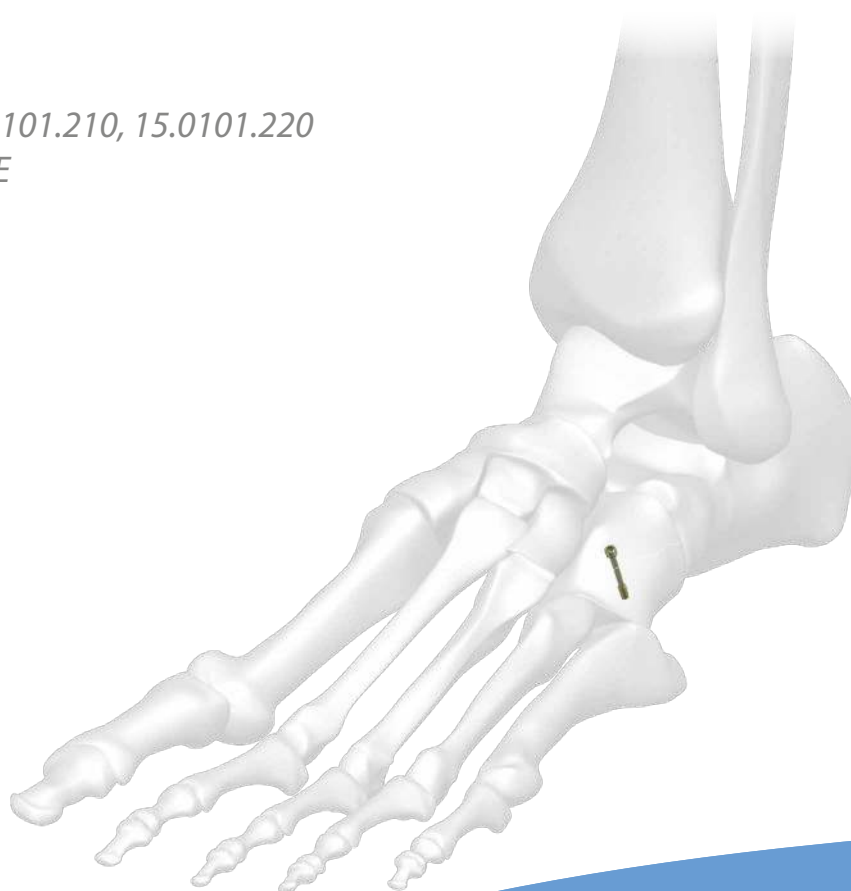




Compression screws 4.5 and 6.5

- *IMPLANTS*
- *INSTRUMENT SET 15.0101.210, 15.0101.220*
- *SURGICAL TECHNIQUE*



SYMBOLS DESCRIPTION

	Caution - pay attention to a special procedure.
	Perform the activity under X-Ray control.
	Information about the next stages of a procedure.
	Proceed to the next stage.
	Return to the specified stage and repeat the activity.
	Before using the product, carefully read the Instructions for Use. It contains, among others, indications, contraindications, side effects, recommendations and warnings related to the use of the product.
	The above description is not a detailed instruction of conduct. The surgeon decides about choosing the operating procedure.

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The manufacturer reserves the right to introduce design changes.

Updated INSTRUCTIONS FOR USE are available at the following website: ifu.chm.eu

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I. INTRODUCTION

The instrument set for compression screws includes:

- instruments for compression screws implantation and subsequent removal,
- surgical technique.

The presented range of implants is made of titanium and its alloys and implantable steel, in accordance with the requirements of ISO 5832 standards.

I.1. INDICATIONS FOR COMPRESSION SCREWS

4.5 and 6.5 compression screws systems are designed for: osteosynthesis, reconstruction, osteotomy and arthrodesis of bones or bone fragments. They ensure permanent fixation in the articular area of:

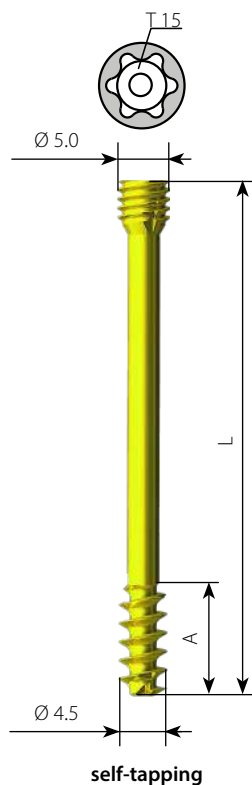
- foot bones,
- humerus,
- femur,
- tibia.

