

ZUOL

INSTRUMENTS

NS

NEUROSURGERY

Neurosurgery deals with the diagnosis and treatment of pathological processes, which affect the nervous system. It includes the operative, non-operative, intensive care management and rehabilitation of patients with disorders affecting the brain and skull, spine and nervous system.

Perfection is in high demand in this discipline and requires talent, expertise and precision instrument manufacturing. At **ZUOL** we support the skilled hands of the surgeon with high quality instruments for perfect surgical work.

Our neurosurgery instruments include but are not limited to the following Special Micro- Neurosurgical Instruments, Special Microsurgical Tube- shaft Instruments, Head-Cranio Instruments and Holding Systems, Pituitary Instruments, Self- retaining Retractors, Spine Instruments, Rongeurs and Laminectomy Punches, Vessel- and Bulldog- Clamps, Vessel Clips, General Surgical Instruments, Neuro-Orthopedic Instruments and Headrest systems to fix the patient's head and flexible Leyla retractor systems.

Neurochirurgie

Neurocirugía

Neurochirurgie

Neurochirurgia

Self-Retaining Brain Retractor
 Selbsthaltender Hirnretractor
 Separador cerebral autostático
 Retracteur cérébrale autostatique
 Retratore celebrale autostatico

Yasargil (Leyla) Brain Retractor Single Arm Complete

Catalog #	Size
NS-010-01	N/A



Yasargil (Leyla) Brain Double Retractor Arm Complete

Catalog #	Size
NS-010-02	N/A



Yasargil (Leyla) Flexible Arm

Catalog #	Size
NS-010-10	N/A



Yasargil (Leyla) Flexible Base

Catalog #	Size
NS-010-21	N/A
NS-010-22	N/A
NS-010-30	N/A



NS-010-21



NS-010-22



NS-010-30

Yasargil (Leyla) Support for Round Spatulas

Catalog #	Size
NS-010-40	N/A



Self-Retaining Brain Retractor
Selbsthaltender Hirnretractor
Separador cerebral autostático
Retracteur cérébrale autostatique
Retratore celebrale autostatico

Yasargil (Leyla) Support for Flat Spatulas

Catalog #	Size
NS-010-45	N/A



Yasargil (Leyla) Ball and Socket Joint

Catalog #	Size
NS-012-09	9 x 32 mm
NS-012-10	10 x 25 mm



Yasargil (Leyla) Holding Rod

Catalog #	Size
NS-012-20	N/A



Yasargil (Leyla) Coupling Head

Catalog #	Size
NS-012-25	N/A
NS-012-40	N/A



NS-012-25



NS-012-40

Caspar Vertebral Distractor

Right

Catalog #	Size
NS-020-01	N/A



Vertebral Distractor
Wirbel distractor
Vertebrales distractor
Vertébrale distracteur
Vertebrale distrattore

Caspar Drill Guide

Right

Catalog #	Size
NS-020-02	N/A



Caspar Vertebral Distractor

Left

Catalog #	Size
NS-022-01	N/A



Caspar Drill Guide

Left

Catalog #	Size
NS-022-02	N/A



Caspar Twist Drill

Catalog #	Size
NS-024-00	14.5 cm (5 1/2")



Caspar Distraction Screw

Catalog #	Working End
NS-026-14	14 mm
NS-026-16	16 mm
NS-026-18	18 mm



Wire Saws, Skull Traction Tongs
 Drahtsägen, Schädelhalter
 Sierras de hilo, Estribos de tracción craneal
 Fils-scies, Pinces de traction crânienne
 Fili sega, Pinze per trazione craniale

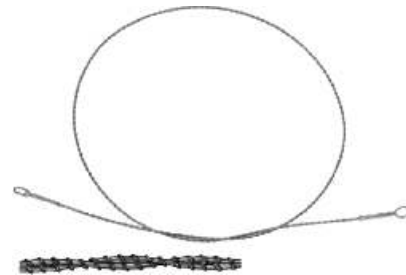
Casper Screw Driver



Catalog #	Size
NS-028-20	20 cm (8")

Gigli Wire Saw

Catalog #	Size
NS-050-30	30 cm (11 3/4")
NS-050-40	40 cm (11 3/4")
NS-050-50	50 cm (11 3/4")
NS-050-60	60 cm (11 3/4")
NS-050-70	70 cm (11 3/4")



Gigli Wire Saw Handle

Catalog #	Size
NS-055-00	N/A



De Martel Wire Saw Guide



Catalog #	Size
NS-058-00	33 cm (13")

Crutchfield Skull Traction Tongs

Small Pattern

Catalog #	Size
NS-061-01	N/A



Skull Traction Tongs
Schädelhalter
Estribos de tracción craneal
Pinces de traction crânienne
Pinze per trazione craniale

Crutchfield Skull Traction Tongs

Medium Pattern

Catalog #	Size
NS-061-02	N/A



Crutchfield Drill Point

Catalog #	Size, Diameter
NS-065-35	7 cm (2 3/4"), Ø 3.5 mm
NS-065-50	7 cm (2 3/4"), Ø 5.0 mm



Skull Traction Tongs

Large Pattern

Catalog #	Size
NS-071-00	N/A



Spare Pin

Catalog #	Size
NS-075-01	N/A



Wrench

Catalog #	Size
NS-075-02	N/A



Cranial Rongeurs
Schädelzangen
Pinzas sacabocados craneales
Pinces emporte-pièces crâniennes
Pinze per craniectomia

Dahlgren Cranial Rongeur

Catalog #	Size
NS-091-20	20 cm (8")



De Vilbiss Cranial Rongeur

Catalog #	Size
NS-093-21	20.5 cm (8")



Cone Cranial Punch

Catalog #	Size
NS-095-22	22.5 cm (8 3/4")



Raney Scalp Clip

Catalog #	Size
NS-100-00	N/A



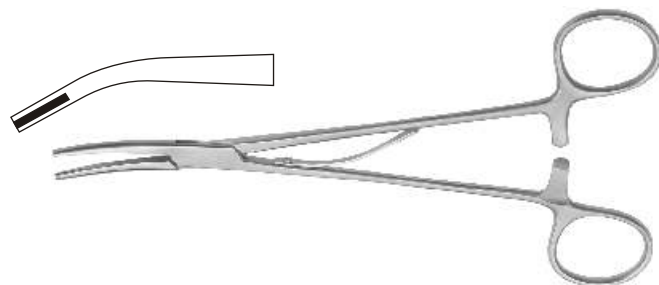
Raney Applying - Removal Forcep

Catalog #	Size
NS-102-00	15.5 cm (6")



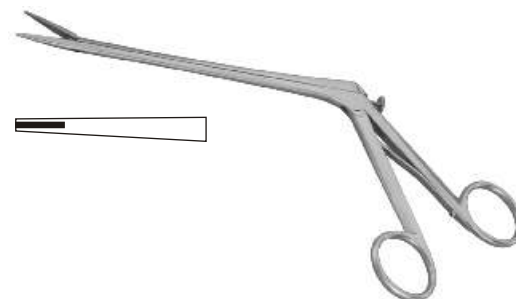
Clips and Applying Forceps
Clips und Anlegezangen
Grapas y pinzas aplicadoras
Clips et pinces pour appliquer
Agrafes e pinze per applicare

McKenzie Clip Applying Forcep



Catalog #	Size
NS-112-19	18.5 cm (7 1/4")

Olivecrona-Toennis Clip Applying Forcep



Catalog #	Size, Shaft Length
NS-115-14	N/A, 140 mm

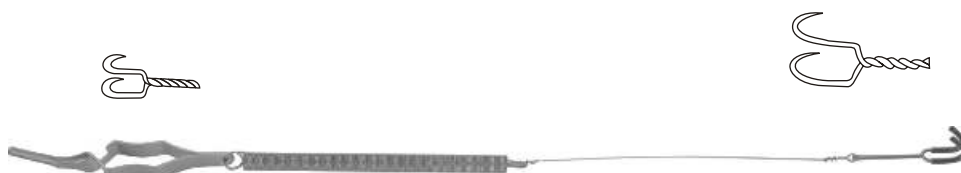
Silver Brain Clip

Pack of 100



Catalog #	Size
NS-118-00	N/A

Yasargil Galea Hook



Catalog #	Size
NS-120-01	N/A
NS-120-02	N/A

Davis Dura Dissector



Catalog #	Size
NS-151-21	21.5 cm (8 1/2")

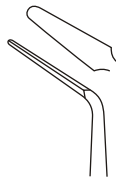
Dura Dissectors
 Duradisektoren
 Disecadores para duramadre
 Dissecteurs à dure-mère
 Dissettori per la dura-madre

Davis Dura Dissector



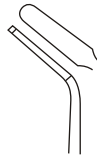
Catalog #	Size
NS-153-24	24.5 cm (9 ¾")

Frazier Dura Dissector

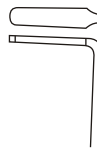


Catalog #	Size
NS-155-01	15 cm (6")

Hoer Dura Dissector



NS-155-02



NS-155-03



Catalog #	Size
NS-155-02	15 cm (6")
NS-155-03	15 cm (6")

Love-Adson Dura Dissector



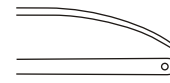
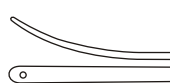
Catalog #	Size
NS-157-16	16 cm (6 ½")

Toennis Dura Dissector



Catalog #	Size
NS-159-26	26 cm (10 ¼")

Dura Dissectors
Duradissektoren
Disecadores para duramadre
Dissecteurs à dure-mère
Dissettori per la dura-madre

Olivecrona Dura Dissector

Catalog #	Size
NS-161-01	24 cm (9 1/2")

Olivecrona Dura Dissector

Catalog #	Size
NS-161-02	18 cm (7")

Olivecrona Dura Dissector

Catalog #	Size
NS-161-03	24 cm (9 1/2")

Olivecrona Dura Dissector

Catalog #	Size
NS-161-04	20 cm (8")

Sachs Dura Dissector

Sharp



Catalog #	Size
NS-163-21	20 cm (8")

Dura Dissectors
 Duradissektoren
 Disecadores para duramadre
 Dissecteurs à dure-mère
 Dissettori per la dura-madre

Milligan Dura Dissector



Catalog #	Size
NS-165-21	21.5 cm (8 1/2")

Dura Dissector



Catalog #	Size
NS-167-22	22 cm (8 3/4")

Penfield Dura Dissector



Catalog #	Size, Profile
NS-171-01	17.5 cm (7"), Fig. 1

Penfield Dura Dissector



Catalog #	Size, Profile
NS-171-02	19.5 cm (7 3/4"), Fig. 2

Penfield Dura Dissector



Catalog #	Size, Profile
NS-171-03	19.5 cm (7 3/4"), Fig. 3

Dura Dissectors
 Duradisektoren
 Disecadores para duramadre
 Dissecteurs à dure-mère
 Dissettori per la dura-madre

