

**Neurosurgery**

**Neurochirurgie**

**Neurocirugía**

**Neurochirurgia**

**Neurochirurgie**



**180-003-00**  
Brace only

Burrs, Drills and  
Trepine only



**180-004-01** Twist Drills  
Fig. 1 - Ø 2.5 mm  
**180-004-02** Fig. 2 - Ø 3.0 mm  
**180-004-03** Fig. 3 - Ø 3.5 mm  
**180-004-04** Fig. 4 - Ø 4.0 mm



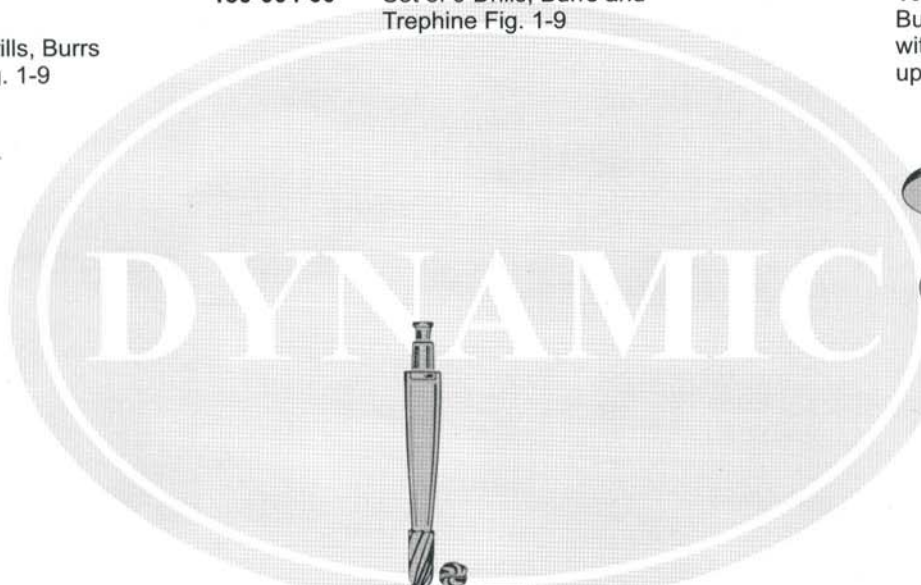
**180-004-05** Trepine  
Fig. 5 - Ø 10 mm  
**180-004-06** Cutting Burrs  
Fig. 6 - Ø 5 mm  
**180-004-07** Fig. 7 - Ø 8 mm  
**180-004-08** Fig. 8 - Ø 12 mm  
**180-004-09** Fig. 9 - Ø 16 mm



**100-045-01**  
Bunnell  
with channel for k-wires  
up to 3 mm diam.

**180-003-10**  
Stille  
complete with Drills, Burrs  
and Trepine Fig. 1-9

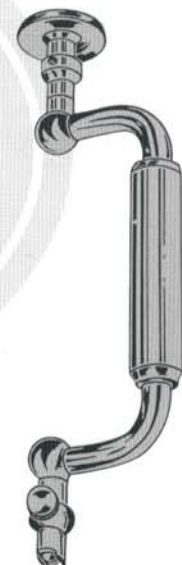
**180-004-00** Set of 9 Drills, Burrs and  
Trepine Fig. 1-9



**100-050-10**  
Cerebella extension only



**100-050-09** Hudson  
Ø 9 mm  
**100-050-02** Ø 14 mm  
Conical Burr



**100-050-00**  
Hudson brace



**100-050-05** Hudson  
Ø 9 mm  
**100-050-03** Ø 14 mm  
Spherical Burr



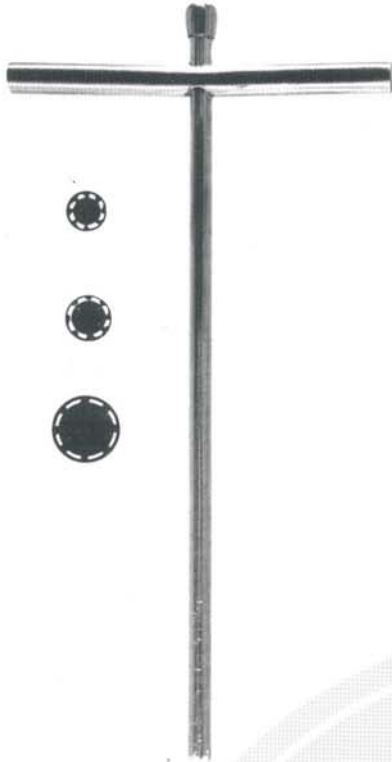
**100-050-07**  
Hudson  
Ø 14 mm  
perforator Drill



**100-050-13**  
McKenzie  
Ø 13 mm  
perforator Drill



**100-050-16**  
D'Errico  
Ø 16 mm  
perforator Drill



**180-012-50** Michele  
Ø5.0 mm  
**180-012-55** Ø5.5 mm  
**180-012-80** Ø8.0 mm  
Vertebral Body Biopsy Trephine



**180-013-04**  
Adson  
135 mm  
Ø4 mm, 12 Fr.



Frazier  
125 mm  
**180-015-06** Ø2.0 mm, 6 Fr.  
**180-015-08** Ø2.5 mm, 8 Fr.  
**180-015-10** Ø3.0 mm, 10 Fr.  
**180-015-12** Ø2.5 mm, 12 Fr.

Frazier  
180 mm  
**180-016-06**  
**180-016-08**  
**180-016-10**  
**180-016-12**



90 mm  
**180-018-01** Ø1.8 mm + 1.8 mm  
**180-018-02** Ø2.5 mm + 2.0 mm  
**180-018-03** Ø3.0 mm + 2.0 mm



180 mm  
**180-019-01**  
**180-019-02**  
**180-019-03**  
**100-870-30**  
**100-870-40**  
**100-870-50**  
**100-870-70**

Gigli Saw, stainless 30 mm  
Gigli Saw, stainless 40 mm  
Gigli Saw, stainless 50 mm  
Gigli Saw, stainless 70 mm



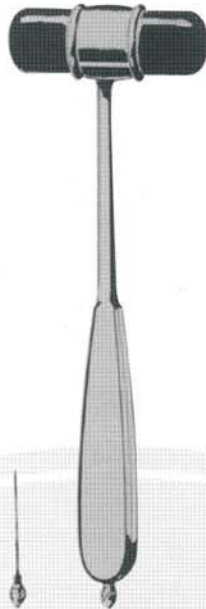
**100-873-02**  
Gigli Handle



**100-879-31** De Martel 310 mm, Saw Guide



**180-025-20** Taylor  
200 mm



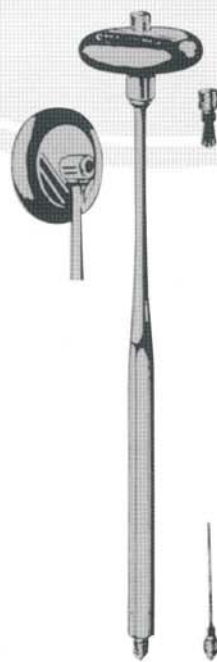
**180-027-21** Dejerine  
210 mm  
with needle



**180-028-02** Dejerine modif.  
210 mm  
with needle



**180-030-18** Buck  
180 mm  
with needle and brush



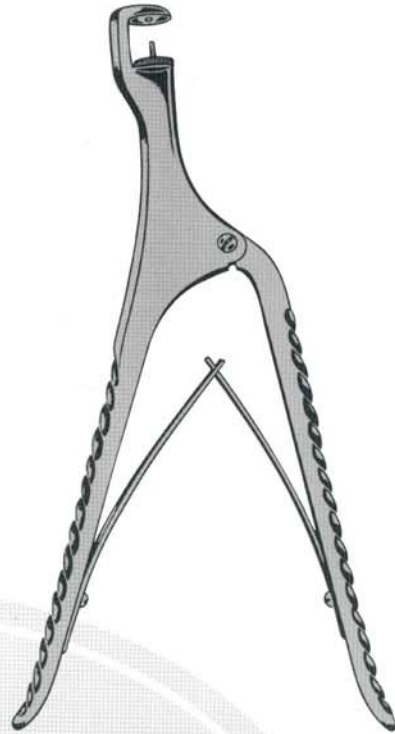
**180-031-22** Babinski  
220 mm  
with needle



**180-033-18** Wartenberg  
180 mm  
Pinwheel



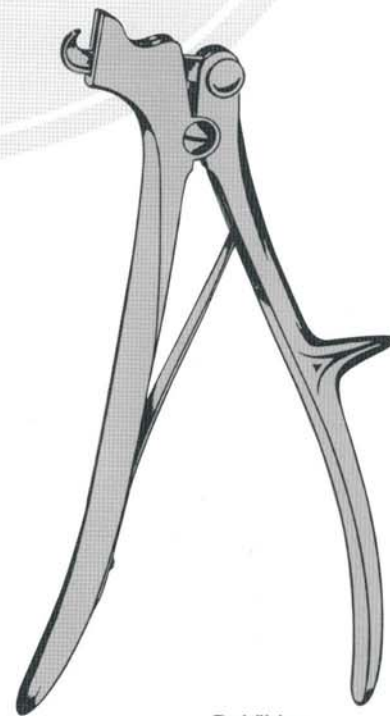
**180-054-15**  
Adson  
150 mm  
Drill Guide and  
Dura Protector



**180-057-20** Cone  
**180-057-23** 200 mm  
230 mm  
Skull Punch



**180-060-20**  
Dahlgren  
200 mm  
Complete with 2 Blades

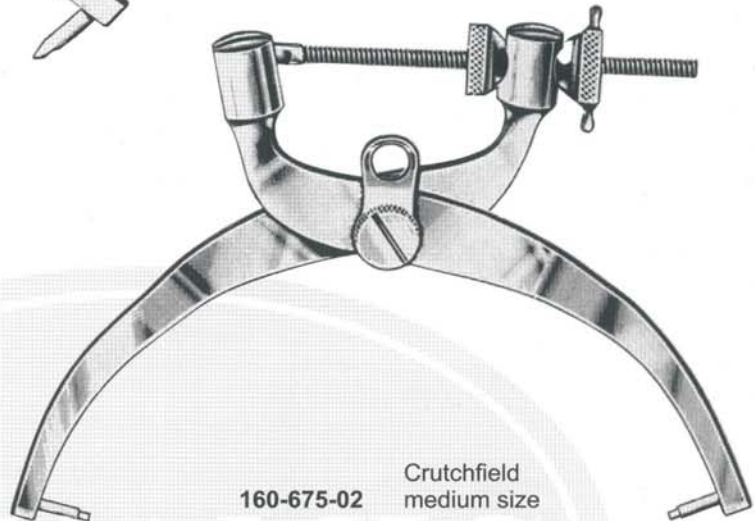


**180-063-21**  
DeVibiss  
210 mm  
complete with 1 small and  
1 large blade

DYNAMIC



**160-675-01** Crutchfield  
Small size



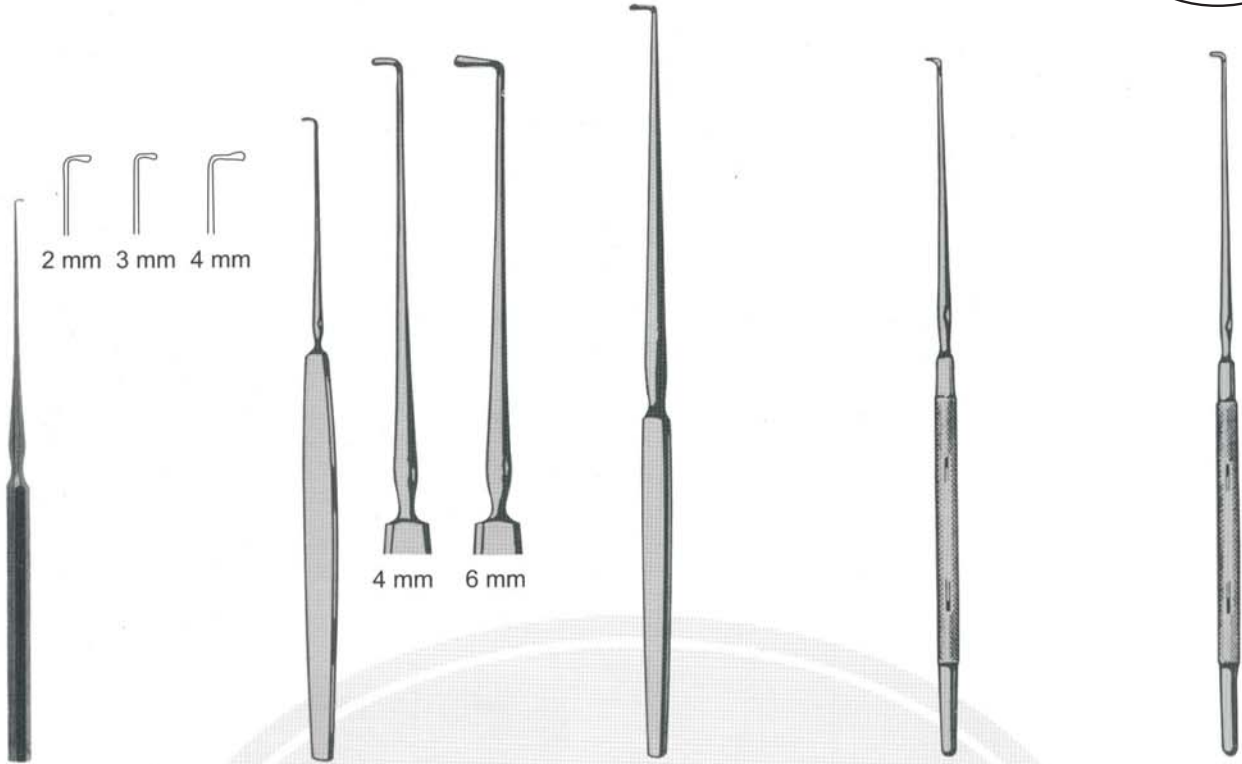
**160-675-02** Crutchfield  
medium size



**160-683-35** Drill points  
**160-683-40**



**160-678-03** Crutchfield  
Large size



Lucae  
140 mm

- 180-080-02 2 mm
- 180-080-03 3 mm
- 180-080-04 4 mm

Cushing  
190 mm

- 180-083-04 4 mm
- 180-083-06 6 mm

Cushing  
280 mm

- 180-085-04 4 mm
- 180-085-06 6 mm

180-089-03  
Adson  
3 mm, 200 mm  
sharp

180-090-03  
Adson  
3 mm, 200 mm  
Blunt



180-092-07  
Crile  
7 mm, 200 mm

180-095-21  
Dandy  
210 mm  
straight

180-096-01  
Dandy  
210 mm  
left

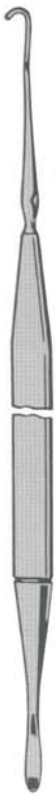
180-096-02  
Dandy  
210 mm  
right

180-097-16  
Graham  
165 mm

180-099-21  
Smithwick  
210 mm

**DYNAMIC  
INSTRUMENTS**

**Nerve Hooks, Nerve Separators  
Nerve Haken, Nerve Separatoren  
Nervio ganchos, separadores de nervios  
Ganci nervi, separatori Nerve  
Nerve Crochets, séparateurs Nerve**



