

stryker



SONOPET[®]

Ultrasonic Aspirator

Product catalog

Soft tissue ablation | Fine bone dissection | Decompression

**Delivering
optimal
flexibility**





Your superior experience starts with our people

People

Our people stand out. They're dedicated, highly skilled experts that care deeply and listen carefully. When you need a partner in improving care, we're by your side.

Culture

We create a dynamic, supportive environment that enables amazing people to do amazing things. Count on us to do what's right and deliver—every time.

Product innovation

Innovation is in our DNA—from Dr. Homer Stryker to the researchers, engineers and surgeons creating solutions that are reshaping neurotechnology today.

Medical education

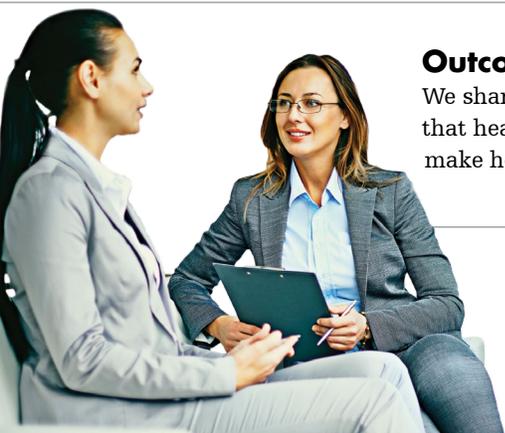
Innovation and skill come together in our educational outreach to providers. Each year, we help surgical teams nationwide master the latest medical technologies and care practices.

Research and development

We amplify our investments in R&D by listening to our customers and collaborating with them to create solutions that are simply superior.

Outcomes

We share your values and your commitment to innovative care that heals effectively and efficiently. With you, we're driven to make healthcare better.



Optimal flexibility and unmatched performance

SONOPET Ultrasonic Aspirator delivers optimal flexibility for you, your team and your patients. It's precise, easy to use and remarkably versatile. In one high-performance system, you get unparalleled control in soft-tissue applications—plus the nuanced power you need for fine bone dissection.

The SONOPET System

We've designed every component for maximum performance, reliability and ease of use.



Handpieces

- Lightweight, ergonomic
- Angled and straight 25kHz models
- 34kHz option for even greater precision



Tips

- 20 options for soft tissue and bone
- Variety of diameters and lengths
- Precise engineering for power and control



Console

- Easy to set up and operate
- Automatic handpiece recognition
- Precise control of suction, irrigation and ultrasonic power



Universal handpieces

During complex procedures, you need superior access and lightweight comfort. Our angled and straight designs give you the flexibility to find the perfect fit.



Universal 25kHz angled handpiece

| Part number | Description |
|--------------|--|
| 5450-840-000 | Universal 25kHz straight handpiece |
| 5450-820-000 | Universal 25kHz angled handpiece |
| 5450-800-039 | 90° release torque wrench |
| 5450-800-276 | Cleaning wire |
| 5450-800-278 | Sterilization tray (7mm) |
| 5450-840-013 | Replacement nose cone for universal straight handpiece |
| 5450-820-016 | Replacement nose cone for universal angled handpiece |

Versatility, comfort and control

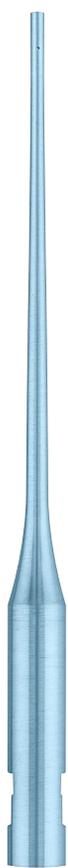
- Universal 25kHz handpieces accept tips for soft tissue ablation and bone cutting
- Angled and straight handpieces
- Tailored to surgeon preference, procedure and line-of-sight demands
- Lightweight, ergonomic design
- Superb tactile feedback
- Continuous irrigation and active suction keeps field clear of liquid and debris
- No external cooling required
- Frangible tip covers for better access and line of sight



