	Extraction drill bit 
1.0–1.5	80023	1.5
1.6–2.0	80123	2.0
2.1–2.5	80024	2.5
2.6–3.2	80025	3.2
3.3–4.0	80019	4.0
4.1–5.0	80026	5.0
5.1–6.5	80027	6.5
6.6–7.5	80021	7.5

1. Select extraction reamer of the appropriate size matched to the screw recess according to the Table 4.
2. Locate the stationary extraction reamer and turn in the direction of the screw axis to ream over the screw shaft remaining in the bone. Apply **slight pressure** initially, **turning to the left, counterclockwise**.
3. As soon as the reamer grips the screw shaft, continue reaming with increased pressure until the conical left-handed thread is securely seated on the screw shaft.
4. **When unscrewing the reamer do not relieve the pressure, but maintain the constant axial pressure and direction of rotation.**

Ø	OPERACE REF	Extraction reamer 
1.4–2.0	80009	2.0
2.1–2.5	80028	2.5
2.6–3.2	80029	3.2
3.3–4.0	80030	4.0
4.1–4.5	80033	4.5
4.6–5.8	80035	5.8
5.9–7.5	80015	7.5

1. Select extraction reamer of the appropriate size matched to the screw recess according to Table 4.
2. Locate the stationary extraction reamer perpendicular to the bone so that the teeth rest on the bone as evenly as possible. Apply **slight pressure** initially, **turning to the left, counter-clockwise**.
3. As soon as the reamer grips, ream in the direction of the screw axis under image intensifier control until it can be guided through the screw shaft.
4. **Remove the reamer from the bone at regular intervals and free it of accumulated bone material.**
5. Continue reaming with increased pressure until the conical left-handed thread is securely seated on the screw shaft.
6. **When unscrewing the reamer do not relieve the pressure, but maintain the constant axial pressure and direction of rotation.**