**180-106-01**  
Scoville  
300 mm  
Nerve Hook and  
Dissector



**180-107-03**  
Scoville  
300 mm  
Nerve Hook and  
Dissector



**180-109-30**  
Scoville  
300 mm  
Sympathectomy Hook and  
Dissector



**180-112-04**  
Davis  
4 mm, 190 mm



**180-112-03**  
Sachs  
3 mm, 200 mm



**180-112-06**  
Sachs  
6 mm, 200 mm

Nerve Separator and Spatula



**180-115-25**  
Frazier  
125 cm



**Gillies**  
190 mm



**180-118-01**  
Small



**180-122-13**  
large



**180-122-13**  
Straight  
130 mm



**180-125-13**  
Lahey Clinic  
130 mm



**180-127-13**  
Sachs  
185 mm



**180-129-16**  
160 mm

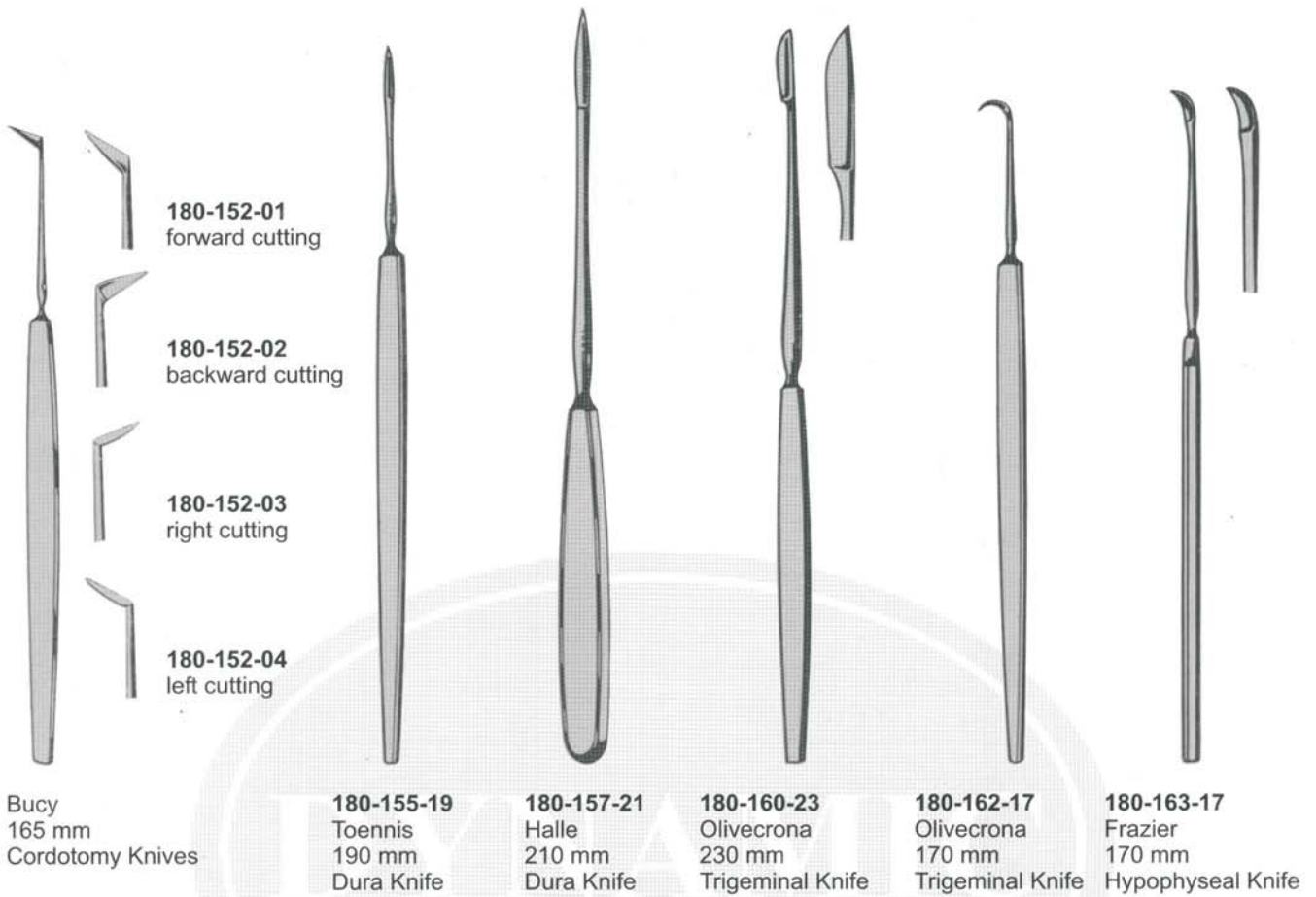


**180-132-15**  
Toennis  
150 mm



**180-135-16**  
Dura Twist Hook  
140 mm





**Bucy**  
165 mm  
Cordotomy Knives

**180-152-01**  
forward cutting

**180-152-02**  
backward cutting

**180-152-03**  
right cutting

**180-152-04**  
left cutting

**180-155-19**  
Toennis  
190 mm  
Dura Knife

**180-157-21**  
Halle  
210 mm  
Dura Knife

**180-160-23**  
Olivecrona  
230 mm  
Trigeminal Knife

**180-162-17**  
Olivecrona  
170 mm  
Trigeminal Knife

**180-163-17**  
Frazier  
170 mm  
Hypophyseal Knife



**20.290.09**  
Trouman-Chris  
90 mm



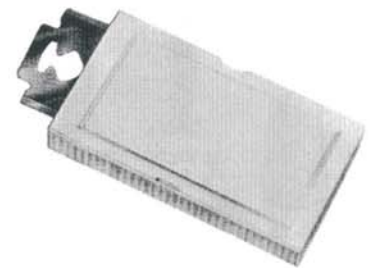
**20.291.11**  
110 mm



**20.294.13**  
Castroviejo, 130 mm

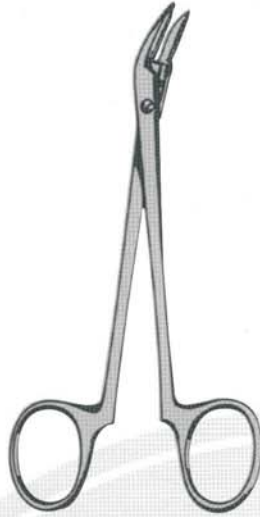


**20.296.00**  
In packages of 10 Pc





**180-175-12**  
Michel 125 mm  
Applying  
Forceps



**180-178-02**  
Michel 120 mm  
Clip Applying and  
Removing Forceps



**180-181-13**  
Collin, 130 mm  
Clip Removing  
Forceps



**180-184-05**  
Raney  
applying and  
Removing Forceps  
for Scalp Clip

DYNAMIC



DeMartel  
**180-186-13** 135 mm  
**180-186-18** 185 mm  
slightly curved



**180-190-13**  
Dandy-Baby, 130 mm  
delicate pattern

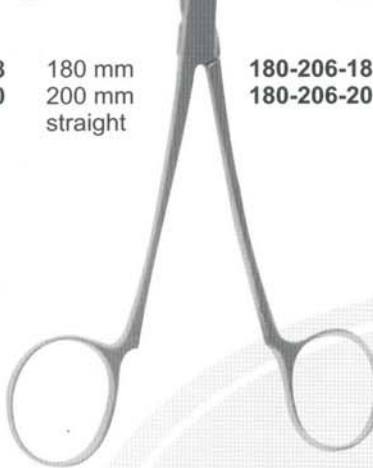


Dandy, 140 mm

**180-192-01** 140 mm  
**180-192-12** 140 mm  
1 x 2 Teeth



**180-205-18** 180 mm  
**180-205-20** 200 mm  
straight



Gross  
without ratchet



**180-206-18** 180 mm  
**180-206-20** 200 mm  
curved



**180-209-18** 180 mm  
**180-209-20** 200 mm  
straight



Gross  
with ratchet

**180-210-18** 180 mm  
**180-210-20** 200 mm  
curved



**180-212-01**  
straight



Foerster Serrated  
240 mm



**180-212-02**  
curved



**180-215-01**  
straight



Foerster Smooth  
240 mm



**180-215-02**  
curved



24.102.11 115 mm  
24.102.13 130 mm  
24.102.14 145 mm  
24.102.16 160 mm  
24.102.18 180 mm  
24.102.20 200 mm  
24.102.25 250 mm  
24.102.30 300 mm



USA

24.104.11 115 mm  
24.104.13 130 mm  
24.104.14 145 mm  
24.104.15 155 mm  
24.104.18 180 mm  
24.104.21 210 mm  
24.104.25 250 mm



Stille  
24.106.15 150 mm



Narrow  
24.110.11 115 mm  
24.110.13 130 mm  
24.110.14 145 mm  
24.110.16 160 mm



Potts-Smith

24.112.18	180 mm	24.116.18 TC	180 mm
24.112.21	210 mm	24.116.21 TC	210 mm
24.112.25	250 mm	24.116.25 TC	250 mm



Potts-Smith

24.126.18	180 mm
24.126.21	210 mm
24.126.25	250 mm



24.120.11 115 mm  
24.120.13 130 mm  
24.120.14 145 mm  
24.120.16 160 mm  
24.120.18 180 mm  
24.120.20 200 mm  
24.120.25 250 mm  
24.120.30 300 mm



24.122.11 115 mm  
24.122.13 130 mm  
24.122.15 155 mm  
24.122.18 160 mm  
24.122.21 200 mm  
24.122.25 210 mm



Stille  
24.124.15 150 mm



Narrow  
24.130.13 130 mm  
24.130.14 145 mm  
24.130.16 160 mm



24.112.14 145 mm  
24.112.16 160 mm  
24.112.20 200 mm



24.150.14 145 mm  
24.150.16 160 mm



24.160.14 145 mm  
24.160.16 160 mm



Adson  
24.170.12 120 mm  
24.174.12 TC 120 mm  
24.170.15 150 mm  
24.174.15 TC 150 mm



24.176.12  
Adson-Micro  
120 mm



24.220.17  
Cushing  
170 mm



Adson  
24.180.12 120 mm  
24.180.15 150 mm



24.186.12  
Adson-Micro  
120 mm



24.188.12  
Adson.Brown  
120 mm



Brown  
24.189.16 160 mm  
24.189.20 200 mm  
24.189.25 250 mm



24.190.10  
Graefe  
105 mm



24.230.17  
Cushing  
170 mm



**24.232.15**  
Lerche  
150 mm



Adlerkreuz  
**24.236.15** 150 mm  
**24.236.20** 200 mm



**24.240.14**  
Lane  
140 mm



**24.242.14**  
Lane  
140 mm



**24.246.18**  
Ferris-Smith  
180 mm



**24.248.18**  
Ferris-Smith  
180 mm



**24.250.14**  
Duval  
145 mm



**24.252.20**  
Collin-Duval  
200 mm



**24.256.15** Russ-Mod  
**24.256.20** 150 mm  
**24.256.25** 200 mm  
250 mm



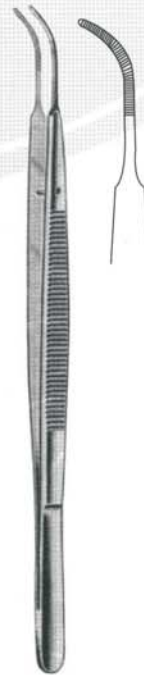
**24.258.15**  
McIndoe  
150 mm



**24.260.12** Semken  
**24.260.15** 125 mm  
150 mm



**24.302.18**  
Gerald  
180 mm



**24.303.18**  
Gerald  
180 mm



**24.305.18**  
Gerald  
180 mm





**24.270.12** Semken  
125 mm  
**24.270.15** 155 mm



**24.272.15** Gillies  
155 mm



**24.310.18** Gerald  
180 mm



**24.311.18** Gerald  
180 mm



**24.313.18** Gerald  
180 mm



**24.320.23** Singley  
230 mm



**24.322.23** Nelson  
230 mm



**24.324.23** Wangenstein  
230 mm

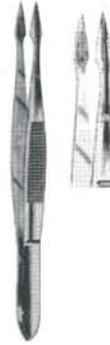




24-802-09 90 mm  
24-802-11 115 mm



Feilchenfeld  
24-810-07 75 mm  
24-810-11 115 mm



24-812-10  
Hunter  
105 mm



24-813-10  
Hunter  
105 mm



24-815-12  
125 mm



24-815-10  
Carmalt  
105 mm



24-817-10  
Carmalt  
105 mm



24-821-11  
Peet  
115 mm



Stiegletz 135 mm  
24-822-13 straight  
24-823-13 curved



Archer 140 mm  
24-824-14 straight  
24-825-14 curved

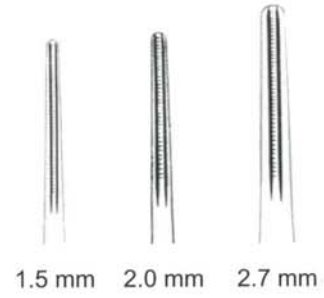


24.828.15  
Archer (Ralk)  
150 mm



2.0 mm

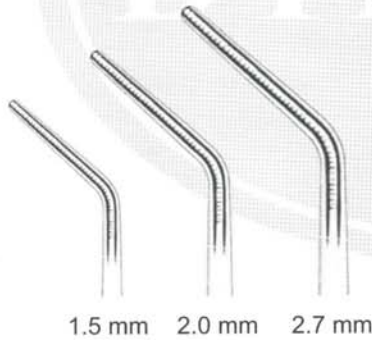
DeBakey-Adson  
180-225-12 125 mm  
180-225-15 150 mm



1.5 mm 2.0 mm 2.7 mm

DeBakey straight

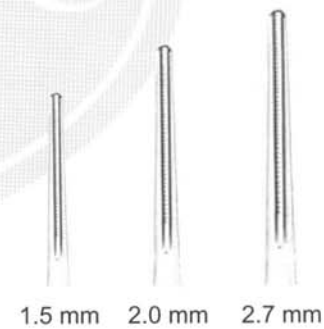
Length	1.5 mm tip	2.0 mm tip	2.7 mm tip
160 mm	180-228-16	180-229-16	180-230-16
200 mm	180-228-20	180-229-20	180-230-20
240 mm	180-228-24	180-229-24	180-230-24
300 mm	180-228-30	180-229-30	180-230-30



1.5 mm 2.0 mm 2.7 mm

DeBakey angled

Length	1.5 mm tip	2.0 mm tip	2.7 mm tip
160 mm	180-233-16	180-234-16	180-235-16
200 mm	180-233-20	180-234-20	180-235-20
240 mm	180-233-24	180-234-24	180-235-24
300 mm	180-233-30	180-234-30	180-235-30



1.5 mm 2.0 mm 2.7 mm

DeBakey bayonet

Length	1.5 mm tip	2.0 mm tip	2.7 mm tip
160 mm	180-238-16	180-239-16	180-240-16
200 mm	180-238-20	180-239-20	180-240-20
240 mm	180-238-24	180-239-24	180-240-24
300 mm	180-238-30	180-239-30	180-240-30



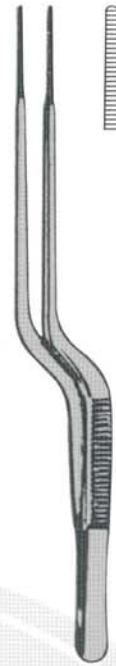
**180-250-18**  
Cushing (Taylor)  
185 mm  
serrated



**180-251-18**  
Cushing (Taylor)  
185 mm  
1 x 2 Teeth



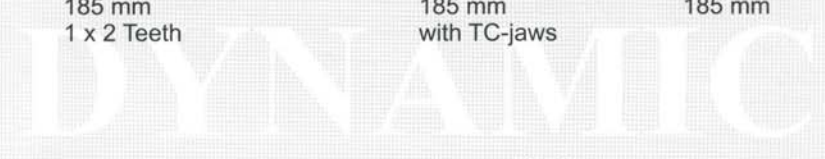
**180-252-18**  
Taylor  
185 mm  
with TC-jaws



**180-253-18**  
Serrated  
185 mm



**180-254-18**  
1 x 2 Teeth  
185 mm



**180-255-19**  
Cushing-Brown  
190 mm



**Gruenwald**  
195 mm



**180-256-19**  
Serrated



**180-257-19**  
1 x 2 Teeth



**180-258-18**  
Gruenwald  
180 mm  
with TC-jaws



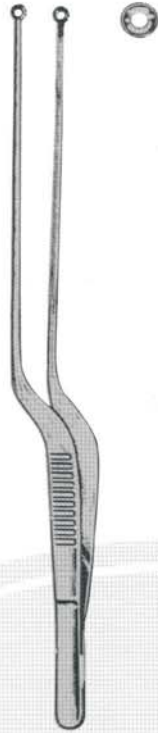
**180-259-19**  
Micro  
190 mm  
Smooth jaws, blunt

**DYNAMIC  
INSTRUMENTS**

**Hypophyseal, Tumor Grasping & Brain Spatula Forceps**  
**Hypophysären, Tumorfaßzange & Hirnspatel Zange**  
**Hipofisario, tumor cerebral Entender y pinzas Espátula**  
**Ipofisario, tumore Cogliere e pinze Spatola Brain**  
**Hypophysaire, tumeur préhension et pinces Spatule Brain**



**180-270-03**  
 Ø3 mm, 220 mm  
 spoon-shaped jaws



**180-270-05**  
 Ø5 mm, 220 mm  
 spoon-shaped jaws



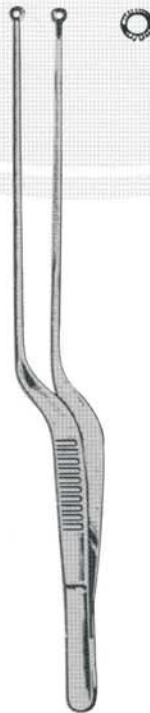
**180-272-22**  
 Adson, 220 mm  
 straight



