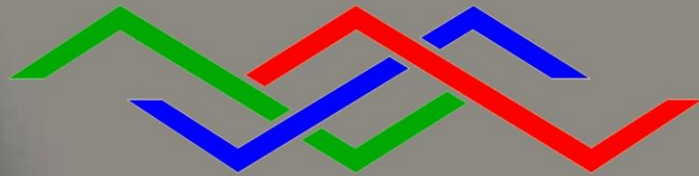


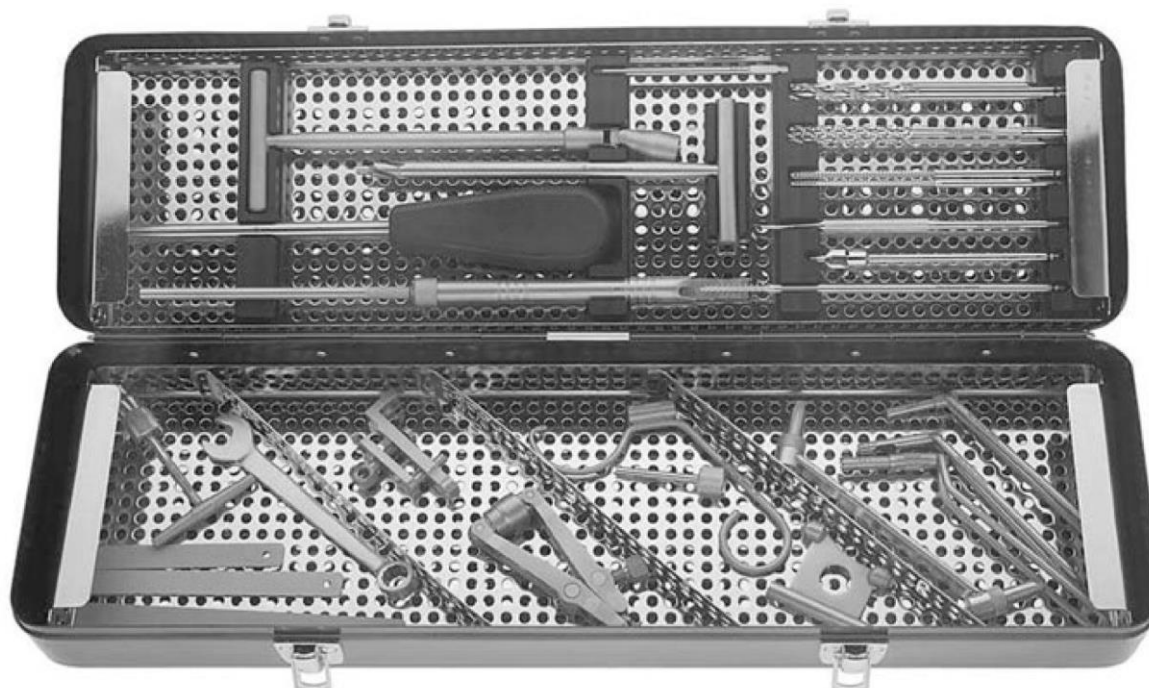
TRIPLE HELIX



SOLUTIONS



Basic Instrument Set for Screws and Plates



T 300	Basic Instrument Set for Screws and Plates for 4.5 mm and 6.5 mm diameter screws	
19E-286.03	Implant-Container, red, 500 x 155 x 75 mm	
T 301	Upper Tray	
T 402	Lower Case	
9-020	Drill Bit, $\varnothing$ 3.2 mm, with end to fit quick coupling of small air drill	3 ea.
9-026	Drill Bit, $\varnothing$ 4.5 mm, with end to fit quick coupling of small air drill	2 ea.
9-104	Malleolar Countersink, $\varnothing$ 3.2 mm tip, for malleolar screws	
9-092	Tap Handle for $\varnothing$ 4.5 mm and $\varnothing$ 6.5 mm taps and Countersink	
9-078	Tap, $\varnothing$ 4.5 mm	2 ea.
9-079	Tap, $\varnothing$ 6.5 mm	
9-256	Tap Sleeve, $\varnothing$ 3.5 mm (also for use as $\varnothing$ 3.2 mm drill guide)	
9-280	Insert Drill Sleeve, 4.5 mm / 3.2 mm, 58 mm length	
9-260	Tap Sleeve, $\varnothing$ 4.5 mm (also for use as $\varnothing$ 4.5 mm drill guide)	
9-258	Pointed Drill Guide	
9-144	Hexagonal Screwdriver, width across flats 3.5 mm	
9-176	Hexagonal Screwdriver for quick coupling, width across flats 3.5 mm	
9-114	Depth Gauge for 4.5 mm and 6.5 mm screws	
9-116	Sharp Hook	
9-430	Drill Sleeve for tension device	
9-262	Drill Sleeve for plates, 40 mm length, for round-hole plates	
9-436	Tension Device, 8 mm span	
9-440	Articulated Tension Device with gauge, 20 mm span	
9-432	Socket Wrench, width across flats 11 mm	
9-438	Combination Wrench, width across flats 11 mm	
9-272	Neutral and Load Drill Guide, $\varnothing$ 4.5 mm	
3-070	Bending Template, 5 holes	
3-071	Bending Template, 7 holes	
3-072	Bending Template, 9 holes	
9-106	Countersink $\varnothing$ 4.5 mm	

Standard Contents:

Instruments for 4.5 mm Cortex and 6.5 mm Cancellous Bone Screws



- 9-020** Drill Bits with end to fit quick coupling ø 3.2 mm
- 9-026** Drill Bits with end to fit quick coupling ø 4.5 mm



