



Abraham Blacksmith

Better Solutions for Better Surgeons

www.abrahamblacksmith.co.uk

Arthroscopy
Arthroskopie
Arthroscopie
Artroscopia
Artroscopia





Abraham Blacksmith
Better Solutions for Better Surgeons



Scalpel-Knife
Skalpelmesser



AS-61
130 mm

Banana knife
toothed
Bananamesser
glatt



AS-62
130 mm

Meniscotome Smillie
4 mm straight edge
Meniskotome
Smillie 4 mm
Gerade Schneide



AS-63
130 mm

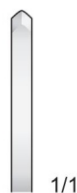
Meniscotome Smillie
5 mm straight edge
Meniskotome
Smillie 5 mm
Gerade Schneide



AS-64
130 mm

Knife
Incisionmesser

3 mm



AS-65
130 mm

Knife
Incisionmesser

5 mm



AS-66
130 mm

Hook knife 90°
Hakenmesser 90°



AS-67
130 mm

Knife
Messer



AS-68
130 mm

Meniscotome Smillie
5 mm round edge
Meniskotome
Smillie 5 mm
Runde Schneide

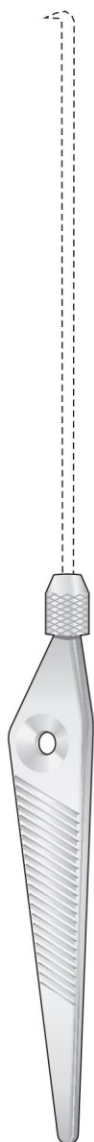


AS-69
130 mm

Hook probe
pointed
Hakensonde
Spitz



AS-70
130 mm



AS-60
125 mm

Handle only
Griff allein
125 mm

Hook probe pointed
Hakensonde spitz



AS-11
220 mm

Knife 45 °
Messer 45°



AS-12
220 mm

Bajonet knife 45 °
Bajonettmesser 45°



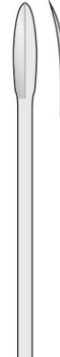
AS-13
225 mm

Banana knife
toothed
Bananamesser
gezahnt



AS-14
225 mm

Banana knife
smooth
Bananamesser
glatt



AS-15
225 mm

Spoon Ø 3 mm
30° curved
Löffel Ø 3 mm
30° gebogen



AS-16
225 mm

Ring-Kürette Ø
3 mm
Ring-Curette Ø
3 mm



AS-17
220 mm

Ring-Kürette Ø
7 mm
Ring-Curette Ø
7 mm



AS-18
225 mm

Probe graduated
2,5 mm
Sonde graduirert
2,5 mm



AS-19
220 mm

Probe graduated
3,5 mm
Sonde graduirert
3,5 mm



AS-20
220 mm

Meniscotome
Smillie 3 mm
gerade Schneide
Meniscotome Smillie
3 mm straight edge



AS-21
225 mm

Meniscotome
Smillie 5 mm
gerade Schneide
Meniscotome Smillie
5 mm straight edge



AS-22
225 mm

Meniscotome Smillie
7 mm round edge
Meniscotome Smillie
7 mm runde Schneide



AS-23
220 mm

Scalpel-Knife
Skalpelmesser



AS-24
225 mm

Knife, toothed,
straight
Messer gezahnt,
gerade



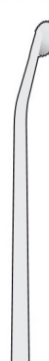
AS-25
225 mm

Knife, toothed,
curved 30°, left
Messer gezahnt,
gebogen, 30°, links



AS-26
220 mm

Knife, toothed,
curved 30°, right