II. IMPLANTS

Compression cannulated screws

Ø4.5/Ø5.0

L [mm]	A [mm]	Cat. No.	
		Steel	Titanium
20	6	1.1980.020	3.1980.020
22	6	1.1980.022	3.1980.022
24	6	1.1980.024	3.1980.024
26	7	1.1980.026	3.1980.026
28	7	1.1980.028	3.1980.028
30	7	1.1980.030	3.1980.030
32	7	1.1980.032	3.1980.032
34	7	1.1980.034	3.1980.034
36	7	1.1980.036	3.1980.036
38	7	1.1980.038	3.1980.038
40	8	1.1980.040	3.1980.040
42	8	1.1980.042	3.1980.042
44	9	1.1980.044	3.1980.044
46	9	1.1980.046	3.1980.046
48	9	1.1980.048	3.1980.048
50	10	1.1980.050	3.1980.050
52	10	1.1980.052	3.1980.052
54	11	1.1980.054	3.1980.054
56	11	1.1980.056	3.1980.056
58	11	1.1980.058	3.1980.058
60	12	1.1980.060	3.1980.060
65	13	1.1980.065	3.1980.065
70	14	1.1980.070	3.1980.070
75	15	1.1980.075	3.1980.075
80	16	1.1980.080	3.1980.080
85	17	1.1980.085	3.1980.085
90	18	1.1980.090	3.1980.090
95	19	1.1980.095	3.1980.095
100	20	1.1980.100	3.1980.100
105	21	1.1980.105	3.1980.105
110	22	1.1980.110	3.1980.110

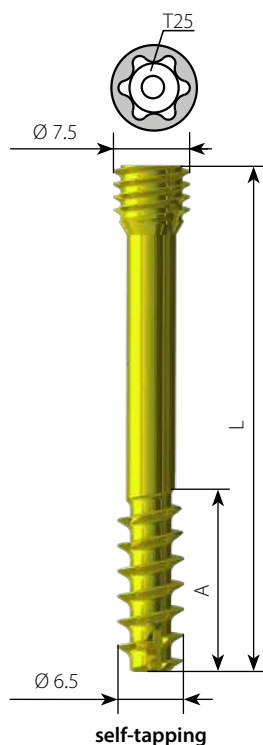


Ø4.5/Ø5.0

L [mm]	A [mm]	Cat. No.	
		Steel	Titanium
30	12	1.1981.030	3.1981.030
32	12	1.1981.032	3.1981.032
34	12	1.1981.034	3.1981.034
36	14	1.1981.036	3.1981.036
38	14	1.1981.038	3.1981.038
40	16	1.1981.040	3.1981.040
42	16	1.1981.042	3.1981.042
44	18	1.1981.044	3.1981.044
46	18	1.1981.046	3.1981.046
48	18	1.1981.048	3.1981.048
50	20	1.1981.050	3.1981.050
52	20	1.1981.052	3.1981.052
54	22	1.1981.054	3.1981.054
56	22	1.1981.056	3.1981.056
58	22	1.1981.058	3.1981.058
60	24	1.1981.060	3.1981.060
65	26	1.1981.065	3.1981.065
70	28	1.1981.070	3.1981.070
75	30	1.1981.075	3.1981.075
80	32	1.1981.080	3.1981.080
85	34	1.1981.085	3.1981.085
90	36	1.1981.090	3.1981.090
95	38	1.1981.095	3.1981.095
100	40	1.1981.100	3.1981.100
105	42	1.1981.105	3.1981.105
110	44	1.1981.110	3.1981.110