**Universal
25kHz straight
handpiece**

Soft tissue tips

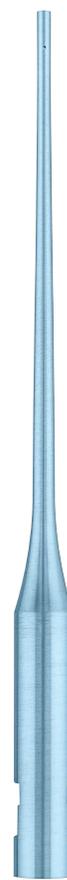
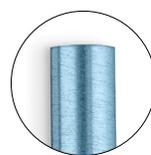
Moderate ablation



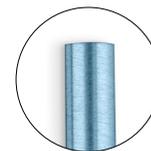
Straight



Straight micro diameter



Straight large diameter



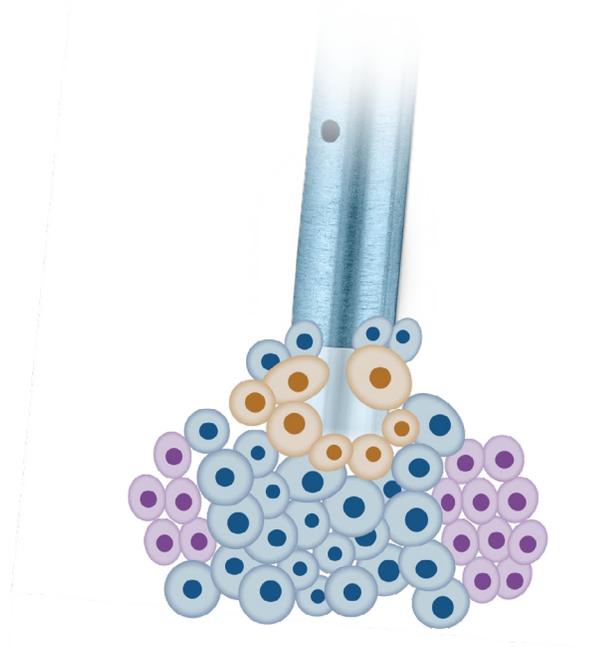
Straight superlong

| | | | | |
|-------------|----------------|----------------|----------------|----------------|
| Part number | 5450-800-307 | 5450-800-309 | 5450-800-308 | 5450-800-301 |
| Length | 4.5in (11.4cm) | 4.9in (12.3cm) | 4.6in (11.7cm) | 7.9in (20.0cm) |
| OD | 1.92mm | 1.77mm | 2.47mm | 1.92mm |
| ID | 1.50mm | 1.37mm | 1.92mm | 1.50mm |

OD = outer diameter; ID = inner diameter

Versatile tip options

- Large selection of tips includes four soft tissue tips, five fibrous tissue tips and 11 bone tips
- Standard and superlong lengths allow for access into a variety of depths
- Available in a variety of diameters and lengths
- Detachable frangible sections allow for adjustable tip exposure

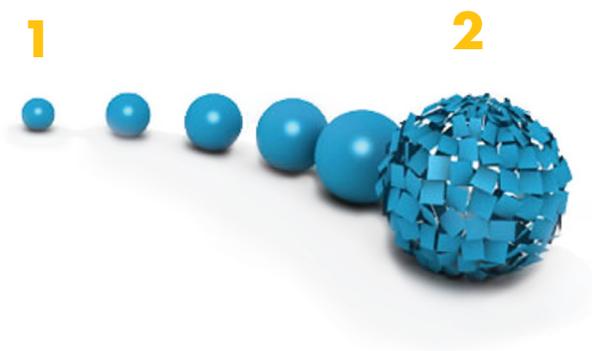


Cavitation

The vibration of the ultrasonic tip creates negative pressure in targeted tissue. Cells expand under increasing pressure until they burst. The process is selective because tissue with high water content—fat, lesions, unhealthy tissue—is more susceptible to cavitation. Collagen and elastin vibrate in resonance with the acoustic vibrations leaving blood vessels, nerves and most other healthy tissues largely untouched.

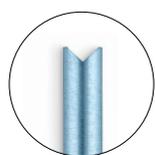
Process of cavitation

- 1 Under negative pressure, a cell expands to maximum size.
- 2 The cell bursts under compression.

