Precision Meets Versatility™

SONDET

PRODUCT CATALOG

Tissue Ablation Hard Tissue Dissection Sonic Control Bone Tips (Dissection & Decompression) Bone Dissection Tissue Ablation

stryker

Neuro Spine ENT

UNIVERSAL HAND PIECES

Universal Angled or Universal Straight Hand Pieces

Soft Tissue Ablation and/or **Fine Bone Dissection Decompression**

Precision Versatility, Ease of Use

50 ter (1=

UNIVERSAL ANGLED HAND PIECE 25kHz

STRYKER REF DESCRIPTION

5450-820-000 UNIVERSAL ANGLED HAND PIECE 25 KHZ

5450-800-038 STEP TORQUE WRENCH, OFFSET (7MM) 5450-800-276 CLEANING WIRE 5450-800-278 STERILIZATION TRAY (7MM)

UNIVERSAL STRAIGHT HAND PIECE 25kHz

STRYKER REF DESCRIPTION

5450-840-000 UNIVERSAL STRAIGHT HAND PIECE 25 KHZ

5450-800-038 STEP TORQUE WRENCH, OFFSET (7MM) 5450-800-276 CLEANING WIRE 5450-800-278 STERILIZATION TRAY (7MM)

-

ONE HAND PIECE FOR SOFT TISSUE AND FINE BONE DISSECTION

SONOPET ultrasonic aspirator by Stryker is the most versatile and user-friendly system. In addition to the soft tissue ablation capabilities common to ultrasonic aspirators, the SONOPET Hand Piece can effectively address fine dissection of bone traditionally performed with rotating drills and hand held cutting instruments. In addition to the soft tissue ablation capabilities common to ultrasonic aspirators, the SONOPET can effectively address fine dissection of bone traditionally performed with rotating performed with rotating drills and held cutting instruments.

- 25 kHz Universal Straight and Angled Hand Pieces accept both Soft Tissue Ablation Tips and Fine Bone Dissection Tips
- Straight or Angled Hand Piece allows for tailoring of instrumentation to specific tissue/procedure or line of sight demands

FACILITATING PRECISION

- Irrigation is continuously delivered to the cutting surface of the titanium tip when the system is activated. This reduces heat and keeps the field clear – enhancing visibility
- Active suction ensures debris and liquid are quickly cleared from the field.
- Suction and Irrigation can be easily controlled on the front of the console, tailoring the settings to the specific application and patient anatomy.



ERGONOMICS AND USER EXPERIENCE

- The hand piece profile and construction contribute to increased dexterity and enhances tactile feedback.
- The hand piece is produced with lightweight materials which reduce muscle fatigue during long procedures.



Higher Frequency = Conservative Tissue Effect and Increased Tactile Feedback

Ideal for lesions that are superficial and soft, in close proximity to, or on, critical structures and motor centers.





HIGHER FREQUENCY RESULTS IN LOWER AMPLITUDE

Amplitude = The distance that the tip moves longitudinally from start to finish. Lower tip amplitude allows for more selectivity and precision, which is beneficial near vital structures and for applications which require less tissue penetration.

Controlled Tactile Response Conservative Effect on Pia Mater

Pia mater = a delicate, thin fibrous tissue that clings to the brain following the convolutions and is impermeable to fluid. The Pia mater works with the Arachnoid and Dura mater layers to protect and cushion the brain. It is also the Blood Brain Barrier which means it is responsible for keeping CSF separate from blood. The CSF is only kept separate if the Pia mater is intact, healthy, and undisturbed.



Cancer cells normal cells

SOFT TISSUE TIPS

MODERATE ABLATION TIPS



CAVITATIONAL EFFECT

The motion of an ultrasonic blade creates an area of transient low pressure, causing intracellular fluids to boil, expand and contract, then implode. The effect enhances dissection.

tumor tissue tumor tissue tumor tissue healthy tissue

Precision Meets Versatility™

Susceptibility of tissue to cavitation depends on the water content of the tissue. Fat, lesion, or unhealthy tissues generally have higher water content and are affected by cavitation.

Blood vessels, nerves, and most other healthy tissues have lower water content but a higher collagen and elastin content. Elastin and collagen fibers vibrate in resonance with the acoustic vibrations and thus are not easily affected by cavitation.