Messer gezahnt,
gebogen, 30°, rechts



AS-27
220 mm

Sickle Knife
Sichelmesser



AS-28
220 mm

Hook Knife 90°
Hakenmesser 90°



AS-29
220 mm

AS-10
125 mm

Hook-Knife 90°
Hakenmesser 90°



AS-30
225 mm

Meniscotome
Meniskotome



AS-31
220 mm

Knife 45°
Messer 45°



AS-32
220 mm

Banana-Knife
Bananamesser



AS-33
220 mm

Scalpel-Knife
Skalpelmesser



AS-34
220 mm

Hook-Probe 4 mm
Hakensonde 4 mm



AS-35
220 mm

Spoon ø 3 mm
30° curved
Löffel ø 3 mm
30° gebogen



AS-36
220 mm

Smille Meniscotome
3 mm width
Smille Meniskotome
3 mm breit



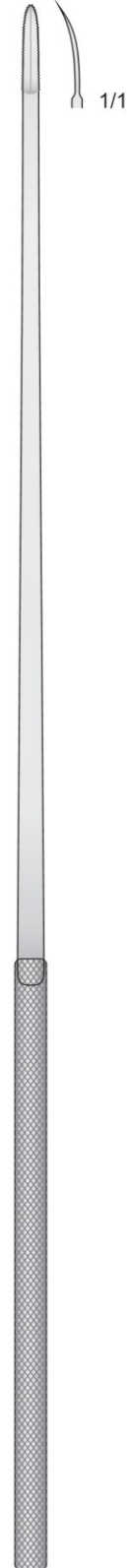
AS-37
220 mm

Rosetten-Knife
stright
Rosettenmesser
gerade



AS-38
220 mm

Banana-Knife
serrated
Bananamesser
gezahnt

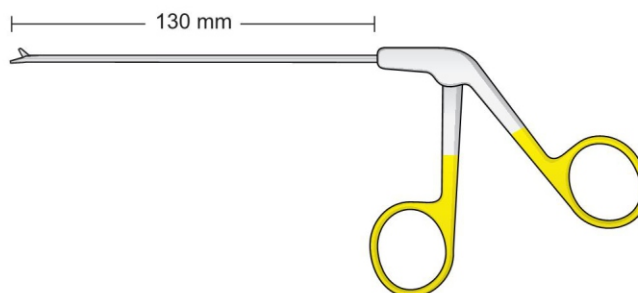


AS-39
230 mm

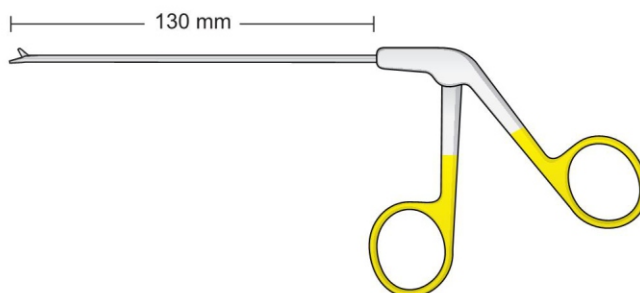
Ring-Curette ø 3 mm
30° curved
Ring-Kürette ø 3 mm
30° gebogen



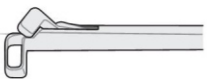
AS-40
220 mm

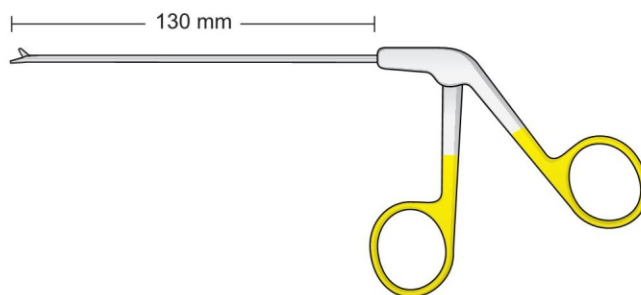


	Ø mm	Hakenstanzen mit Schaufel Hook Punches with Scoop Pinze per biopsia con pala Pinzas para biopsia con pala Pincers à biopsie à pelle	Hakenstanzen abgesetzt Hook Punches set down Pinze per biopsia Pinzas para biopsia Pincers à biopsie	Hakenschere - Hook Scissors Pinze a gancio - Tijeras de gancho Pincers - ciseaux
		 L = 5,0 mm B = 1,6 mm	 L = 5,0 mm B = 1,6 mm	
Gerade - Straight Diritta - Recto - Droit 	2,7	FO-370	FO-380	FO-390
	3,5	FO-310	FO-320	FO-340
30° rechts - right destra - derecha - droite 	2,7	FO-371	FO-381	FO-391
	3,5	FO-311	FO-321	FO-341
30° links - left - sinistra izquierda - gauche 	2,7	FO-372	FO-382	FO-392
	3,5	FO-312	FO-322	FO-342
45° rechts - right destra - derecha - droite 	2,7	FO-373	FO-383	FO-393
	3,5	FO-313	FO-323	FO-343
45° links - left - sinistra izquierda - gauche 	2,7	FO-374	FO-384	FO-394
	3,5	FO-314	FO-324	FO-344
7° auf - up - sopra 	2,7	FO-375	FO-385	FO-395
	3,5	FO-315	FO-325	FO-345
7° ab - down - sotto 	2,7	FO-376	FO-386	FO-396
	3,5	FO-316	FO-326	FO-346
15° auf - up - sopra 	2,7	FO-377	FO-387	FO-397
	3,5	FO-317	FO-327	FO-347
15° ab - down - sotto 	2,7	FO-378	FO-388	FO-398
	3,5	FO-318	FO-328	FO-348