Ø6.5/Ø7.5

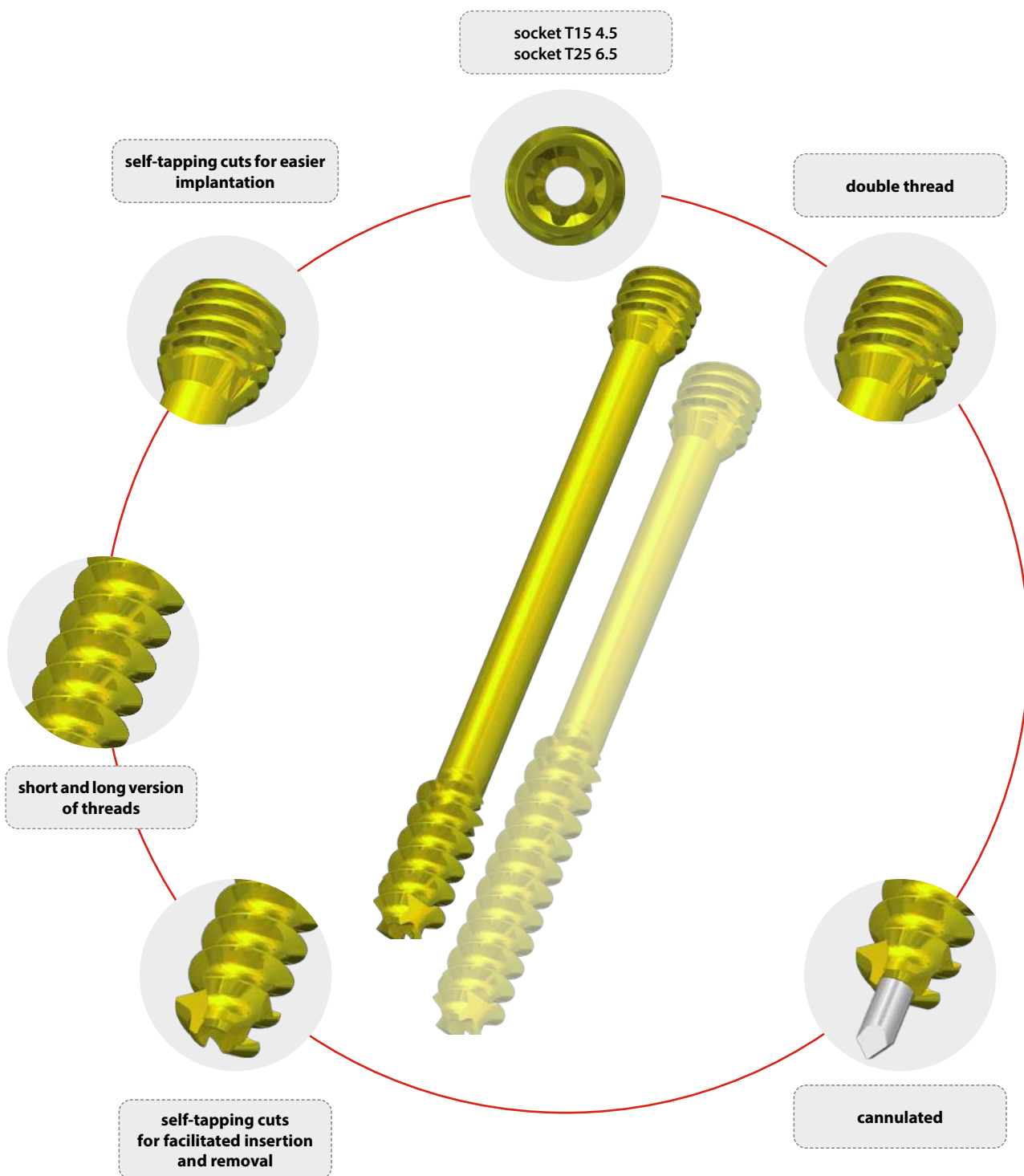
L [mm]	A [mm]	Cat. No.	
		Steel	Titanium
30	16	1.1982.030	3.1982.030
35	16	1.1982.035	3.1982.035
40	16	1.1982.040	3.1982.040
45	16	1.1982.045	3.1982.045
50	16	1.1982.050	3.1982.050
55	16	1.1982.055	3.1982.055
60	16	1.1982.060	3.1982.060
65	16	1.1982.065	3.1982.065
70	16	1.1982.070	3.1982.070
75	16	1.1982.075	3.1982.075
80	16	1.1982.080	3.1982.080
85	16	1.1982.085	3.1982.085
90	16	1.1982.090	3.1982.090
95	16	1.1982.095	3.1982.095
100	16	1.1982.100	3.1982.100
105	16	1.1982.105	3.1982.105
110	16	1.1982.110	3.1982.110
115	16	1.1982.115	3.1982.115
120	16	1.1982.120	3.1982.120
125	16	1.1982.125	3.1982.125
130	16	1.1982.130	3.1982.130
135	16	1.1982.135	3.1982.135
140	16	1.1982.140	3.1982.140
145	16	1.1982.145	3.1982.145
150	16	1.1982.150	3.1982.150



Ø6.5/Ø7.5

L [mm]	A [mm]	Cat. No.	
		Steel	Titanium
45	32	1.1983.045	3.1983.045
50	32	1.1983.050	3.1983.050
55	32	1.1983.055	3.1983.055
60	32	1.1983.060	3.1983.060
65	32	1.1983.065	3.1983.065
70	32	1.1983.070	3.1983.070
75	32	1.1983.075	3.1983.075
80	32	1.1983.080	3.1983.080
85	32	1.1983.085	3.1983.085
90	32	1.1983.090	3.1983.090
95	32	1.1983.095	3.1983.095
100	32	1.1983.100	3.1983.100
105	32	1.1983.105	3.1983.105
110	32	1.1983.110	3.1983.110
115	32	1.1983.115	3.1983.115
120	32	1.1983.120	3.1983.120
125	32	1.1983.125	3.1983.125
130	32	1.1983.130	3.1983.130
135	32	1.1983.135	3.1983.135
140	32	1.1983.140	3.1983.140
145	32	1.1983.145	3.1983.145
150	32	1.1983.150	3.1983.150