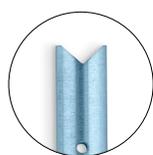


Soft tissue tips

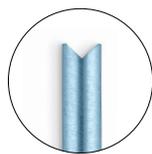
Cutting ablation



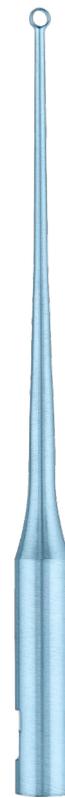
**Spetzler
barracuda**



**Spetzler barracuda
large diameter**



**Spetzler
barracuda superlong**



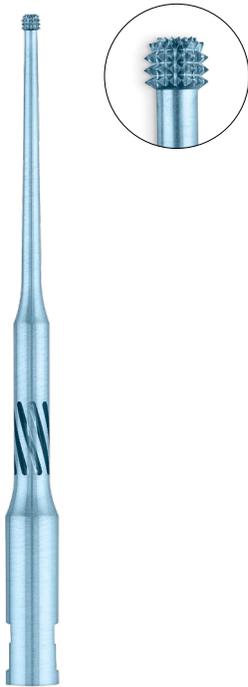
Ring curette

| | | | | |
|-------------|----------------|----------------|----------------|----------------|
| Part number | 5450-800-310 | 5450-800-306 | 5450-800-317 | 5450-800-316 |
| Length | 4.5in (11.4cm) | 4.6in (11.7cm) | 7.9in (20.0cm) | 4.4in (11.2cm) |
| OD | 1.92mm | 2.46mm | 1.92mm | 3.18mm |
| ID | 1.50mm | 2.01mm | 1.50mm | 2.26mm |

OD = outer diameter; ID = inner diameter

Calcified and fibrous tissue

Because the high-strength collagen bonds in calcified and fibrotic tissue don't absorb ultrasonic waves, cavitation alone isn't enough for evacuation. The honed edges on the distal ends of our cutting ablation tips sever and break the collagen bonds and allow cavitation to take effect.



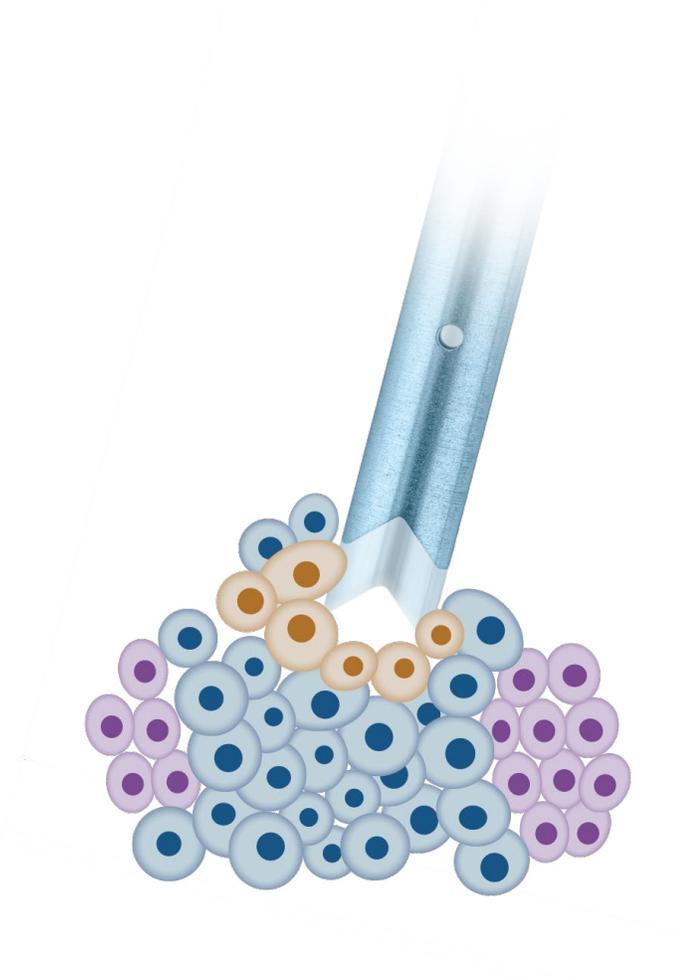
Payner 360

5450-800-312

3.9in (9.9cm)