**180-272-23**  
 Adson, 230 mm  
 curved



**180-276-20**  
 Hunt  
 Ø5 mm, 200 mm  
 curved



**180-277-22**  
 Hunt  
 Ø5 mm, 220 mm  
 bayonet-shaped



**180-279-22**  
 Scoville  
 220 mm  
 blade width 10 mm



**22.160.14** 145 mm  
**22.160.17** 170 mm  
straight



Mayo



**22.161.14** 145 mm  
**22.161.17** 170 mm  
curved



**22.164.14 TC** 145 mm  
**22.164.17 TC** 170 mm  
straight



Mayo TC cutting edges



**22.165.14 TC** 145 mm  
**22.165.17 TC** 170 mm  
curved



**22.170.15** 150 mm  
**22.170.17** 170 mm  
straight



Mayo-Stillle



**22.171.15** 150 mm  
**22.171.17** 170 mm  
curved



**22.174.15 TC** 150 mm  
**22.174.17 TC** 170 mm  
straight



Mayo-Stillle TC cutting edges



**22.175.15 TC** 150 mm  
**22.175.17 TC** 170 mm  
curved

DYNAMIC



22.281.15 Metzenbaum 150 mm  
22.281.18 Metzenbaum 180 mm curved



22.283.20 Metzenbaum 200 mm  
22.283.23 Metzenbaum 230 mm delicate pattern curved



22.287.20 Metzenbaum 200 mm  
22.287.23 Metzenbaum 230 mm with TC cutting edges delicate, curved



22.289.18 Metzenbaum 180 mm  
22.289.20 Metzenbaum 200 mm  
22.289.23 Metzenbaum 230 mm supersharp, delicate, curved



22.321.18 Reynolds 180 mm  
22.321.20 Reynolds 200 mm curved



22.391.15 Olivecrona 150 mm shaft Trigeminal Scissors



Potts-Smith, 190 mm



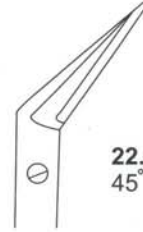
22.480.25  
25°



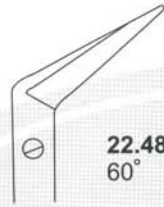
22.484.25  
25°



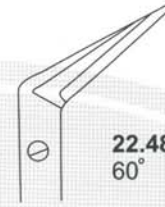
22.480.45  
45°



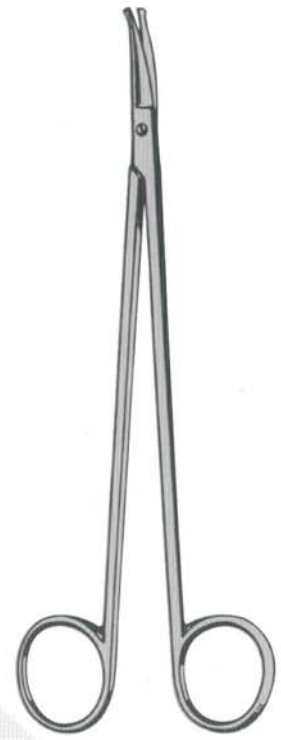
22.484.45  
45°



22.480.60  
60°



22.484.60  
60°



22.601.20  
Strully  
220 mm  
probe-pointed

**DYNAMIC**



22.611.18  
Toennis  
180 mm  
curved



22.613.18  
Toennis-Adson  
180 mm  
extra-delicate  
curved

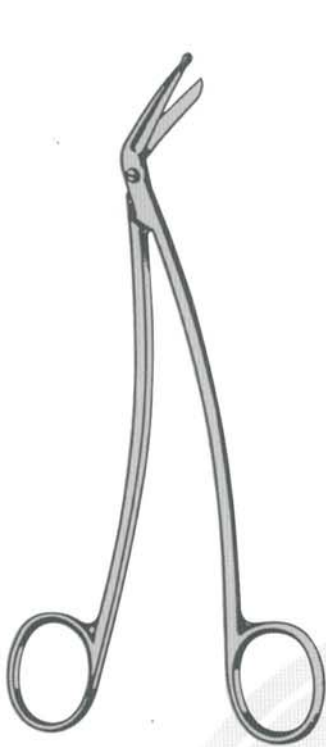


22.613.18 TC  
Toennis-Adson  
180 mm  
with TC cutting edges,  
extra-delicate, curved



22.617.17  
22.617.19  
Dandy  
170 mm  
190 mm  
Trigeminal Scissors





**22.619.17**  
Schmieden (Taylor)  
160 mm  
Dural Scissors



**22.930.18**  
sharp points

**22.931.18**  
blunt points



DeMartel, 180 mm  
straight



**22.932.18**  
sharp points

**22.933.18**  
blunt points



DeMartel, 180 mm  
curved



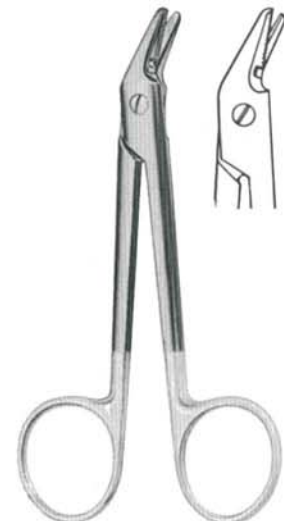
**22.936.16**  
straight



Adson (Kelly)  
160 mm  
Ganglion-Scissors



**22.937.16**  
curved



**130-200-10** Universal Scissors  
**130-200-12** Universal Scissors  
with TC cutting edge



Mayo-Hegar with TC tips

- 34.184.14 140 mm
- 34.184.18 180 mm
- 34.184.20 200 mm



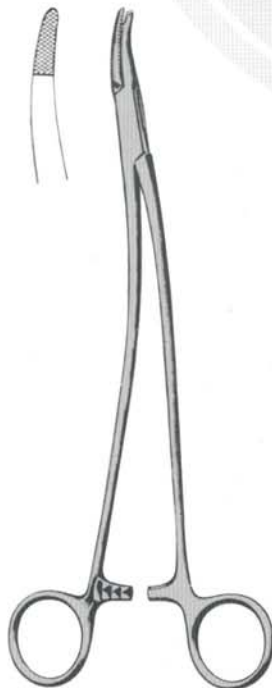
Crile-Wood with TC tips

- 34.164.15 150 mm
- 34.164.18 180 mm
- 34.164.20 200 mm
- 34.164.23 230 mm



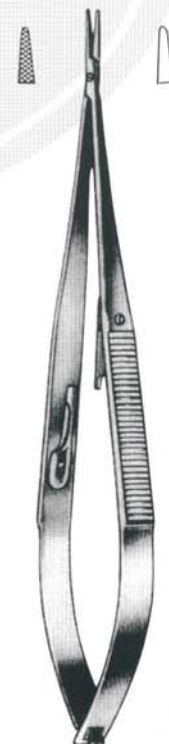
French Eye delicate, narrow jaws

- 34.224.15 150 mm
- 34.224.18 180 mm
- 34.224.20 200 mm
- 34.224.23 230 mm



Stratte jaws and shanks curved with TC tips

- 34.334.20 200 mm
- 34.334.23 230 mm

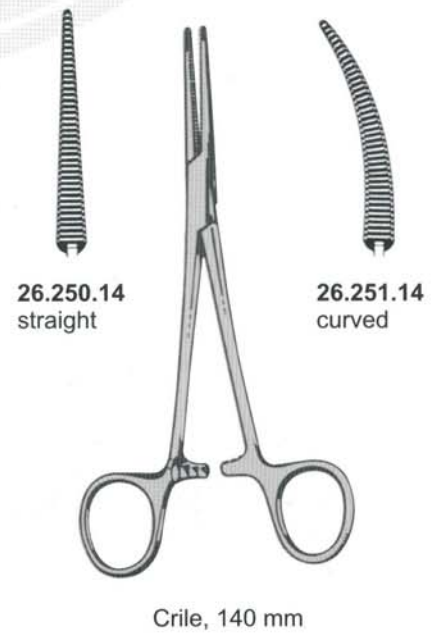
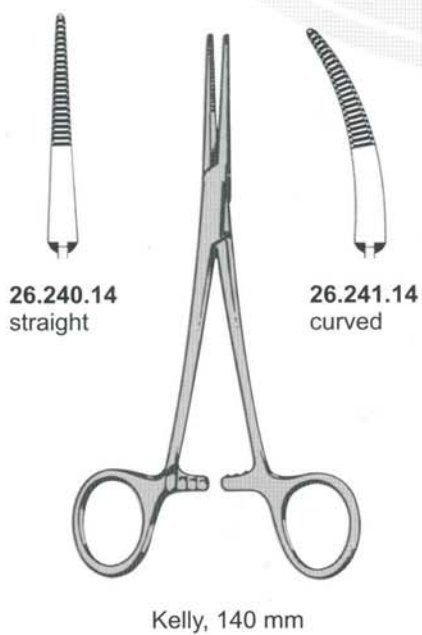
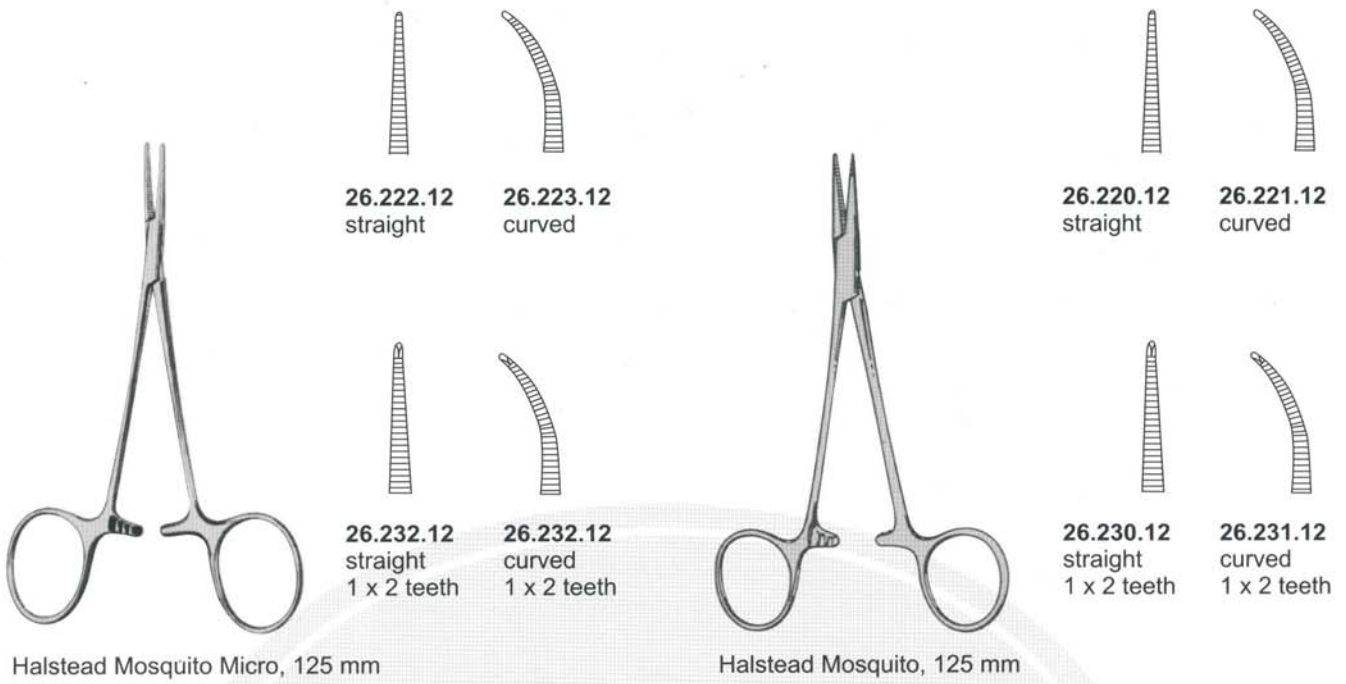


Castroviejo with TC tips, with catch, serrated jaws

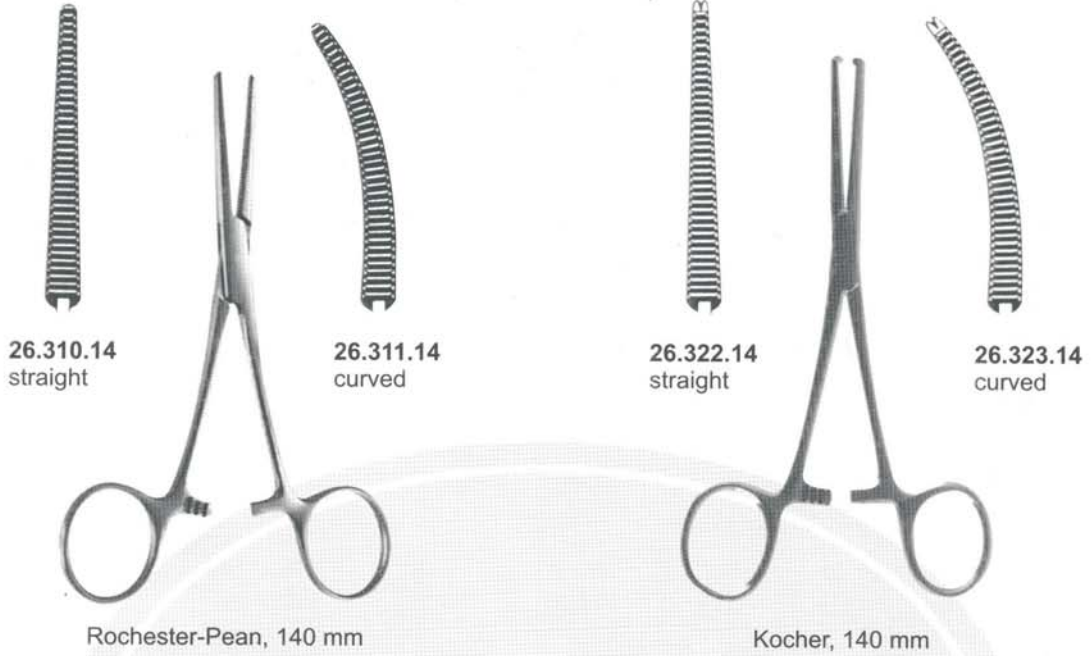
- 34.696.14 TC 140 mm
- 34.696.17 TC 170 mm

Castroviejo with TC tips, with catch, smooth jaws

- 34.692.14 TC 140 mm
- 34.692.17 TC 170 mm



DYNAMIC



26.310.14  
straight

26.311.14  
curved

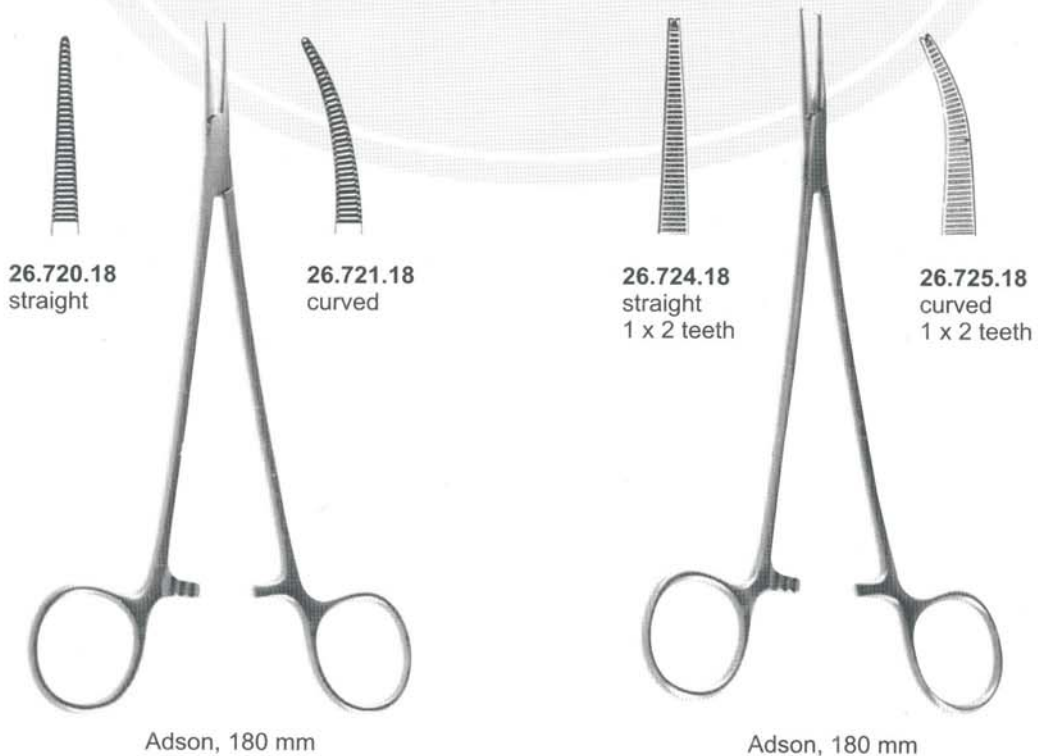
26.322.14  
straight

26.323.14  
curved

Rochester-Pean, 140 mm

Kocher, 140 mm

DYNAMIC



26.720.18  
straight

26.721.18  
curved

26.724.18  
straight  
1 x 2 teeth

26.725.18  
curved  
1 x 2 teeth

Adson, 180 mm

Adson, 180 mm



**28.101.09**  
Schaedel, 90 mm



**28.111.09** Backhaus 90 mm  
**28.111.11** 110 mm  
**28.111.13** 130 mm



**28.121.13**  
Lorna, 130 mm

DYNAMIC



**28.714.16** Presbyterian 160 mm  
**28.714.18** 180 mm  
**28.714.20** 200 mm



**28.710.15** Schoenberg 150 mm  
**28.710.18** 180 mm  
**28.710.20** 200 mm



**180-302-13**  
135 mm  
straight



**180-303-04**  
4 cm, 110 mm  
straight



**180-303-05**  
5 cm, 110 mm  
straight



**180-306-11**  
110 mm  
angled tips



**180-307-07**  
7 cm, 115 mm  
curved



**180-315-05**  
140 mm  
straight, tips 0.5 mm



**180-315-08**  
140 mm  
straight, tips 0.8 mm



**180-322-19**  
195 mm  
sharp tips



195 mm  
smooth jaws, blunt



**180-325-01**  
straight



**180-326-03**  
curved



**180-329-06**  
angled



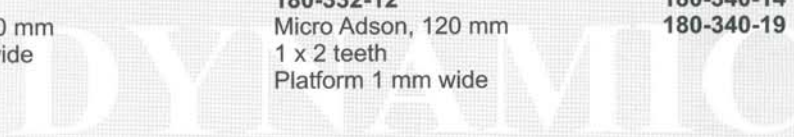
**180-331-12**  
Micro Adson, 120 mm  
Platform 1 mm wide



**180-332-12**  
Micro Adson, 120 mm  
1 x 2 teeth  
Platform 1 mm wide



**180-340-14** 120 mm  
**180-340-19** 195 mm  
Platform 0.8 mm wide



**180-346-12** 120 mm  
**180-346-15** 150 mm  
**180-346-18** 180 mm  
platform 0.3 mm wide,  
straight



**180-347-12** 120 mm  
**180-347-15** 150 mm  
**180-347-18** 180 mm  
platform 0.3 mm wide,  
curved



**180-362-12** 120 mm  
**180-362-15** 150 mm  
**180-362-18** 180 mm  
sharp tips,  
straight

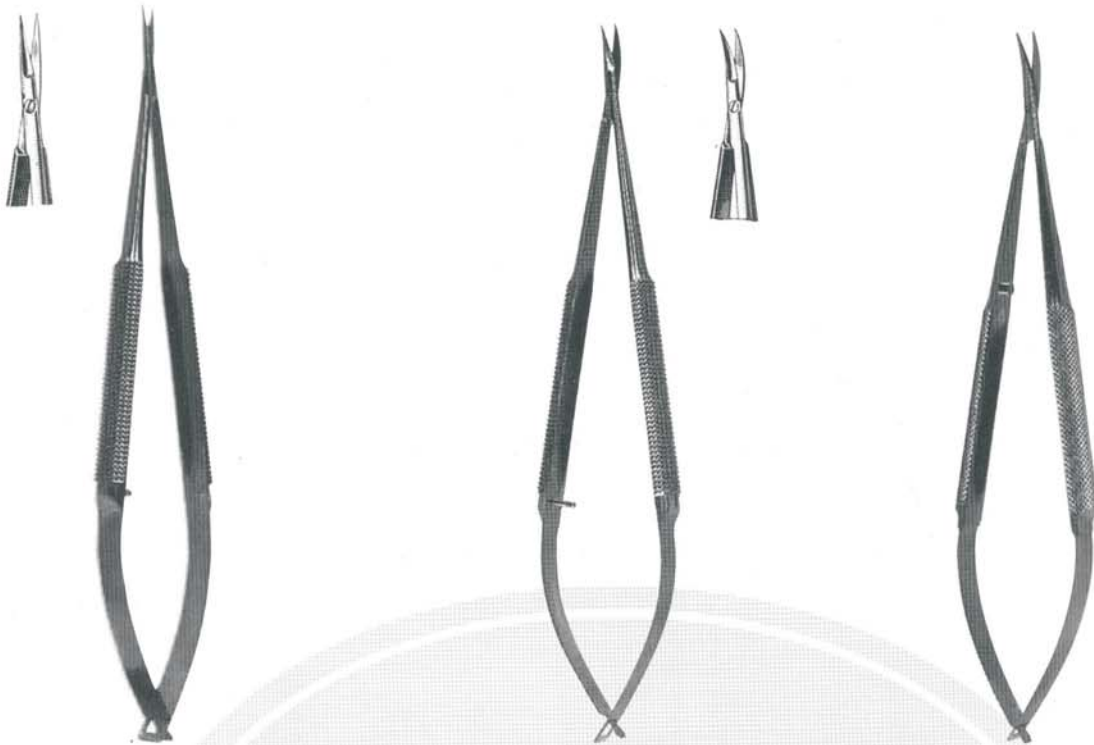


**180-364-12** 120 mm  
**180-364-15** 150 mm  
**180-364-18** 180 mm  
dull tips,  
straight



**180-363-12** 120 mm  
**180-363-15** 150 mm  
**180-363-18** 180 mm  
sharp tips,  
curved

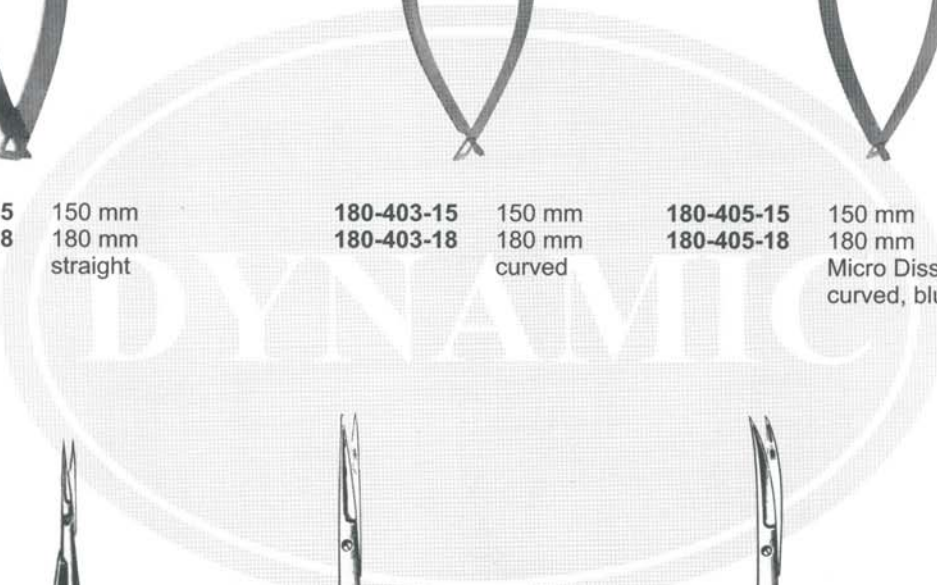
**180-365-12** 120 mm  
**180-365-15** 150 mm  
**180-365-18** 180 mm  
dull tips,  
curved



**180-402-15** 150 mm  
**180-402-18** 180 mm  
straight

**180-403-15** 150 mm  
**180-403-18** 180 mm  
curved

**180-405-15** 150 mm  
**180-405-18** 180 mm  
Micro Dissecting Scissors  
curved, blunt point



**180-414-15** 150 mm  
**180-414-18** 180 mm  
straight



**180-415-15** 150 mm  
**180-415-18** 180 mm  
curved



**180-416-15** 150 mm  
**180-416-18** 180 mm  
straight,  
delicate blades



**180-417-15** 150 mm  
**180-417-18** 180 mm  
curved,  
delicate blades





**180-422-18**  
180 mm  
angled to side,  
sharp tips



**180-423-18**  
180 mm  
angled to side,  
blunt tips



DYNAMIC



**180-430-19** 190 mm  
**180-430-23** 230 mm  
straight



**180-431-19** 190 mm  
**180-431-23** 230 mm  
curved



**180-432-19** 190 mm  
**180-432-23** 230 mm  
straight,  
delicate blades



**180-433-19** 190 mm  
**180-433-23** 230 mm  
curved  
delicate blades



**180-434-19**  
190 mm  
angled to side



**180-435-19**  
190 mm  
angled to side,  
1 probe-pointed blade



**180-436-19**  
190 mm  
Circumflex Scissors



**180-437-19**  
190 mm  
Circumflex Scissors  
1 probe-pointed blade

**DYNAMIC  
INSTRUMENTS**

**Micro Needle Holders & Forceps  
Micro Nadel Inhaber & Pinzetten  
Micro aguja los titulares de Y Pinzas  
Micro ago titolari E pinze  
Micro aiguille titulaires Et pinces**