- 9-079** Tap, ø 6.5 mm



- 9-078** Tap, ø 4.5 mm



- 9-256** Tap Sleeve, ø 3.5 mm
also for use as ø 3.2 mm Drill Guide



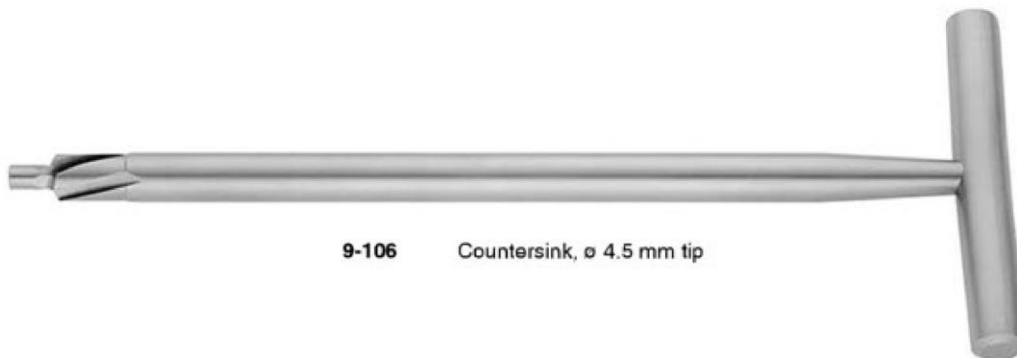
- 9-260** Tap Sleeve ø 4.5 mm



- 9-262** Drill Sleeve for Round Hole Plates



9-092 Tap Handle



9-106 Countersink, $\varnothing$ 4.5 mm tip



9-272 Neutral and Load Drill Guide $\varnothing$ 3.2 mm



9-280 Insert Drill Sleeve 4.5 mm / 3.2 mm
for 3.2 mm $\varnothing$ Drill Bit



9-258 Pointed Drill Guide



9-432 Socket Wrench, width across flats 11 mm



9-104 Malleolar Countersink



9-144 Hexagonal Screwdriver, width across flats 3.5 mm



9-176 Hexagonal Screwdriver for quick coupling width across flats 3.5 mm



9-430 Drill Sleeve for Tension Device



9-438 Combination Wrench width across flats 11 mm



9-114 Depth Gauge for 4.5 mm and 6.5 mm ø screws



9-116 Sharp Hook



4-184 Screw Forceps



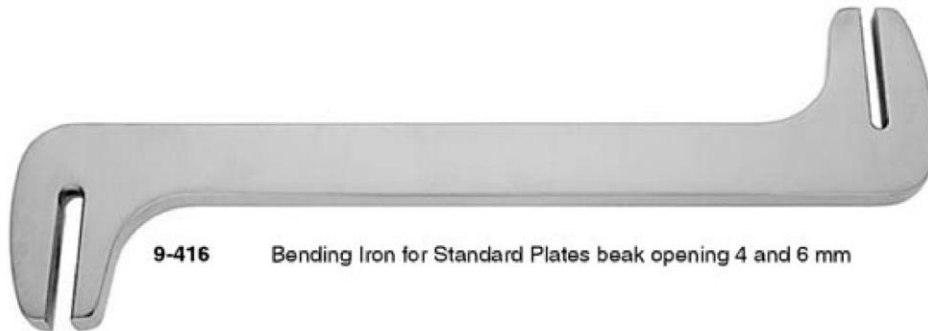
3-070 Bending Template 5 holes
3-071 Bending Template 7 holes
3-072 Bending Template 9 holes



9-436 8 mm screw-type
Compression Device



9-440 Articulated Tension Device with Indicator, span 20 mm
May also be used for distraction of standard and small plates



9-416 Bending Iron for Standard Plates beak opening 4 and 6 mm



9-442 Pin Wrench for Tension Device and Distractor



16E-585.42 Plat Bending Apparatus, 42,0 cm

Screw Set



T 306	Screw Set	
19E-286.03	Implant-Container, red, 500 x 155 x 75 mm	
T 307	Tray (aluminium)	
T 308	Tray (plastic)	
	4.5 mm Cortex Screws	pieces
3-200-	14 mm 7 units: 16 / 18 / 20 / 22 / 24 / 26 / 28 mm, 8 units each:	
3-250	30 mm, 16 units: 32 / 34 / 36 / 38 / 40 / 44 mm 12 units each:	
	42 / 46 / 48 / 52 / 56 mm, 6 units each: 60 mm, 5 units:	
	64 / 70 mm, 4 units each	194
	4.5 mm Malleolar Screws	
3-352-	25 / 30 / 35 / 40 / 45 / 50 / 55 / 60 mm, 2 units each	
3-370	65 / 70 mm, 3 units each	22
	6.5 mm Cancellous Bone Screws, 16 mm thread length	
3-382-	30 / 35 / 40 / 45 / 50 / 55 / 60, 2 units each	
3-414	65 / 70 / 75 / 80 / 85 / 90 / 95 / 100 / 105 / 110 mm, 3 units each:	44
	6.5 mm Cancellous Bone Screws, 32 mm thread length	
3-436-	45 / 50 / 55 / 60 mm, 4 units each:	
3-454	65 / 70 / 80 / 90 mm, 3 units each	28
	6.5 mm Cancellous Bone Screws, fully threaded	
3-480	25 mm, 6 units	6
3-482-	30 / 35 / 40 mm, 4 units each:	12
3-486		
4-184	Screw Forceps	1
3-522	Washer for 6.5 mm Cancellous Bone Screw	6

