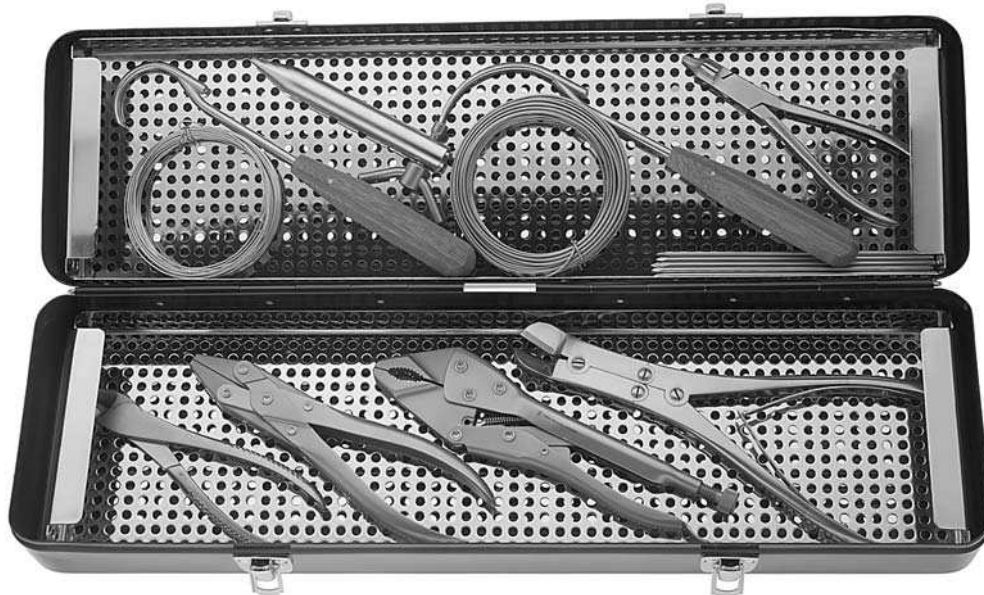


Wire Instrument Set



<b>T 700</b>	Wire Instrument Set	
<b>19E-286.03</b>	Implant-Container,red, 500 x 155 x 75 mm	
<b>T 112</b>	Upper Tray	
<b>T 112</b>	Lower Tray	
	Instruments	
	Tray (lower)	
<b>7-416</b>	Forceps for holding cerclage wire	2 units
<b>7-418</b>	Wire Bending-Cutting Pliers	
<b>16E-500.19</b>	Flat-Nosed Pliers, parallel, 18,5 cm	
<b>16E-505.18</b>	Locking Pliers, 18,0 cm	
<b>7-414</b>	Wire Cutter, small	
<b>16E-525.22</b>	Wire Cutting Pliers, TC, 22,0 cm	
	Instruments	
	Tray (upper)	
<b>7-375</b>	Wire Guide 45 mm	
<b>7-377</b>	Wire Guide 70 mm	
<b>7-378</b>	Wire Tightener	
<b>7-022</b>	Cerclage Wires with eye, 1.0 mm $\varnothing$ , 280 mm long	10 units
<b>7-023</b>	Cerclage Wires with eye, 1.2 mm $\varnothing$ , 280 mm long	20 units
<b>7-010</b>	Wire Coil, 1.0 mm $\varnothing$ , length 10 metres	1 units
<b>7-012</b>	Wire Coil, 1.2 mm $\varnothing$ , length 10 metres	1 units
<b>7-252-7-270</b>	1.0 / 1.2 / 2.0 / 2.5 / 3.0 mm $\varnothing$ , 10 each Kirschner	50 units
<b>7-260</b>	1.6 mm $\varnothing$ 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.:	<b>7-002</b>	<b>7-003</b>	<b>7-004</b>	<b>7-005</b>	<b>7-006</b>	<b>7-007</b>	<b>7-008</b>	<b>7-009</b>	<b>7-010</b>	<b>7-012</b>	<b>7-015</b>



Cerclage Wires  
with eye, soft

	Diameter	Length
<b>7-020</b>	0.8 mm	280 mm
<b>7-022</b>	1.0 mm	280 mm
<b>7-023</b>	1.2 mm	280 mm
<b>7-024</b>	1.0 mm	600 mm
<b>7-025</b>	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	<b>7-120</b>	<b>7-140</b>
ø 1.2 mm	<b>7-121</b>	<b>7-141</b>
ø 1.4 mm	<b>7-122</b>	<b>7-142</b>
ø 1.5 mm	<b>7-123</b>	<b>7-143</b>
ø 1.6 mm	<b>7-124</b>	<b>7-144</b>
ø 1.8 mm	<b>7-126</b>	<b>7-145</b>
ø 2.0 mm	<b>7-127</b>	<b>7-146</b>
ø 2.2 mm	<b>7-128</b>	<b>7-147</b>
ø 2.5 mm	<b>7-129</b>	<b>7-148</b>
ø 3.0 mm	<b>7-130</b>	