**180-445-19** 190 mm  
**180-445-23** 230 mm  
sharp tips,  
straight



**180-446-19** 190 mm  
**180-446-23** 230 mm  
blunt tips,  
straight



**180-447-19**  
190 mm  
blunt tips,  
angled

DYNAMIC



**180-452-15** 150 mm  
**180-452-18** 180 mm  
**180-453-15** 150 mm  
**180-453-18** 180 mm



**180-458-15** 150 mm  
**180-458-18** 180 mm  
**180-459-15** 150 mm  
**180-459-18** 180 mm



**180-464-18** 180 mm  
**180-464-21** 210 mm  
**180-466-18** 180 mm  
**180-466-21** 210 mm



**180-468-18 TC** 185 mm  
**180-468-21 TC** 210 mm  
with Tungsten Carbide  
inserts, straight, with catch





**180-474-15** 150 mm  
**180-474-18** 180 mm



**180-475-15** 150 mm  
**180-475-18** 180 mm



**180-478-15** 150 mm  
**180-478-18** 180 mm



**180-479-15** 150 mm  
**180-479-18** 180 mm



Without catch



With catch

**DYNAMIC**



**180-482-19** 150 mm  
**180-482-23** 180 mm  
straight,  
smooth jaws



**180-483-19** 190 mm  
**180-483-23** 230 mm  
curved  
smooth jaws



**180-483-18 TC** 185 mm  
**180-483-22 TC** 220 mm  
straight, smooth jaws,  
with TC-inserts



**180-508-01**  
2.5 mm  
Raspatory,  
slightly curved

**180-508-02**  
3.0 mm  
Raspatory,  
strongly curved

**180-508-03**  
2.5 mm  
Dissector,  
angled

**180-508-04**  
4.0 mm  
Raspatory,  
angled

**180-508-05**  
1.0 mm  
Raspatory,  
angled

**180-508-06**  
winkelt  
Probe, angled

**180-508-07**  
Double Prong Probe

**180-508-08**  
Suture Pusher

**180-412-01**  
short curve

**180-412-02**  
long curve

**180-412-03**  
90° angle

**180-412-30**  
3.0 mm  
ball tip

**180-412-35**  
3.5 mm  
ball tip

**180-412-20**  
2.0 mm  
blunt tip

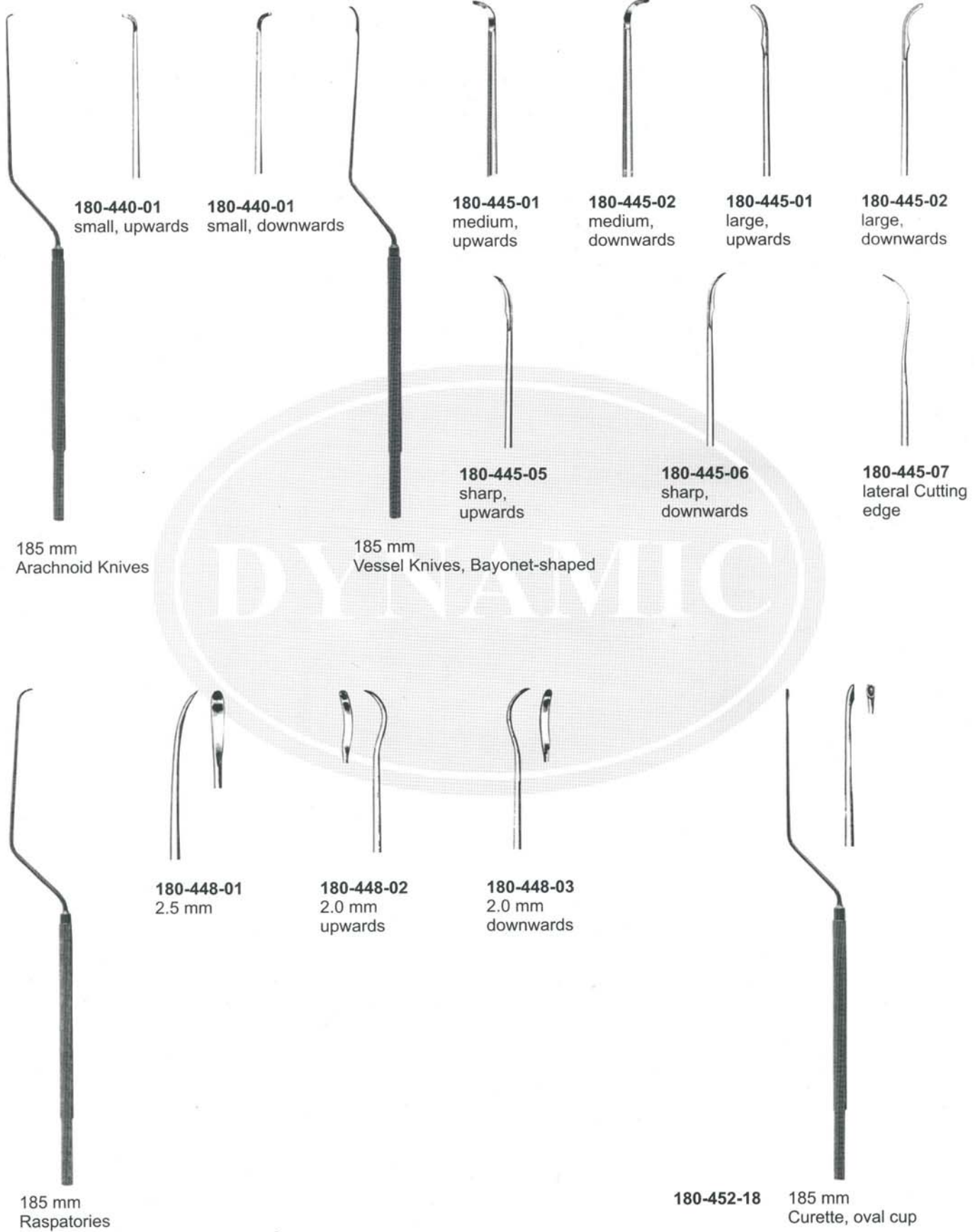
**180-412-25**  
2.5 mm  
blunt tip

**180-419-18**

185 mm  
Ligature Guede

185 mm  
Nerve and Vessel Hook

185 mm  
Vessel Knife





185 mm  
**180-462-10** 1.0 mm  
**180-462-15** 1.5 mm  
**180-462-20** 2.0 mm

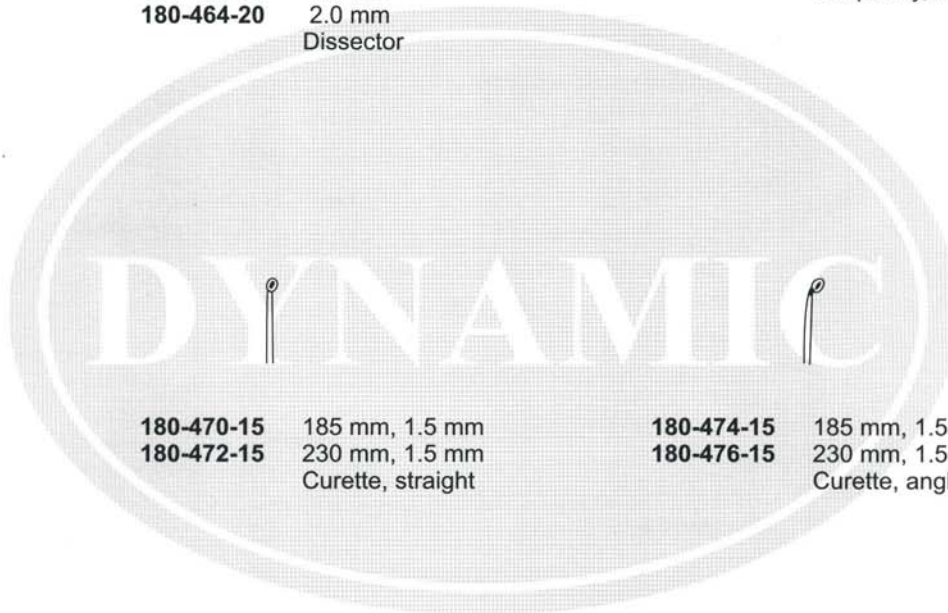


185 mm  
**180-466-20** 2.0 mm  
**180-466-30** 3.0 mm



230 mm  
**180-464-10** 1.0 mm  
**180-464-15** 1.5 mm  
**180-464-20** 2.0 mm  
 Dissector

230 mm  
**180-468-20** 2.0 mm  
**180-468-30** 3.0 mm  
 Raspatory, round



**180-470-15** 185 mm, 1.5 mm  
**180-472-15** 230 mm, 1.5 mm  
 Curette, straight

**180-474-15** 185 mm, 1.5 mm  
**180-476-15** 230 mm, 1.5 mm  
 Curette, angled



**180-477-15** 185 mm, 1.5 mm, 90°  
**180-479-15** 230 mm, 1.5 mm, 90°  
 Hook, sharp



**180-481-15** 185 mm, 1.5 mm, 90°  
**180-483-15** 230 mm, 1.5 mm, 90°  
 Hook, blunt



**180-485-10** 185 mm, 1.0 mm  
**180-487-15** 185 mm, 1.5 mm  
 Tissue Lifter



Working length 14 mm



**180-506-14**  
Micro Grasping Forceps,  
serrated, straight

**180-526-14**  
Micro Alligator Scissors,  
straight



**180-542-01**  
Ø 1.0 mm  
Straight



**180-542-02**  
Ø 2.0 mm  
Straight



**180-542-03**  
Ø 3.0 mm  
Straight



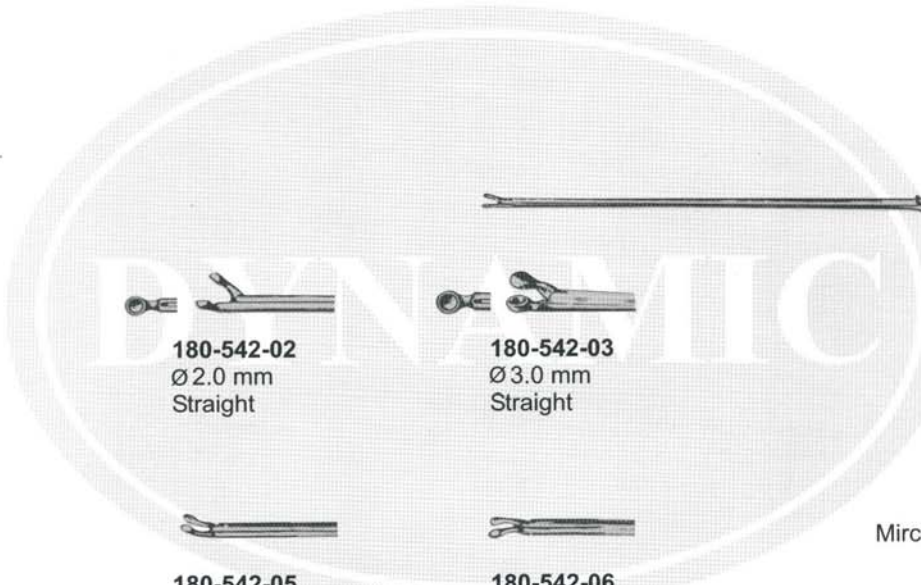
**180-542-04**  
Ø 1.0 mm  
angled up



**180-542-05**  
Ø 2.0 mm  
curved to right



**180-542-06**  
Ø 3.0 mm  
curved to left



Micro Cup Forceps

**180-485-15** 185 mm  
1.0 mm  
**180-487-15** 1.5 mm  
Tissue Lifter



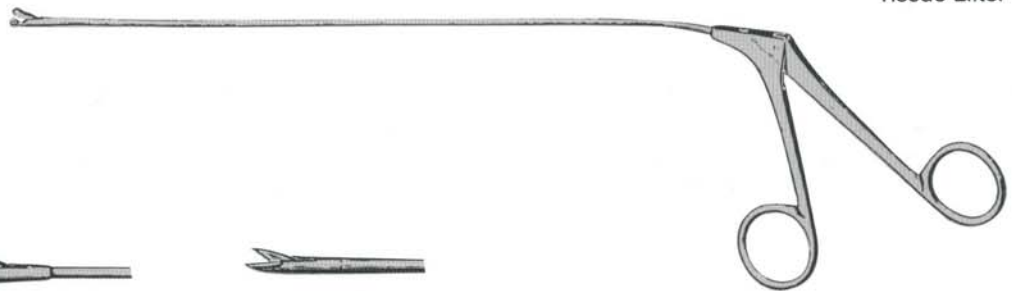
**180-556-01**  
Grasping Forceps



**180-556-02**  
Cup Forceps, Ø2 mm



**180-556-02**  
Alligator Scissors



Micro Alligator Forceps  
with tubular shaft 180 mm



**160-204-15**  
Frazier  
150 mm



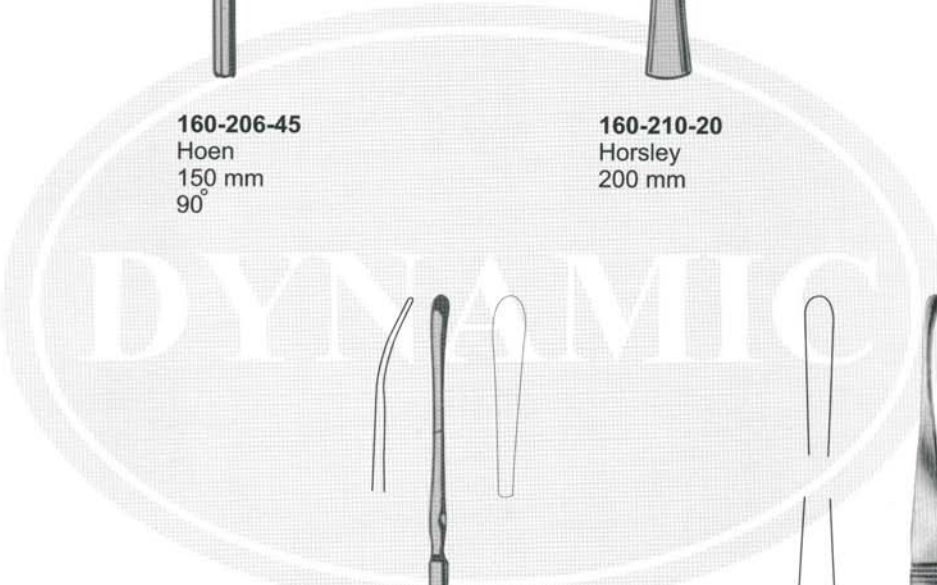
**160-206-45**  
Hoen  
150 mm  
90°



**160-210-20**  
Horsley  
200 mm



**160-212-18**  
Woodson  
180 mm



**160-230-17**  
woodson  
175 mm  
separator and packer



**160-219-04**  
Davis  
4 mm, 245 mm



**160-218-01**  
narrow



**160-218-02**  
wide



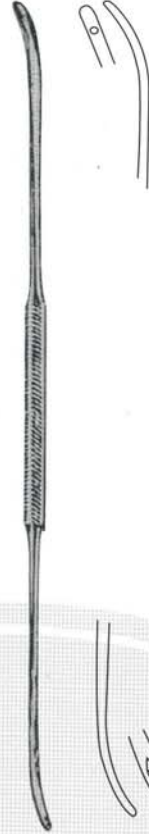
Toennis  
240 mm





**160-222-18**  
**160-222-24**

Olivecrona  
180 mm  
240 mm  
delicate pattern



**160-223-18**  
**160-223-24**

Olivecrona  
180 mm  
240 mm  
heavy pattern



**160-232-01**  
Penfield  
180 mm  
No. 1



**160-233-02**  
Penfield  
200 mm  
No. 2



**160-234-03**  
Penfield  
200 mm  
No. 4



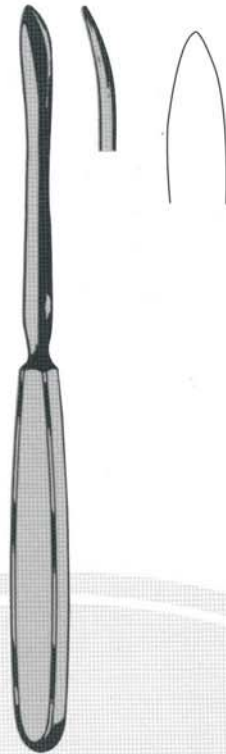
**160-235-04**  
Penfield  
200 mm  
No. 4



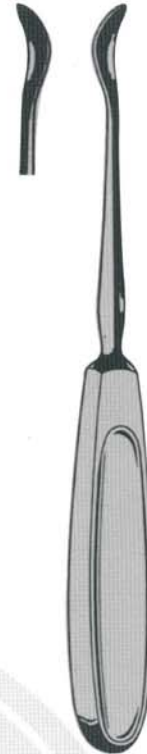
**160-236-05**  
Penfield  
290 mm  
No. 5



**160-271-07** Hoen  
7 mm, 160 mm  
**160-271-15** 15 mm, 190 mm  
**160-271-20** 20 mm, 190 mm  
Semisharp



**160-272-07** Langenbeck, 200 mm  
7 mm  
**160-272-10** 10 mm  
Elevator, blunt



**160-273-19** Cushing, 190 mm  
left  
**160-274-19** right



**160-275-17**  
Adson, 170 mm



**100-784-14** Farabeuf  
13 mm, 140 mm  
sharp, straight



**100-785-14** Farabeuf  
13 mm, 140 mm  
sharp, curved



**160-226-03**  
Sachs Nerve Elevator  
185 mm  
3 mm blunt



**160-227-19**  
Kleinert Kutz  
Elevator and Dissector  
195 mm  
2 mm x 3 mm Sharp ends



**160-228-18**  
Freer Elevator  
185 mm double ended  
5 mm sharp end  
and 5 mm blunt end



**160-229-22**  
Woodson Elevator And Spatula  
225 mm double ended  
3 mm semi-blunt ends



**160-230-17**  
Woodson Dural Separator And Packer  
175 mm double ended with grooved blade  
3 mm blunt end



**160-242-45** angled 45°    **160-242-90** angled 90°

**160-239-08**  
Smithwick Hook and Dissector  
300 mm double ended  
5 mm semi-sharp end  
and 1 x 10 mm blunt hook

Nerve Probe endoscopic  
380 mm with ball end  
80 mm tip and shaft length  
290 mm handle length  
7.1 mm shaft diameter

**160-245-38**  
Penfield Elevator endoscopic  
380 mm blunt, 4 mm tip width  
88 mm tip and shaft length, graduated  
290 mm handle length  
7.1 mm shaft diameter



160-248-01  
160-248-02  
160-248-03



160-248-04



160-248-05



160-248-06  
160-248-07  
160-248-08



160-248-09



160-248-10



160-248-11



160-248-12



160-248-13  
160-248-14



160-248-15



160-248-16  
160-248-17



160-248-18  
160-248-19

**Rhoton Micro Dissection Instruments 190 mm**

- 160-248-01 Round Dissector 1 mm, angled
- 160-248-02 Round Dissector 2 mm, angled
- 160-248-03 Round Dissector 3 mm, angled
- 160-248-04 Elevator, curved
- 160-248-05 Elevator, angled
- 160-248-06 Spatula Dissector # 6 small, angled
- 160-248-07 Spatula Dissector # 7 medium, angled
- 160-248-08 Spatula Dissector # 8 large, angled
- 160-248-09 Hook, 90° angle, sharp
- 160-248-10 Hook, 90° angle, blunt
- 160-248-11 Hook, 45° angle, sharp
- 160-248-12 Needle, straight, sharp
- 160-248-13 Micro Curette, straight, 1 mm x 2 mm
- 160-248-14 Micro Curette, angled, 1 mm x 2 mm
- 160-248-15 Ball-tipped Dissector, 0.8 mm
- 160-248-16 Ball-tipped Dissector, 90° angle, 3 mm
- 160-248-17 Ball-tipped Dissector, 90° angle, 5 mm
- 160-248-18 Ball-tipped Dissector, 40° angle, 4 mm
- 160-248-19 Ball-tipped Dissector, 40° angle, 8 mm



**160-267-06** Key, 190 mm  
6 mm  
**160-267-12** 12 mm  
**160-267-20** 20 mm  
**160-267-25** 25 mm  
sharp, slightly curved



**160-269-06**  
Pennybacker  
6 mm, 170 mm  
sharp, curved



**160-270-15**  
Langenbeck  
15 mm, 190 mm  
sharp, slightly curved



**160-271-01** Cushing  
180 mm, 15 mm  
round edge  
**160-271-02** Square edge



**100-735-06**  
6 mm, 185 mm  
sharp, curved



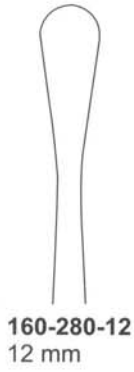
**100-730-13**  
13 mm, 200 mm  
sharp, curved



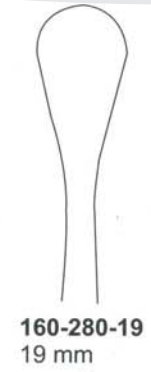
**100-725-14**  
14 mm, 200 mm  
sharp, straight



**100-727-14**  
14 mm, 200 mm  
sharp, curved



**160-280-12**  
12 mm



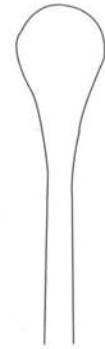
**160-280-19**  
19 mm



**160-280-25**  
25 mm



**160-280-32**  
32 mm



**160-282-19** Harrington Spinal Elevator  
300 mm Sharp  
19 mm tip width

Cobb Spinal Elevator 238 mm sharp  
with hexagonal handle

DYNAMIC



7 mm



9 mm



11 mm

**160-284-07** Cobb modif.  
280 mm  
7 mm  
**160-284-09** 9 mm  
**160-284-11** 11 mm  
Round Handle



4 mm



6 mm

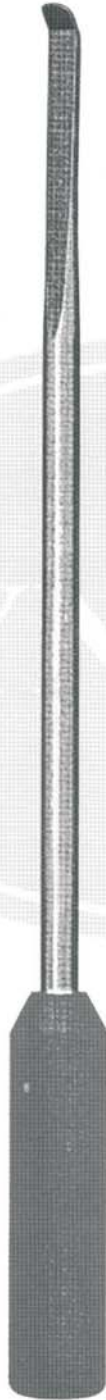


8 mm

**160-285-04** Cobb modif.  
280 mm  
4 mm  
**160-285-06** 6 mm  
**160-285-08** 8 mm  
Round Handle



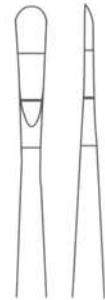
**160-288-19**  
Harrington Spinal Elevator  
300 mm Sharp  
19 mm tip width