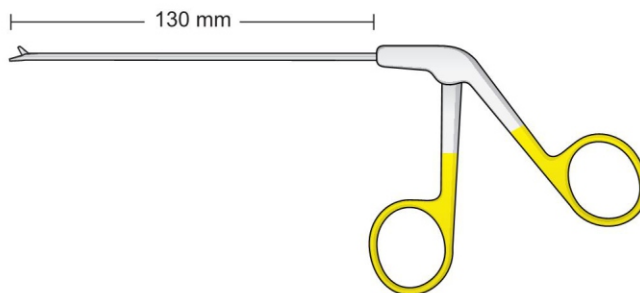


		45°		90°	
	Ø mm	Stanze mit Schaufel Punch with Scoop Pinza con pala Pinzas con pala Pince à pelle  L = 4,5 mm B = 1,6 mm	Stanze stumpf Punch blunt Pinza smussa Pinzas romas Pince mousse  L = 4,5 mm B = 1,6 mm	Stanze mit Schaufel Punch with Scoop Pinza con pala Pinzas con pala Pince à pelle  L = 4,5 mm B = 1,6 mm	Stanze stumpf Punch blunt Pinza smussa Pinzas romas Pince mousse  L = 4,5 mm B = 1,6 mm
rechts abgewinkelt right angled angolata destra angolada a la derecha courbe à droits	3,5	FO-330	FO-334	FO-332	FO-336
links abgewinkelt left angled angolata sinistra angolada a la izquierda courbe à gauche	3,5	FO-331	FO-335	FO-333	FO-337

		90°	
	Ø mm	Breitmaulstanze klein Wide Jaw Punch small  L = 7,0 mm B = 1,8 mm	Breitmaulstanze mittel Wide Jaw Punch medium  L = 7,0 mm B = 3,0 mm
rechts abgewinkelt right angled angolata destra angolada a la derecha courbe à droits	3,5	FO-379	FO-319
links abgewinkelt left angled angolata sinistra angolada a la izquierda courbe à gauche	3,5	FO-389	FO-329

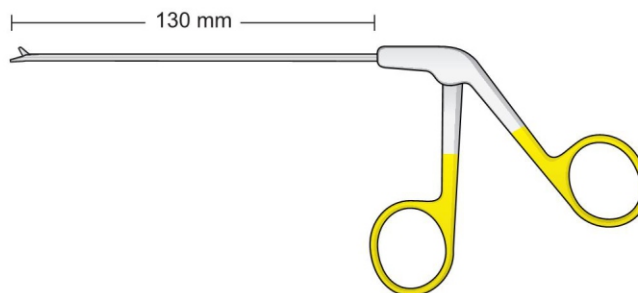


	Ø mm	Breitmaulstanze klein Wide Jaw Punch small  L = 6,0 mm B = 2,5 mm	Breitmaulstanze mittel Wide Jaw Punch medium  L = 5,0 mm B = 3,5 mm	Breitmaulstanze groß Wide Jaw Punch large  L = 5,0 mm B = 4,5 mm
Gerade - Straight Diritta - Recto - Droit 	3,5	FO-401	FO-410	FO-419
30° rechts - right destra - derecha - droite 	3,5	FO-402	FO-411	FO-420
30° links - left - sinistra izquierda - gauche 	3,5	FO-403	FO-412	FO-421
45° rechts - right destra - derecha - droite 	3,5	FO-404	FO-413	FO-422
45° links - left - sinistra izquierda - gauche 	3,5	FO-405	FO-414	FO-423
7° auf - up - sopra 	3,5	FO-406	FO-415	FO-424
7° ab - down - sotto 	3,5	FO-407	FO-416	FO-425
15° auf - up - sopra 	3,5	FO-408	FO-417	FO-426
15° ab - down - sotto 	3,5	FO-409	FO-418	FO-427