2.7mm

3.12mm

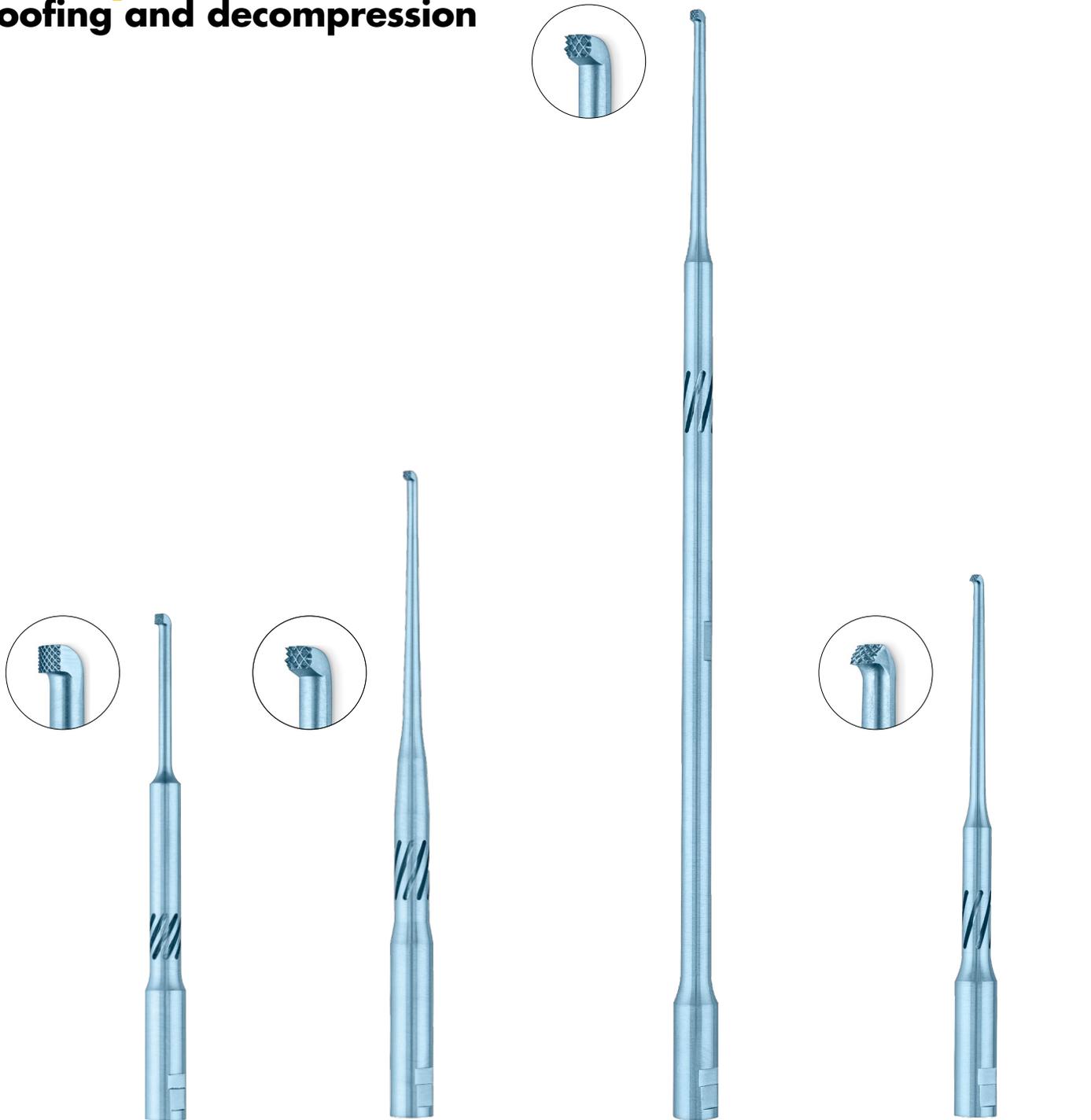


Deeper, minimally invasive access

Our superlong lengths give you access to deeper structures and are especially useful in applications that require minimally invasive approaches.