Rib Elevator endoscopic  
425 mm Sharp with fiber handle  
9 mm radius tip  
**160-290-45** angled 45°  
**160-290-90** angled 90°



**160-295-01**  
500 mm sharp  
13 mm tip width



**160-295-02**  
500 mm sharp  
6 mm tip width



**160-295-03**  
500 mm sharp  
10 mm tip width



**160-295-04**  
500 mm sharp  
6 mm tip width

Cobb Spinal Elevator endoscopic  
with fiber handle graduated tips





Hibbs Chisel		225 mm curved	
225 mm straight			
<b>160-350-06</b>	6 mm	<b>160-351-06</b>	6 mm
<b>160-350-09</b>	9 mm	<b>160-351-09</b>	9 mm
<b>160-350-12</b>	12 mm	<b>160-351-12</b>	12 mm
<b>160-350-15</b>	15 mm	<b>160-351-15</b>	15 mm
<b>160-350-18</b>	18 mm	<b>160-351-18</b>	18 mm
<b>160-350-20</b>	20 mm	<b>160-351-20</b>	20 mm
<b>160-350-25</b>	25 mm	<b>160-351-25</b>	25 mm
<b>160-350-30</b>	30 mm	<b>160-351-30</b>	30 mm
<b>160-350-35</b>	35 mm	<b>160-351-35</b>	35 mm
<b>160-350-40</b>	40 mm	<b>160-351-40</b>	40 mm

Osteotomes		225 mm curved	
225 mm straight			
<b>160-360-06</b>	6 mm	<b>160-361-06</b>	6 mm
<b>160-360-09</b>	9 mm	<b>160-361-09</b>	9 mm
<b>160-360-12</b>	12 mm	<b>160-361-12</b>	12 mm
<b>160-360-15</b>	15 mm	<b>160-361-15</b>	15 mm
<b>160-360-18</b>	18 mm	<b>160-361-18</b>	18 mm
<b>160-360-20</b>	20 mm	<b>160-361-20</b>	20 mm
<b>160-360-25</b>	25 mm	<b>160-361-25</b>	25 mm
<b>160-360-30</b>	30 mm	<b>160-361-30</b>	30 mm
<b>160-360-35</b>	35 mm	<b>160-361-35</b>	35 mm
<b>160-360-40</b>	40 mm	<b>160-361-40</b>	40 mm

Hibbs Chisel / Osteotomes



Cobb Chisel		275 mm curved	
275 mm straight			
<b>160-354-06</b>	6 mm	<b>160-355-06</b>	6 mm
<b>160-354-09</b>	9 mm	<b>160-355-09</b>	9 mm
<b>160-354-12</b>	12 mm	<b>160-355-12</b>	12 mm
<b>160-354-15</b>	15 mm	<b>160-355-15</b>	15 mm
<b>160-354-18</b>	18 mm	<b>160-355-18</b>	18 mm
<b>160-354-25</b>	25 mm	<b>160-355-25</b>	25 mm
<b>160-354-35</b>	35 mm	<b>160-355-35</b>	35 mm

Osteotomes		275 mm curved	
275 mm straight			
<b>160-364-06</b>	6 mm	<b>160-365-06</b>	6 mm
<b>160-364-09</b>	9 mm	<b>160-365-09</b>	9 mm
<b>160-364-12</b>	12 mm	<b>160-365-12</b>	12 mm
<b>160-364-15</b>	15 mm	<b>160-365-15</b>	15 mm
<b>160-364-18</b>	18 mm	<b>160-365-18</b>	18 mm
<b>160-364-25</b>	25 mm	<b>160-365-25</b>	25 mm
<b>160-364-35</b>	35 mm	<b>160-365-35</b>	35 mm

Cobb Chisel / Osteotomes



**160-357-10**  
Hibbs Chisel endoscopic  
460 mm  
10 mm tip width straight

**160-367-10**  
Hibbs Osteotomes endoscopic  
460 mm  
10 mm tip width straight



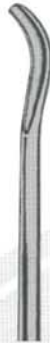
Cobb  
240 mm



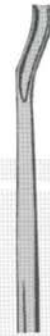
**160-375-01**  
Straight



**160-375-02**  
Slightly Curved



**160-375-03**  
Strongly Curved



**160-375-04**  
Curved down



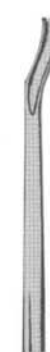
**160-375-05**  
Straight



**160-375-06**  
Slightly Curved



**160-375-07**  
Strongly Curved



**160-375-08**  
Curved down



**160-377-07**  
Hibbs Gouge endoscopic 460 mm  
7 mm tip width straight, graduated



Cobb  
240 mm

**DYNAMIC  
INSTRUMENTS**

Osteotomes / Gouges  
Osteotom / Hohlmeißel  
Osteotomo / Gubias  
Osteotomo / Sgorbie  
Osteotomes / Gouges



Lexer	Osteotome
220 mm	7 mm
<b>100-656-07</b>	10 mm
<b>100-656-10</b>	12 mm
<b>100-656-12</b>	15 mm
<b>100-656-15</b>	20 mm
<b>100-656-20</b>	25 mm
<b>100-656-25</b>	30 mm

Lexer modif.	Osteotome
290 mm	7 mm
<b>100-658-07</b>	10 mm
<b>100-658-10</b>	12 mm
<b>100-658-12</b>	15 mm
<b>100-658-15</b>	20 mm
<b>100-658-20</b>	25 mm
<b>100-658-25</b>	30 mm

Lexer	Gouge
220 mm	7 mm
<b>100-657-07</b>	10 mm
<b>100-657-10</b>	12 mm
<b>100-657-12</b>	15 mm
<b>100-657-15</b>	20 mm
<b>100-657-20</b>	25 mm
<b>100-657-25</b>	30 mm

Lexer modif.	Gouge
290 mm	7 mm
<b>100-659-07</b>	10 mm
<b>100-659-10</b>	12 mm
<b>100-659-12</b>	15 mm
<b>100-659-15</b>	20 mm
<b>100-659-20</b>	25 mm
<b>100-659-25</b>	30 mm



Lexer	straight
250 mm	7 mm
<b>100-684-07</b>	10 mm
<b>100-684-10</b>	15 mm
<b>100-684-15</b>	

Lexer	curved
250 mm	7 mm
<b>100-685-07</b>	10 mm
<b>100-685-10</b>	15 mm
<b>100-685-15</b>	



Smith-Peterson, 200 mm  
Osteotome, Straight

<b>100-632-06</b>	6 mm
<b>100-632-09</b>	9 mm
<b>100-632-12</b>	12 mm
<b>100-632-15</b>	15 mm
<b>100-632-20</b>	20 mm
<b>100-632-25</b>	25 mm
<b>100-632-30</b>	30 mm

Smith-Peterson, 200 mm  
Osteotome, curved

<b>100-633-06</b>	6 mm
<b>100-633-09</b>	9 mm
<b>100-633-12</b>	12 mm
<b>100-633-15</b>	15 mm
<b>100-633-20</b>	20 mm
<b>100-633-25</b>	25 mm
<b>100-633-30</b>	30 mm



Smith-Peterson, 200 mm  
Gouge, Straight

<b>100-672-06</b>	6 mm
<b>100-672-09</b>	9 mm
<b>100-672-12</b>	12 mm
<b>100-672-15</b>	15 mm
<b>100-672-20</b>	20 mm
<b>100-672-25</b>	25 mm
<b>100-672-30</b>	30 mm

Smith-Peterson, 200 mm  
Gouge, curved

<b>100-673-06</b>	6 mm
<b>100-673-09</b>	9 mm
<b>100-673-12</b>	12 mm
<b>100-673-15</b>	15 mm
<b>100-673-20</b>	20 mm
<b>100-673-25</b>	25 mm
<b>100-673-30</b>	30 mm

Lambotte, 240 mm  
Osteotome, Straight

<b>100-642-06</b>	6 mm
<b>100-642-09</b>	9 mm
<b>100-642-12</b>	12 mm
<b>100-642-15</b>	15 mm
<b>100-642-20</b>	20 mm
<b>100-642-25</b>	25 mm
<b>100-642-30</b>	30 mm



Bruns, 270 mm  
straight  
100-825-40 Fig. 0000  
100-825-30 Fig. 000  
100-825-20 Fig. 00  
100-825-10 Fig. 0  
100-825-01 Fig. 1  
100-825-02 Fig. 2  
100-825-03 Fig. 3  
100-825-04 Fig. 4  
100-825-05 Fig. 5  
100-825-06 Fig. 6



Bruns, 270 mm  
angled  
100-826-40 Fig. 0000  
100-826-30 Fig. 000  
100-826-20 Fig. 00  
100-826-10 Fig. 0  
100-826-01 Fig. 1  
100-826-02 Fig. 2  
100-826-03 Fig. 3  
100-826-04 Fig. 4  
100-826-05 Fig. 5  
100-826-06 Fig. 6



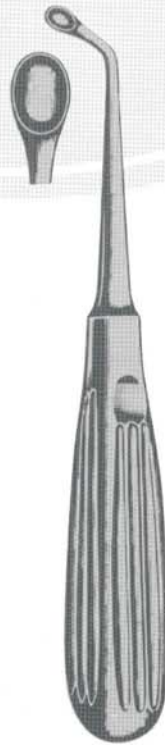
100-830-00  
4 mm x 10 mm  
straight



100-830-04  
4 mm x 10 mm  
up angle



100-830-03  
4 mm x 10 mm  
down angle

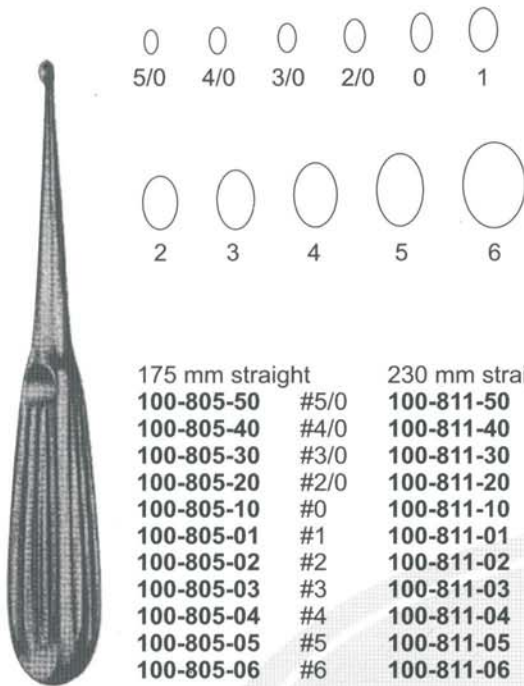


100-840-07  
Uffenorde left 175 mm



100-840-08  
Uffenorde right 175 mm

Scoville, 250 mm  
Ruptured Disc Curette

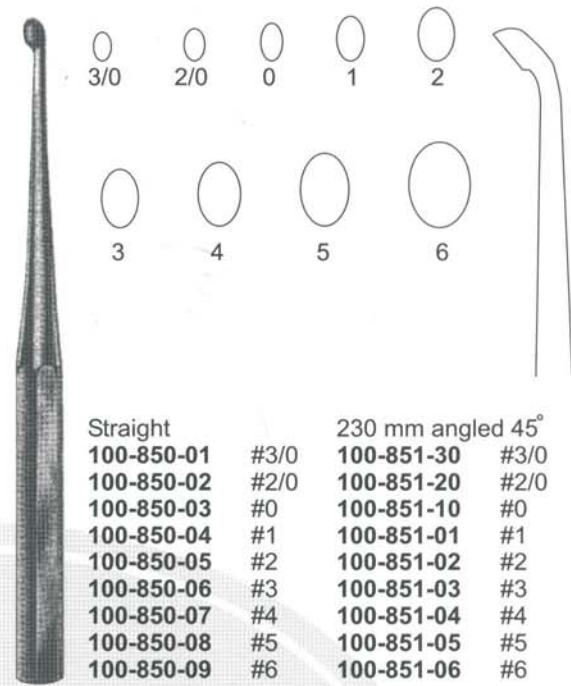


5/0 4/0 3/0 2/0 0 1

2 3 4 5 6

175 mm straight		230 mm straight	
100-805-50	#5/0	100-811-50	#5/0
100-805-40	#4/0	100-811-40	#4/0
100-805-30	#3/0	100-811-30	#3/0
100-805-20	#2/0	100-811-20	#2/0
100-805-10	#0	100-811-10	#0
100-805-01	#1	100-811-01	#1
100-805-02	#2	100-811-02	#2
100-805-03	#3	100-811-03	#3
100-805-04	#4	100-811-04	#4
100-805-05	#5	100-811-05	#5
100-805-06	#6	100-811-06	#6

Brun (Spinal Fusion) Curette with hollow handle, oval cup



3/0 2/0 0 1 2

3 4 5 6

Straight		230 mm angled 45°	
100-850-01	#3/0	100-851-30	#3/0
100-850-02	#2/0	100-851-20	#2/0
100-850-03	#0	100-851-10	#0
100-850-04	#1	100-851-01	#1
100-850-05	#2	100-851-02	#2
100-850-06	#3	100-851-03	#3
100-850-07	#4	100-851-04	#4
100-850-08	#5	100-851-05	#5
100-850-09	#6	100-851-06	#6

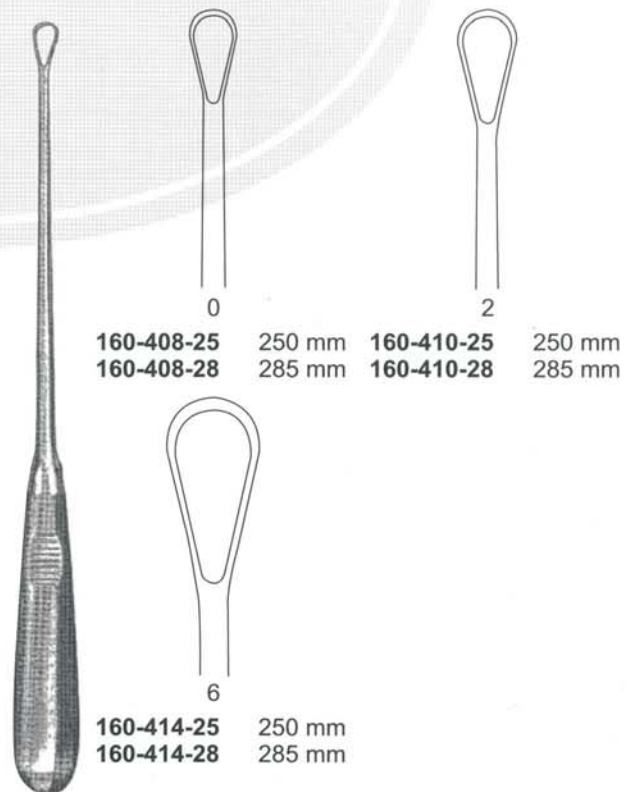
Bruns (Spinal Fusion) Curette 230 mm with solid hexagonal handle



3 mm 6 mm 8 mm

Straight	
160-403-08	Size #1, 8 mm ø
160-403-06	Size #2, 6 mm ø
160-403-03	Size #3, 3 mm ø
angled	
160-404-08	Size #1, 8 mm ø
160-404-06	Size #2, 6 mm ø
160-404-03	Size #3, 3 mm ø

Cone Ring Curette 230 mm with knurled handle, fenestrated cup



160-408-25 250 mm 160-410-25 250 mm  
160-408-28 285 mm 160-410-28 285 mm

160-414-25 250 mm  
160-414-28 285 mm

Ring Curette hollow handle, with fenestrated cup



**100-854-05**  
5 mm



**100-854-07**  
7 mm



**100-854-09**  
9 mm



**100-854-10**  
10 mm



**100-854-10**  
12 mm

Cushing, 235 mm  
Pituitary Spoon,  
malleable, silver-plated



Simon 240 mm

Fig.1  
**100-845-01**

Fig.4  
**100-845-04**

Fig.2  
**100-845-02**

Fig.5  
**100-845-05**

Fig.3  
**100-845-03**

Fig.6  
**100-845-06**



**100-857-03** 45°  
Ø 3 mm  
**100-857-04** Ø 4 mm  
**100-857-05** Ø 5 mm

**100-858-03** 90°  
Ø 3 mm  
**100-858-04** Ø 4 mm  
**100-858-05** Ø 5 mm

**100-859-03** 45° offset  
Ø 3 mm  
**100-859-04** Ø 4 mm  
**100-859-05** Ø 5 mm

**100-860-03** 90° offset  
Ø 3 mm  
**100-860-04** Ø 4 mm  
**100-860-05** Ø 5 mm

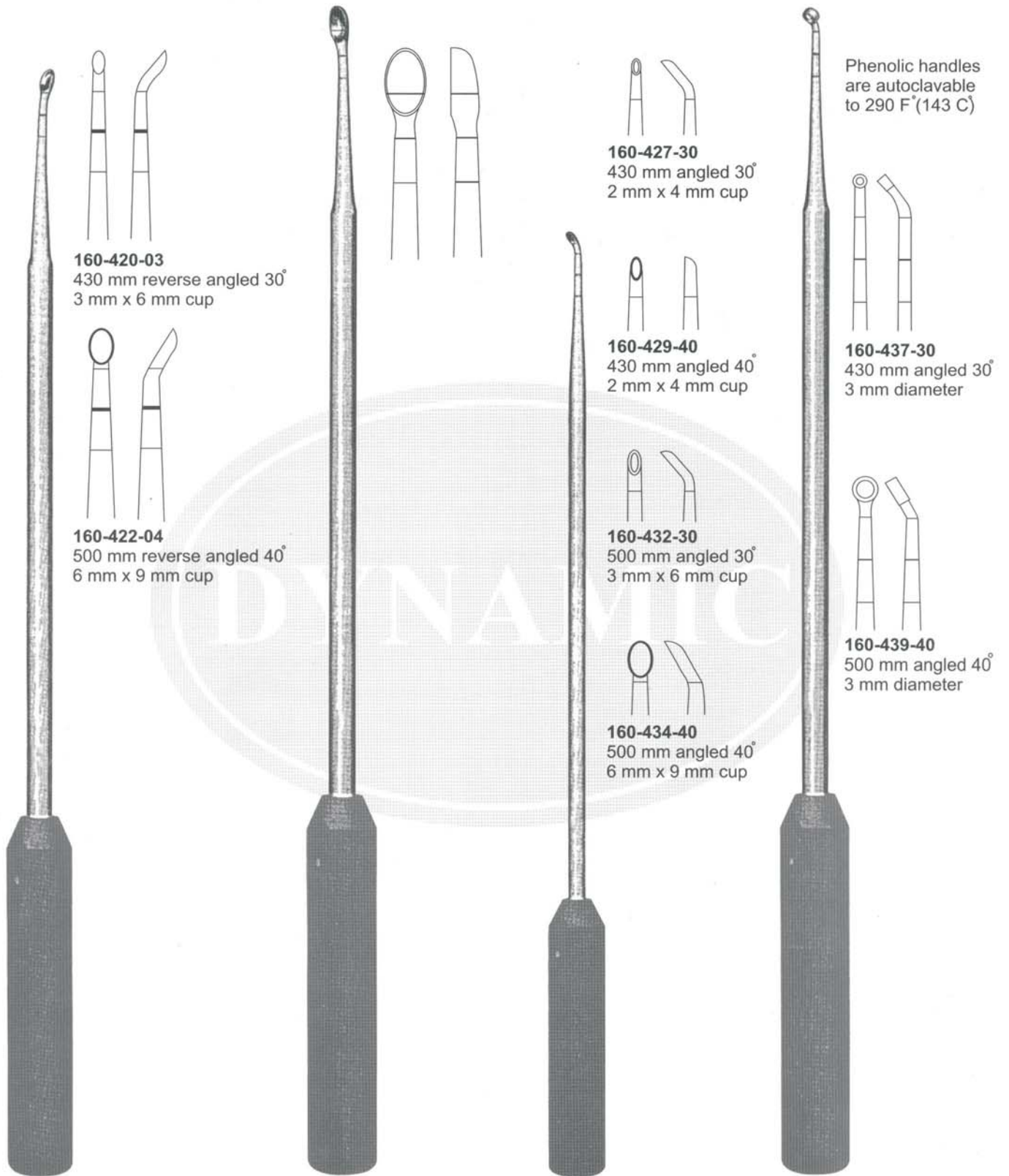
**100-063-04** Ø 4 mm  
straight

**100-064-03** 30°  
Ø 3 mm  
**100-064-04** Ø 4 mm  
**100-064-05** Ø 5 mm

**100-065-03** 45°  
Ø 3 mm  
**100-065-04** Ø 4 mm  
**100-065-05** Ø 5 mm

Ray, 190 mm  
Pituitary Curette

Tay-Bronson, 220 mm  
Pituitary Curette,  
double-edged



**160-420-03**  
430 mm reverse angled 30°  
3 mm x 6 mm cup

**160-422-04**  
500 mm reverse angled 40°  
6 mm x 9 mm cup

**160-427-30**  
430 mm angled 30°  
2 mm x 4 mm cup

**160-429-40**  
430 mm angled 40°  
2 mm x 4 mm cup

**160-432-30**  
500 mm angled 30°  
3 mm x 6 mm cup

**160-434-40**  
500 mm angled 40°  
6 mm x 9 mm cup

Phenolic handles  
are autoclavable  
to 290 F° (143 C)