Bone Screws

Large Screws with large hexagonal flats 3.5 mm



Washers

3-520

11 mm

3-522

13 mm

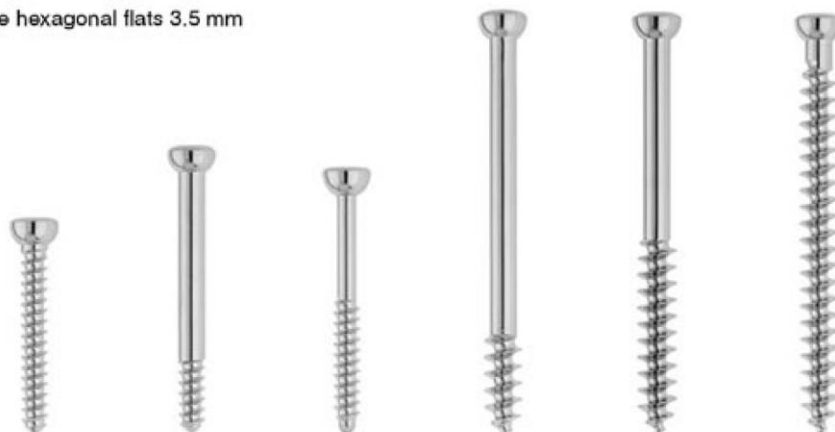


SW 8 mm

3-524

Nut for 4.5 mm

Cortex Screws



Dia of thread	4.5 mm	4.5 mm	4.5 mm	6.5 mm	6.5 mm	6.5 mm
Dia of core	3.0 mm	3.1 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm
Dia of shaft		4.5 mm	3.0 mm	4.5 mm	4.5 mm	
Dia of head	8.0 mm	8.0 mm	8.0 mm	8.0 mm	8.0 mm	8.0 mm
Length						
14 mm	3-200					
16 mm	3-202					
18 mm	3-204					
20 mm	3-206		3-350			
22 mm	3-208	3-280				
24 mm	3-210	3-282				
25 mm			3-352			3-480
26 mm	3-212	3-284				
28 mm	3-214	3-286				
30 mm	3-216	3-288	3-354	3-382		3-482
32 mm	3-218	3-290				
34 mm	3-220	3-292				
35 mm			3-356	3-384		3-484
36 mm	3-222	3-294				
38 mm	3-224	3-296				
40 mm	3-226	3-298	3-358	3-386	3-434	3-486
42 mm	3-228	3-300				
44 mm	3-230	3-302				
45 mm			3-360	3-388	3-436	3-488
46 mm	3-232	3-304				
48 mm	3-234	3-306				
50 mm	3-236	3-308	3-362	3-390	3-438	3-490
52 mm	3-238	3-310				
54 mm	3-240	3-312				
55 mm			3-364	3-392	3-440	3-492
56 mm	3-242	3-314				
58 mm	3-244	3-316				
60 mm	3-246	3-318	3-366	3-394	3-442	3-494
65 mm	3-248	3-320	3-368	3-396	3-444	3-496
70 mm	3-250	3-322	3-370	3-398	3-446	3-498
75 mm	3-254	3-324	3-371	3-400	3-448	3-500
80 mm	3-260	3-326	3-372	3-402	3-450	3-502
85 mm	3-262	3-328		3-404	3-452	3-504
90 mm	3-264	3-330		3-406	3-454	3-506
95 mm	3-266	3-332		3-408	3-456	3-508
100 mm	3-268	3-334		3-410	3-458	3-510
105 mm	3-269	3-336		3-412	3-460	3-512
110 mm	3-270	3-338		3-414	3-462	3-514
115 mm	3-271			3-415	3-464	3-516
120 mm	3-272			3-416	3-466	3-518

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Bone Screws

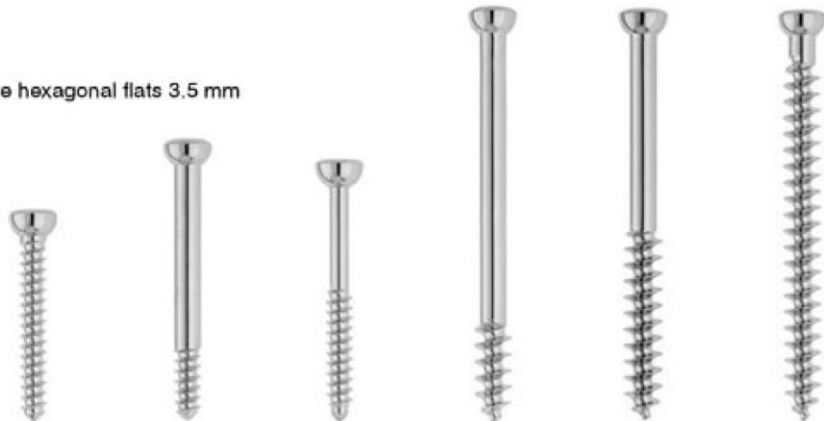
Large Screws with large hexagonal flats 3.5 mm



Washers
3-5200 11 mm
3-5220 13 mm



SW 8 mm
3-5240
Nut for 4.5 mm
Cortex Screws



Dia of thread	4.5 mm	4.5 mm	4.5 mm	6.5 mm	6.5 mm	6.5 mm
Dia of core	3.0 mm	3.1 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm
Dia of shaft		4.5 mm	3.0 mm	4.5 mm	4.5 mm	
Dia of head	8.0 mm	8.0 mm	8.0 mm	8.0 mm	8.0 mm	8.0 mm
Length						
14 mm	3-20000					
16 mm	3-20200					
18 mm	3-20400					
20 mm	3-20600		3-35000			
22 mm	3-20800	3-28000				
24 mm	3-21000	3-28200				
25 mm			3-35200			3-48000
26 mm	3-21200	3-28400				
28 mm	3-21400	3-28600				
30 mm	3-21600	3-28800	3-35400	3-38200		3-48200
32 mm	3-21800	3-29000				
34 mm	3-22000	3-29200				
35 mm			3-35600	3-38400		3-48400
36 mm	3-22200	3-29400				
38 mm	3-22400	3-29600				
40 mm	3-22600	3-29800	3-35800	3-38600	3-43400	3-48600
42 mm	3-22800	3-30000				
44 mm	3-23000	3-30200				
45 mm			3-36000	3-38800	3-43600	3-48800
46 mm	3-23200	3-30400				
48 mm	3-23400	3-30600				
50 mm	3-23600	3-30800	3-36200	3-39000	3-43800	3-49000
52 mm	3-23800	3-31000				
54 mm	3-24000	3-31200				
55 mm			3-36400	3-39200	3-44000	3-49200
56 mm	3-24200	3-31400				
58 mm	3-24400	3-31600				
60 mm	3-24600	3-31800	3-36600	3-39400	3-44200	3-49400
65 mm	3-24800	3-32000	3-36800	3-39600	3-44400	3-49600
70 mm	3-25000	3-32200	3-37000	3-39800	3-44600	3-49800
75 mm	3-25400	3-32400	3-37100	3-40000	3-44800	3-50000
80 mm	3-26000	3-32600	3-37200	3-40200	3-45000	3-50200
85 mm	3-26200	3-32800		3-40400	3-45200	3-50400
90 mm	3-26400	3-33000		3-40600	3-45400	3-50600
95 mm	3-26600	3-33200		3-40800	3-45600	3-50800
100 mm	3-26800	3-33400		3-41000	3-45800	3-51000
105 mm	3-26900	3-33600		3-41200	3-46000	3-51200
110 mm	3-27000	3-33800		3-41400	3-46200	3-51400
115 mm	3-27100			3-41500	3-46400	3-51600
120 mm	3-27200			3-41600	3-46600	3-51800