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



Kirschner Wires with thread and trocar points, round end

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



**7-350** Bending Iron  
for Kirschner Wires



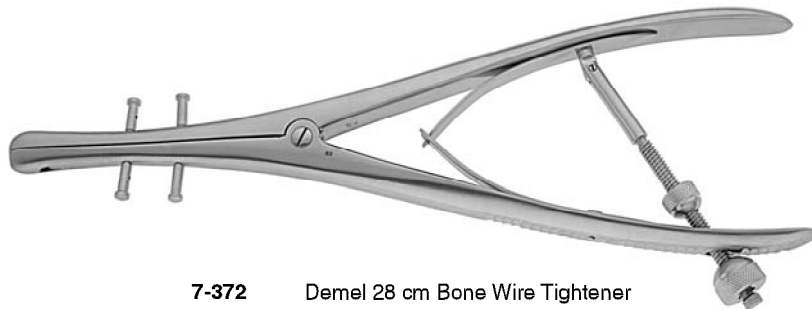
**7-353** Pliers with serrated  
jaws and groove  
**7-356** Pliers with serrated  
jaws without groove



**7-358** Rounded Pliers with  
serrated jaws



**16E-041** Loure 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

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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** Universal Scissors  
**21E-159** 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

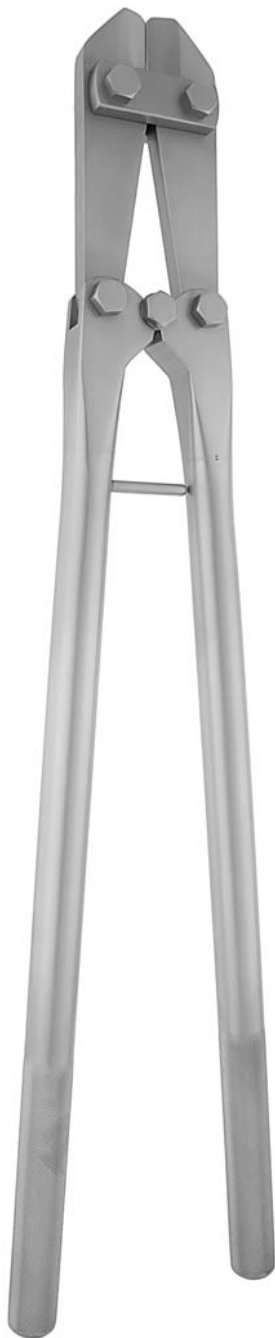


**7-443** Wire Cutter  
Hard Wire 2.0 mm



**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
<b>7-460</b> Medium	130 mm
<b>7-462</b> Large	185 mm
<b>7-464</b> Extra Large	220 mm



Kirscher

<b>7-468</b>	40 x 140 mm
<b>7-470</b>	60 x 220 mm



Kirschner

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

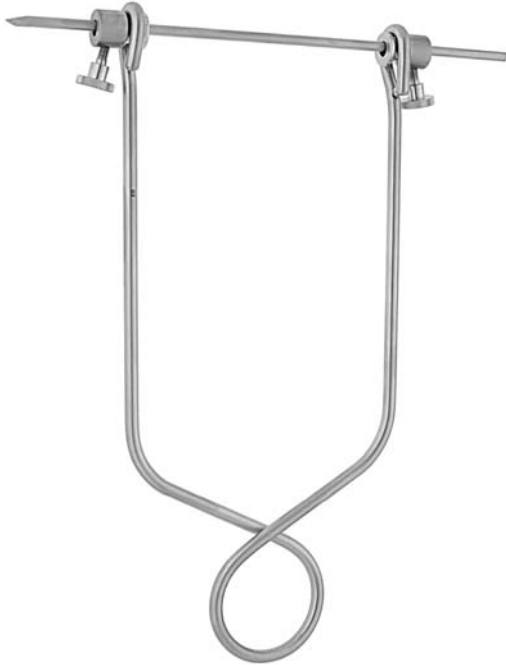


**7-490** Wire Strainer for Kirschner Extension Bow



**7-492** Screw Nut Wrench  
14 x 17 mm

Wire Extension



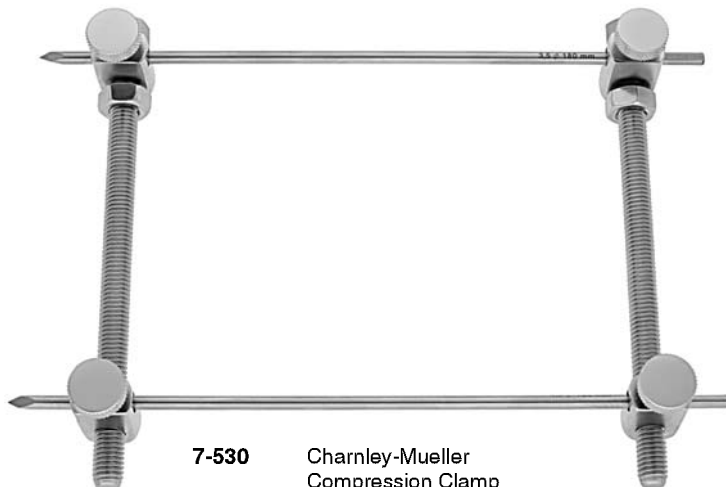
	Inside Length	Inside Width
<b>7-496</b>	90 mm	75 mm
<b>7-498</b>	160 mm	90 mm
<b>7-500</b>	210 mm	110 mm
<b>7-502</b>	210 mm	150 mm