Penfield Dura Dissector



Catalog #	Size, Profile
NS-171-04	20.5 cm (8"), Fig. 4

Penfield Dura Dissector



Catalog #	Size, Profile
NS-171-05	18 cm (7"), Fig. 5

Horsley Dura Elevator



Catalog #	Size
NS-181-20	20 cm (8")

Sachs Dura Elevator



Catalog #	Size
NS-183-21	21 cm (8 1/4")

Love Nerve Root Retractor

Straight



Catalog #	Size
NS-190-21	21.5 cm (8 1/2")

Nerve Root Retractors
Nervwurzelhaken
Separadores para la raíz de nervio
Retracteurs pour racines nerveuses
Uncini per le radici dei nervi

Love Nerve Root Retractor

Angled 45°

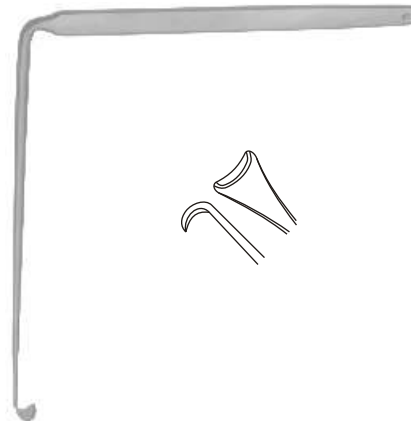
Catalog #	Size
NS-191-18	17.5 cm (7")



Love Nerve Root Retractor

Angled 90°

Catalog #	Size
NS-193-11	11 cm (4 1/4")



Love Nerve Root Retractor

Catalog #	Size
NS-195-21	22 cm (8 3/4")



Hess Nerve Root Retractor

Catalog #	Size, Width
NS-197-03	17.5 cm (7"), 3 mm
NS-197-05	17.5 cm (7"), 5 mm
NS-197-07	17.5 cm (7"), 7 mm



Scoville Nerve Root Retractor

Catalog #	Size
NS-200-23	23.5 cm (9 1/4")



Nerve Root Retractors
Nervwurzelhaken
Separadores para la raíz de nervio
Retracteurs pour racines nerveuses
Uncini per le radici die nervi

Holsher Nerve Root Retractor



Catalog #	Size
NS-201-24	23.5 cm (9 1/4")

Scoville Nerve Root Retractor



Catalog #	Size
NS-203-19	16.5 cm (6 1/2")

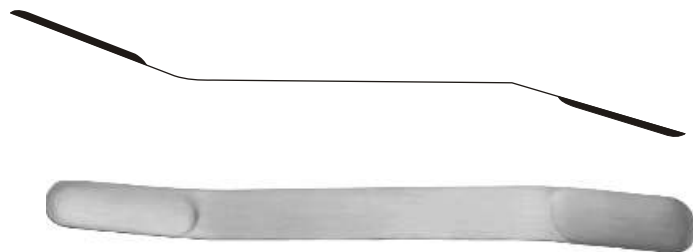
Cushing Brain Spatulas



Catalog #	Size, Blade Size
NS-210-07	18 cm (7"), 7 + 9 mm
NS-210-11	18 cm (7"), 11 + 13 mm
NS-210-15	18 cm (7"), 15 + 18 mm
NS-210-18	18 cm (7"), 18 + 22 mm

Olivecrona Brain Spatulas

Concave



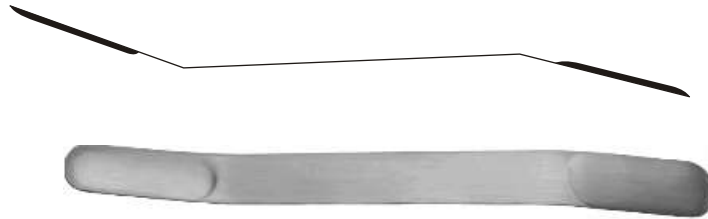
Catalog #	Size, Blade Size
NS-213-07	18 cm (7"), 7 + 9 mm
NS-213-11	18 cm (7"), 11 + 13 mm
NS-213-15	18 cm (7"), 15 + 18 mm
NS-213-18	18 cm (7"), 18 + 22 mm

Brain Spatulas
Hirnspatel
Espátulas cerebrales
Spatules cérébrales
Spatole cerebrali

Olivecrona Brain Spatulas

Convex

Catalog #	Size, Blade Size
NS-215-07	18 cm (7"), 7 + 9 mm
NS-215-11	18 cm (7"), 11 + 13 mm
NS-215-15	18 cm (7"), 15 + 18 mm
NS-215-18	18 cm (7"), 18 + 22 mm



Heifetz Brain Spatulas

Catalog #	Size, Blade Size
NS-218-07	20 cm (8"), 7 + 8 mm
NS-218-10	20 cm (8"), 10 + 11 mm
NS-218-13	20 cm (8"), 13 + 14 mm
NS-218-15	20 cm (8"), 15 + 17 mm
NS-218-19	20 cm (8"), 19 + 20 mm
NS-218-22	20 cm (8"), 22 + 22 mm



Heifetz Brain Spatulas

Round Handle

Catalog #	Size, Blade Size
NS-221-08	20 cm (8"), 8 mm
NS-221-11	20 cm (8"), 11 mm
NS-221-14	20 cm (8"), 14 mm
NS-221-17	20 cm (8"), 17 mm
NS-221-20	20 cm (8"), 20 mm



Brain Spatulas

Malleable

Catalog #	Size
NS-224-12	20 cm (8"), 12 mm
NS-224-17	20 cm (8"), 17 mm



Nerve Hooks
Nervhaken
Ganchos para nervios
Crochets à nerfs
Uncini per nervi

Smithwick Nerve Hook



Catalog #	Size
NS-231-17	17 cm (6 ¾")

Smithwick Nerve Hook



Catalog #	Size
NS-233-21	21 cm (8 ¼")

Adson Dura Hook



Catalog #	Size
NS-235-20	20 cm (8")

Graham Dura Hook

Blunt



Catalog #	Size
NS-237-16	16.5 cm (6 ½")

Sachs Dura Hook

Sharp



Catalog #	Size
NS-239-18	18 cm (7")

Nerve Hooks
Nervhaken
Ganchos para nervios
Crochets à nerfs
Uncini per nervi

Frazier Dura Hook

Sharp



Catalog #	Size
NS-241-18	18 cm (7")

Hoen Nerve Retractor



Catalog #	Size
NS-245-22	22 cm (8 3/4")

Dandy Nerve Retractor



NS-251-01



NS-251-02



NS-251-03

Catalog #	Size
NS-251-01	20 cm (8")
NS-251-02	20 cm (8")
NS-251-03	20 cm (8")

Smithwick Nerve Retractor



Catalog #	Size
NS-253-29	29 cm (11 1/2")

Toennis Nerve Retractor



Catalog #	Size
NS-261-15	15 cm (6")

Dura Knives, Laminectomy Punches
 Duramesser, Laminektomiestanzen
 Bisturís para duramadre, Pinzas cortantes para laminectomía
 Bistouries pour duremère, Pincas emporte-pièces à laminectomie
 Bisturi per duramadre, Pinze taglianti per laminectomia

Toennis Brain Knife



Catalog #	Size
NS-280-18	18 cm (7")

Halle Brain Knife

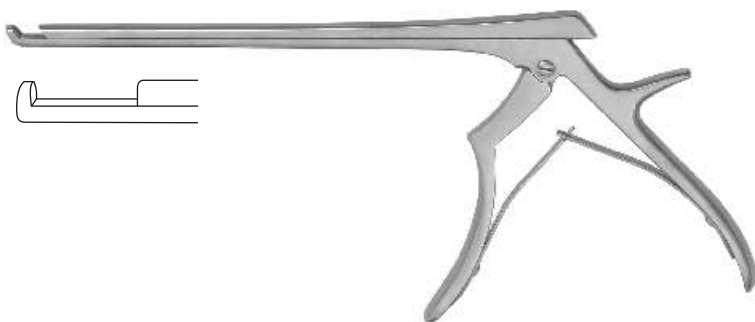


Catalog #	Size
NS-282-20	20 cm (8")

Ferris-Smith Kerrison Rongeur Up Cutting



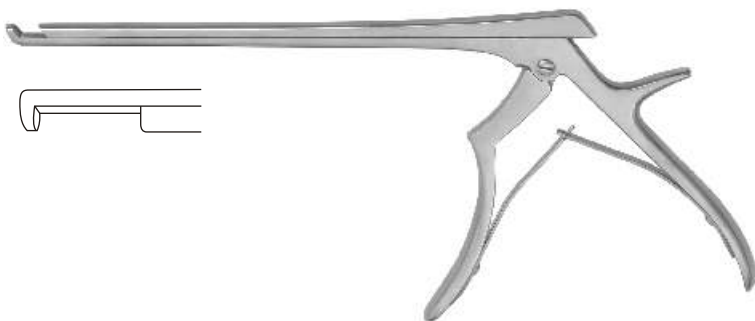
Catalog #	Size, Bite Size
NS-300-01	15 cm (6"), 1 mm
NS-300-02	15 cm (6"), 2 mm
NS-300-03	15 cm (6"), 3 mm
NS-300-04	15 cm (6"), 4 mm
NS-300-05	15 cm (6"), 5 mm



Ferris-Smith Kerrison Rongeur Down Cutting



Catalog #	Size, Bite Size
NS-301-01	15 cm (6"), 1 mm
NS-301-02	15 cm (6"), 2 mm
NS-301-03	15 cm (6"), 3 mm
NS-301-04	15 cm (6"), 4 mm
NS-301-05	15 cm (6"), 5 mm

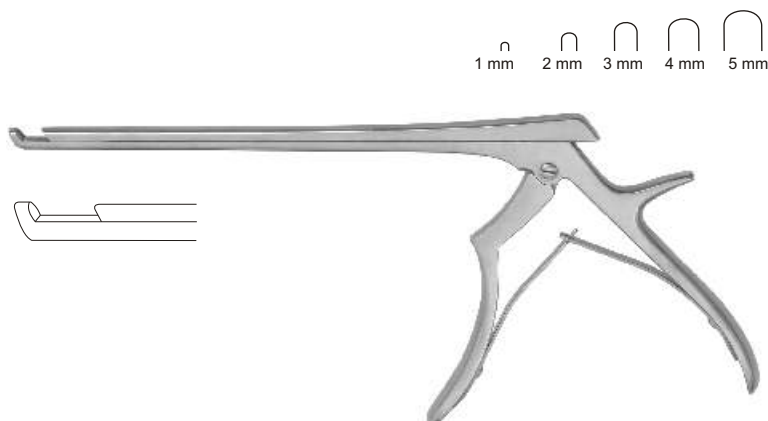


Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
Pinze taglianti per laminectomia