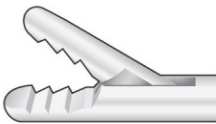
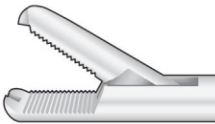
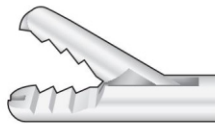
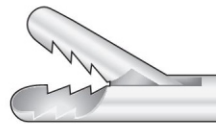


15° aufwärts gefräst - 15° up milled

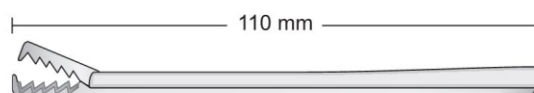
	Ø mm	Breitmaulstanze klein Wide Jaw Punch small  L = 6,0 mm B = 2,5 mm	Breitmaulstanze mittel Wide Jaw Punch medium  L = 5,0 mm B = 3,5 mm	Breitmaulstanze groß Wide Jaw Punch large  L = 5,0 mm B = 4,5 mm
Gerade - Straight Diritta - Recto - Droit 	3,5	FO-428	FO-437	FO-446
30° rechts - right destra - derecha - droite 	3,5	FO-429	FO-438	FO-447
30° links - left - sinistra izquierda - gauche 	3,5	FO-430	FO-439	FO-448
45° rechts - right destra - derecha - droite 	3,5	FO-431	FO-440	FO-449
45° links - left - sinistra izquierda - gauche 	3,5	FO-432	FO-441	FO-450
7° auf - up - sopra 	3,5	FO-433	FO-442	FO-451
7° ab - down - sotto 	3,5	FO-434	FO-443	FO-452
15° auf - up - sopra 	3,5	FO-435	FO-444	FO-453
15° ab - down - sotto 	3,5	FO-436	FO-445	FO-454



1x2 Zähne - 1x2 Theets - 1x2 Denti
1x2 Dientes - 1x2 Dents

	Ø mm	Faßzange Grasping Forceps Pinza da presa Pinza para agarrar Pinces à préhension	Faßzange Grasping Forceps Pinza da presa Pinza para agarrar Pinces à préhension	Faßzange Grasping Forceps Pinza da presa Pinza para agarrar Pinces à préhension	Faß- und Biopsiezange Grasping - Biopsy Forceps Pinza da presa e biopsia Pinza para agarrar y biopsia Pinces préhension - biopsie
ohne Sperre without catch senza cremagliera sin cremallera sans crémaillère	2,7				
ohne Sperre without catch senza cremagliera sin cremallera sans crémaillère	3,5	FO-351	FO-353	FO-356	FO-359
mit Sperre with catch con cremagliera con cremallera avec crémaillère	3,5	FO-352	FO-354	FO-357	FO-360

Meniskus Faßzangen - Meniscus Grasping forceps
Pinza per menisco - Pinzas para menisco
Pinces à ménisque



1x2 Zähne
1x2 Theets
1x2 Denti
1x2 Dientes
1x2 Dents

Gerade - Straight
Dritta - Recta
Droit

FO-365

Rechts Gebogen - Right curved
Curva a destra - Curva a la derecha
Courbe a droites

FO-366

Links Gebogen - Left curved
Curva a sinistra - Curva a la izquierda
Courbe a gauche