Bone tips

Unroofing and decompression



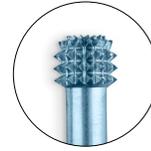
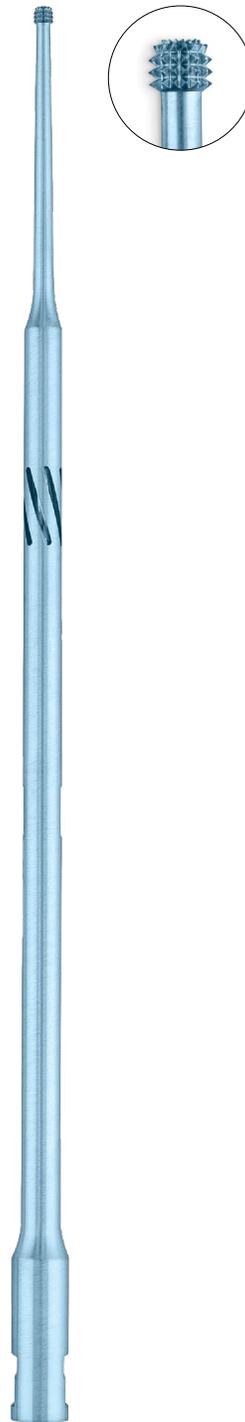
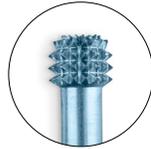
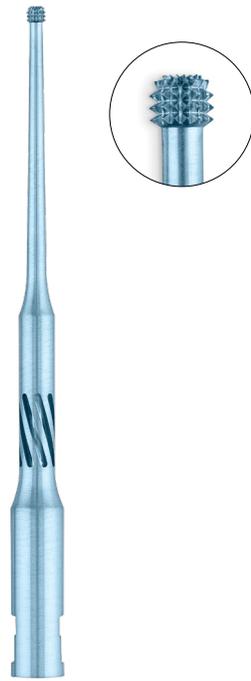
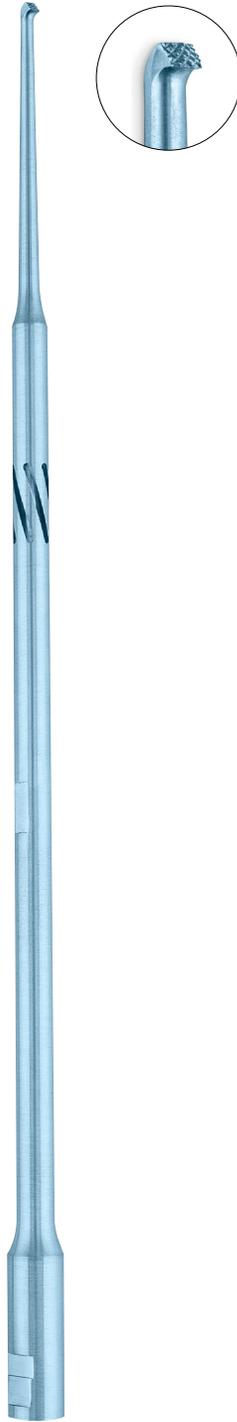
Spetzler claw

Spetzler micro claw long

Spetzler micro claw superlong

Spetzler open angle micro claw

| | | | | |
|----------------|---------------|----------------|----------------|----------------|
| Part number | 5450-800-311 | 5450-800-315 | 5450-800-303 | 5450-800-313 |
| Length | 3.8in (9.7cm) | 4.6in (11.7cm) | 7.9in (20.0cm) | 4.0in (10.2cm) |
| Cutting length | 2.0mm | 1.8mm | 1.8mm | 1.2mm |
| Cutting width | 2.8mm | 2.0mm | 2.0mm | 2.0mm |



**Spetzler open angle
micro claw superlong**

Payner 360

**Payner 360
superlong**

**Superlong for
superior access**

Our superlong bone tips let you dissect thin, delicate bone to reach the anterior skull base with maximum control.