Positive Compression Rarefaction AMPLITUDE Maximum Implosion Implosion

AMPLITUDE The peak to trough **FREQUENCY** from trough to trough

PROCESS OF CAVITATION

FREQUENCY

SOFT AND FIBROUS TISSUE TIPS

CUTTING ABLATION TIPS Spetzler™ Barracuda PART # LENGTH IN.(CM) OD (MM) 5450-800-310 4.5 (11.5) 1.92 Spetzler™ Large Dia. Barracuda

PART #	LENGTH IN.(CM)	OD (MM)	ID (MM)	
5450-800-306	4.6 (11.8)	2.46	2.01	
Ring Curette	_			
		0		
PART #	LENGTH IN.(CM)	OD (MM)	ID (MM)	
5450-800-316	4.4 (11.2)	3.18	2.26	
Payner [™] 360		-		

PART #	LENGTH IN.(CM)	CUTTING LENGTH (MM)	CUTTING WIDTH (MM)
5450-800-312	3.9 (9.9)	2.7	3.12

CAVITATION COMBINED WITH MANUAL CUTTING

ID (MM)

1.50

CALCIFIED TISSUE

Calcified or Fibrotic tissue often has high strength collagen bonds that do not absorb the ultrasonic waves. Thus cavitation alone often cannot cavitate and evacuate the tissue.

SOLUTION: Cutting edges on the distal end of the tip sever and break the collagen bonds. Once the high strength bonds are addressed and cut, cavitating can take effect ...



Collagen fiber

BONE TIPS - MICROSURGICAL DECOMPRESSION

UNROOFING AND SKELETALIZATION



Precision Meets VersatilityTM

Time Saved (Sonic) & Improved Treatment Efficacy in Close Proximity to Critical Anatomy (Control)!

PROPRIETARY LT TECHNOLOGY

PRECISE, GRADED BONE DISSECTION

HIGH DEGREE OF CONTROL

The Patented LT technology makes it possible to emulsify bone with no grabbing or kicking due to the non-rotational reciprocating motion, and oscillation at 25,000 times per second with width variation.

Wth the Sonopet Hand Piece mnimal pressure is needed. With just a touch of the LT tip to bone, a true synergy of control and efficacy can be achieved with Sonopet.



LONGITUDINAL MOTION



TORSIONAL MOTION



CLAW TIP decompressing nerve without patty protection

BONE TIPS - MICROSURGICAL DECOMPRESSION

LONGITUDINAL CUTTING AND SPLITTING

Nakagawa Sei	rated Knife			
PART #	LENGTH IN. (CM)	CUTTING LENGTH (MM)	CUTTING WIDTH (MM)	
5450-800-305	4.3 (11)	3	0.8	
Knife				
	CONTRACTOR OF THE OWNER OF THE OWNER			
PART #	LENGTH IN. (CM)	CUTTING LENGTH (MM)	CUTTING WIDTH (MM)	
5450-815-100	4.3 (11)	12.4	0.8	
Serrated Knif	e			
PART #	LENGTH IN. (CM)	CUTTING LENGTH (MM)	CUTTING WIDTH (MM)	
5450-815-107	4.3 (11)	12.4	0.8	
Serrated Agg	ressive Knife			
	and the second			
PART #	LENGTH IN. (CM)	CUTTING LENGTH (MM)	CUTTING WIDTH (MM)	

Precision Meets Versatility™









SOFT TISSUE TIPS

SUPERLONG ACCESS TIPS

BONE TIPS - MICROSURGICAL DECOMPRESSION

SONICONTROL

SUPERLONG ACCESS TIPS

Payner [™] Superlong 360				
	100	2		•
PART #	LENGTH IN. (CM)	CUTTING LENGTH (MM)	OD (MM)	
5450-800-302	7.9 (20.0)	2.7	3.12	
Spetzler [™] Sup	erlong Micro Cla	aw 🌌		
PART #	LENGTH IN. (CM)	CUTTING LENGTH (MM)	CUTTING WIDTH (MM)	18
5450-800-303	7.9 (20.0)	1.8	2.0 mm	
Spetzler [™] Superlong Open Angle Micro Claw				
PART #	LENGTH IN. (CM)	CUTTING LENGTH (MM)	CUTTING WIDTH (MM)	
			0.0	

SKULL BASE AND DEEP ACCESS

CONFIDENCE NEAR CRITICAL ANATOMY

REPEATABILITY

Superlong Access Tips have the length to reach the targeted anatomy and the tactile feel to enhance the users dexterity every time.

Smart Consol

CONSOLE

"Ease of use is important when seconds matter. The quick and simple set-up of the Sonopet System will allow the staff to focus on the patient."

ADVANTAGES

- Automatically recognizes hand pieces for easy set-up
- Multiple frequencies of handpieces allow tissue selectivity for in situ evacuation in eloquent areas or aggressive removal of fine bone
- Suction, Irrigation and Ultrasonic functions can be used alone or simultaneously by using the SYNC mode
- Individual linear control of each output enables user to fine tune power balance

ACCESSORIES

ASSORTED ACCESSORIES

STRYKER REF DESCRIPTION

 5450-800-038
 STEP TORQUE WRENCH, OFFSET (7MM)

 5450-800-276
 CLEANING WIRE

 5450-800-278
 STERILIZATION TRAY (7MM)

 5450-850-000
 CONSOLE 110 V (INCLUDES FOOT PEDAL AND IV POLE)