FO-367

Ø 2,0 mm



FO-301
Mini Grasping forceps

Ø 2,0 mm



FO-302
Mini rongeur and biopsy forceps

Ø 2,0 mm



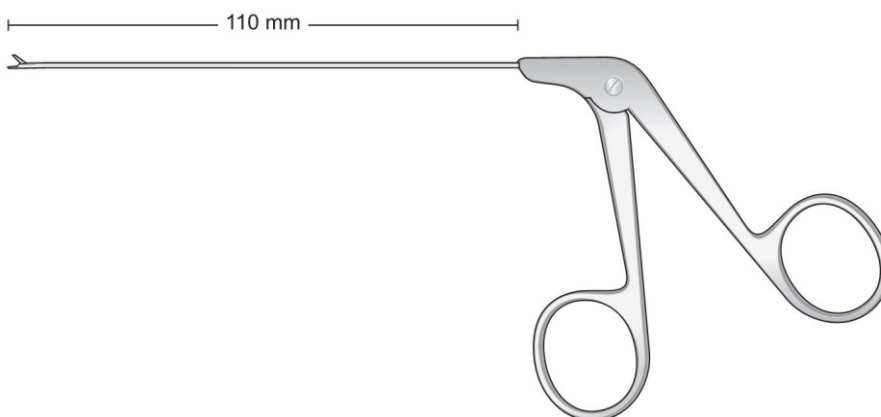
FO-303
Mini punch for arthroscopy

Ø 2,0 mm



FO-304
Mini scissors for arthroscopy

Ø 2,0 mm



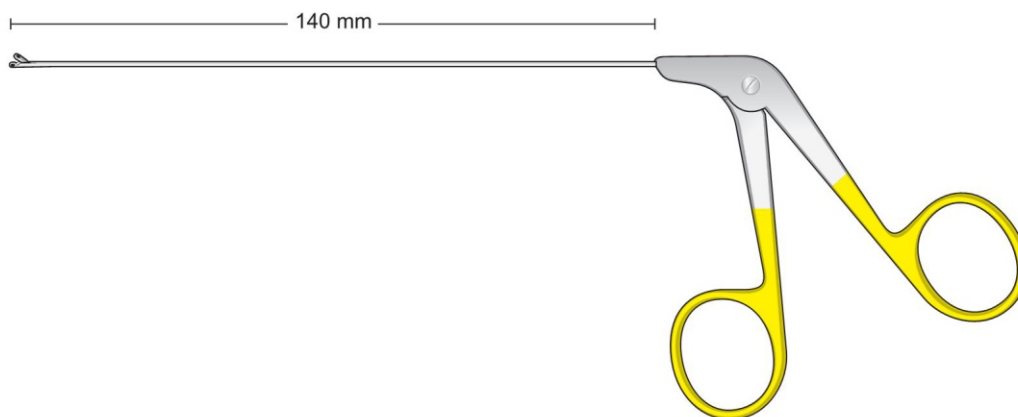
FO-301/FO-304
110 mm

Ø 2,0 mm



FO-305
Mini rongeur and biopsy forceps

Ø 2,0 mm



FO-305
140 mm

Cleaning, Maintenance and Sterilization of Surgical Instruments



SHARPEN - LUBRICATE

India # 6 Medium grit 100 x 45 mm 4 x 1.8 in Arkansas # 6A Fine texture 100 x 25 x 12 mm 4 x 1 x 0.5 in DB-3 DB-6A Wedge Stones They combine flat surfaces with rounded edges to manually sharpen internal parts (straight and curved edges) of curettes and scalers. Arkansas: for routine sharpening and finishing. India: for sharpening of excessively dull instruments or those requiring recontouring.	Arkansas # 4 100 x 25 x 12 mm 4 x 1 x 0.5 in DB-4 Rectangular Stone A flat and rectangular stone used to sharpen all cutting parts of surgical instruments. Necessary in routine sharpening and finishing of edge and toe of an instrument.	Arkansas # 299 Ø 8 x 90 mm Ø 0.3 x 3.5 in DB-299 Conical Stone A cone-shaped and cylindrical stone used to manually sharpen internal parts of curettes, scalers, gouges, rongeurs, etc. (in areas that otherwise cannot be reached).	Arkansas # 8 100 x 50 x 13 mm 4 x 2 x 0.5 in DB-96 Flat Stone A flat and rectangular stone used to sharpen all cutting parts of scissors, osteotomes, curettes, etc. (whenever necessary).	Oil 30 cc 1 fl oz DB-OL Lubricating and Sharpening Oil A non-coloured oil, which is an indispensable complement for lubricating and manual sharpening of surgical instruments. To activate the abrasive properties of Arkansas or India stones and to reduce the possibility of overheating the instruments during sharpening. It should be applied on all hinges or all other parts which are subject to movement or friction. Its use facilitates elimination of any residue present within the instrument hinges. Used to ensure perfect function and fluid movement of all surgical instruments. Must ALWAYS be used during all sharpening operations.	Ceramic 76 x 25 x 6 mm 3 x 1 x ¼ in DB-71 Ceramic Stone Ceramic stones are valued for their durability and the very keen edge they give in the finer grits. Will never pit or groove. Used for routine sharpening procedures. Autoclave safe. <i>Ceramic: use only dry. (Do not use with oil, water or lubricants)</i>
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Arkansas: a natural stone extracted from the Arkansas mountains.
India: a synthetic stone quarried from the finest Ozark novaculite -silicon quartz- deposits.