Ferris-Smith Kerrison Rongeur

40° Forward Up Cutting

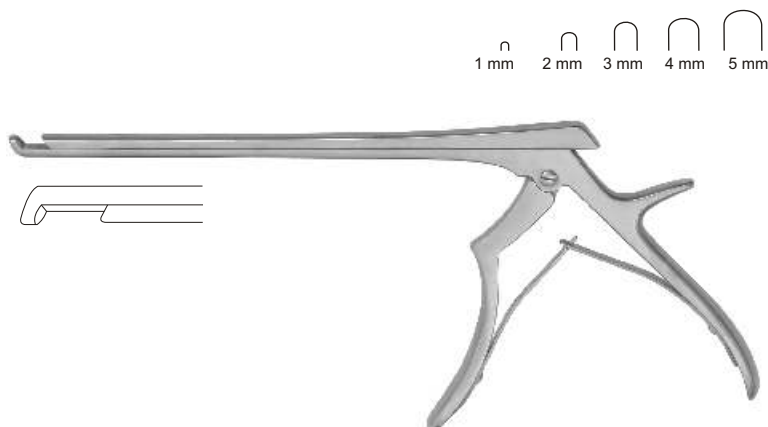
Catalog #	Size, Bite Size
NS-302-01	15 cm (6"), 1 mm
NS-302-02	15 cm (6"), 2 mm
NS-302-03	15 cm (6"), 3 mm
NS-302-04	15 cm (6"), 4 mm
NS-302-05	15 cm (6"), 5 mm



Ferris-Smith Kerrison Rongeur

40° Forward Down Cutting

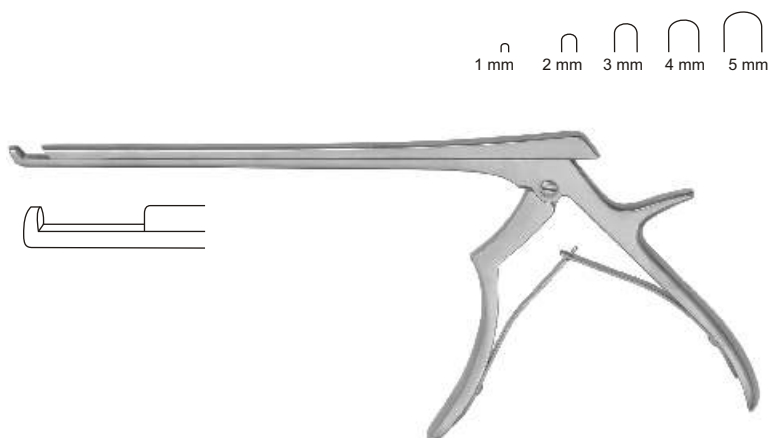
Catalog #	Size, Bite Size
NS-303-01	15 cm (6"), 1 mm
NS-303-02	15 cm (6"), 2 mm
NS-303-03	15 cm (6"), 3 mm
NS-303-04	15 cm (6"), 4 mm
NS-303-05	15 cm (6"), 5 mm



Ferris-Smith Kerrison Rongeur

Up Cutting

Catalog #	Size, Bite Size
NS-304-01	18 cm (7"), 1 mm
NS-304-02	18 cm (7"), 2 mm
NS-304-03	18 cm (7"), 3 mm
NS-304-04	18 cm (7"), 4 mm
NS-304-05	18 cm (7"), 5 mm



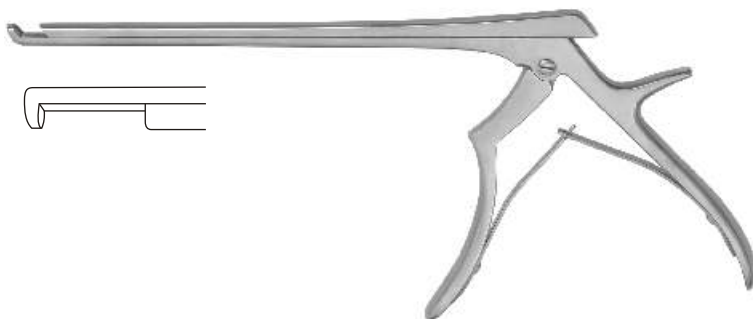
Laminectomy Punches
 Laminektomiestanzen
 Pinzas cortantes para laminectomía
 Pinces emporte-pièces à laminectomie
 Pinze taglianti per laminectomia

Ferris-Smith Kerrison Rongeur

Down Cutting



Catalog #	Size, Bite Size
NS-305-01	18 cm (7"), 1 mm
NS-305-02	18 cm (7"), 2 mm
NS-305-03	18 cm (7"), 3 mm
NS-305-04	18 cm (7"), 4 mm
NS-305-05	18 cm (7"), 5 mm

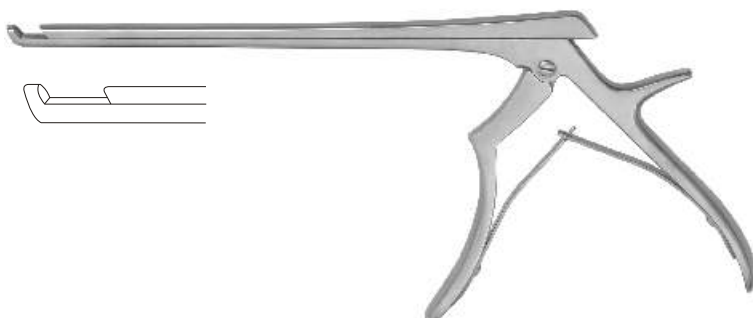


Ferris-Smith Kerrison Rongeur

40° Forward Up Cutting



Catalog #	Size, Bite Size
NS-306-01	18 cm (7"), 1 mm
NS-306-02	18 cm (7"), 2 mm
NS-306-03	18 cm (7"), 3 mm
NS-306-04	18 cm (7"), 4 mm
NS-306-05	18 cm (7"), 5 mm

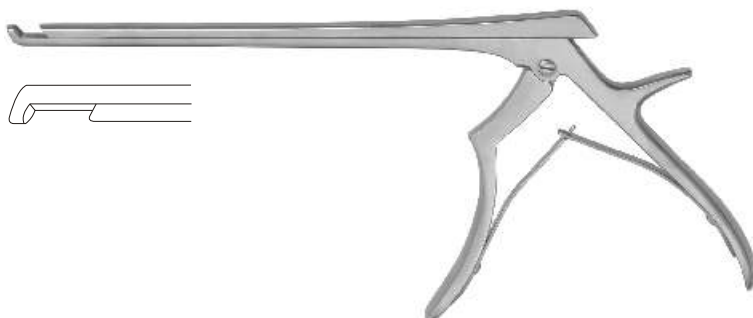


Ferris-Smith Kerrison Rongeur

40° Forward Down Cutting



Catalog #	Size, Bite Size
NS-307-01	18 cm (7"), 1 mm
NS-307-02	18 cm (7"), 2 mm
NS-307-03	18 cm (7"), 3 mm
NS-307-04	18 cm (7"), 4 mm
NS-307-05	18 cm (7"), 5 mm



Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
Pinze taglianti per laminectomia

Ferris-Smith Kerrison Rongeur

Up Cutting

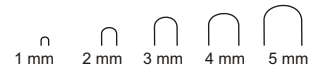


Catalog #	Size, Bite Size
NS-308-01	20 cm (8"), 1 mm
NS-308-02	20 cm (8"), 2 mm
NS-308-03	20 cm (8"), 3 mm
NS-308-04	20 cm (8"), 4 mm
NS-308-05	20 cm (8"), 5 mm



Ferris-Smith Kerrison Rongeur

Down Cutting

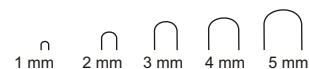


Catalog #	Size, Bite Size
NS-309-01	20 cm (8"), 1 mm
NS-309-02	20 cm (8"), 2 mm
NS-309-03	20 cm (8"), 3 mm
NS-309-04	20 cm (8"), 4 mm
NS-309-05	20 cm (8"), 5 mm

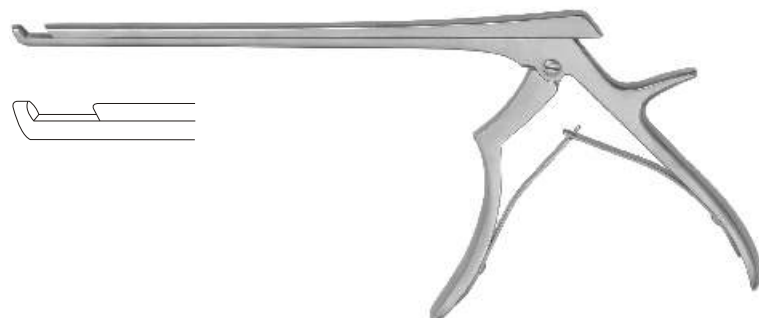


Ferris-Smith Kerrison Rongeur

40° Forward Up Cutting



Catalog #	Size, Bite Size
NS-310-01	20 cm (8"), 1 mm
NS-310-02	20 cm (8"), 2 mm
NS-310-03	20 cm (8"), 3 mm
NS-310-04	20 cm (8"), 4 mm
NS-310-05	20 cm (8"), 5 mm

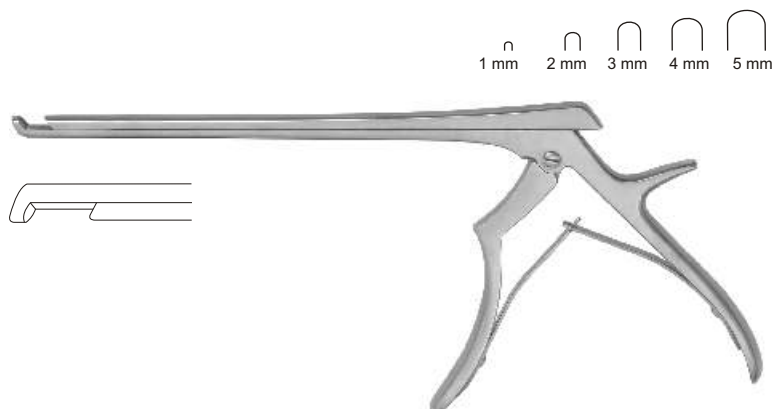


Laminectomy Punches
 Laminektomiestanzen
 Pinzas cortantes para laminectomía
 Pinces emporte-pièces à laminectomie
 Pinze taglienti per laminectomia

Ferris-Smith Kerrison Rongeur

40° Forward Down Cutting

Catalog #	Size, Bite Size
NS-311-01	20 cm (8"), 1 mm
NS-311-02	20 cm (8"), 2 mm
NS-311-03	20 cm (8"), 3 mm
NS-311-04	20 cm (8"), 4 mm
NS-311-05	20 cm (8"), 5 mm