 5450-850-007
 FOOT PEDAL

 5450-850-028
 IV POLE

 5450-850-410
 SONOPET CART

TUBING ACCESSORIES

STRYKER REFDESCRIPTION5450-850-003DISPOSABLE TUBING SET &
EXTENDER FILTER TUBING (5/PKG)

CANISTER ACCESSORIES

STRYKER REF DESCRIPTION

5450-850-001PLASTIC SUCTION CANISTER, REUSABLE5450-850-002DISPOSABLE SUCTION CANISTER LINER5450-851-012PLASTIC SUCTION CANISTER, DISPOSABLE

SONOPET HAND PIECES

STRYKER® DESCRIPTION

- 5450-820-000 UNIVERSAL ANGLED HAND PIECE 25KHZ
- 5450-840-000 UNIVERSAL STRAIGHT HAND PIECE 25KHZ
 - 5450-804-000 34KHZ ANGLED HAND PIECE

SOFT TISSUE TIPS

STRYKER® DESCRIPTION

MODERATE ABLATION TIPS

- 5450-800-309 25KHZ STRAIGHT MICRO DIAMETER TIP (5/PKG)
- 5450-800-307 25KHZ STRAIGHT TIP (5/PKG)
- 5450-800-308 25KHZ STRAIGHT LARGE DIAMETER TIP (5/PKG)

CUTTING ABLATION TIPS

- \bigcirc
- 5450-800-306 25KHZ SPETZLER™ BARRACUDA LARGE DIAMETER TIP (5/PKG)
- 5450-800-316 RING CURETTE TIP (5/PKG)

SUPERLONG ACCESS TIPS

- 5450-800-301 25KHZ SUPERLONG STRAIGHT TIP (5/PKG)
- 5450-800-317 25KHZ SUPERLONG BARRACUDA (5/PKG)

SONICONTROL

BONE TIPS - MICROSURGICAL DECOMPRESSION

STRYKER[®] DESCRIPTION

UNROOFING & SKELETONIZATION

- 5450-800-311 25KHZ SPETZLER[™] CLAW TIP (5/PKG)
- 5450-800-315 25KHZ LONG SPETZLER[™] MICRO CLAW TIP (5/PKG)
- 5450-800-313 25KHZ SPETZLER[™] OPEN ANGLE MICRO CLAW TIP (5/PKG)
- 5450-800-312 25KHZ PAYNER[™] 360 TIP (5/PKG)

LONGITUDINAL CUTTING AND SPLITTING

5450-800-305
 25KHZ NAKAGAWA SERRATED KNIFE TIP (5/PKG)
 5450-800-302
 N25KHZ SUPERLONG PAYNER[™] 360 TIP (5/PKG)
 5450-800-303
 SERRATED KNIFE
 5450-800-304
 SERRATED AGGRESSIVE KNIFE

SUPERLONG ACCESS TIPS

- 5450-800-302 PAYNER[™] SUPERLONG 360
- 5450-800-303 SPETZLER[™] SUPERLONG MICRO CLAW
- 5450-800-304 SPETZLER[™] SUPERLONG OPEN ANGLE MICRO CLAW

ACCESSORIES

STRYKER[®] DESCRIPTION

5450-800-038	STEP TORQUE WRENCH, OFFSET (7MM)
5450-800-276	CLEANING WIRE
5450-800-278	STERILIZATION TRAY (7MM)
5450-850-000	CONSOLE 110 V (INCLUDES FOOT PEDAL AND IV POLE)
5450-851-012	PLASTIC SUCTION CANISTER, DISPOSABLE
5450-850-001	PLASTIC SUCTION CANISTER, REUSABLE
5450-850-002	DISPOSABLE SUCTION CANISTER LINER
5450-850-003	DISPOSABLE TUBING SET & EXTENDER FILTER TUBING (5/PKG
5450-850-007	FOOT PEDAL
5450-850-028	IV POLE
5450-850-410	SONOPET® CART

stryker

Reconstructive

Hips Knees Trauma & Extremities Joint Preservation Orthobiologics

Medical & Surgical

Power Tools & Surgical Accessories Image Guided Navigation Endoscopy & Arthroscopy Integrated Communications Beds, Stretchers & EMS Sustainability Solutions

Neurotechnology & Spine

Craniomaxillofacial Interventional Spine Neurosurgical, Spine & ENT Neurovascular Spinal Implants

Stryker® Neuro Spine ENT 4100 East Milham Avenue Kalamazoo, MI 49001 USA t: 269 323 7700 f: 269 353 3026 toll free: 800 253 3210 www.stryker.com

Products referenced with [™] designation are trademarks of Stryker. Products referenced with [®] designation are registered trademarks of Stryker.

Literature Number: **9100-002-705 Rev. None** UnDe/P.S. Copyright © 2013 Stryker Printed in USA