Bone Screws, self tapping



self cutting screws, tapping not needed

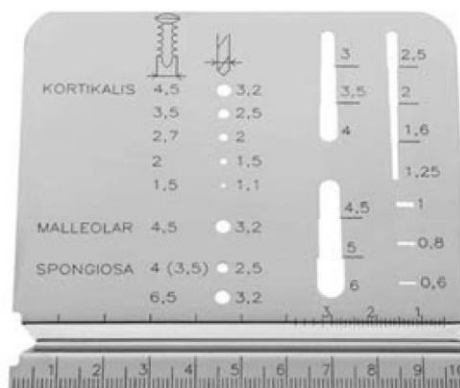
Dia of thread	4.5 mm	4.5 mm
Dia of core	3.0 mm	
Dia of shaft		4.5 mm
Dia of head	8.0 mm	8.0 mm
Length		
14 mm	3-1200	
16 mm	3-1202	
18 mm	3-1204	
20 mm	3-1206	
22 mm	3-1208	3-1280
24 mm	3-1210	3-1282
25 mm		
26 mm	3-1212	3-1284
28 mm	3-1214	3-1286
30 mm	3-1216	3-1288
32 mm	3-1218	3-1290
34 mm	3-1220	3-1292
35 mm		
36 mm	3-1222	3-1294
38 mm	3-1224	3-1296
40 mm	3-1226	3-1298
42 mm	3-1228	3-1300
44 mm	3-1230	3-1302
45 mm		
46 mm	3-1232	3-1304
48 mm	3-1234	3-1306
50 mm	3-1236	3-1308
52 mm	3-1238	3-1310
54 mm	3-1240	3-1312
55 mm		
56 mm	3-1242	3-1314
58 mm	3-1244	3-1316
60 mm	3-1246	3-1318
65 mm	3-1248	3-1320
70 mm	3-1250	3-1322
75 mm	3-1252	3-1324
80 mm	3-1254	3-1326
85 mm	3-1256	3-1328
90 mm	3-1258	3-1330
95 mm	3-1260	3-1332
100 mm	3-1262	3-1334
105 mm	3-1264	3-1336
110 mm	3-1266	3-1338



19E285.03 Implant-Container, red, 300 x 138 x 65 mm



- T 310** Rack for $\varnothing$ 1.5 mm screws
- T 311** Rack for $\varnothing$ 2.0 mm screws
- T 312** Rack for $\varnothing$ 2.7 mm screws
- T 313** Rack for $\varnothing$ 3.5 mm 1.25 pitch screws
- T 314** Rack for $\varnothing$ 3.5 mm 1.75 pitch screws
- T 315** Rack for $\varnothing$ 4.0 mm screws (half threaded)
- T 316** Rack for $\varnothing$ 4.0 mm screws (full threaded)
- T 317** Rack for $\varnothing$ 4.5 mm screws



3-530 Measuring Gauge for Screws

Plate Set



T 320	Plate Set Broad and Narrow Compression Plates for 4.5 mm and 6.5 mm diameter screws	
19E-285.02	Implant-Container, gold, 300 x 138 x 65 mm	
T 322	Trays for plates (3)	
	Semi-tubular Plates	
3-674-	2 ea: with 4, 5 and 6 holes	7 units
3-680	1 ea: with 7 holes	
	Narrow Dynamic Compression Plates	
3-604-	2 ea: with 4, 5, 7, 8 and 9 holes	
3-620	4 ea: with 6 holes	16 units
	1 ea: with 10 and 12 holes	
	Broad Dynamic Compression Plates	
3-640-	2 ea: with 6, 7 and 8 holes	10 units
3-656	1 ea: with 9, 10, 12 and 14 holes	
	Spoon Plates	
3-692-	1 ea: with 5 and 6 holes in shaft	2 units
3-694		
	T-Plates	
3-702-	1 ea: with 4, 6 and 8 holes in shaft	3 units
3-708		
3-714	T-Buttress Plate, 4 holes in shaft	
3-720	L-Buttress Plate, 4 holes in shaft, angled left	
3-722	L-Buttress Plate, 4 holes in shaft, angled right	
4-184	Screw Forceps	

Narrow Compression Plates



Profile: 12 x 3.8 mm
Distance between holes: 16 and 25 mm

	Length	Holes		Length	Holes
3-600	39 mm	2	3-616	167 mm	10
3-602	55 mm	3	3-618	183 mm	11
3-604	71 mm	4	3-620	199 mm	12
3-606	87 mm	5	3-622	215 mm	13
3-608	103 mm	6	3-624	231 mm	14
3-610	119 mm	7	3-626	247 mm	15
3-612	135 mm	8	3-628	263 mm	16
3-614	151 mm	9			

Broad Compression Plates



Profile: 16 x 4.8 mm
Distance between holes: 16 and 25 mm

	Length	Holes		Length	Holes
3-640	103 mm	6	3-654	215 mm	13
3-642	119 mm	7	3-656	231 mm	14
3-644	135 mm	8	3-658	247 mm	15
3-646	151 mm	9	3-660	263 mm	16
3-648	167 mm	10	3-662	279 mm	17
3-650	183 mm	11	3-664	295 mm	18
3-652	199 mm	12			