Ferris-Smith Kerrison Rongeur

Detachable Model, Up Cutting

Catalog #	Size, Bite Size
NS-320-01	18 cm (7"), 1 mm
NS-320-02	18 cm (7"), 2 mm
NS-320-03	18 cm (7"), 3 mm
NS-320-04	18 cm (7"), 4 mm
NS-320-05	18 cm (7"), 5 mm



Ferris-Smith Kerrison Rongeur

Detachable Model, Down Cutting

Catalog #	Size, Bite Size
NS-321-01	18 cm (7"), 1 mm
NS-321-02	18 cm (7"), 2 mm
NS-321-03	18 cm (7"), 3 mm
NS-321-04	18 cm (7"), 4 mm
NS-321-05	18 cm (7"), 5 mm



Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
Pinze taglianti per laminectomia

Ferris-Smith Kerrison Rongeur

Detachable Model, 40° Forward Up Cutting

Catalog #	Size, Bite Size
NS-322-01	18 cm (7"), 1 mm
NS-322-02	18 cm (7"), 2 mm
NS-322-03	18 cm (7"), 3 mm
NS-322-04	18 cm (7"), 4 mm
NS-322-05	18 cm (7"), 5 mm



Ferris-Smith Kerrison Rongeur

Detachable Model, 40° Forward Down Cutting

Catalog #	Size, Bite Size
NS-323-01	18 cm (7"), 1 mm
NS-323-02	18 cm (7"), 2 mm
NS-323-03	18 cm (7"), 3 mm
NS-323-04	18 cm (7"), 4 mm
NS-323-05	18 cm (7"), 5 mm



Ferris-Smith Kerrison Rongeur

Detachable Model, Up Cutting

Catalog #	Size, Bite Size
NS-324-01	20 cm (8"), 1 mm
NS-324-02	20 cm (8"), 2 mm
NS-324-03	20 cm (8"), 3 mm
NS-324-04	20 cm (8"), 4 mm
NS-324-05	20 cm (8"), 5 mm



Laminectomy Punches
 Laminektomiestanzen
 Pinzas cortantes para laminectomía
 Pinces emporte-pièces à laminectomie
 Pinze taglianti per laminectomia

Ferris-Smith Kerrison Rongeur

Detachable Model, Down Cutting

Catalog #	Size, Bite Size
NS-325-01	20 cm (8"), 1 mm
NS-325-02	20 cm (8"), 2 mm
NS-325-03	20 cm (8"), 3 mm
NS-325-04	20 cm (8"), 4 mm
NS-325-05	20 cm (8"), 5 mm



Ferris-Smith Kerrison Rongeur

Detachable Model, 40° Up Cutting

Catalog #	Size, Bite Size
NS-326-01	20 cm (8"), 1 mm
NS-326-02	20 cm (8"), 2 mm
NS-326-03	20 cm (8"), 3 mm
NS-326-04	20 cm (8"), 4 mm
NS-326-05	20 cm (8"), 5 mm



Ferris-Smith Kerrison Rongeur

Detachable Model, 40° Down Cutting

Catalog #	Size, Bite Size
NS-327-01	20 cm (8"), 1 mm
NS-327-02	20 cm (8"), 2 mm
NS-327-03	20 cm (8"), 3 mm
NS-327-04	20 cm (8"), 4 mm
NS-327-05	20 cm (8"), 5 mm

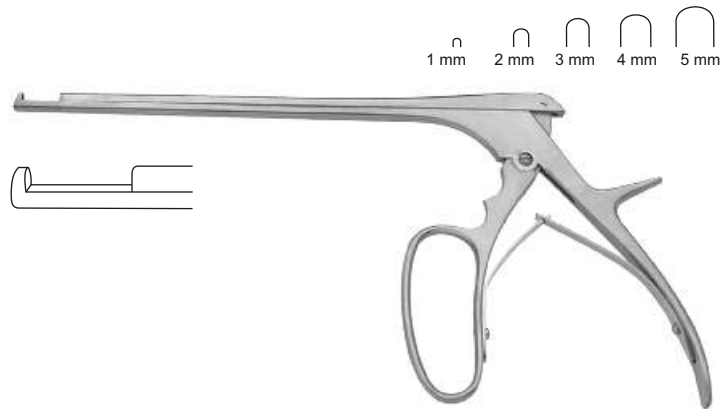


Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
Pinze taglianti per laminectomia

Ferris-Smith Kerrison Rongeur

Up Cutting

Catalog #	Size, Bite Size
NS-330-01	18 cm (7"), 1 mm
NS-330-02	18 cm (7"), 2 mm
NS-330-03	18 cm (7"), 3 mm
NS-330-04	18 cm (7"), 4 mm
NS-330-05	18 cm (7"), 5 mm



Ferris-Smith Kerrison Rongeur

Down Cutting

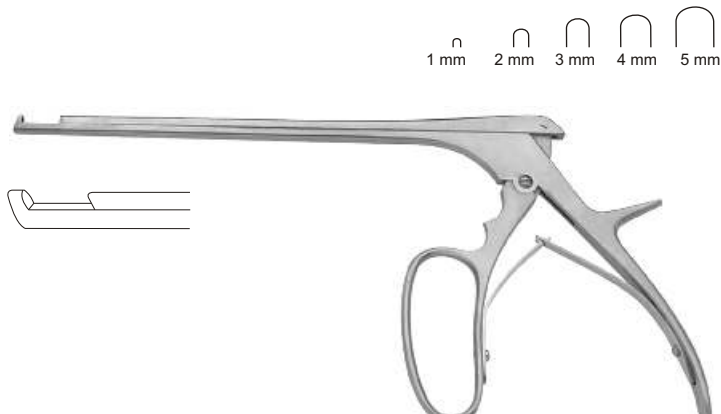
Catalog #	Size, Bite Size
NS-331-01	18 cm (7"), 1 mm
NS-331-02	18 cm (7"), 2 mm
NS-331-03	18 cm (7"), 3 mm
NS-331-04	18 cm (7"), 4 mm
NS-331-05	18 cm (7"), 5 mm



Ferris-Smith Kerrison Rongeur

40° Forward Up Cutting

Catalog #	Size, Bite Size
NS-332-01	18 cm (7"), 1 mm
NS-332-02	18 cm (7"), 2 mm
NS-332-03	18 cm (7"), 3 mm
NS-332-04	18 cm (7"), 4 mm
NS-332-05	18 cm (7"), 5 mm

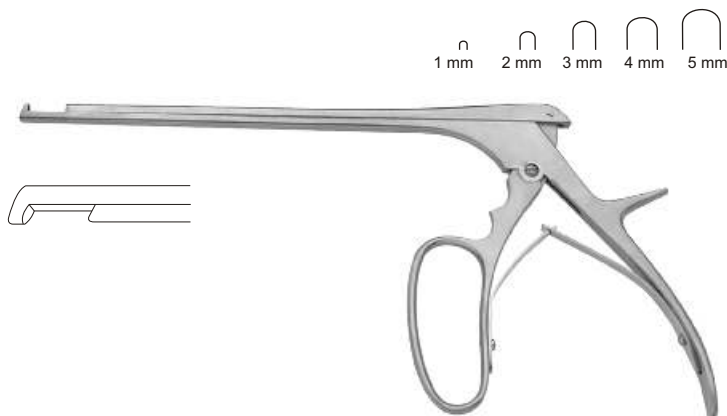


Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
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Ferris-Smith Kerrison Rongeur

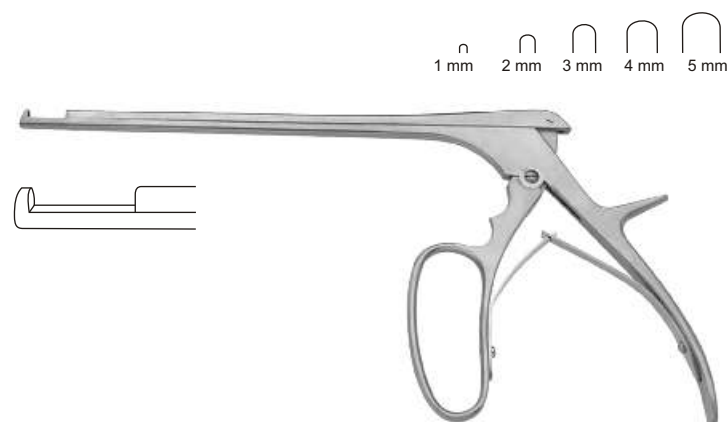
40° Forward Down Cutting

Catalog #	Size, Bite Size
NS-333-01	18 cm (7"), 1 mm
NS-333-02	18 cm (7"), 2 mm
NS-333-03	18 cm (7"), 3 mm
NS-333-04	18 cm (7"), 4 mm
NS-333-05	18 cm (7"), 5 mm

**Ferris-Smith Kerrison Rongeur**

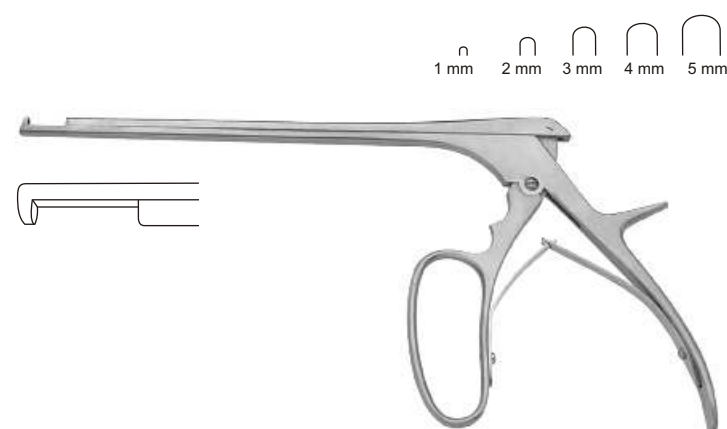
Up Cutting

Catalog #	Size, Bite Size
NS-334-01	20 cm (8"), 1 mm
NS-334-02	20 cm (8"), 2 mm
NS-334-03	20 cm (8"), 3 mm
NS-334-04	20 cm (8"), 4 mm
NS-334-05	20 cm (8"), 5 mm

**Ferris-Smith Kerrison Rongeur**

Down Cutting

Catalog #	Size, Bite Size
NS-335-01	20 cm (8"), 1 mm
NS-335-02	20 cm (8"), 2 mm
NS-335-03	20 cm (8"), 3 mm
NS-335-04	20 cm (8"), 4 mm
NS-335-05	20 cm (8"), 5 mm

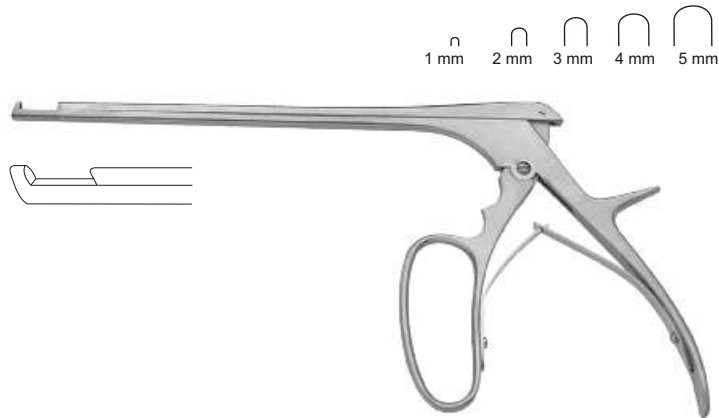


Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
Pinze taglianti per laminectomia