RINSE - CLEAN

CLEANLACT | Detergent Milk

Special milk for surgical instruments. Anticorrosive, bacteriostatic and lubricating action on all surgical instruments. Extends your instrument's lifetime. It guarantees perfect maintenance by eliminating eventual stains, halos and browning due to sterilization, disinfection and washing with tap water.

Must be applied periodically, diluted or concentrated. (see special instructions on packaging)



DB-50M DB-1L
500 cc 17 oz 1000 cc 34 oz

Brushes | Autoclavables

Special brushes to clean surgical instruments.

Used to remove eventual residue, organic or not, from all surgical instruments, in particular in angled, hinged and knurled parts, without damaging instrument surface.

Must be applied every time, for regular cleaning of all instrumentation and in the event that an instrument is exposed for an extended period to air before being immersed in the cleaning solution.



DB-11 DB-12
155 mm 6 in 175 mm 7 in

Special Rubbers for metal

50 x 40 x 20 mm / 2 x 1.6 x 0.8 in

An abrasive eraser specially designed for surgical instruments to remove stains, halos or persistent burnishing from all surgical instruments without damaging the instrument surface.

Necessary when routine cleaning does not remove all stains.



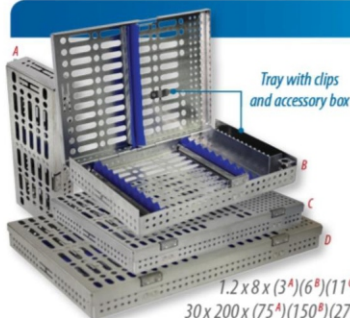
DB-08 DB-07
Coarse Fine

STERILIZATION

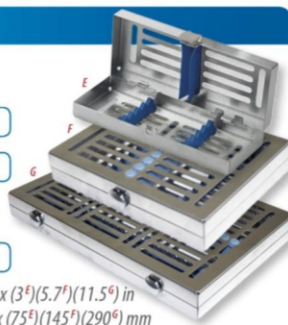
Stainless Steel Cassettes

Silicone racks - Autoclavable

BS-905^A 5 instruments **BS-59^E**
BS-910^B 10 instruments **BS-60^F**
BS-915^C 15 instruments
BS-920^D 20 instruments **BS-61^G**



1.2 x 8 x (3^A)(6^B)(11^C)(12^D) in
30 x 200 x (75^A)(150^B)(275^C)(300^D) mm
Available only in North America



1.4 x 7 x (3^F)(5.7^F)(11.5^G) in
35 x 185 x (75^F)(145^F)(290^G) mm

TESTING

Teflon Testing Stick

Ø 8 x 100 mm / Ø 0.3 x 3.5 in

A hard plastic stick used to test the blade of an instrument to determine the sharpness of an instrument.

Must be used ALWAYS. If the blade of the instrument runs smoothly over the plastic stick, then it is blunt. A sharp instrument will grab into the stick and removes small fragments of the plastic.