Semi-Tubular Plates



Profile: 12 x 1 mm
Distance between holes: 16 and 26 mm

	Length	Holes		Length	Holes
3-670	39 mm	2	3-680	119 mm	7
3-672	55 mm	3	3-682	135 mm	8
3-674	71 mm	4	3-684	151 mm	9
3-676	87 mm	5	3-686	167 mm	10
3-678	103 mm	6	3-688	183 mm	11
			3-690	199 mm	12



Spoon-Plates for Tibial-proximal
(shaft with V-profile for fixation
edge of tibia on frontal) for Left and Right

- 3-692** Shaft with 5 holes, 100 mm long
3-694 Shaft with 6 holes, 120 mm long



T-Plates for Tibial and Humeral
Head fractures, proximal - medial
for Left and Right

- 3-700** Shaft with 3 holes, 68 mm long
3-702 Shaft with 4 holes, 84 mm long
3-704 Shaft with 5 holes, 100 mm long
3-706 Shaft with 6 holes, 116 mm long
3-708 Shaft with 8 holes, 148 mm long



T-Buttress Plates for Tibial
Head fractures, proximal-lateral
for Left and Right

- 3-714** 4 holes
3-716 5 holes
3-718 6 holes



T-Buttress Plates for Tibial Head fractures,
proximal-lateral (Left and Right Plates)

- 3-720** 4 holes left
3-722 4 holes right
3-724 6 holes left
3-726 6 holes right
3-728 8 holes left
3-730 8 holes right

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Spoon-Plates for Tibial-proximal
(shaft with V-profile for fixation
edge of tibia on frontal) for Left and Right

- 3-6920** Shaft with 5 holes, 100 mm long
3-6940 Shaft with 6 holes, 120 mm long



T-Plates for Tibial and Humeral
Head fractures, proximal - medial
for Left and Right

- 3-7000** Shaft with 3 holes, 68 mm long
3-7020 Shaft with 4 holes, 84 mm long
3-7040 Shaft with 5 holes, 100 mm long
3-7060 Shaft with 6 holes, 116 mm long
3-7080 Shaft with 8 holes, 148 mm long



T-Buttress Plates for Tibial
Head fractures, proximal-lateral
for Left and Right

- 3-7140** 4 holes
3-7160 5 holes
3-7180 6 holes



T-Buttress Plates for Tibial Head fractures,
proximal-lateral (Left and Right Plates)

- 3-7200** 4 holes left
3-7220 4 holes right
3-7240 6 holes left
3-7260 6 holes right
3-7280 8 holes left
3-7300 8 holes right

Straight Plates



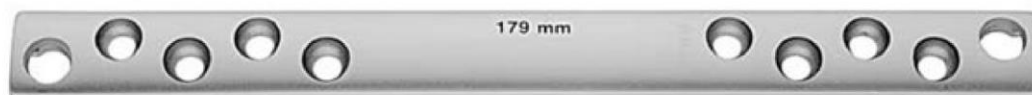
Broad Lengthening Plates with 8 holes

	Amount of lengthening	Length
3-750	30 mm	135 mm
3-752	40 mm	145 mm
3-754	50 mm	155 mm
3-756	60 mm	165 mm



Narrow Lengthening Plates with 8 holes

	Amount of lengthening	Length
3-760	30 mm	135 mm
3-762	40 mm	145 mm
3-764	50 mm	155 mm
3-766	60 mm	165 mm
3-768	70 mm	175 mm
3-770	80 mm	185 mm



Broad Lengthening Plates with 10 holes

	Amount of lengthening	Length
3-772	50 mm	179 mm
3-774	60 mm	189 mm
3-776	70 mm	199 mm
3-778	80 mm	209 mm
3-779	90 mm	219 mm
3-780	100 mm	229 mm
3-782	110 mm	239 mm
3-784	120 mm	249 mm

Special Plates



Plates for Distal Femur lateral

For use with 4.5 mm Screws

Condylar Buttress Plates

Primary Indication: As a buttress for femoral condyles with multiple fragments
(Left and Right Plates)

3-800	158 mm	7 left
3-802	158 mm	7 right
3-804	190 mm	9 left
3-806	190 mm	9 right
3-808	221 mm	11 left
3-810	221 mm	11 right
3-812	253 mm	13 left
3-814	253 mm	13 right
3-816	285 mm	15 left
3-818	285 mm	15 right



Cobra Femoral Plates, proximal-lateral for Left and Right
Primary Indication: Hip Arthrodesis

	Length	Holes in shaft
3-820	170 mm	8
3-822	186 mm	9
3-824	202 mm	10
3-826	218 mm	11



Lateral Tibia Plate proximal-lateral
(Left and Right Plates)

3-830	5 Holes	right
3-831	5 Holes	left
3-832	7 Holes	right
3-833	7 Holes	left
3-834	9 Holes	right
3-835	9 Holes	left
3-836	11 Holes	right
3-837	11 Holes	left
3-838	13 Holes	right
3-839	13 Holes	left

Anatomical Bone Plates



Tibial Plate, distal-medial
(Left and Right Plates)
width of shaft: 16 mm
width of head: 22 mm

3-850	122 mm	7 right
3-852	122 mm	7 left
3-854	158 mm	9 right
3-856	158 mm	9 left
3-858	194 mm	11 right
3-860	194 mm	11 left
3-862	230 mm	13 right
3-866	230 mm	13 left



Tibial Plates, proximal-lateral
(Left and Right Plates)
width of shaft: 16 mm
width of head: 22 mm

3-870	122 mm	7 right
3-872	122 mm	7 left
3-874	158 mm	9 right
3-876	158 mm	9 left
3-878	194 mm	11 right
3-880	194 mm	11 left
3-882	230 mm	13 right
3-884	230 mm	13 left



Anatomical Bone Plates



Femoral Plates, distal-lateral
(Left and Right Plates)
width of shaft: 16 mm
width of head: 22 mm

3-886	122 mm	7 right
3-888	122 mm	7 left
3-890	158 mm	9 right
3-892	158 mm	9 left
3-894	194 mm	11 right
3-896	194 mm	11 left
3-898	230 mm	13 right
3-900	230 mm	13 left



Tibial Plates for Fibulae, distal-lateral
(Left and Right Plates)
width of shaft: 16 mm
width of head: 22 mm