Ferris-Smith Kerrison Rongeur

40° Forward Up Cutting

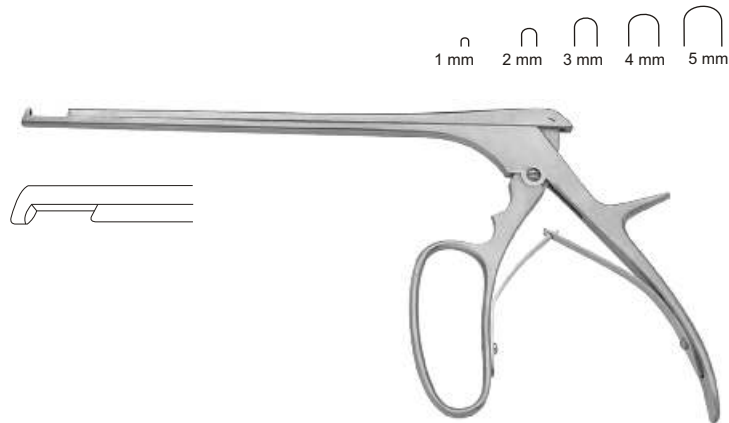
Catalog #	Size, Bite Size
NS-336-01	20 cm (8"), 1 mm
NS-336-02	20 cm (8"), 2 mm
NS-336-03	20 cm (8"), 3 mm
NS-336-04	20 cm (8"), 4 mm
NS-336-05	20 cm (8"), 5 mm



Ferris-Smith Kerrison Rongeur

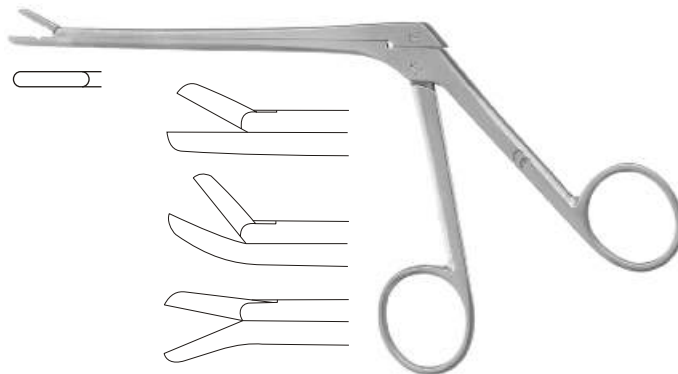
40° Forward Down Cutting

Catalog #	Size, Bite Size
NS-337-01	20 cm (8"), 1 mm
NS-337-02	20 cm (8"), 2 mm
NS-337-03	20 cm (8"), 3 mm
NS-337-04	20 cm (8"), 4 mm
NS-337-05	20 cm (8"), 5 mm



Cushing Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-400-01	13 cm (5"), 2 x 10 mm, Straight
NS-400-02	13 cm (5"), 2 x 10 mm, Up
NS-400-03	13 cm (5"), 2 x 10 mm, Down



Cushing Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-401-01	15 cm (6"), 2 x 10 mm, Straight
NS-401-02	15 cm (6"), 2 x 10 mm, Up
NS-401-03	15 cm (6"), 2 x 10 mm, Down



Laminectomy Punches
 Laminektomiestanzen
 Pinzas cortantes para laminectomía
 Pinces emporte-pièces à laminectomie
 Pinze taglianti per laminectomia

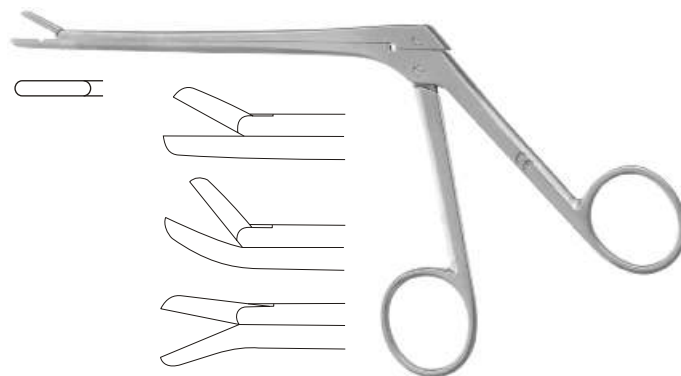
Cushing Leminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-402-01	18 cm (7"), 2 x 10 mm, Straight
NS-402-02	18 cm (7"), 2 x 10 mm, Up
NS-402-03	18 cm (7"), 2 x 10 mm, Down



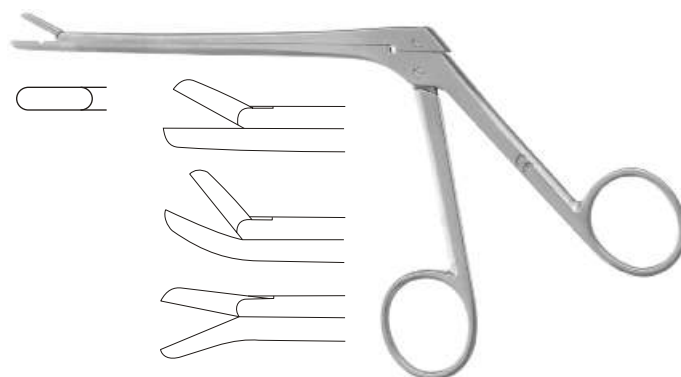
Cushing Leminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-403-01	20 cm (8"), 2 x 10 mm, Straight
NS-403-02	20 cm (8"), 2 x 10 mm, Up
NS-403-03	20 cm (8"), 2 x 10 mm, Down



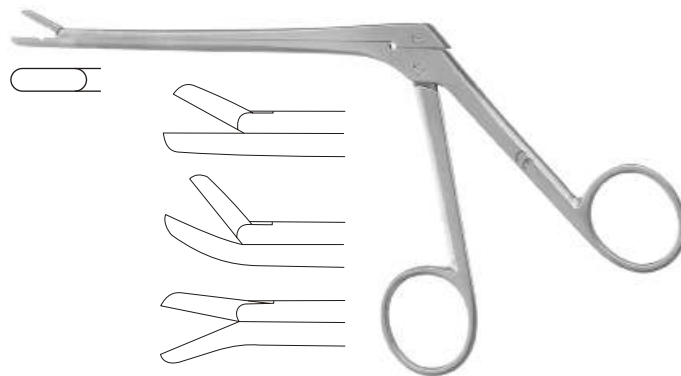
Love-Gruenwald Leminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-404-01	13 cm (5"), 3 x 10 mm, Straight
NS-404-02	13 cm (5"), 3 x 10 mm, Up
NS-404-03	13 cm (5"), 3 x 10 mm, Down



Love-Gruenwald Leminectomy Rongeur

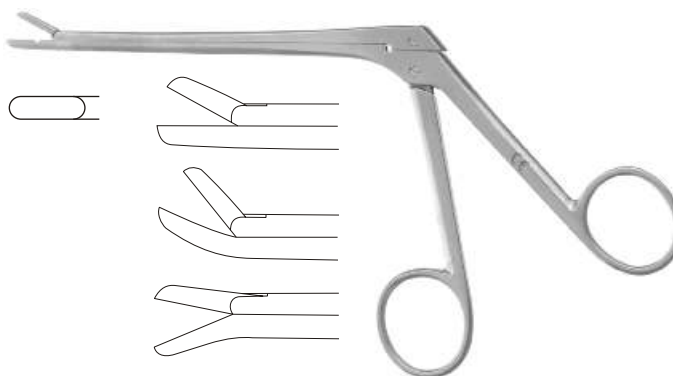
Catalog #	Size, Bite Size, Profile
NS-405-01	15 cm (6"), 3 x 10 mm, Straight
NS-405-02	15 cm (6"), 3 x 10 mm, up
NS-405-03	15 cm (6"), 3 x 10 mm, Down



Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
Pinze taglianti per laminectomia

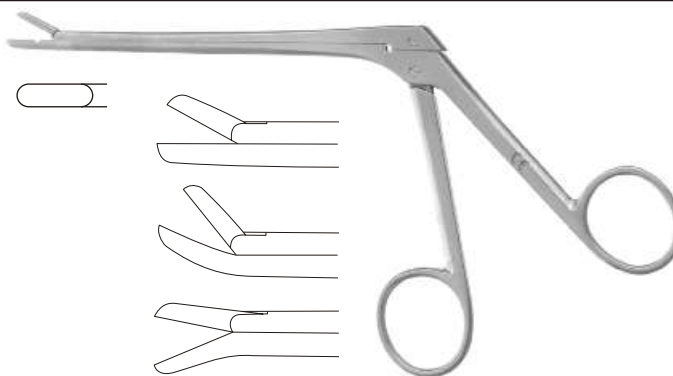
Love-Gruenwald Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-406-01	18 cm (7"), 3 x 10 mm, Straight
NS-406-02	18 cm (7"), 3 x 10 mm, Up
NS-406-03	18 cm (7"), 3 x 10 mm, Down



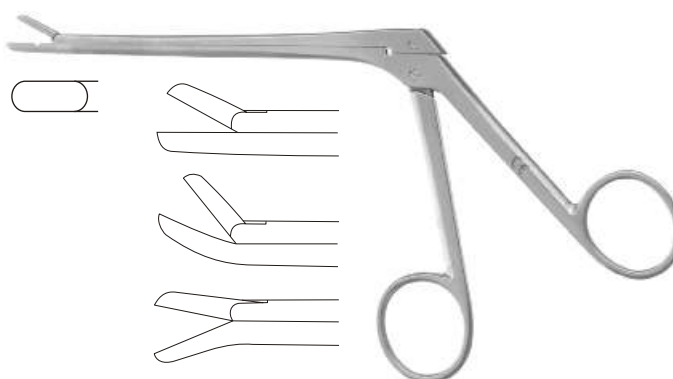
Love-Gruenwald Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-407-01	20 cm (8"), 3 x 10 mm, Straight
NS-407-02	20 cm (8"), 3 x 10 mm, Up
NS-407-03	20 cm (8"), 3 x 10 mm, Down