**160-437-30**  
430 mm angled 30°  
3 mm diameter

**160-439-40**  
500 mm angled 40°  
3 mm diameter

Epstein Curette endoscopic  
graduated with fiber handle

**160-425-09**  
Scoville Curette endoscopic  
500 mm graduated with fiber handle  
9 mm x 15 mm cup straight

Brun  
Curette endoscopic  
graduated with  
fiber handle

Cone Ring Curette endoscopic  
graduated with fiber handle

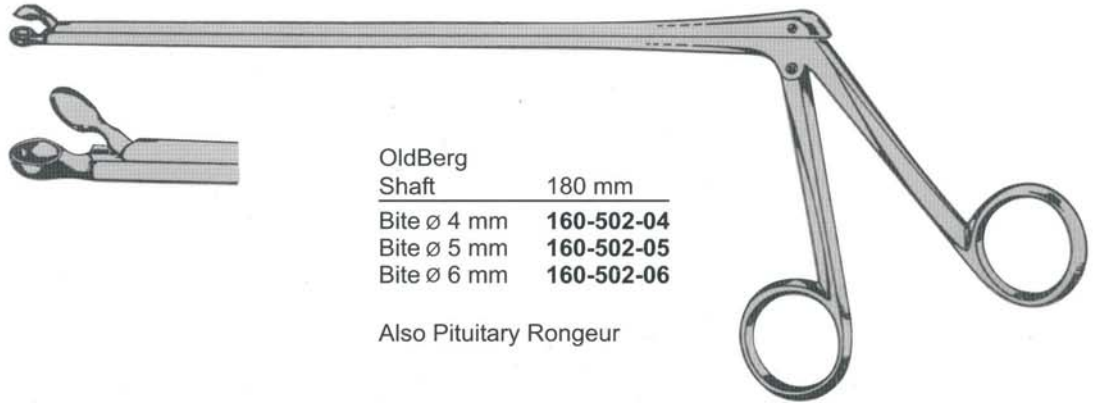


**DYNAMIC  
INSTRUMENTS**

**Intervertebral Disc Rongeur  
Zwischenwirbelscheiben Disc Rongeur  
Intervertebral Pinzas Disc  
Intervertebrale Disc Rongeur  
Rongeur Disc intervertébral**

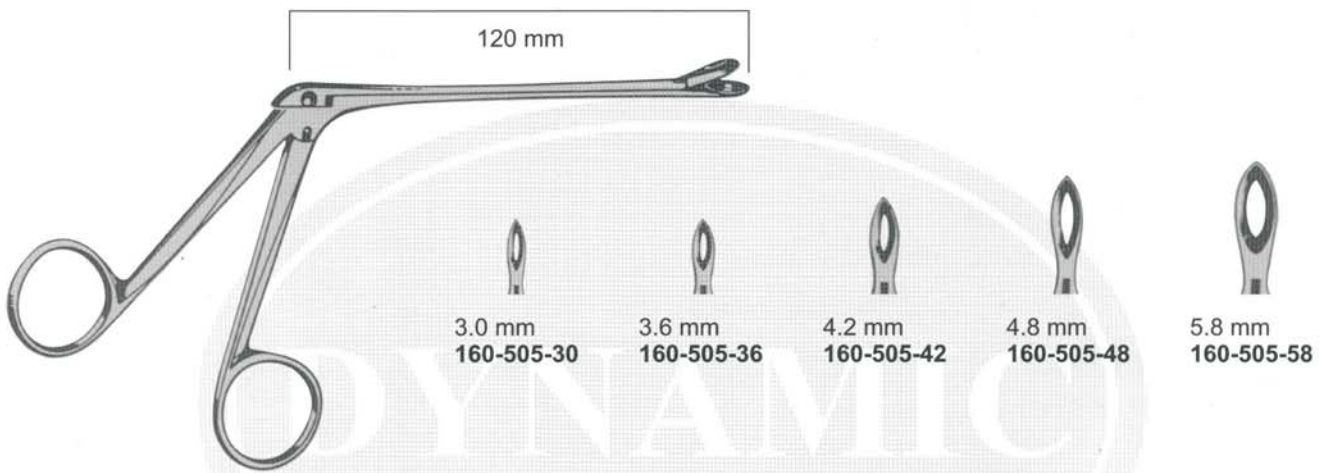


4 mm      5 mm      6 mm



OldBerg  
Shaft 180 mm  
Bite ø 4 mm **160-502-04**  
Bite ø 5 mm **160-502-05**  
Bite ø 6 mm **160-502-06**

Also Pituitary Rongeur



120 mm

3.0 mm  
**160-505-30**

3.6 mm  
**160-505-36**

4.2 mm  
**160-505-42**

4.8 mm  
**160-505-48**

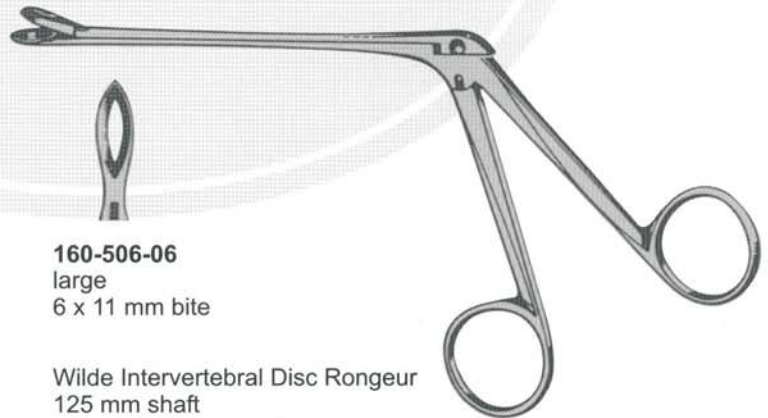
5.8 mm  
**160-505-58**

Weil - Blakesley

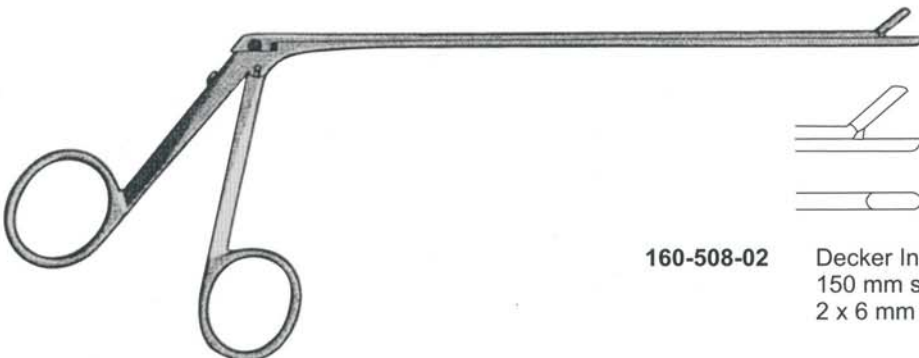
**160-506-04**  
small  
4 x 9 mm bite

**160-506-05**  
Medium  
5 x 10 mm bite

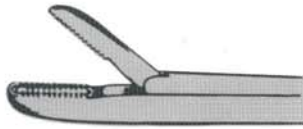
**160-506-06**  
large  
6 x 11 mm bite



Wilde Intervertebral Disc Rongeur  
125 mm shaft  
fenestrated jaws straight



**160-508-02** Decker Intervertebral Disc Rongeur  
150 mm shaft  
2 x 6 mm bite straight



Straight

Shaft	130 mm	180 mm
Bite 2 x 10 mm	<b>160-511-02</b>	<b>160-512-02</b>
Bite 3 x 10 mm	<b>160-511-03</b>	<b>160-512-03</b>
Bite 4 x 10 mm	<b>160-511-04</b>	<b>160-512-04</b>



Schlesinger



**160-515-01** Straight



**160-515-02** Angled-up



**160-515-03** Angled-down

Shaft 150 mm  
Bite 6 x 10 mm



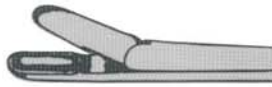
Cloward-type  
Serrated cup jaws

DYNAMIC

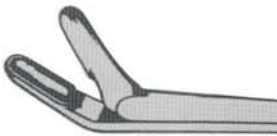
**Intervertebral Disc Rongeur**  
**Zwischenwirbelscheiben Disc Rongeur**  
**Intervertebral Pinzas Disc**  
**Intervertebrale Disc Rongeur**  
**Rongeur Disc intervertébral**



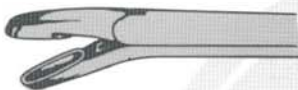
2x10 3x10 4x10



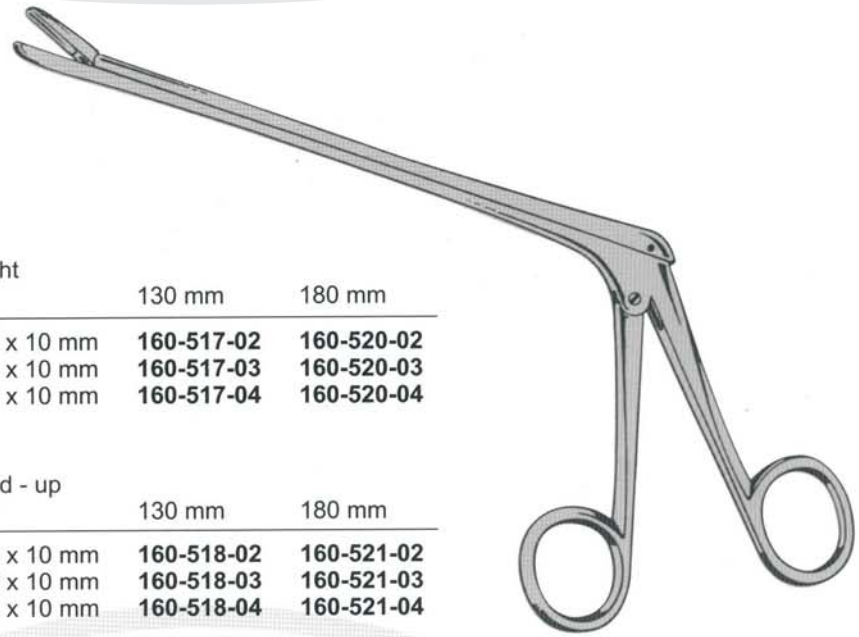
Straight Shaft	130 mm	180 mm
Bite 2 x 10 mm	<b>160-517-02</b>	<b>160-520-02</b>
Bite 3 x 10 mm	<b>160-517-03</b>	<b>160-520-03</b>
Bite 4 x 10 mm	<b>160-517-04</b>	<b>160-520-04</b>



Angled - up Shaft	130 mm	180 mm
Bite 2 x 10 mm	<b>160-518-02</b>	<b>160-521-02</b>
Bite 3 x 10 mm	<b>160-518-03</b>	<b>160-521-03</b>
Bite 4 x 10 mm	<b>160-518-04</b>	<b>160-521-04</b>



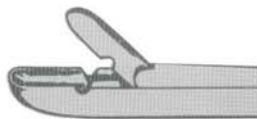
Angled - down Shaft	130 mm	180 mm
Bite 2 x 10 mm	<b>160-519-02</b>	<b>160-522-02</b>
Bite 3 x 10 mm	<b>160-519-03</b>	<b>160-522-03</b>
Bite 4 x 10 mm	<b>160-519-04</b>	<b>160-522-04</b>



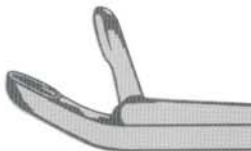
Cushing  
Love - Gruenwald  
Spurling



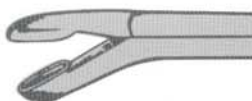
2x10 3x10 4x10



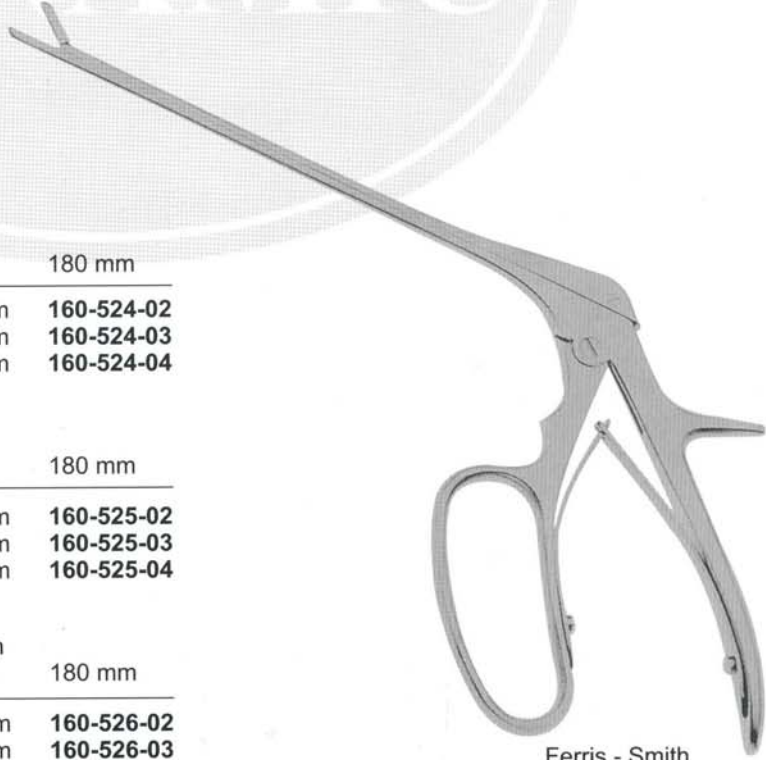
Straight Shaft	180 mm
Bite 2 x 10 mm	<b>160-524-02</b>
Bite 3 x 10 mm	<b>160-524-03</b>
Bite 4 x 10 mm	<b>160-524-04</b>



Angled - up Shaft	180 mm
Bite 2 x 10 mm	<b>160-525-02</b>
Bite 3 x 10 mm	<b>160-525-03</b>
Bite 4 x 10 mm	<b>160-525-04</b>



Angled - down Shaft	180 mm
Bite 2 x 10 mm	<b>160-526-02</b>
Bite 3 x 10 mm	<b>160-526-03</b>
Bite 4 x 10 mm	<b>160-526-04</b>



Ferris - Smith





Thin Footplate Kerrison Punch



Forward 90° Thin footplate

□	1 mm bite forward	
	<b>160-531-01</b>	150 mm
	<b>160-532-01</b>	180 mm
	<b>160-533-01</b>	200 mm

□	2 mm bite forward	
	<b>160-531-02</b>	150 mm
	<b>160-532-02</b>	180 mm
	<b>160-533-02</b>	200 mm

□	3 mm bite forward	
	<b>160-531-03</b>	150 mm
	<b>160-532-03</b>	180 mm
	<b>160-533-03</b>	200 mm

□	4 mm bite forward	
	<b>160-531-04</b>	150 mm
	<b>160-532-04</b>	180 mm
	<b>160-533-04</b>	200 mm

□	5 mm bite forward	
	<b>160-531-05</b>	150 mm
	<b>160-532-05</b>	180 mm
	<b>160-533-05</b>	200 mm



Up 40° Thin footplate

□	1 mm bite up	
	<b>160-535-01</b>	180 mm

□	2 mm bite up	
	<b>160-535-02</b>	180 mm

□	3 mm bite up	
	<b>160-535-03</b>	180 mm

□	4 mm bite up	
	<b>160-535-04</b>	180 mm

□	5 mm bite up	
	<b>160-535-05</b>	180 mm



Down 90° Thin footplate

□	1 mm bite down	
	<b>160-538-01</b>	180 mm

□	2 mm bite down	
	<b>160-538-02</b>	180 mm

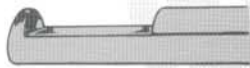
□	3 mm bite down	
	<b>160-538-03</b>	180 mm

□	4 mm bite down	
	<b>160-538-04</b>	180 mm

□	5 mm bite down	
	<b>160-538-05</b>	180 mm



Love-kerrison Laminectomy Punch



Forward 90° Regular Footplate

- 2 mm bite forward  
**160-541-02** 150 mm  
**160-543-02** 200 mm

- 3 mm bite forward  
**160-541-03** 150 mm  
**160-543-03** 200 mm

- 4 mm bite forward  
**160-541-04** 150 mm  
**160-543-04** 200 mm

- 5 mm bite forward  
**160-541-05** 150 mm  
**160-543-05** 200 mm

- 6 mm bite forward  
**160-541-06** 150 mm  
**160-543-06** 200 mm



Up 40° Regular footplate

- 2 mm bite up  
**160-544-02** 150 mm  
**160-546-02** 200 mm

- 3 mm bite up  
**160-544-03** 150 mm  
**160-546-03** 200 mm

- 4 mm bite up  
**160-544-04** 150 mm  
**160-546-04** 200 mm

- 5 mm bite up  
**160-544-05** 150 mm  
**160-546-05** 200 mm

- 6 mm bite up  
**160-546-06** 200 mm



Down 90° Regular footplate

- 3 mm bite down  
**160-547-03** 150 mm  
**160-549-03** 200 mm

- 4 mm bite down  
**160-547-04** 150 mm  
**160-549-04** 200 mm

- 5 mm bite down  
**160-547-05** 150 mm  
**160-549-05** 200 mm



2.0 mm 3.0 mm 3.5 mm



90°  
Up-cutting  
Shaft 140 mm  
Bite 2.0 mm **160-555-02**  
Bite 3.0 mm **160-555-03**  
Bite 3.5 mm **160-555-04**

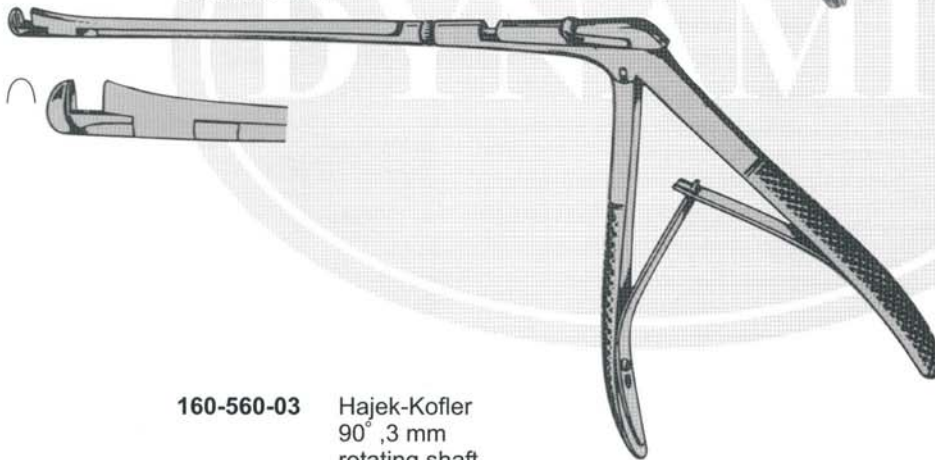


90°  
Down-cutting  
Shaft 140 mm  
Bite 2.0 mm **160-556-02**  
Bite 3.0 mm **160-556-03**  
Bite 3.5 mm **160-556-04**