3-902	122 mm	7 right
3-904	122 mm	7 left
3-906	158 mm	9 right
3-908	158 mm	9 left
3-910	194 mm	11 right
3-912	194 mm	11 left
3-914	230 mm	13 right
3-916	230 mm	13 left



Kerboul Plates



Tibia Plates
(Left and Right Plates)

3-930	81 mm	7 right
3-932	81 mm	7 left
3-934	101 mm	9 right
3-936	101 mm	9 left
3-938	121 mm	11 right
3-940	121 mm	11 left



Radius Plates

3-944	2 Holes
3-946	3 Holes
3-948	4 Holes



Proximal Humerus Plates
Screw to be used: $\varnothing$ 3.5 mm and 6.5 mm

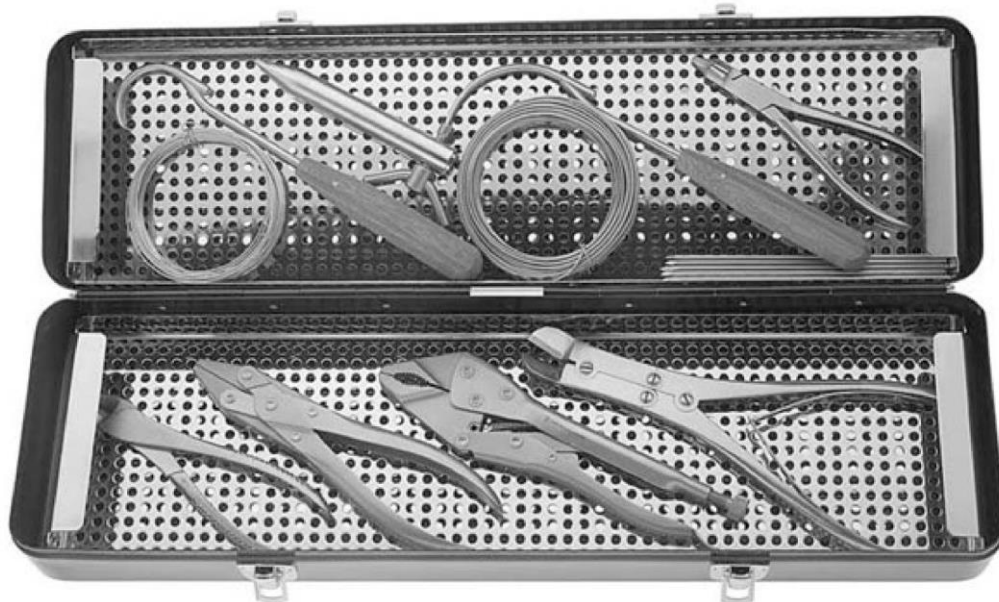
3-960	3 Holes	84 mm
3-962	5 Holes	124 mm
3-964	8 Holes	183 mm



Humeral Epicondylar Plates
(Left and Right Plates)
Screw to be used: $\varnothing$ 3.5 mm and 4.0 mm

3-968	100 mm	7 right
3-970	100 mm	7 left
3-972	140 mm	9 right
3-974	140 mm	9 left
3-976	160 mm	11 right
3-978	160 mm	11 left
3-980	160 mm	13 right
3-982	160 mm	13 left

Wire Instrument Set



T 700	Wire Instrument Set	
19E-286.03	Implant-Container, red, 500 x 155 x 75 mm	
T 112	Upper Tray	
T 112	Lower Tray	
	Instruments	
	Tray (lower)	
7-416	Forceps for holding cerclage wire	2 units
7-418	Wire Bending-Cutting Pliers	
16E-500.19	Flat-Nosed Pliers, parallel, 18,5 cm	
16E-505.18	Locking Pliers, 18,0 cm	
7-414	Wire Cutter, small	
16E-525.22	Wire Cutting Pliers, TC, 22,0 cm	
	Instruments	
	Tray (upper)	
7-375	Wire Guide 45 mm	
7-377	Wire Guide 70 mm	
7-378	Wire Tightener	
7-022	Cerclage Wires with eye, 1.0 mm ø, 280 mm long	10 units
7-023	Cerclage Wires with eye, 1.2 mm ø, 280 mm long	20 units
7-010	Wire Coil, 1.0 mm ø, length 10 metres	1 units
7-012	Wire Coil, 1.2 mm ø, length 10 metres	1 units
7-252-7-270	1.0 / 1.2 / 2.0 / 2.5 / 3.0 mm ø, 10 each Kirschner	50 units
7-260	1.6 mm ø Kirschner Wire	20 units



Cerclage Wire soft,
in coils of 10 m

ø mm	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.5
Gauge	31	29	27	25	23	22	21	20	19	18	17
Cat. No.:	7-002	7-003	7-004	7-005	7-006	7-007	7-008	7-009	7-010	7-012	7-015



Cerclage Wires
with eye, soft

	Diameter	Length
7-020	0.8 mm	280 mm
7-022	1.0 mm	280 mm
7-023	1.2 mm	280 mm
7-024	1.0 mm	600 mm
7-025	1.2 mm	600 mm



7-380 Wire Tightener



7-030 Parham Martin Band Tightener



7-032 Parham Metal Bone Bands 19 cm x 0.5 mm

Kirschner Wires



Point	Trocar	Trocar
Shaft End	round	Trocar
Length	310 mm	310 mm
ø 1.0 mm	7-120	7-140
ø 1.2 mm	7-121	7-141
ø 1.4 mm	7-122	7-142
ø 1.5 mm	7-123	7-143
ø 1.6 mm	7-124	7-144
ø 1.8 mm	7-126	7-145
ø 2.0 mm	7-127	7-146
ø 2.2 mm	7-128	7-147
ø 2.5 mm	7-129	7-148
ø 3.0 mm	7-130	