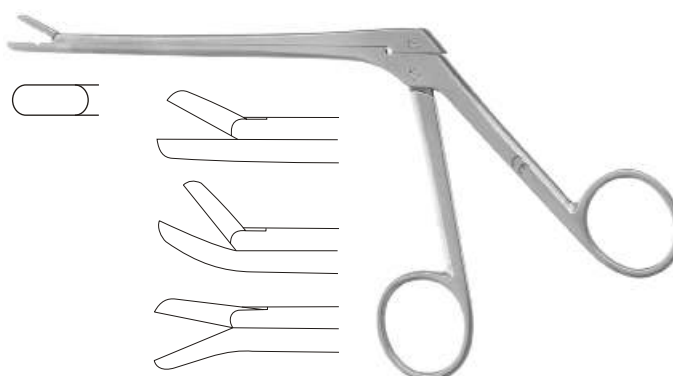
Spurling Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-408-01	13 cm (5"), 4 x 10 mm, Straight
NS-408-02	13 cm (5"), 4 x 10 mm, Up
NS-408-03	13 cm (5"), 4 x 10 mm, Down



Spurling Laminectomy Rongeur

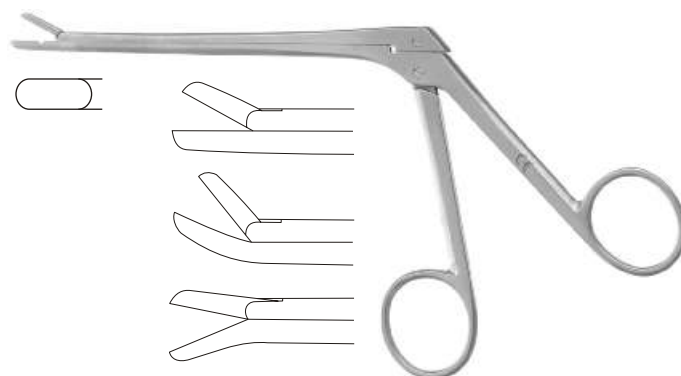
Catalog #	Size, Bite Size, Profile
NS-409-01	15 cm (6"), 4 x 10 mm, Straight
NS-409-02	15 cm (6"), 4 x 10 mm, Up
NS-409-03	15 cm (6"), 4 x 10 mm, Down



Laminectomy Punches
 Laminektomiestanzen
 Pinzas cortantes para laminectomía
 Pinces emporte-pièces à laminectomie
 Pinze taglianti per laminectomia

Spurling Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-410-01	18 cm (7"), 4 x 10 mm, Straight
NS-410-02	18 cm (7"), 4 x 10 mm, Up
NS-410-03	18 cm (7"), 4 x 10 mm, Down



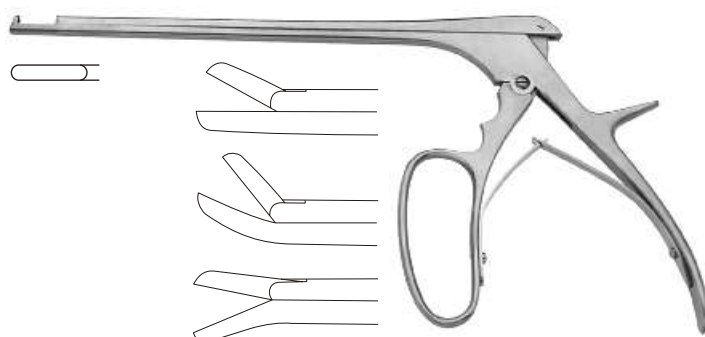
Spurling Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-411-01	20 cm (8"), 4 x 10 mm, Straight
NS-411-02	20 cm (8"), 4 x 10 mm, Up
NS-411-03	20 cm (8"), 4 x 10 mm, Down



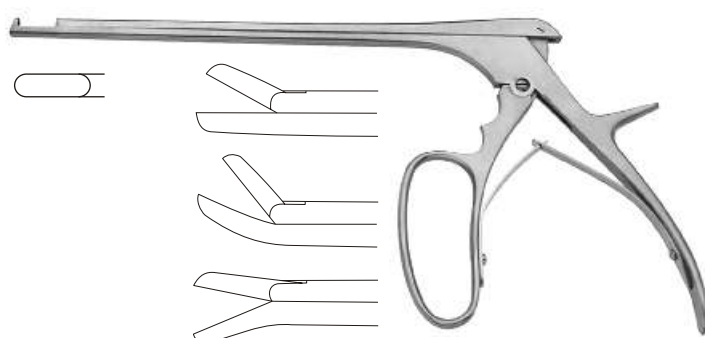
Ferris-Smith Laminectomy Rongeur Straight

Catalog #	Size, Bite Size, Profile
NS-430-01	15.5 cm (6"), 2 mm, Straight
NS-430-02	15.5 cm (6"), 2 mm, Up
NS-430-03	15.5 cm (6"), 2 mm, Down



Ferris-Smith Laminectomy Rongeur

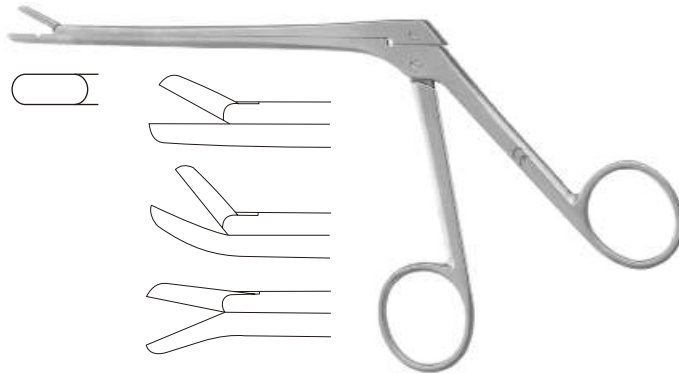
Catalog #	Size, Bite Size, Profile
NS-431-01	15.5 cm (6"), 3 mm, Straight
NS-431-02	15.5 cm (6"), 3 mm, Up
NS-431-03	15.5 cm (6"), 3 mm, Down



Laminectomy Punches
Laminektomiestanzen
Pinzas cortantes para laminectomía
Pinces emporte-pièces à laminectomie
Pinze taglianti per laminectomia

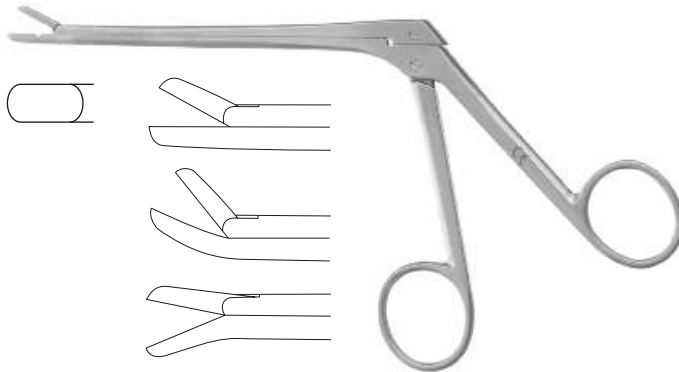
Ferris-Smith Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-432-01	15.5 cm (6"), 4 mm, Straight
NS-432-02	15.5 cm (6"), 4 mm, Up
NS-432-03	15.5 cm (6"), 4 mm, Down



Ferris-Smith Laminectomy Rongeur

Catalog #	Size, Bite Size, Profile
NS-433-01	15.5 cm (6"), 5 mm, Straight
NS-433-02	15.5 cm (6"), 5 mm, Up
NS-433-03	15.5 cm (6"), 5 mm, Down



Laminectomy Rongeur

Fenestrated and Serrated Jaws

Catalog #	Size, Bite Size, Profile
NS-440-01	15.5 cm (6"), 2 x 12 mm, Straight
NS-440-02	15.5 cm (6"), 2 x 12 mm, Up
NS-440-03	15.5 cm (6"), 2 x 12 mm, Down



Laminectomy Rongeur

Fenestrated and Serrated Jaws

Catalog #	Size, Bite Size, Profile
NS-441-01	15.5 cm (6"), 3 x 12 mm, Straight
NS-441-02	15.5 cm (6"), 3 x 12 mm, Up
NS-441-03	15.5 cm (6"), 3 x 12 mm, Down



Laminectomy Punches
 Laminektomiestanzen
 Pinzas cortantes para laminectomía
 Pinces emporte-pièces à laminectomie
 Pinze taglienti per laminectomia

Laminectomy Rongeur

Straight, Fenestrated and Serrated Jaws

Catalog #	Size, Bite Size, Profile
NS-442-01	15.5 cm (6"), 4 x 14 mm, Straight
NS-442-02	15.5 cm (6"), 4 x 14 mm, Up
NS-442-03	15.5 cm (6"), 4 x 14 mm, Down



Laminectomy Rongeur

Fenestrated and Serrated Jaws

Catalog #	Size, Bite Size, Profile
NS-443-01	15.5 cm (6"), 5 x 14 mm, Straight
NS-443-02	15.5 cm (6"), 5 x 14 mm, Up
NS-443-03	15.5 cm (6"), 5 x 14 mm, Down



Laminectomy Rongeur

Fenestrated and Serrated Jaws

Catalog #	Size, Bite Size, Profile
NS-444-01	15.5 cm (6"), 6 x 14 mm, Straight
NS-444-02	15.5 cm (6"), 6 x 14 mm, Up
NS-444-03	15.5 cm (6"), 6 x 14 mm, Down



Schlesinger Laminectomy Rongeur

Serrated Jaws

Catalog #	Size, Bite Size
NS-451-02	13 cm (5"), 2 x 10 mm
NS-451-03	13 cm (5"), 3 x 10 mm
NS-451-04	13 cm (5"), 4 x 10 mm



Laminectomy Punches, Micro Neuro Instruments
 Laminektomiestanzen, Mikro Neuro Instrumente
 Pinzas cortantes para laminectomía, Micro Neuro Instrumentos
 Pincas emporte-pièces à laminectomie, Micro Neuro Instruments
 Pinze taglianti per laminectomia, Micro Neuro Strumenti

Yasargil Tumor Grasping Forcep

Catalog #	Size, Bite Size
NS-461-35	20 cm (8"), Ø 3.5 mm



Oldberg Tumor Grasping Forcep

Catalog #	Size, Bite Size
NS-463-60	18 cm (7"), Ø 6.5 mm



Jacobson Micro Knife

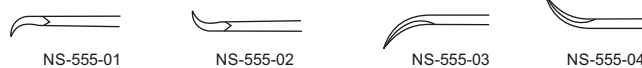
Straight



Catalog #	Size
NS-550-18	18.5 cm (7 1/4")

Koos Micro Knife

Bayonet Shaped

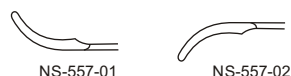


Catalog #	Size, Bite Size
NS-555-01	18.5 cm (7 1/4")
NS-555-02	18.5 cm (7 1/4")
NS-555-03	18.5 cm (7 1/4")
NS-555-04	18.5 cm (7 1/4")



Koos Micro Knife

Bayonet Shaped



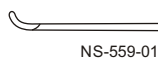
Catalog #	Size
NS-557-01	18.5 cm (7 1/4")
NS-557-02	18.5 cm (7 1/4")