5450-800-304

5450-800-312

5450-800-302

7.9in (20.0cm)

3.9in (9.9cm)

7.9in (20.0cm)

1.4mm

2.7mm

2.7mm

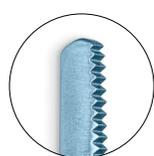
2.0mm

3.12mm

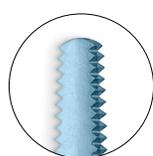
3.12mm

Bone tips

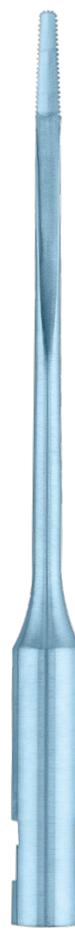
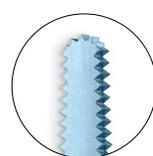
Longitudinal cutting and splitting



Knife



Serrated knife

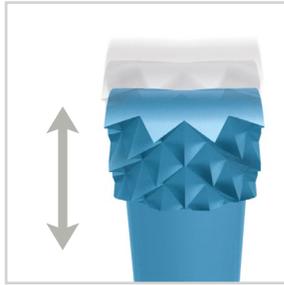


Serrated aggressive knife

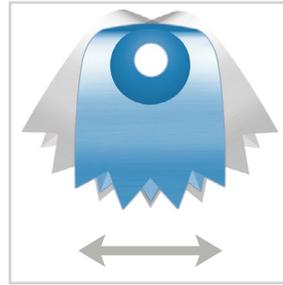


Nakagawa serrated knife

| | | | | |
|----------------|----------------|----------------|----------------|----------------|
| Part number | 5450-815-100 | 5450-815-107 | 5450-815-114 | 5450-800-305 |
| Length | 4.3in (11.0cm) | 4.3in (11.0cm) | 4.3in (11.0cm) | 4.3in (11.0cm) |
| Cutting length | 12.4mm | 12.4mm | 12.4mm | 3.0mm |
| Cutting width | 0.8mm | 0.8mm | 0.8mm | 0.8mm |



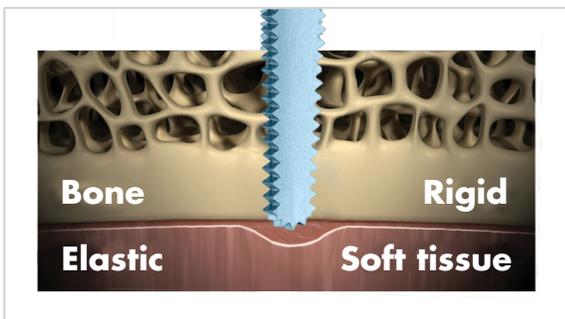
Longitudinal motion



Torsional motion

Proprietary LT vibration technology

SONOPET Ultrasonic Aspirator masters fine bone and hard tissue dissection by coupling longitudinal vibration with torsional oscillation. This patented technology and ergonomic design let you emulsify bone with a high level of precision.



Cutting and protection combined

Because calcified and rigid structures don't absorb ultrasonic oscillation, the SONOPET System cuts bone smoothly and efficiently. Underlying soft tissue vibrates with oscillation and moves away from the vibrating tip, remaining largely unaffected.

Precise, graded bone dissection

Our bone tips give you a high degree of control with minimal pressure. Helical reliefs machined into the shaft of the tip redirect the ultrasonic pulse from a purely longitudinal to longitudinal/torsional excursion.