Compression cannulated screws 4.5 and 6.5



III. INSTRUMENT SET

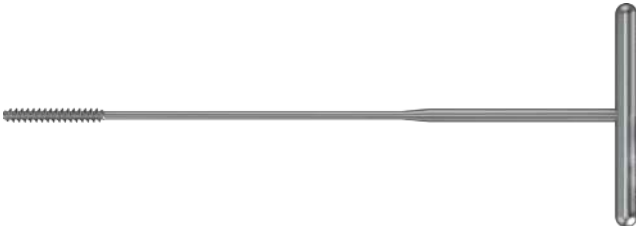
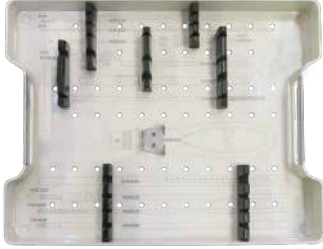
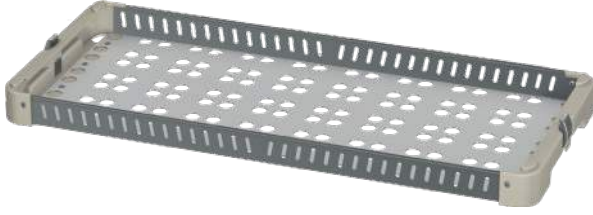
Instrument sets **[15.0101.210]** and **[15.0101.220]** are used for bone fractures fixation with compression screws 4.5 and 6.5, respectively, and for subsequent removal, when the treatment is complete.

The instruments and implants included are arranged on pallets which form a modular set.

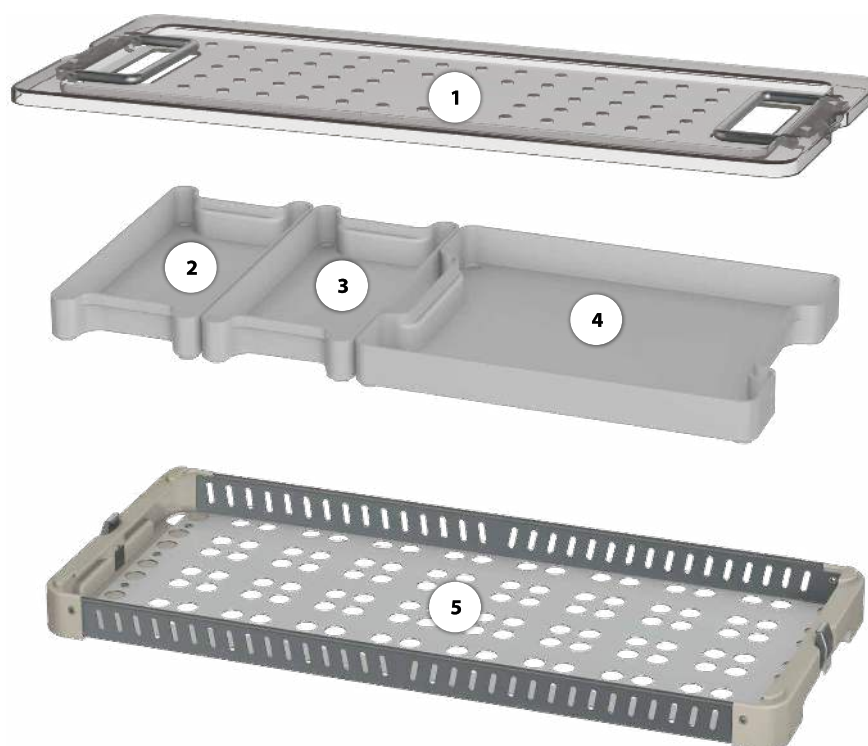
The pallets are placed in a container and covered with a lid for facilitated storage and transportation to the operating theater.

Instrument set for 4.5 compression screws 5x4 1/2H

15.0101.210

No.		Name	Catalogue no.	Pcs
1		Cannulated drill 3.2/1.6/225	40.8142.225	2
2		Cannulated tap 4.5/1.6	40.8143.000	1
3		Cannulated screwdriver tip T15/1.6/225	40.8144.000	1
4		Cannulated drill with limiter 4.0/1.6/225	40.8145.225	1
5		Hole depth measure	40.8146.000	1
6		Guide 9.5/7.0	40.8147.000	1
7		Guide sleeve 7.0/3.2	40.8148.000	1
8		Guide sleeve 3.2/1.6	40.8149.000	1
9		Trocars 1.6/100	40.8150.000	1
10		Quick coupling handle 1/4"	40.6659.000	1
11		Holder for 4.5 screws	40.8153.000	1
12		Guide rod 1.6/225	40.8155.225	2
13		Guide rod 1.6/225	40.8155.525	2
14		Tray for instrument set for 4.5 compression screws 5x4 1/2H	14.0101.210	1
15		Container lid 9x4	14.0000.101	1
16		Container 9x4 1/2H	14.0000.002	1