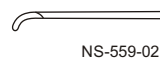
Micro Neuro Instruments
Mikro Neuro Instrumente
Micro Neuro Instrumentos
Micro Neuro Instruments
Micro Neuro Strumenti

Yasargil Micro Knife

Bayonet Shaped



NS-559-01



NS-559-02



Catalog #	Size
NS-559-01	18.5 cm (7 1/4")
NS-559-02	18.5 cm (7 1/4")

Yasargil Micro Respiratory

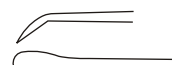
Straight



NS-564-01



NS-564-02



NS-564-03

Catalog #	Size
NS-564-01	18.5 cm (7 1/4")
NS-564-02	18.5 cm (7 1/4")
NS-564-03	18.5 cm (7 1/4")
NS-564-04	18.5 cm (7 1/4")
NS-564-05	18.5 cm (7 1/4")



NS-564-04



NS-564-05



Yasargil Micro Respiratory

Bayonet Shaped



NS-565-01



NS-565-02



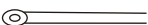
NS-565-03



Catalog #	Size
NS-565-01	18.5 cm (7 1/4")
NS-565-02	18.5 cm (7 1/4")
NS-565-03	18.5 cm (7 1/4")

Yasargil Micro Curette

Bayonet Shaped



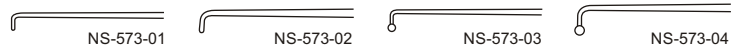
Catalog #	Size
NS-567-18	18.5 cm (7 1/4")

Micro Nerve & Vessel Hook



Catalog #	Size, Tip Length
NS-571-01	18.5 cm (7 1/4"), 3.0 mm
NS-571-02	18.5 cm (7 1/4"), 5.0 mm

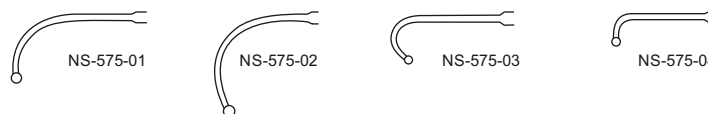
Krayenbuhl Micro Nerve & Vessel Hook



Catalog #	Size, Profile
NS-573-01	18.5 cm (7 1/4"), Fig. 1
NS-573-02	18.5 cm (7 1/4"), Fig. 2
NS-573-03	18.5 cm (7 1/4"), Fig. 3
NS-573-04	18.5 cm (7 1/4"), Fig. 4



Yasargil Ligature Guide



Catalog #	Size, Profile
NS-575-01	18.5 cm (7 1/4"), Fig. 1
NS-575-02	18.5 cm (7 1/4"), Fig. 2
NS-575-03	18.5 cm (7 1/4"), Fig. 3
NS-575-04	18.5 cm (7 1/4"), Fig. 4



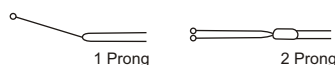
Micro Vessel Dilator



Catalog #	Size, Diameter, Profile
NS-577-01	12.5 cm (5"), Ø 0.5 mm, Fig. 1
NS-577-02	12.5 cm (5"), Ø 1.0 mm, Fig. 2
NS-577-3	12.5 cm (5"), Ø 1.5 mm, Fig. 3

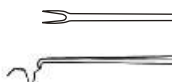
Micro Neuro Instruments
 Mikro Neuro Instrumente
 Micro Neuro Instrumentos
 Micro Neuro Instruments
 Micro Neuro Strumenti

Jacobson Micro Vessel Probe



Catalog #	Size, Profile
NS-579-01	18.5 cm (7 1/4"), 1 Prong
NS-579-02	18.5 cm (7 1/4"), 2 Prong

Jacobson Micro Suture Pusher



Catalog #	Size
NS-579-03	18.5 cm (7 1/4")

Rhoton Micro Dissector

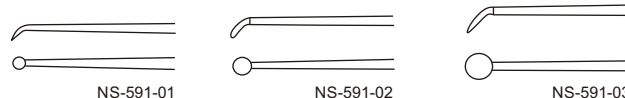
Set of 15 Ref: NS-591-01 up to NS-591-15



Catalog #	Size
NS-590-00	N/A

Rhoton Micro Dissector

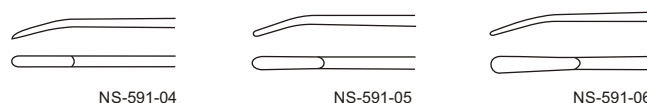
Round Shaped



Catalog #	Size, Diameter
NS-591-01	18.5 cm (7 1/4"), Ø 1.0 mm
NS-591-02	18.5 cm (7 1/4"), Ø 2.0 mm
NS-591-03	18.5 cm (7 1/4"), Ø 3.0 mm

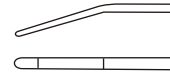
Rhoton Micro Dissector

Spatula Shaped



Catalog #	Size, Tip Size
NS-591-04	18.5 cm (7 1/4"), 1.0 mm
NS-591-05	18.5 cm (7 1/4"), 1.5 mm
NS-591-06	18.5 cm (7 1/4"), 2.0 mm

Rhoton Micro Elevator



NS-591-07



NS-591-08

Catalog #	Size, Tip Size
NS-591-07	18.5 cm (7 1/4"), 1.2 mm
NS-591-08	18.5 cm (7 1/4"), 2.8 mm

Rhoton Micro Needle

Semi, Sharp



Catalog #	Size
NS-591-09	18.5 cm (7 1/4")

Rhoton Micro Hook

Angled 90°, Blunt



Catalog #	Size, Tip Size
NS-591-10	18.5 cm (7 1/4"), 2 mm

Rhoton Micro Hook

Angled 90°, Semi Sharp



Catalog #	Size, Tip Size
NS-591-11	18.5 cm (7 1/4"), 2 mm

Rhoton Micro Hook

Angled 45°, Semi Sharp



Catalog #	Size, Tip Size
NS-591-12	18.5 cm (7 1/4"), 3 mm

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Rhoton Micro Hook

Angled 90°



Catalog #	Size
NS-591-13	18.5 cm (7 1/4")

Rhoton Micro Curette



Catalog #	Size, Tip Size
NS-591-14	18.5 cm (7 1/4"), 1.0 x 2.0 mm

Rhoton Micro Curette

Angled 45°



Catalog #	Size, Tip Size
NS-591-15	18.5 cm (7 1/4"), 1.0 x 2.0 mm

Yasargil Micro Elevator

Bayonet Shaped



Catalog #	Size
NS-607-24	24 cm (9 1/2")

Yasargil Micro Elevator

Bayonet Shaped



Catalog #	Size
NS-611-24	24 cm (9 1/2")

Yasargil Micro Raspatory

Bayonet Shaped

Catalog #	Size
NS-613-24	24 cm (9 1/2")



Yasargil Micro Dissector

Bayonet Shaped

Catalog #	Size
NS-615-01	24 cm (9 1/2")
NS-615-02	24 cm (9 1/2")



Yasargil Micro Needle

Bayonet Shaped, Semi Sharp

Catalog #	Size
NS-618-24	24 cm (9 1/2")



Yasargil Micro Curette

Straight

Catalog #	Size
NS-631-01	24 cm (9 1/2")



Yasargil Micro Curette

Angled

Catalog #	Size
NS-633-01	24 cm (9 1/2")



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Yasargil Micro Curette

Bayonet Shaped

Catalog #	Size
NS-635-01	24 cm (9 1/2")

**Hardy Micro Sickle Dissector**

Bayonet Shaped, Blunt

Catalog #	Size
NS-651-01	24 cm (9 1/2")
NS-651-02	24 cm (9 1/2")

**Hardy Micro Sickle Dissector**

Bayonet Shaped, Sharp

Catalog #	Size
NS-651-03	24 cm (9 1/2")
NS-651-04	24 cm (9 1/2")

**Hardy Implant Fork**

Bayonet Shaped

Catalog #	Size
NS-655-24	24 cm (9 1/2")

**Hardy-Fahlbusch Micro Dissector**

Bayonet Shaped Sharp

Catalog #	Size
NS-659-01	24 cm (9 1/2")
NS-659-02	24 cm (9 1/2")



Casper Micro Dissector

Set of 6 Ref: NS-671-10 up to NS-675-10

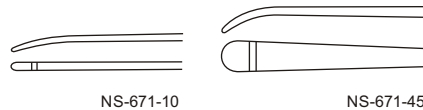
Catalog #	Size
NS-670-00	N/A



Casper Micro Dissector

Straight

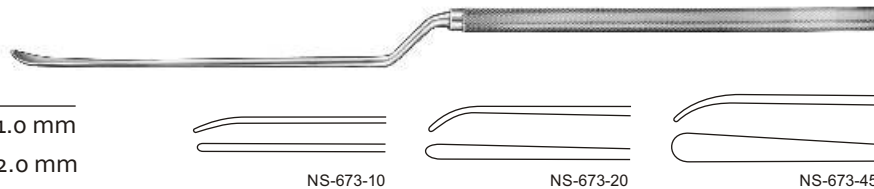
Catalog #	Size, Tip Size
NS-671-10	24 cm (9 1/2"), 1.0 mm
NS-671-45	24 cm (9 1/2"), 4.5 mm



Casper Micro Dissector

Bayonet Shaped, Curved Down

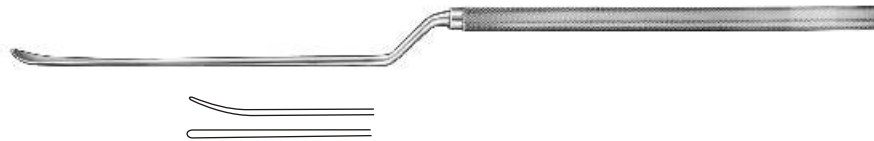
Catalog #	Size, Tip Size
NS-673-10	24 cm (9 1/2"), 1.0 mm
NS-673-20	24 cm (9 1/2"), 2.0 mm
NS-673-45	24 cm (9 1/2"), 4.5 mm



Casper Micro Dissector

Bayonet Shaped, Curved Up

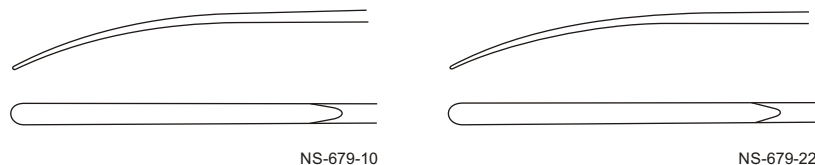
Catalog #	Size, Tip Size
NS-675-10	24 cm (9 1/2"), 1.0 mm



Micro Dissector

Straight

Catalog #	Size
NS-679-10	19 cm (7 1/2")
NS-679-22	21.5 cm (8 1/2")