**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



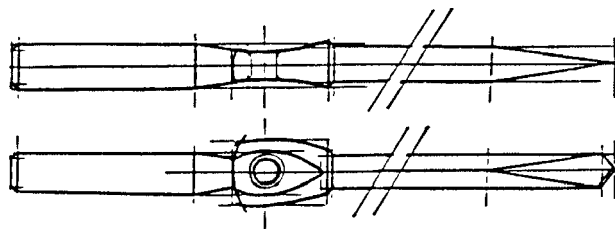
<b>7-540</b>	Larsen Pin Dia. 1.6 mm x Length 60 mm
<b>7-541</b>	Larsen Pin Dia. 1.6 mm x Length 80 mm
<b>7-542</b>	Larsen Pin Dia. 1.6 mm x Length 100 mm
<b>7-543</b>	Larsen Pin Dia. 1.6 mm x Length 120 mm

## The Larsen Pin

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

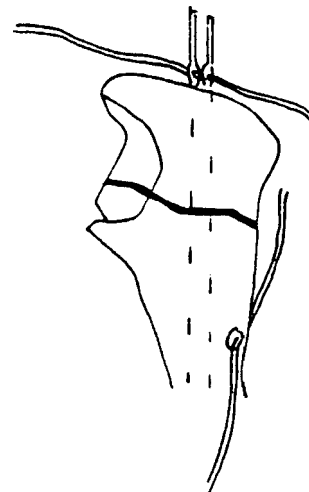
#### FEATURES

The stainless steel (W14310 - AISI 302) pin is a high polished 1,6 mm diameter 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.



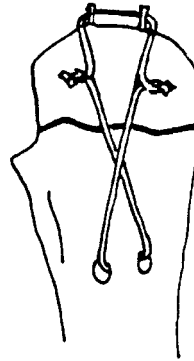
#### GENERAL OPERATIVE TECHNIQUES

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.



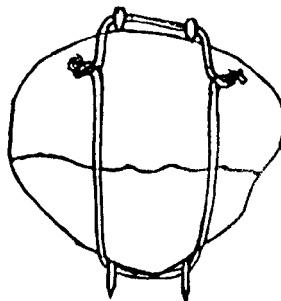
### INDICATIONS

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.

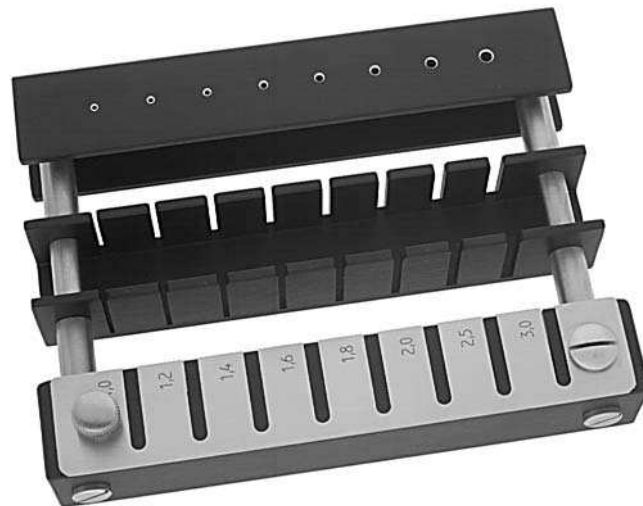
A 1 mm cerclage wire is inserted through the holes in the pin heads, and another similar cerclage is placed through the hole in the ulnar bone.

The pins are impacted until stopped by the pin heads. The importance of good impaction on the fracture side is emphasized. 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



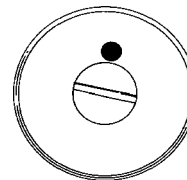
Wire length	Wire ø 0,8 mm	Wire ø 1,0 mm	Wire ø 1,2 mm	Wire ø 1,4 mm	Wire ø 1,6 mm	Wire ø 2,0 mm	Wire ø 2,2 mm	Wire ø 2,5 mm
16,0 cm	<b>7-850</b>	<b>7-852</b>	<b>7-854</b>	<b>7-856</b>	<b>7-858</b>	<b>7-860</b>	<b>7-862</b>	<b>7-864</b>
31,0 cm	<b>7-870</b>	<b>7-872</b>	<b>7-874</b>	<b>7-876</b>	<b>7-878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



**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