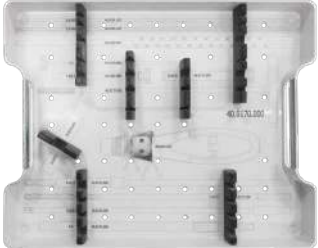
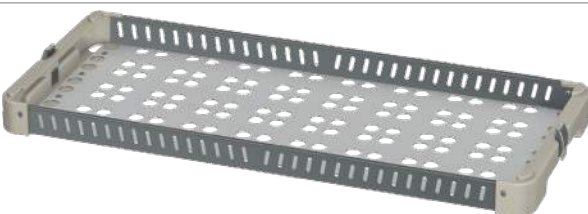
Modular set - compression screws 4.5 5x4 1/2 H



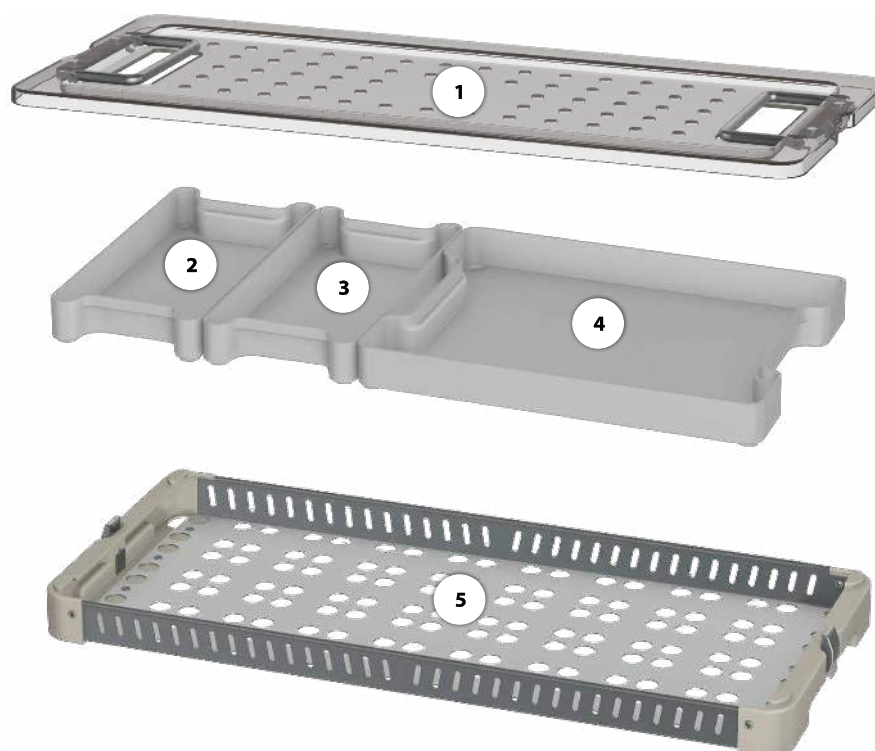
No.	Name	Cat. No.	Pcs
1	Container lid 9x4	14.0000.101	1
2	Tray for 4.5 compression screws 4x2 1/2H	14.0101.412	1
3	Tray for 4.5 compression screws 4x2 1/2H	14.0101.413	1
4	Tray for instrument set for 4.5 compression screws 5x4 1/2H	14.0101.210	1
5	Container 9x4 1/2H	14.0000.002	1

Instrument set for 6.5 compression screws 5x4 1/2H

15.0101.220

No.		Name	Catalogue no.	Pcs
1		Cannulated drill 5.0/2.5/250	40.8172.250	2
2		Cannulated tap 6.5/2.5/225	40.8179.000	1
3		Cannulated screwdriver tip T25/2.5/250	40.8174.000	1
4		Cannulated drill with limiter 6.0/2.5/250	40.8173.000	1
5		Hole depth measure	40.8180.000	1
6		Guide 12.0/8.5	40.8176.000	1
7		Guide sleeve 8.5/5.0	40.8177.000	1
8		Guide sleeve 5.0/2.5	40.8182.000	1
9		Trocar 2.5/100	40.8178.000	1
10		Quick coupling handle 1/4"	40.6659.000	1
11		Holder for 6.5 screws	40.8175.000	1
12		Guide rod 2.5/265	40.8181.265	2
13		Guide rod 2.5/265	40.8181.575	1
14		Tray for instrument set for 6.5 compression screws 5x4 1/2H	14.0101.220	1
15		Container lid 9x4	14.0000.101	1
16		Container 9x4 1/2H	14.0000.002	1

Modular set - compression screws 6,5 5x4 1/2 H



No.	Name	Cat. No.	Pcs
1	Container lid 9x4	14.0000.101	1
2	Tray for 6.5 compression screws 4x2 1/2H	14.0101.422	1
3	Tray for 6.5 compression screws 4x2 1/2H	14.0101.423	1
4	Tray for instrument set for 6.5 compression screws 5x4 1/2H	14.0101.220	1
5	Container 9x4 1/2H	14.0000.002	1

IV. SURGICAL TECHNIQUE

The surgical technique used depends on the type of fracture, its location and size of the selected compression screw. The surgeon plans and chooses the surgical technique.