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Ray Micro Curette

Angled 45°, Horizontal



Catalog #	Size, Diameter
NS-681-01	19 cm (7 1/2"), Ø 4.0 mm

Ray Micro Curette

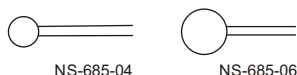
Angled 45°, Vertical



Catalog #	Size, Diameter
NS-681-02	19 cm (7 1/2"), Ø 4.0 mm

Hardy Micro Curette

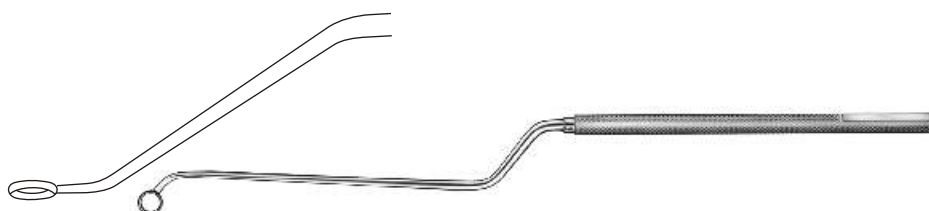
Bayonet Shaped



Catalog #	Size, Diameter
NS-685-04	26 cm (10 1/4"), Ø 4.0 mm
NS-685-06	26 cm (10 1/4"), Ø 6.0 mm

Nicola Micro Curette

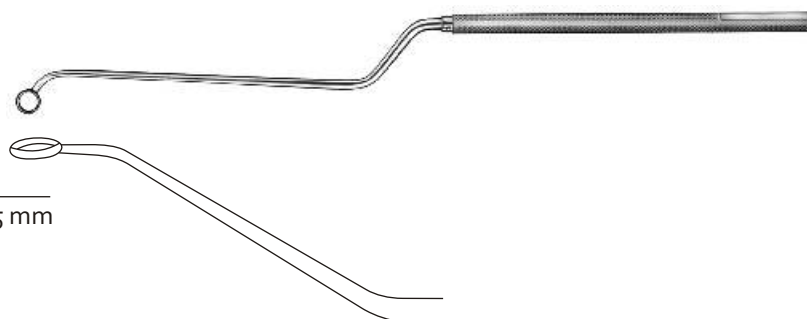
Bayonet Shaped, Left



Catalog #	Size, Diameter
NS-689-01	21.5 cm (8 1/2"), Ø 6.5 mm

Nicola Micro Curette

Bayonet Shaped, Right



Catalog #	Size, Diameter
NS-689-02	21.5 cm (8 1/2"), Ø 6.5 mm

Nicola Micro Curette

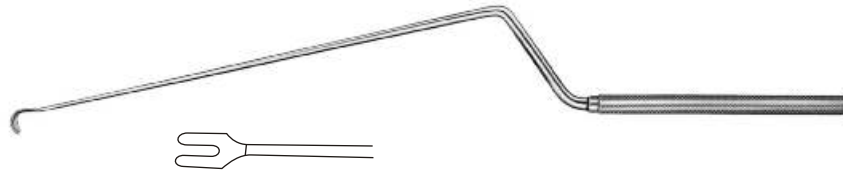
Bayonet Shaped, Angled Up



Catalog #	Size, Diameter
NS-689-03	21.5 cm (8 1/2"), Ø 6.5 mm

Hosobuchi Fork Spatula

Bayonet Shaped, Rigid



Catalog #	Size
NS-695-26	26 cm (10 1/4")

Landolt Micro Curette

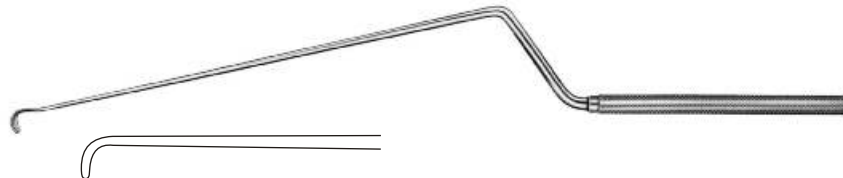
Bayonet Shaped, Malleable



Catalog #	Size
NS-697-26	26 cm (10 1/4")

Landolt Micro Curette

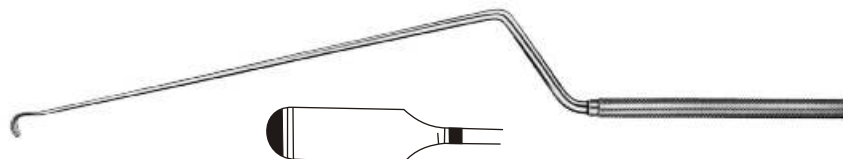
Bayonet Shaped, Blunt, Malleable



Catalog #	Size
NS-699-26	26 cm (10 1/4")

Landolt Micro Raspatory

Bayonet Shaped, Malleable



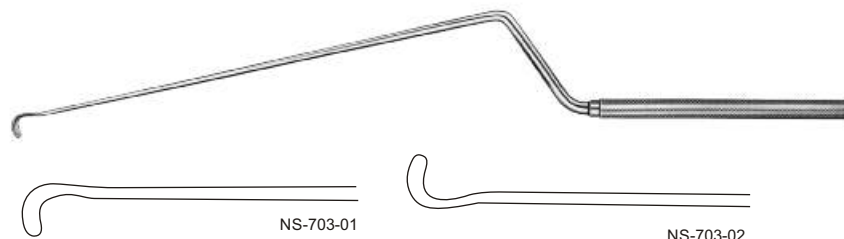
Catalog #	Size
NS-701-26	26 cm (10 1/4")

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Landolt Micro Enucleator

Bayonet Shaped

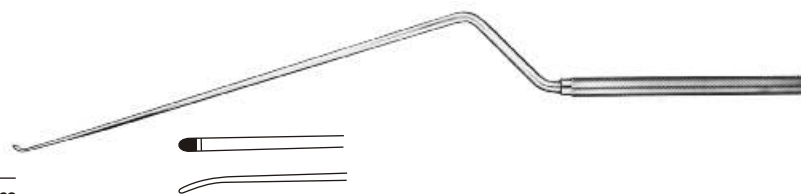
Catalog #	Size
NS-703-01	26 cm (10 1/4")
NS-703-02	26 cm (10 1/4")



Landolt-Reulen Micro Dissector

Bayonet Shaped, Rigid

Catalog #	Size, Tip Size
NS-711-26	26 cm (10 1/4"), 2.0 mm



Landolt-Reulen Micro Hook

Bayonet Shaped, Blunt, Rigid

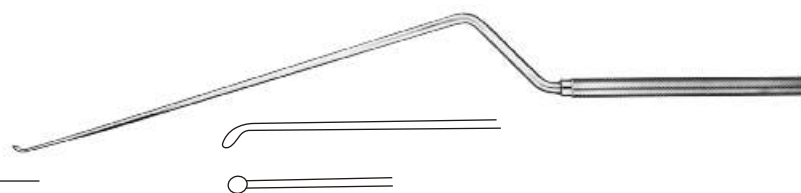
Catalog #	Size, Tip Size
NS-713-26	26 cm (10 1/4"), 1.7 mm



Landolt-Reulen Micro Curette

Bayonet Shaped, Rigid

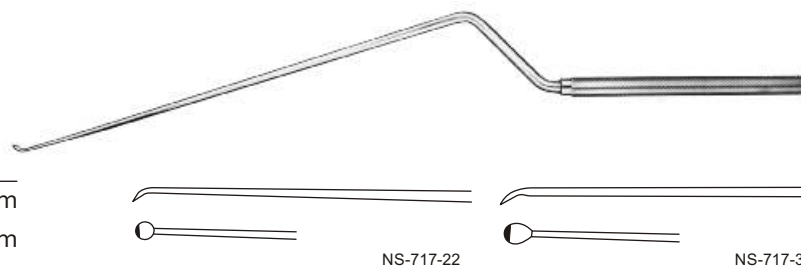
Catalog #	Size, Diameter
NS-715-26	26 cm (10 1/4"), Ø 2.5 mm



Landolt-Reulen Micro Raspatory

Bayonet Shaped, Rigid

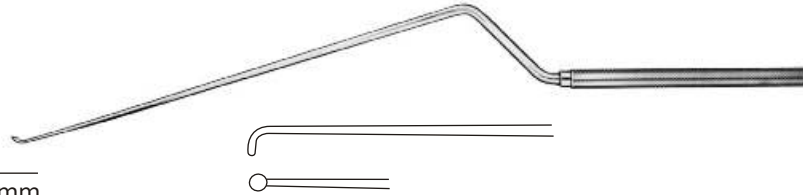
Catalog #	Size, Tip Size
NS-717-22	26 cm (10 1/4"), 2.2 mm
NS-717-32	26 cm (10 1/4"), 2.2 mm



Fahlbusch Micro Curette

Bayonet Shaped, Malleable

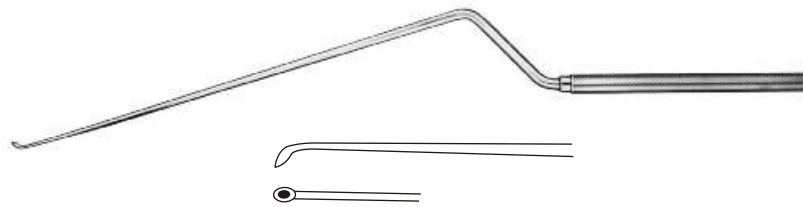
Catalog #	Size, Diameter
NS-719-01	26 cm (10 1/4"), Ø 2.5 mm



Fahlbusch Micro Scoop

Bayonet Shaped, Malleable

Catalog #	Size
NS-719-02	26 cm (10 1/4")



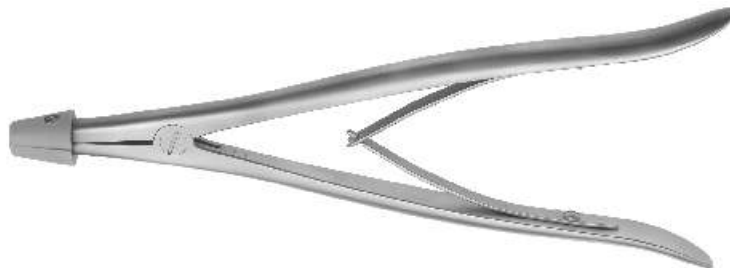
Cushing-Landolt Specula

Catalog #	Size, Blade Size
NS-751-01	N/A, 70 x 15 mm
NS-751-02	N/A, 90 x 15 mm
NS-751-03	N/A, 110 x 15 mm



Landolt Spcula

Catalog #	Size
NS-755-21	21.5 cm (8 1/2")



Mirror

Catalog #	Diameter
NS-790-06	Ø 6.0 mm
NS-790-08	Ø 8.0 mm
NS-790-10	Ø 10.0 mm
NS-790-12	Ø 12.0 mm



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Mirror Handle

Bayonet Shaped

Catalog #	Size
NS-792-00	15 cm (6")