Higher-frequency handpiece

Higher-frequency 34kHz angled handpiece



| Part number | Description |
|-------------|-------------|
|-------------|-------------|

| | |
|--------------|---|
| 5450-804-000 | Higher-frequency 34kHz angled handpiece |
| 5450-800-024 | Torque wrench (1.96mm-7mm) |
| 5450-800-278 | Sterilization tray (7mm) |
| 5450-803-043 | Replacement nose cone for 34kHz handpiece |

Even greater precision and control

Designed for delicate tissue removal in superficial lesions, our 34kHz angled handpiece gives you enhanced tactile feedback and more nuanced control.

Higher frequency results in lower amplitude—the distance the tip moves along its length. Because lower amplitude delivers more selectivity and precision, this high-performance handpiece is ideal for work near critical structures and motor centers.

Straight tip

| | |
|-------------|----------------|
| Part number | 5450-815-100 |
| Length | 4.9in (12.3cm) |
| OD | 1.77mm |
| ID | 1.37mm |



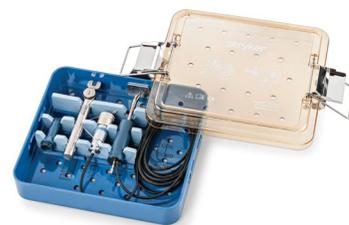


Making performance simple

When seconds matter, the efficiency and ease of the SONOPET System shine through. Because setup is quick and simple, you and your team can focus on what matters most—your patient.

- Durable, reliable standalone system with onboard suction and irrigation
- Non-sequential setup process for enhanced speed and efficiency
- Automatic handpiece recognition
- Precise control of ultrasonic power, suction and irrigation

Accessories



Assorted accessories

| Part number | Description |
|--------------|---|
| 5450-800-039 | 90° release torque wrench for use with universal 25kHz straight handpiece |
| 5450-800-024 | Torque wrench (1.96mm-7mm) for use with higher frequency 34kHz handpiece |
| 5450-800-276 | Cleaning wire |
| 5450-800-278 | Sterilization tray (7mm) |
| 5450-850-000 | Console 110v (includes foot pedal and irrigation pole) |
| 5450-850-007 | Foot pedal |
| 5450-850-028 | Irrigation pole |
| 5450-850-410 | Cart |

Tubing and canister accessories

| Part number | Description |
|--------------|--|
| 5450-850-003 | Disposable tubing set and extender filter tubing (5/pkg) |
| 5450-850-001 | Reusable plastic suction canister |
| 5450-850-002 | Disposable suction canister liner |
| 5450-851-012 | Disposable plastic suction canister |



Handpiece nose cones



Part number

5450-820-016

Description

Replacement nose cone for universal 25kHz angled handpiece



Part number

5450-840-013

Description

Replacement nose cone for universal 25kHz straight handpiece



Part number

5450-803-043

Description

Replacement nose cone for higher-frequency 34kHz handpiece

Ordering information

Handpieces

| Part number | Description |
|--------------|---|
| 5450-820-000 | Universal 25kHz angled handpiece |
| 5450-840-000 | Universal 25kHz straight handpiece |
| 5450-804-000 | Higher-frequency 34kHz angled handpiece |

Tip for higher-frequency 34kHz angled handpiece

| Part number | Description |
|--------------|------------------|
| 5450-800-002 | Straight (5/pkg) |

Soft tissue tips

| Part number | Description |
|--------------|---|
| 5450-800-307 | Straight (5/pkg) |
| 5450-800-309 | Straight micro diameter (5/pkg) |
| 5450-800-308 | Straight large diameter (5/pkg) |
| 5450-800-301 | Straight superlong (5/pkg) |
| 5450-800-310 | Spetzler barracuda (5/pkg) |
| 5450-800-306 | Spetzler barracuda large diameter (5/pkg) |
| 5450-800-317 | Spetzler barracuda superlong |
| 5450-800-316 | Ring curette (5/pkg) |
| 5450-800-312 | Payner 360 (5/pkg) |