Shaft 140 mm

Hajek-Kofler

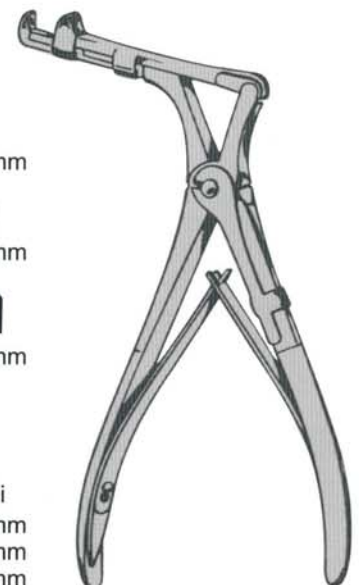


**160-560-03** Hajek-Kofler  
90°, 3 mm  
rotating shaft

1.0 mm  
2.5 mm  
4.0 mm

Citelli  
1.0 mm  
2.5 mm  
4.0 mm

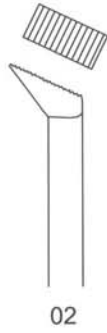
**160-562-01**  
**160-562-02**  
**160-562-03**





01

**160-603-01**  
6 mm x 12 mm



02

**160-603-02**  
7 mm x 16 mm



03

**160-603-03**  
6 mm x 13 mm



04

**160-603-04**  
4 mm x 10 mm



05

**160-603-05**  
4 mm x 10 mm



06

**160-603-06**  
10 mm x 13 mm



07

**160-603-07**  
7 mm x 13 mm



08

**160-603-08**  
10 mm x 13 mm



09

**160-603-09**  
7 mm x 13 mm



**160-607-10**

Bone Tamp endoscopic  
430 mm with stainless steel handle  
10 mm diameter

- |                   |   |        |
|-------------------|---|--------|
| <b>160-603-01</b> | Lumbar and Cervical Impactors and Drivers serrated tips | 215 mm |
| <b>160-603-02</b> | Impactor, standard offset,                              | 215 mm |
| <b>160-603-03</b> | Impactor, central canal,                                | 215 mm |
| <b>160-603-04</b> | Impactor, lateral narrow,                               | 215 mm |
| <b>160-603-05</b> | Impactor, micro offset,                                 | 180 mm |
| <b>160-603-06</b> | Impactor, micro lateral,                                | 180 mm |
| <b>160-603-07</b> | Graft Driver, lumbar, guarded,                          | 215 mm |
| <b>160-603-08</b> | Graft Driver, anterior, guarded,                        | 215 mm |
| <b>160-603-09</b> | Graft Driver, lumbar, unguarded,                        | 215 mm |
| <b>160-603-09</b> | Graft Driver, anterior, unguarded,                      | 215 mm |

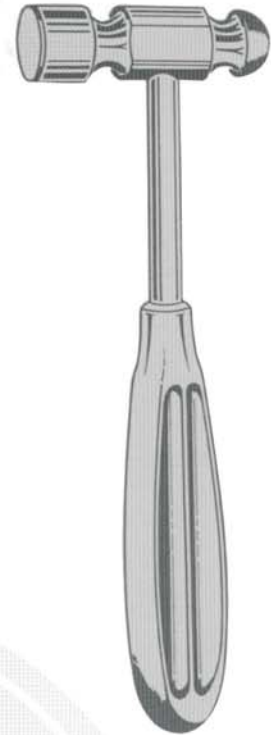
Mallets  
Mallets  
Martillos y mazos  
Martelli  
Maillets



**100-605-28**  
 Ø 28 mm, 230 mm



**100-616-24**  
 Ø 30 mm + 42 mm  
 240 mm



**100-615-19** Ø 19 mm, 190 mm  
**100-615-25** Ø 25 mm, 230 mm  
 Cervical Mallet

DYNAMIC



**100-609-25**  
 42 mm, 250 mm  
 Material Ferozell can be sterilized  
 in an autoclave at 3 bar overpressure  
 (143°C)



**100-610-60**  
 Ø 60 mm, 240 mm  
 Fiber material



**100-612-21** 30 mm / 215 g  
 with interchangeable  
 Plastic disks 250 mm  
**100-613-02** Pair of spare disks

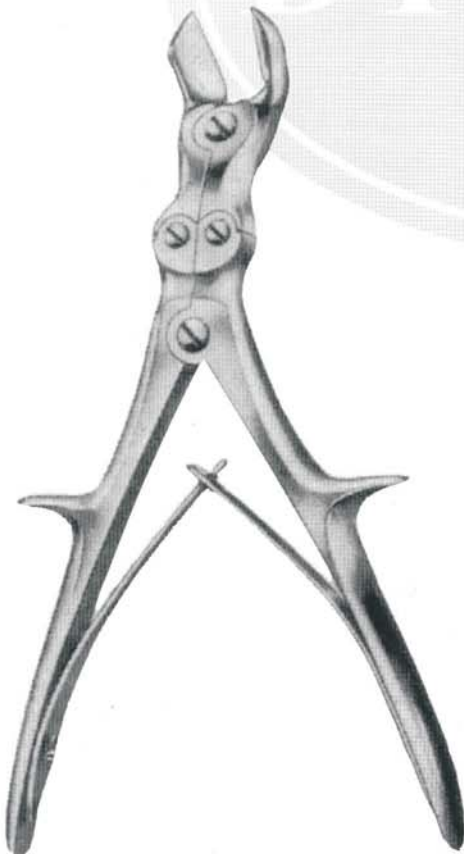




102-025-19 Ruskin-Liston 190 mm straight  
102-026-19 Ruskin-Liston 190 mm curved



102-037-27 Stille-Liston 270 mm straight  
102-038-27 Stille-Liston 270 mm curved



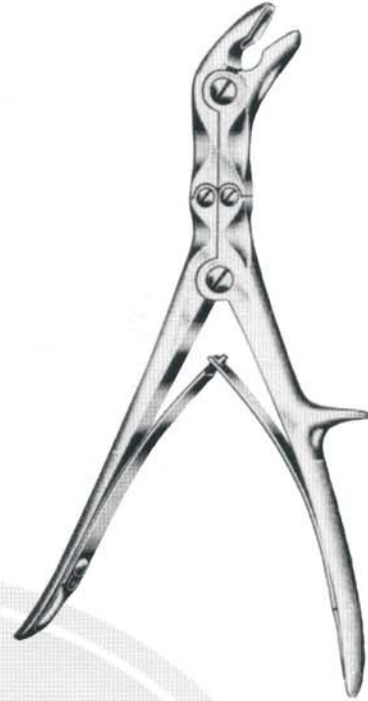
102-030-27 Stille Horsley 270 mm



102-045-28 Giertz-Semb 280 mm



**102-243-23** Stille Luer 230 mm straight  
**102-244-23** Stille Luer 230 mm curved



**102-273-23** Stille, Angular, 230 mm



**102-287-03** Leksell 220 mm 3 mm  
**102-287-04** 5 mm  
**102-287-08** 8 mm



- 102-250-01 Leksell- Stille 240 mm 3 x 16 mm cup curved
- 102-250-04 Leksell- Stille 240 mm 3 x 16 mm cup fully curved
- 102-250-07 Leksell- Stille 240 mm 5 x 16 mm cup curved
- 102-250-12 Leksell- Stille 240 mm 8 x 16 mm cup curved
- 102-250-17 Leksell- Stille 240 mm 5 x 16 mm cup fully curved
- 102-250-23 Leksell- Stille 240 mm 8 x 16 mm cup fully curved

**102-260-22** Semb 225 mm



2 mm  
**102-280-02**



3 mm  
**102-280-03**

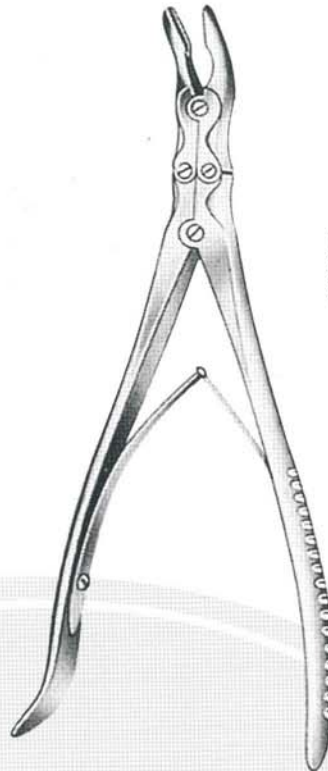


4 mm  
**102-280-04**

- 102-280-02** Echlin, 230 mm 2 mm
- 102-280-03** 3 mm
- 102-280-04** 4 mm



**102-292-03**  
Dale Thoracic Rongeur 360 mm slight curve  
3 x 16 mm



Smith-Peterson Laminectomy Rongeur 235 mm

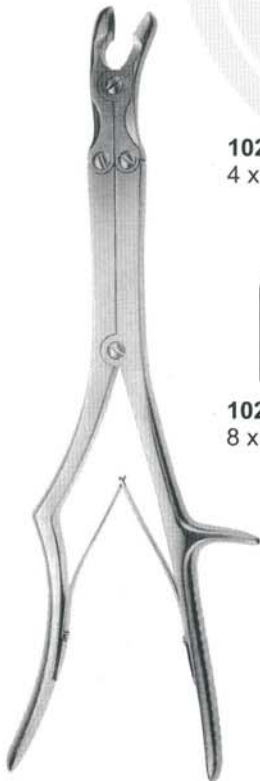
**102-295-01**  
Straight  
3 x 16 mm bite



**102-295-03**  
Curved  
3 x 16 mm bite



**102-295-07**  
Full curved  
3 x 16 mm bite



Syoert Rongeur 360 mm slightly angled jaw

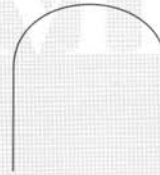
**102-298-04**  
4 x 16 mm bite



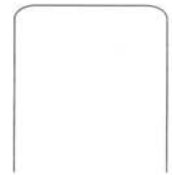
**102-298-04**  
5 x 16 mm bite



**20 mm**  
**100-265-30**



**20 mm**  
**100-266-30**



**102-298-08**  
8 x 16 mm bite



**102-298-12**  
12 x 16 mm bite



**102-265-30** Sauerbruch 310 mm  
**102-266-30** Round  
Straight



**160-039-14**  
Bergmann, 140 mm  
sharp



**160-041-13**  
Rollet, 130 mm  
4 prong, sharp



**160-142-01**  
4 prong, sharp



**160-142-01**  
4 prong, blunt



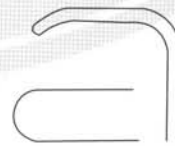
Knapp 160 mm



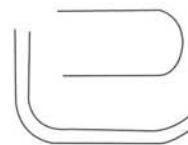
**160-142-07**  
4 prong, sharp



**160-142-08**  
4 prong, blunt



Full Size



Full Size



**160-144-01**  
Ragnell, 160 mm



**160-144-03**  
Ragnell modif.  
160 mm  
Round Handle

Knapp modif.  
160 mm  
angled



Meyerding, 180 mm



**160-154-01**  
7 mm x 18 mm



**160-154-04**  
5 mm x 16 mm



**160-154-02**  
4 mm x 7 mm



**160-154-05**  
3 mm x 10 mm



**160-154-03**  
4 mm x 7 mm



**160-154-06**  
10 mm x 4 mm  
three prongs, sharp

DYNAMIC



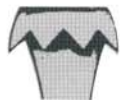
Oldberg  
210 mm



**160-157-01**  
19 mm, 210 mm  
plain



**160-157-03**  
13 mm, 210 mm  
three prong



**160-157-02**  
15 mm, 210 mm  
four prong



**160-157-04**  
19 mm, 210 mm  
six prong

**DYNAMIC  
INSTRUMENTS**

**Retractors  
Wundsperrer  
Separadores  
Divaricatori  
Rétracteurs**



Cushing, 200 mm  
**160-145-08** 8 mm  
**160-145-10** 10 mm  
**160-145-12** 12 mm  
**160-145-14** 14 mm  
**160-145-16** 16 mm  
**160-145-18** 18 mm



Cushing, 200 mm Short Neck  
**160-146-08** 8 mm  
**160-146-10** 10 mm  
**160-146-12** 12 mm  
**160-146-14** 14 mm  
**160-146-16** 16 mm  
**160-146-18** 18 mm



**160-147-23**  
 Cushing, 230 mm  
 10 mm x 10 mm



Love (Morse), 230 mm  
**160-148-10** 10 mm x 12 mm  
**160-148-15** 15 mm x 12 mm  
**160-148-20** 20 mm x 12 mm  
**160-148-30** 30 mm x 12 mm



**160-149-21**  
 Sachs  
 215 mm



**160-150-20**  
 Cushing, 200 mm  
 10 mm x 18 mm  
 Decompression  
 Retractor



Dacis, 200 mm  
**160-151-06** 6 mm  
**160-151-12** 12 mm  
**160-151-17** 17 mm  
**160-151-25** 25 mm



**160-152-17**  
**160-152-20**  
 Cushing  
 170 mm  
 200 mm  
 16 mm x 21 mm



**160-016-01**  
**160-016-03**  
**160-016-08**

Love Nerve Retractor 210 mm  
7 mm width x 5 mm depth  
Straight blade  
blade angled 45° degrees  
blade angled 90° degrees

**160-017-04** Love modif.  
4 mm, 100 mm

**160-017-05** Love modif.  
5 mm, 110 mm

**160-017-07** Love modif.  
7 mm, 110 mm



**160-019-07**  
**160-019-09**

Holsher Nerve Retractor  
230 mm angled 7 mm blade  
9 mm blade

**160-021-22**  
**160-021-23**

Nerve Root Retractor  
Offset 225 mm  
6 mm blade  
9 mm blade

**160-023-08**  
**160-023-13**

Scoville Nerve Root Retractor  
230 mm angled  
8 mm blade  
13 mm blade





**160-027-22**  
Cushing Vein Retractor 225 mm  
with fenestrated handle  
Blade 12 mm width x 10 mm

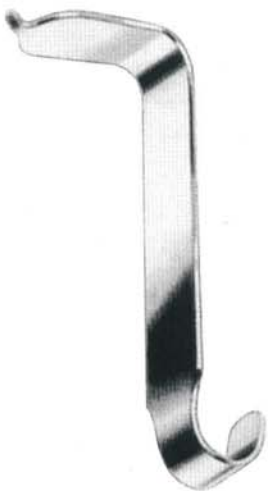


**160-030-21**  
Cushing Decompression Retractor 215 mm  
with fenestrated blade and handle  
Blade 13 mm width x 22 mm



**160-031-01**  
**160-031-02**

Scoville 7 mm, 240 mm  
straight  
carved



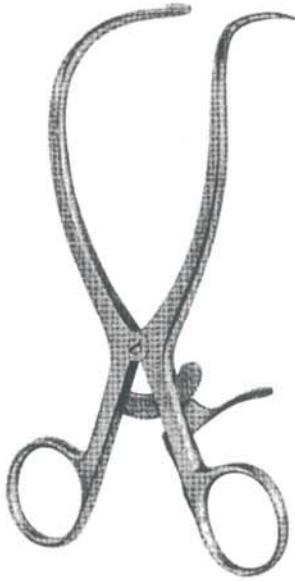
**160-033-07**  
**160-033-10**  
Taylor 170 mm  
30 x 75 mm  
30 x 100 mm



**160-035-07**  
**160-035-08**  
Hibbs  
25 x 75 mm, 230 mm  
25 x 80 mm, 240 mm



**160-038-20**  
**160-038-23**  
**160-038-24**  
Meyerdig  
16 X 50 mm, 200 mm  
25 X 75 mm, 230 mm  
50 X 90 mm, 240 mm



**160-060-15**  
Gelpi-Seletz Retractor  
155 mm  
Sharp, deep Blades



Gelpi Retractor

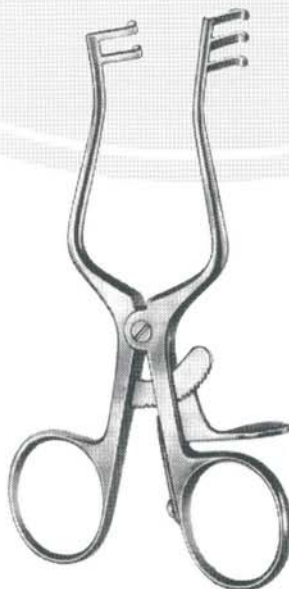


**160-070-15** Gelpi Retractor 150 mm  
**160-070-26** Wiltse Retractor 260 mm  
sharp, deep blade

Length	Blunt	Sharp
85 mm	<b>160-062-08</b>	<b>160-063-08</b>
110 mm	<b>160-062-11</b>	<b>160-063-11</b>
135 mm	<b>160-062-13</b>	<b>160-063-13</b>
285 mm	<b>160-062-28</b>	<b>160-063-28</b>

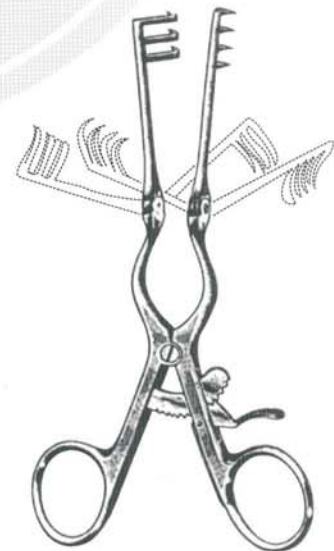


**160-065-17**  
Gelpi Retractor 175 mm  
with ball stops  
sharp points



Weitlaner

Size	Pronges	Blunt	Sharp
105 mm	2 x 3	<b>100-480-01</b>	<b>100-481-01</b>
130 mm	3 x 4	<b>100-480-04</b>	<b>100-481-04</b>
165 mm	3 x 4	<b>100-480-09</b>	<b>100-481-09</b>
200 mm	3 x 4	<b>100-480-15</b>	<b>100-481-15</b>
250 mm	5 x 6	<b>100-480-18</b>	<b>100-481-18</b>



Beckmen-Weitlaner Retractor hinged  
blades, 3 x 4 prongs

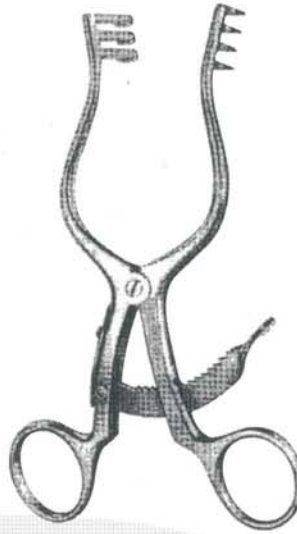
Height	Blunt	Sharp
135 mm	<b>160-080-13</b>	<b>160-081-13</b>
170 mm	<b>160-080-17</b>	<b>160-081-17</b>
210 mm	<b>160-080-21</b>	<b>160-081-21</b>
240 mm	<b>160-080-24</b>	<b>160-081-24</b>



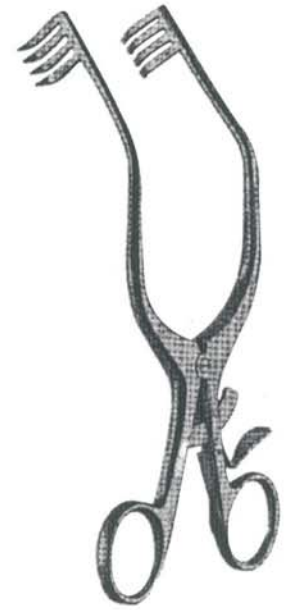
**160-052-10**  
Jansen Retractor 100 mm  
3 x 3 blunt prongs