Point	Trocar	Trocar	Trocar
Shaft End	round	round	Trocar
Length	70 mm	150 mm	150 mm
ø 0.8 mm	7-200	7-250	7-280
ø 1.0 mm	7-201	7-252	7-282
ø 1.2 mm		7-254	7-284
ø 1.4 mm		7-256	7-286
ø 1.5 mm	7-208	7-258	7-288
ø 1.6 mm		7-260	7-290
ø 1.8 mm		7-262	7-292
ø 2.0 mm		7-264	7-294
ø 2.2 mm		7-266	7-296
ø 2.5 mm	7-210	7-268	7-298
ø 3.0 mm		7-270	



Kirschner Wires with thread and trocar points, round end

	Diameter	Length	Threaded Length
7-310	1.6 mm	150 mm	5 mm
7-312	1.6 mm	150 mm	15 mm
7-314	2.0 mm	150 mm	15 mm
7-316	2.0 mm	200 mm	15 mm
7-318	2.5 mm	200 mm	15 mm
7-320	2.5 mm	230 mm	20 mm



7-350 Bending Iron
for Kirschner Wires



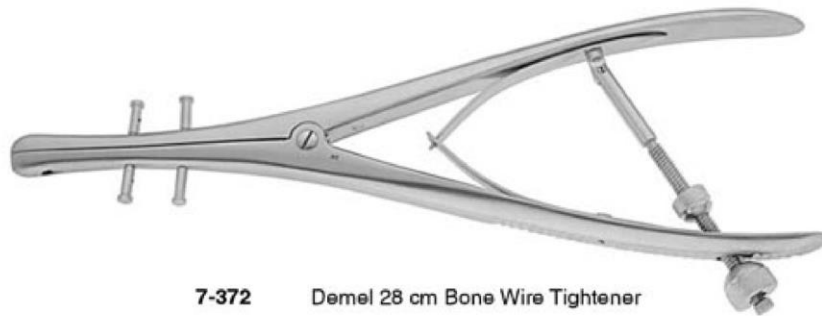
7-353 Pliers with serrated
jaws and groove
7-356 Pliers with serrated
jaws without groove



7-358 Rounded Pliers with
serrated jaws



16E-041 Loute 22 cm Bone Wire Tightener



7-372 Demel 28 cm Bone Wire Tightener



7-375 Wire Guide 45 mm



7-377 Wire Guide 70 mm



7-378 Wire Tightener



7-388 Extraction Pliers for boring wire 130 mm
7-390 Extraction Pliers for boring wire 180 mm



16E-511.02 Flat Nose Pliers, parallel action, 18,0 cm size 2
16E-510.03 Flat Nose Pliers, TC, 18,0 cm, size 3



16E-505.18 Vise Grip 18,0 cm
 Stainless Steel
16E-505.20 Vise Grip 20,0 cm
 Stainless Steel
16E-505.24 Vise Grip 24,0 cm
 Stainless Steel



16E-500.19 Flat-nosed Pliers, parallel, without lateral Wire Cutter, 18,0 cm
 Stainless Steel
16E-501.19 Flat-nosed Pliers, parallel, with lateral Wire Cutter, 18,0 cm
 Stainless Steel

Extraction Instruments



7-404 Extraction Pliers, 190 mm TC



7-406 Extraction Pliers, 200 mm TC

Dolphin Locking Pliers



16E-506.30 30,0 cm



16E-506.25 25,0 cm



16E-506.22 22,0 cm



16E-047
21E-159 Universal Scissors
Universal Scissors
with TC cutting edges



7-414 Wire Cutter



7-416 Wire Tightening Pliers TC



7-418 Wire Bending Pliers
soft wire 1.5 mm
hard wire 1.0 mm



7-420 Wire Bending Cutting
Pliers
soft wire 1.5 mm
hard wire 1.0 mm



7-422 Wire Cutter
soft wire 2.0 mm
hard wire 1.2 mm

Wire Cutters



16E-525.18 TC 18,0 cm
soft wire 2.0 mm
hard wire 1.5 mm



16E-530.18 18,0 cm frontal and lateral
cutting action TC
soft wire 2.0 mm
hard wire 1.5 mm



16E-525.22 Wire Cutter 22,0 cm TC
soft wire 3.0 mm
hard wire 2.5 mm



16E-527.15 Wire Cutter 15,0 cm TC
soft wire 1.5 mm

16E-527.22 Wire Cutter 22,0 cm TC
soft wire 2.5 mm
hard wire 2.2 mm



7-438 Wire Cutter TC 140 mm
soft wire 1.2 mm
hard wire 0.8 mm

Diamond Pin Cutter



16E-524.19 Wire Cutter
cannulated 18,0 cm
soft wire 2.4 mm
hard wire 1.6 mm



7-443 Wire Cutter
Hard Wire 2.0 mm



7-441 Wire Cutter TC
Hard Wire 1.2 mm

Wire Cutters



7-444 Cutter for cutting of Kirschner wires
 Steinmann Pins up to 6 mm ø hard
 540 mm TC

7-446 Cutter for cutting of Kirschner wires
 Steinmann Pins up to 6 mm ø hard
 460 mm TC



7-450 575 mm
 Hard wire 6.0 mm



7-452 260 mm
 Hard wire 3.5 mm

Wire Extension



	Kirscher, American type	
	Size	Max. Jaw Opening
7-460	Medium	130 mm
7-462	Large	185 mm
7-464	Extra Large	220 mm



	Kirscher
7-468	40 x 140 mm
7-470	60 x 220 mm



	Kirschner
7-472	20.0 cm x 15.5 cm
7-474	15.5 cm x 15.5 cm
7-476	13.5 cm x 13.0 cm
7-478	12.0 cm x 12.0 cm
7-480	10.5 cm x 10.0 cm
7-482	9.5 cm x 11.0 cm
7-484	9.5 cm x 7.0 cm



7-490 Wire Strainer for
Kirschner Extension Bow



7-492 Screw Nut Wrench
14 x 17 mm

Wire Extension



	Inside Length	Inside Width
7-496	90 mm	75 mm
7-498	160 mm	90 mm
7-500	210 mm	110 mm
7-502	210 mm	150 mm

7-520 Hexagonal Wrench for Tibia Bolt



7-524 Tibia Bolt $\varnothing$ 2.4 mm, 180 mm length
7-526 Tibia Bolt $\varnothing$ 3.2 mm, 180 mm length