V. FRAGMENTS COMPRESSION

V.1. COMPRESSION OF THE FRAGMENTS USING CANNULATED COMPRESSION SCREWS 4.5 AND 6.5

Cannulated compression screws:

- system 4.5 - Ø4.5/Ø5.0 [1.1980.xxx / 3.1980.xxx]
[1.1981.xxx / 3.1981.xxx]
- system 6.5 - Ø6.5/Ø7.5 [1.1982.xxx / 3.1982.xxx]
[1.1983.xxx / 3.1983.xxx]

1

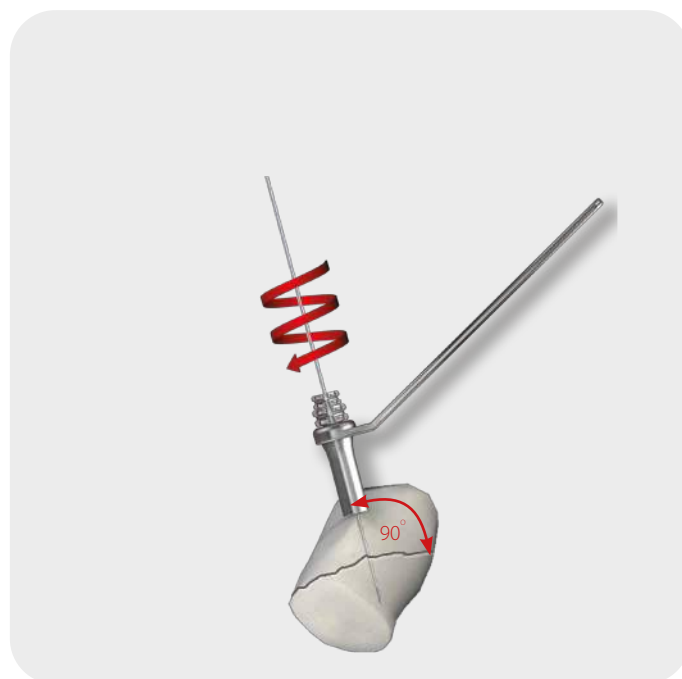
Introduce the guide rod.

System 4.5

No.	Instrument	Cat. No.
1	Guide rod 1.6/225	40.8155.225
2	Trocar 1.6/100	40.8150.000
3	Guide sleeve 3.2/1.6	40.8149.000
4	Guide sleeve 7.0/3.2	40.8148.000
5	Guide 9.5/7.0	40.8147.000

System 6.5

No.	Instrument	Cat. No.
1	Guide rod 2.5/265	40.8181.265
2	Trocar 2.5/100	40.8178.000
3	Guide sleeve 5.0/2.5	40.8182.000
4	Guide sleeve 8.5/5.0	40.8177.000
5	Guide 12.0/8.5	40.8176.000



2

Determine the length of the screw.

System 4.5

No.	Instrument	Cat. No.
1	Hole depth measure	40.8146.000
2	Guide 9.5/7.0	40.8147.000

System 6.5

No.	Instrument	Cat. No.
1	Hole depth measure	40.8180.000
2	Guide 12.0/8.5	40.8176.000

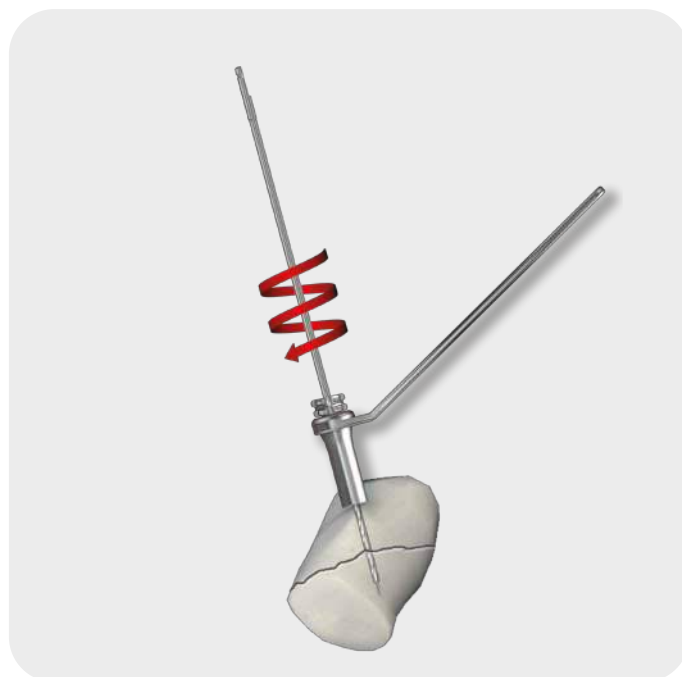


3

Drill a hole.