**160-055-11**  
Snitman Endaural  
Retractor 115 mm  
3 x 3 sharp prongs  
Blade 11mm x 15 mm



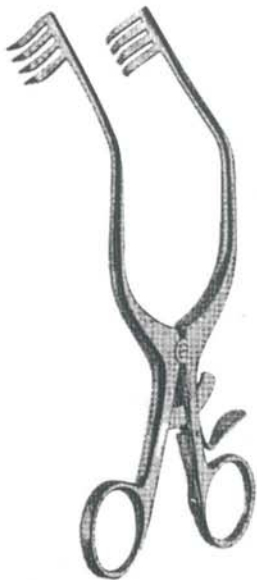
**160-057-13**  
Scalp Contour  
Retractor 135 mm  
3 x 4 sharp prongs  
15 mm x 20 mm



Adson Retractor 185 mm  
4 x 4 Sharp Prong  
Blade 18 x 18 mm  
Straight  
angled

**160-080-18**  
**160-081-18**

DYNAMIC



**160-085-22**  
D'Erroco-Adson Retractor 180 mm  
4 x 4 sharp prongs, 22 mm x 19 mm



**160-087-35**  
Miskimon Cerebellum Retractor 180 mm  
7 x 7 sharp prongs, 35 mm x 32 mm



Adson, 265 mm  
5 x 6 prongs  
blade 35 mm deep  
sharp straight  
blunt straight  
sharp hinged  
blunt hinged

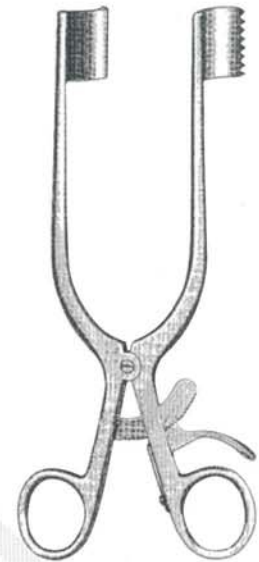
**160-089-01**  
**160-089-02**  
**160-089-05**  
**160-089-06**



**160-092-03** Beckmann - Eaton  
320 mm, 7 x 7 Prongs  
sharp, blades, 50 mm  
**160-092-07** blunt, blades, 50 mm



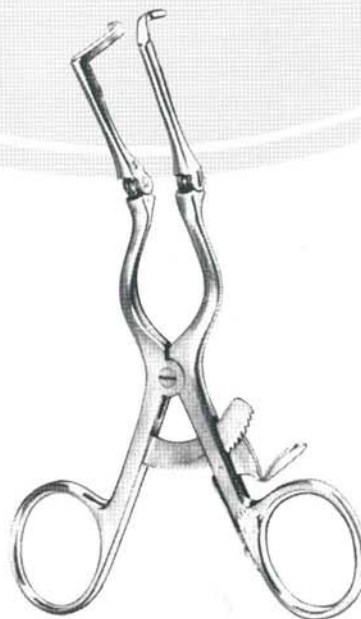
**160-093-04** Beckmann - Adson  
310 mm, 4 x 4 Prongs  
**160-093-08** sharp blades 25 mm  
**160-093-12** blunt blades 25 mm  
**160-093-16** sharp blades 44 mm  
blunt blades 44 mm



**160-095-30** Meyerding Laminectomy  
Retractor  
160 mm sharp blade  
**160-095-40** 25 mm x 30 mm  
**160-095-50** 25 mm x 40 mm  
**160-095-60** 25 mm x 50 mm  
25 mm x 60 mm



**160-097-03** Markham-Meyerding  
Hemilaminectomy Retractor  
175 mm blades 60 mm x 25 mm  
**160-097-05** left  
right



**160-098-13**  
Cervical Tissue Retractor  
130 mm



**160-101-28**  
Charnley, 280 mm



- 160-102-07** Cloward 170 mm  
Frame only  
**160-102-00** complete set with 7 blades  
(30 mm - 60 mm)  
**160-102-03** complete set with 7 toothed blades  
(30 mm - 60 mm)



- Cloward  
Blades only  
**160-102-30** 30 mm  
**160-102-35** 35 mm  
**160-102-40** 40 mm  
**160-102-45** 45 mm  
**160-102-50** 50 mm  
**160-102-55** 55 mm  
**160-102-60** 60 mm



- 160-105-07** Cloward 170 mm  
Frame only  
**160-105-00** complete set with 7 blades  
(30 mm - 60 mm)  
**160-105-03** complete set with 7 toothed blades  
(30 mm - 60 mm)



- Cloward  
Blades toothed  
**160-105-30** 30 mm  
**160-105-35** 35 mm  
**160-105-40** 40 mm  
**160-105-45** 45 mm  
**160-105-50** 50 mm  
**160-105-55** 55 mm  
**160-105-60** 60 mm



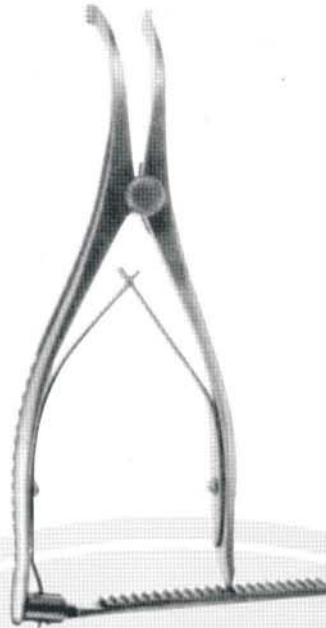
- 160-107-07** Cloward 250 mm  
(with snap lock)  
Frame only  
**160-107-00** complete with 7 blades  
**160-107-03** complete with 7 toothed blades  
(30 mm - 60 mm)



- 160-110-07** Cloward Cervical Retractor 150 mm  
(with sharp lock)  
Frame only  
**160-110-00** complete with 7 blades  
**160-110-03** complete with 7 toothed blades



**160-122-13**  
Cloward 130 mm



**160-125-16**  
Inge 160 mm  
Small pattern



**160-125-05**  
**160-125-10**  
Inge, 260 mm  
Jaw width 5 mm  
Jaw width 10 mm  
large pattern

DYNAMIC



**160-127-02**  
Lumbar Lamina Spreader  
arm length: 87.5 mm  
spread: 37.5 mm



**160-129-16**  
Cloward 160 mm



**160-130-14**  
140 mm



**160-132-00** Casper Retractor for Lumbar Vertebral operations



Blade Lengths  
**160-132-45** 45 mm  
**160-132-50** 50 mm  
**160-132-55** 55 mm  
**160-132-60** 60 mm  
**160-132-65** 65 mm



**160-143-01** Casper Retractor for Ventral cervical fusion  
**160-144-05** Casper Retractor (hinged) for Ventral cervical fusion



**160-137-00** Casper Retractor for Soft tissue with medial and lateral Blades frame only



Medial Blades width 20 mm  
 Blade Lengths  
**160-138-40** 40 mm  
**160-138-45** 45 mm  
**160-138-50** 50 mm  
**160-138-55** 55 mm  
**160-138-60** 60 mm  
**160-138-65** 65 mm



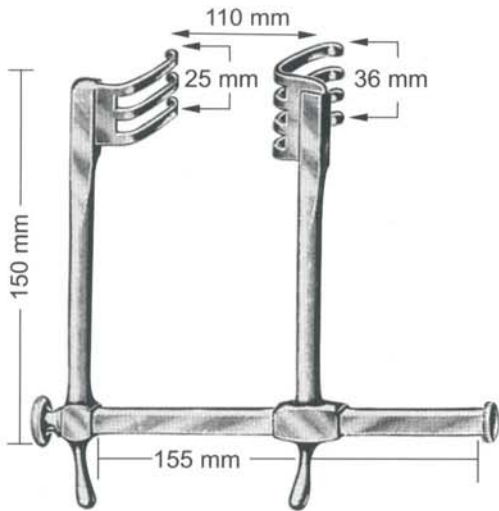
Lateral Blades width 20 mm  
 Blade Lengths  
**160-139-40** 40 mm  
**160-139-45** 45 mm  
**160-139-50** 50 mm  
**160-139-55** 55 mm  
**160-139-60** 60 mm  
**160-139-65** 65 mm



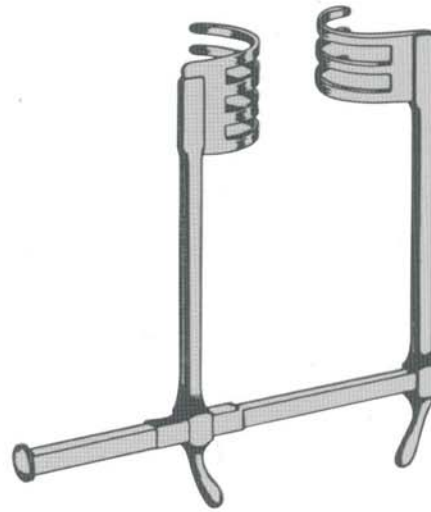
Blunt Blades width 20 mm  
 Blade Lengths  
**160-145-45** 45 mm  
**160-145-50** 50 mm  
**160-145-55** 55 mm  
**160-145-60** 60 mm  
**160-145-65** 65 mm



Casper distractor for ventral cervical vertebral body fusion  
**160-150-00** Distractor  
**160-150-04** Drilling Guide  
**160-150-12** Drill 2.0 mm with Sleeve  
**160-150-16** Distraction Screws  
**160-150-25** Screws Drivers



**160-155-15** Temple-Fay



**160-160-12** Frazier Laminectomy Retractor  
spread: 90 mm  
arm length: 125 mm



**160-165-01**  
60 mm x 50 mm



**160-165-02**  
48 mm x 50 mm



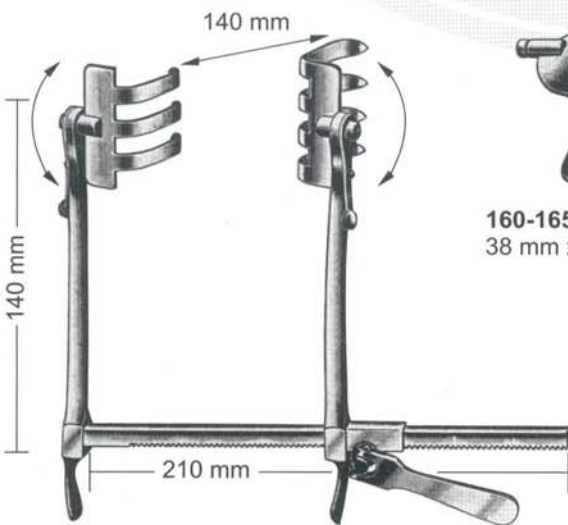
**160-165-03**  
28 mm x 40 mm



**160-165-04**  
38 mm x 62 mm



**160-167-03**  
40 mm x 25 mm  
Blade only, 3 prong

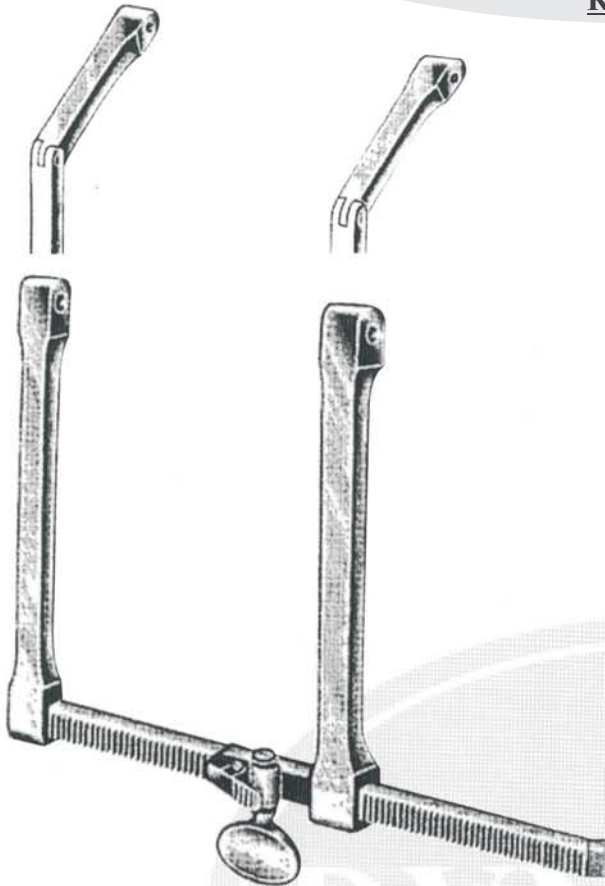


**160-165-21** Scoville- Richter



**160-167-00** Sheldon  
complete with 2 toothed blades  
and 1 3-pronged blade

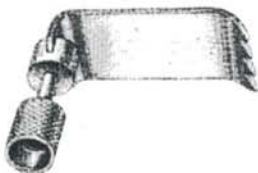




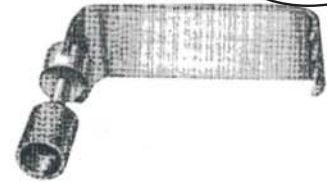
**160-170-18** Scoville Hemilaminectomy Retractor Body  
**160-171-18** Haverfield-scoville Hemilaminectomy Retractor Body (hinged)



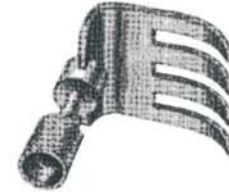
**160-172-01** Scoville Blades, hook Style  
**160-172-02** 51 mm depth  
**160-172-03** 76 mm depth  
**160-172-04** 51 mm depth with cross bar  
**160-172-04** 70 mm depth with cross bar



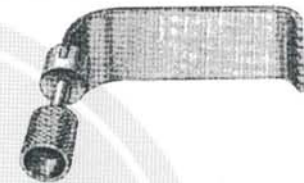
**160-174-01** Hibbs blades  
**160-174-02** 25 mm width x 51 mm depth  
**160-174-03** 51 mm width x 50 mm depth  
**160-174-04** 25 mm width x 38 mm depth  
**160-174-05** 38 mm width x 38 mm depth  
**160-174-06** 25 mm width x 76 mm depth  
**160-174-07** 38 mm width x 76 mm depth  
**160-174-08** 51 mm width x 76 mm depth  
**160-174-09** 25 mm width x 102 mm depth  
**160-174-09** 51 mm width x 102 mm depth



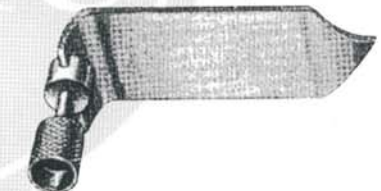
**160-175-01** Scoville Blades, solid  
**160-175-02** 25 mm width x 64 mm depth  
**160-175-03** 51 mm width x 64 mm depth  
**160-175-04** 29 mm width x 67 mm depth  
**160-175-04** 25 mm width x 89 mm depth



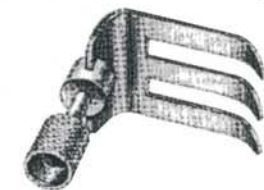
**160-176-01** Scoville Blades, 4 prong  
**160-176-02** 38 mm width x 41 mm depth  
**160-176-02** 48 mm width x 67 mm depth



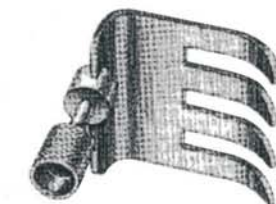
**160-177-01** Meyerding Blades  
**160-177-02** 25 mm width x 57 mm depth  
**160-177-03** 25 mm width x 67 mm depth  
**160-177-03** 51 mm width x 89 mm depth



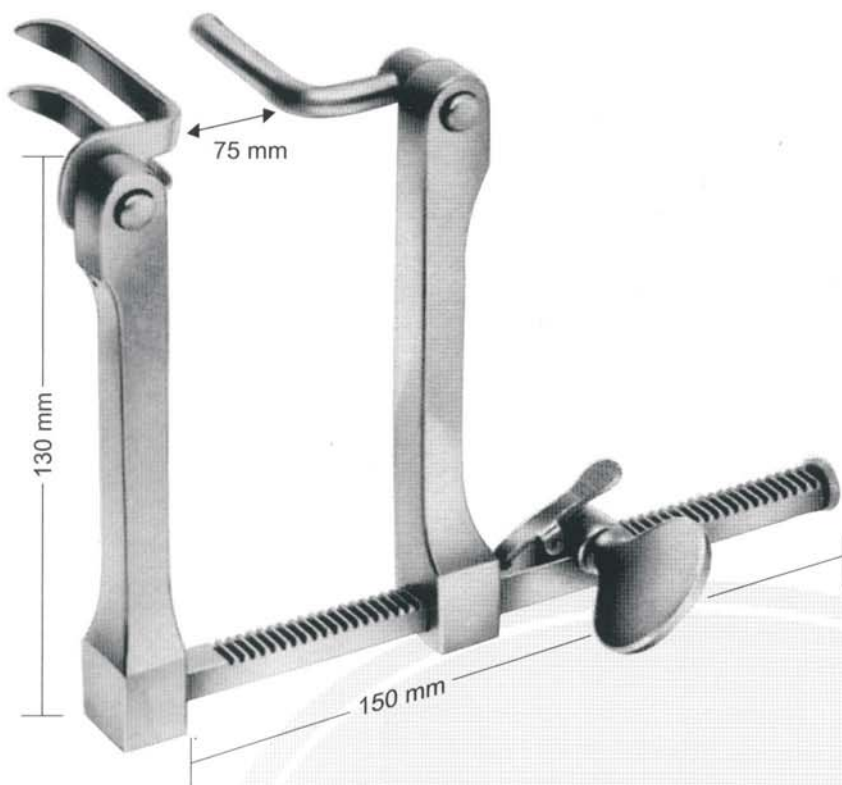
**160-178-01** Taylor Spinal Blades  
**160-178-02** 32 mm width x 76 mm depth  
**160-178-02** 32 mm width x 102 mm depth



**160-179-01** Taylor Laminectomy Blades, 3 prong  
**160-179-01** 38 mm width x 44 mm depth



**160-180-01** Taylor Laminectomy Blades  
**160-180-02** 51 mm width x 48 mm depth  
**160-180-03** 64 mm width x 64 mm depth  
**160-180-03** 57 mm width x 76 mm depth



**160-185-15** Caspar Retractor Frame  
**160-186-15** Caspar Retractor Frame (hinged)



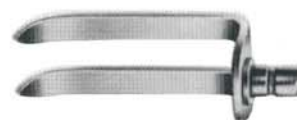
- 160-188-01** 45 x 23 mm
- 160-188-02** 50 x 23 mm
- 160-188-03** 55 x 23 mm
- 160-188-04** 60 x 23 mm
- 160-188-05** 65 x 23 mm



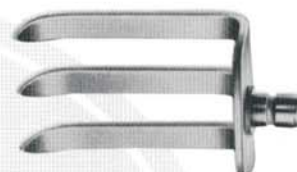
**160-189-01** Hook 50 mm



**160-189-02** Hook 70 mm



- Blades**
- 160-190-01** 35 mm x 22 mm
  - 160-190-02** 40 mm x 22 mm
  - 160-190-03** 45 mm x 22 mm
  - 160-190-04** 50 mm x 22 mm
  - 160-190-05** 55 mm x 22 mm
  - 160-190-06** 60 mm x 22 mm
  - 160-190-07** 65 mm x 22 mm
  - 160-190-08** 70 mm x 22 mm



- Blades**
- 160-191-01** 35 mm x 37 mm
  - 160-191-02** 40 mm x 37 mm
  - 160-191-03** 45 mm x 37 mm
  - 160-191-04** 50 mm x 37 mm
  - 160-191-05** 55 mm x 37 mm
  - 160-191-06** 60 mm x 37 mm
  - 160-191-07** 65 mm x 37 mm
  - 160-191-08** 70 mm x 37 mm



- Blades**
- 160-192-01** 35 mm x 52 mm
  - 160-192-02** 40 mm x 52 mm
  - 160-192-03** 45 mm x 52 mm
  - 160-192-04** 50 mm x 52 mm
  - 160-192-05** 55 mm x 52 mm
  - 160-192-06** 60 mm x 52 mm
  - 160-192-07** 65 mm x 52 mm
  - 160-192-08** 70 mm x 52 mm