7-530 Charnley-Mueller
Compression Clamp



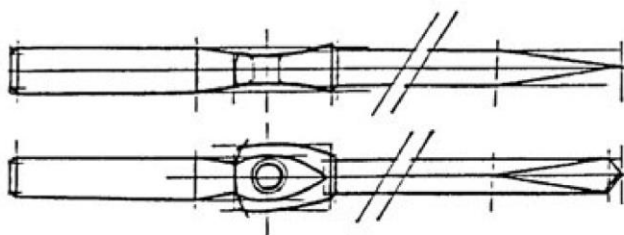
7-540	Larsen Pin Dia. 1.6 mm x Length 60 mm
7-541	Larsen Pin Dia. 1.6 mm x Length 80 mm
7-542	Larsen Pin Dia. 1.6 mm x Length 100 mm
7-543	Larsen Pin Dia. 1.6 mm x Length 120 mm

The Larsen Pin

A non-sliding device for Tension Absorbing Wire (TAW) technique

FEATURES

The stainless steel (W14310 - AISI 302) pin is a high polished 1,6 mm diamond shaped implant, which is available in 4 sizes, 60, 80, 100 and 120 mm of length. The head of the pin is 2,5 mm thick, and the anchoring hole is 1,2 mm to facilitate a 1 mm cerclage wire. The proximal part of the Larsen Pin is prepared for cutting, and fits in conventional as well as mini drivers. This part of the pin is 2 mm thick. No special device or tool is required for the insertion, and a normal wire cutter will suffice for cutting off the pin.



GENERAL OPERATIVE TECHNIQUES

When using tension absorbing wire techniques in connection with this non-sliding pin, the risk of skin problems, sliding off the cerclage wire, pin migration and fragmentation of small bone fragments will be excluded.



TECHNIQUE

The Larsen Pin is designed for the treatment of transverse or oblique fractures of the olecranon and the patella, but is also well suited in all cases where the tension absorbing wire techniques is desirable.



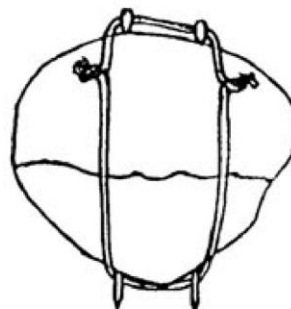
INDICATIONS

The operation technique when using the Larsen Pin is very simple, and in many ways similar to the routine used with conventional Kirschner wires. The fracture and joint is exposed through a postero-lateral approach. The fracture is reduced, and the two Larsen Pins are drilled in parallel to the axis of the diaphyseal part of the ulna. The holes of the pins should at this stage be left 0,5 - 1 cm apart from the olecranon bone. The pins are then positioned with the holes aligned to facilitate the insertion of the cerclage wire.

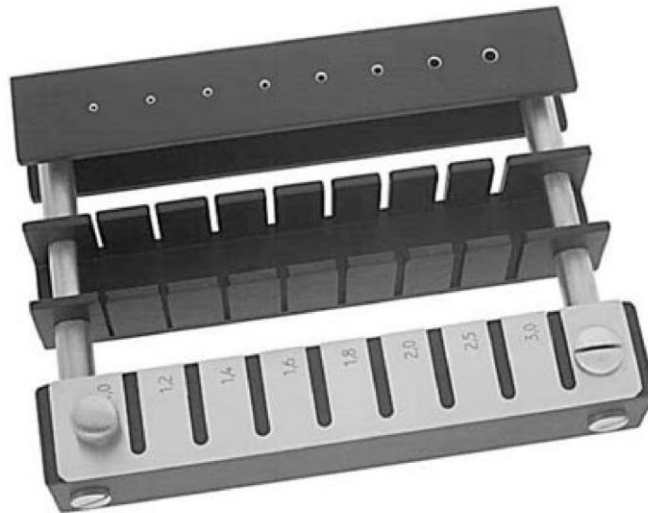
A 2 mm hole is drilled perpendicular to the long axis of the ulna and 3 - 4 mm distally of the fracture line.

A 1 mm cerclage wire is inserted through the holes in the pin heads, and another similar cerclage is placed through the hole in the ulnar bone.

The pins are impacted until stopped by the pin heads. The importance of good impaction on the fracture side is emphasised. Further compression of the fracture is achieved by twisting the free ends of the cerclage wires, making sure that equal tension is reached on both sides. In cases of olecranon fractures, a figure-of-eight technique is recommended. The loop-ends are bent and placed properly, taking into account the risk of skin affection.



Metall Rack for Kirschner Wires



Metall Rack for Kirschner Wires

For storage and sterilization of Kirschner Wires

for different sizes 310 mm **7-840**

for 8 different sizes 150 mm **7-842**

3 different sizes for Kirschner Wires, 10 cm, 16 cm, 31 cm

made of stainless material, sterilizable - 134°

for 4, 6, 8 and 10 different diameters each

each compartment can receive from 6 up to 20 Kirschner Wires (depending on the diameters)

with special Silicon strip to protect the wire tips

with integrated measuring gauge

Wire Drill Dispenser

easy to transport and storage
- silicone insert avoids damaging the wire tips



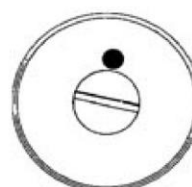
Wire length	Wire ø 0,8 mm	Wire ø 1,0 mm	Wire ø 1,2 mm	Wire ø 1,4 mm	Wire ø 1,6 mm	Wire ø 2,0 mm	Wire ø 2,2 mm	Wire ø 2,5 mm
16,0 cm	7-850	7-852	7-854	7-856	7-858	7-860	7-862	7-864
31,0 cm	7-870	7-872	7-874	7-876	7-878	7-880	7-882	7-884



7-890 Vickers Easidriver



This specially designed dispenser holds four different wire gauges
ø 1.0 / 1.2 / 1.4 / and 1.6 mm, each 10 cm long.



7-892 Wire Drill Dispenser