System 4.5		
No.	Instrument	Cat. No.
1	Cannulated drill 3.2/1.6/225	40.8142.225
2	Guide sleeve 7.0/3.2	40.8148.000
3	Guide 9.5/7.0	40.8147.000
option		
1	Cannulated tap 4.5/1.6	40.8143.000

System 6.5		
No.	Instrument	Cat. No.
1	Cannulated drill 5.0/2.5/250	40.8172.250
2	Guide sleeve 8.5/5.0	40.8177.000
3	Guide 12.0/8.5	40.8176.000
option		
1	Cannulated tap 6.5/2.5/225	40.8179.000



4

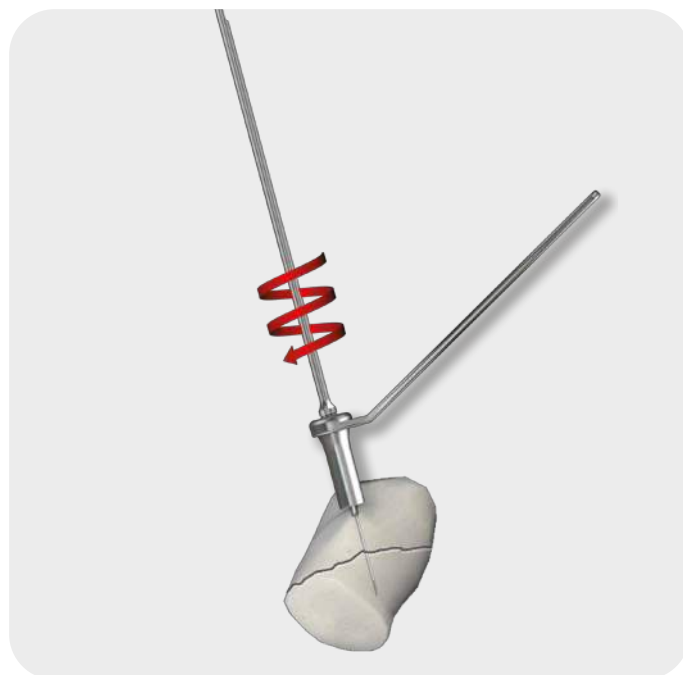
Ream the cortex.

System 4.5

No.	Instrument	Cat. No.
1	Cannulated drill with limiter 4.0/1.6/225	40.8145.225
2	Guide 9.5/7.0	40.8147.000

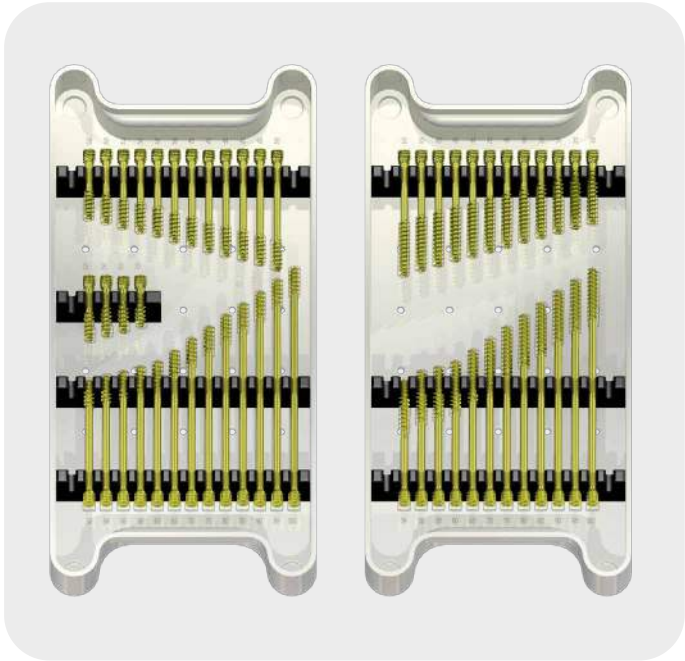
System 6.5

No.	Instrument	Cat. No.
1	Cannulated drill with limiter 6.0/2.5/250	40.8173.000
2	Guide 12.0/8.5	40.8176.000