Bone tips

| Part number | Description |
|-------------|-------------|
|-------------|-------------|

| | |
|--------------|--|
| 5450-800-311 | Spetzler claw (5/pkg) |
| 5450-800-315 | Spetzler micro claw long (5/pkg) |
| 5450-800-303 | Spetzler micro claw superlong (5/pkg) |
| 5450-800-313 | Spetzler open angle micro claw (5/pkg) |
| 5450-800-304 | Spetzler open angle claw superlong (5/pkg) |
| 5450-800-312 | Payner 360 (5/pkg) |
| 5450-800-302 | Payner 360 superlong (5/pkg) |
| 5450-815-100 | Knife (5/pkg) |
| 5450-815-107 | Serrated knife (5/pkg) |
| 5450-815-114 | Serrated aggressive knife (5/pkg) |
| 5450-800-305 | Nakagawa serrated knife (5/pkg) |

Accessories

| Part number | Description |
|-------------|-------------|
|-------------|-------------|

| | |
|--------------|---|
| 5450-800-039 | 90° release torque wrench for use with universal 25kHz straight handpiece |
| 5450-800-024 | Torque wrench (1.96mm-7mm) for use with higher frequency 34khz handpiece |
| 5450-800-276 | Cleaning wire |
| 5450-800-278 | Sterilization tray (7mm) |
| 5450-850-000 | Console 110v (includes foot pedal and irrigation pole) |
| 5450-850-001 | Reusable plastic suction canister |
| 5450-850-002 | Disposable suction canister liner |
| 5450-851-012 | Disposable plastic suction canister |
| 5450-850-003 | Disposable tubing set and extender filter tubing (5/pkg) |
| 5450-850-007 | Foot pedal |
| 5450-850-028 | Irrigation pole |
| 5450-850-410 | Cart |

Accessories cont.

| Part number | Description |
|-------------|-------------|
|-------------|-------------|

| | |
|--------------|--|
| 5450-820-016 | Replacement nose cone for universal 25kHz angled handpiece |
| 0045-001-049 | O-ring |
| 0045-001-047 | O-ring |
| 5450-840-013 | Replacement nose cone for universal 25kHz straight handpiece |
| 0045-001-049 | O-ring |
| 0045-001-047 | O-ring |
| 5450-803-043 | Replacement nose cone for higher-frequency 34kHz handpiece |
| 0045-001-040 | O-ring |
| 0045-001-040 | O-ring |

Proven in neurosurgery—flexible enough for wider use

We've engineered SONOPET Ultrasonic Aspirator to give surgeons fine control and dependable power to fragment, emulsify and aspirate soft tissue and bone. Engineered to meet the rigorous demands of complex cranial neurosurgery, spine and ENT procedures, the SONOPET System is indicated for use in a wide range of applications:

- Gastrointestinal and affiliated organ surgery
- General surgery
- Gynecological surgery
- Neurosurgery
- Orthopaedic surgery
- Plastic and reconstructive surgery
- Thoracic surgery
- Urological surgery



Neuro Spine ENT

This document is intended solely for the use of healthcare professionals. A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery.

The information presented is intended to demonstrate a Stryker product. A surgeon must always refer to the package insert, product label and/or instructions for use, including the instructions for cleaning and sterilization (if applicable), before using any Stryker product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

Stryker Corporation or its affiliates own, use, or have applied for the following trademarks or service marks: SONOPET, Spetzler, Stryker. All other trademarks are trademarks of their respective owners or holders.

Literature Number: 9100-002-705 Rev. B

Copyright © 2016 Stryker

Manufactured by:

Stryker Neuro Spine ENT
4100 East Milham Avenue
Kalamazoo, MI 49001 USA
Tel: 269 323 7700
Fax: 269 353 3026
Toll free: 800 253 3210

stryker.com/nse