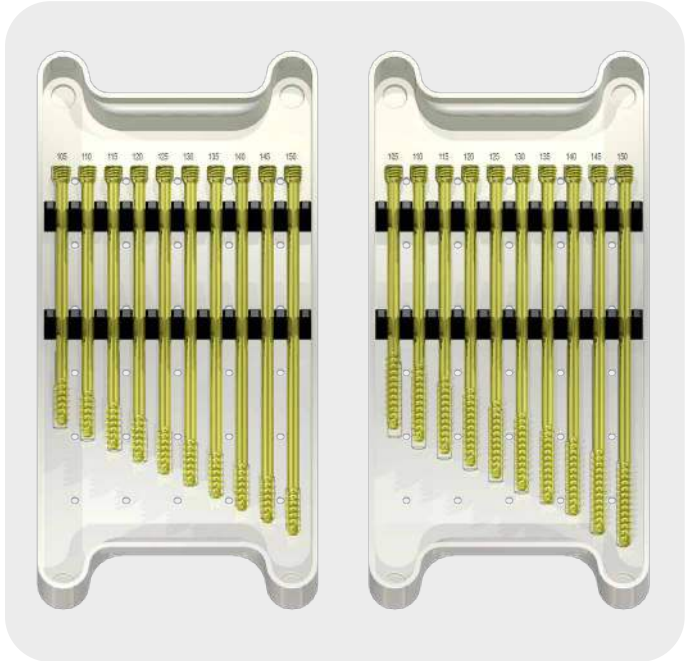


5 Grasp the screw.

System 4.5		
No.	Instrument	Cat. No.
1	Holder for 4.5 screws	40.8153.000



System 6.5		
No.	Instrument	Cat. No.
11	Holder for 6.5 screws	40.8175.000



6

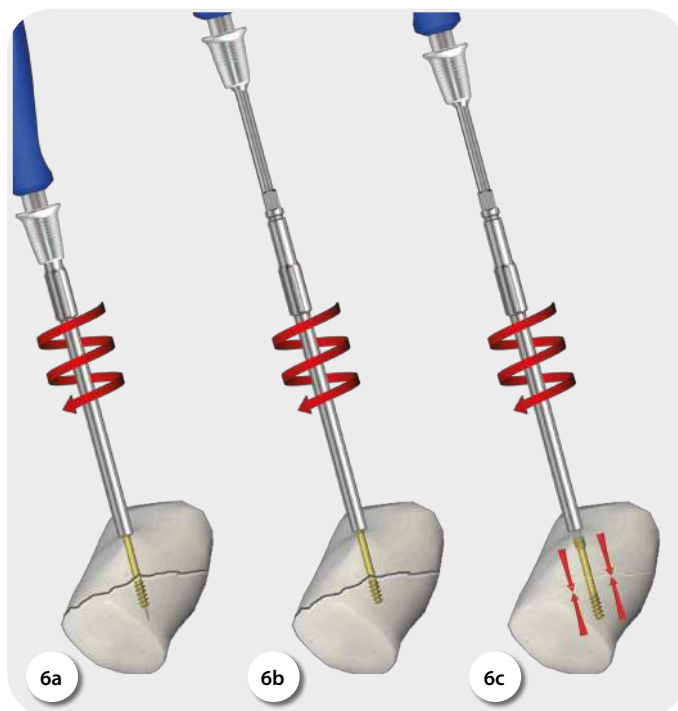
Compress the fragments.

System 4.5

No.	Instrument	Cat. No.
1	Holder for 4.5 screws	40.8153.000
2	Cannulated screwdriver tip T15/1.6/225	40.8144.000
3	Quick coupling handle 1/4"	40.6659.000

System 6.5

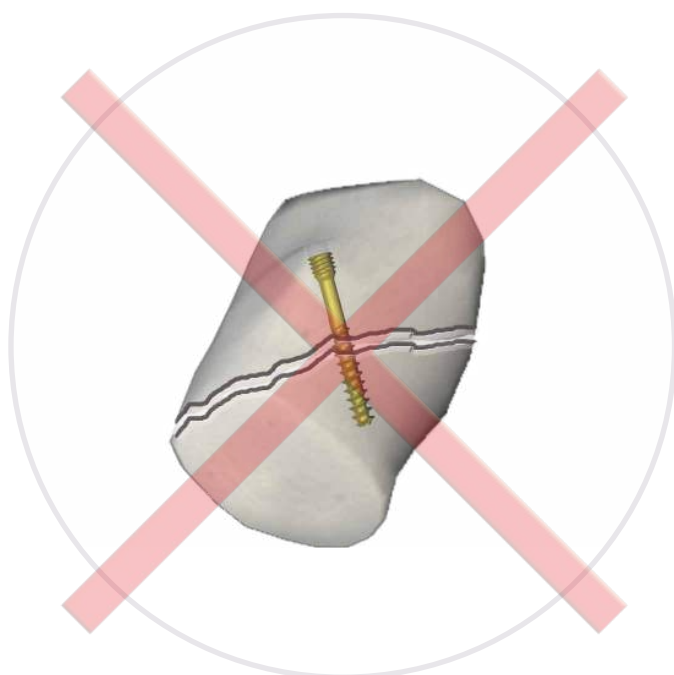
No.	Instrument	Cat. No.
1	Holder for 6.5 screws	40.8175.000
2	Cannulated screwdriver tip T25/2.5/250	40.8174.000
3	Quick coupling handle 1/4"	40.6659.000



6a

6b

6c



Incorrect fixation



Correct fixation

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