DB-15

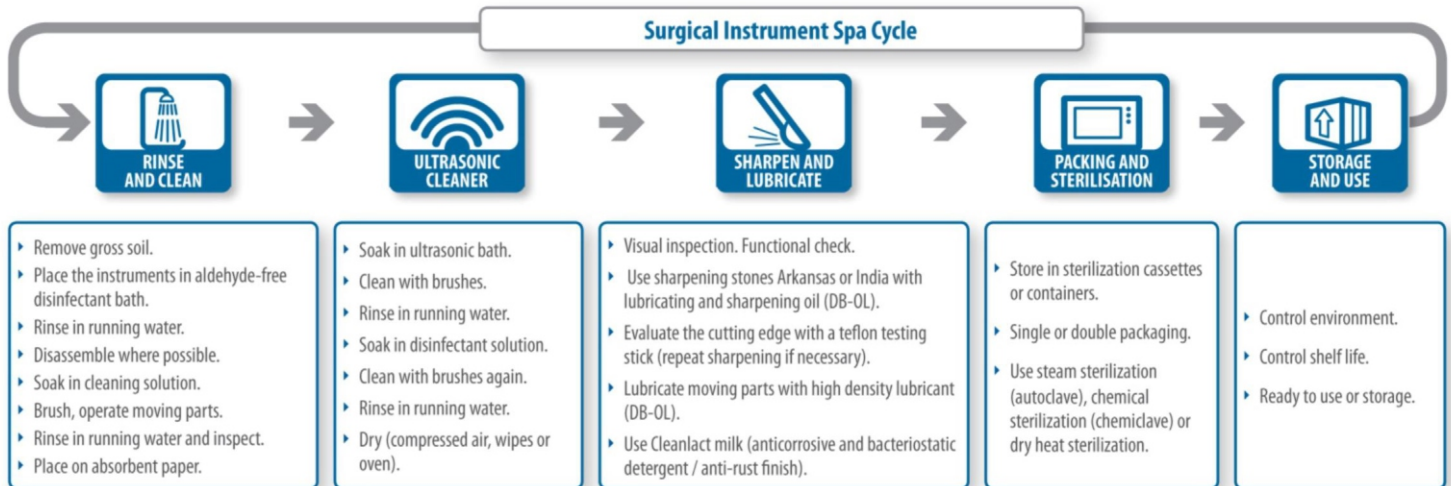
CODING

Silicone Code Rings

DB-941 DB-942
120 Items 175



Maintenance Cycle and Tips



SHARPEN YOUR INSTRUMENTS

Why?

Surgical Instruments should be kept identical to their original design. Surgical procedures are most effective when using sharp instruments as they reduce hand and wrist fatigue, improve calculus removal, save time, improve tactile sensitivity, and minimize patient discomfort.

When?

Instruments should be sharpened lightly after each use; there are two ways to evaluate whether the cutting edge is dull and requires sharpening:

- Visual:** The cutting edge should be inspected regularly in a good light (and if possible, under magnification). If the cutting edge is blunt it will be rounded and reflect the light. A dull, non-reflective line indicates sharpness.
- Teflon Test Stick (DB-15):** If the blade of the instrument runs smoothly over the testing stick, then it is blunt. A sharp instrument will grab into the stick and removes small fragments of the plastic.

How?

Generally, the instruments should be sharpened following this procedure:

- Place one drop of sharpening oil (DB-OL) on the **Arkansas** sharpening stone. Lubrication improves the movement of the instrument blade over the stone; also, it prevents the metal particles from clogging the stone.
- Hold the instrument in one hand, while applying the stone to the lateral surface angled with the face of the blade.
- Position the stone to contact the heel of the blade and work toward the tip, keeping the stone in contact with the blade throughout the sharpening procedure.
- Move the stone up and down with short strokes, placing more pressure on the down stroke (do not move the instrument, keep the instrument still).
- Always finish instrument sharpening with a down stroke; this will prevent a rough edge from forming and remove any flash of metal.
- Evaluate the sharpness with teflon test stick (DB-15). If the blade is still dull, re-evaluate the angle of the stone and repeat the sharpening (steps 2-6).

SHARPENING OF SCALERS AND CURETTES

Sickle Scaler Toe End: the sickle scaler has a pointed tip and, therefore, the stone is held straight as it nears the tip.

Curette Toe End: the curette has a rounded toe, so the position of the stone is adapted around the rounded cross-section.

Always finish instrument sharpening with a down stroke; this will prevent a rough edge from forming and remove any flash of metal.

SHARP AND DELICATE INSTRUMENTS

Scissors, needle holders or bone forceps should be cleaned manually by using cleaning brushes.

LUBRICATION

Regular use of DB-OL lubricant and sharpening oil and "Cleanlact" detergent, will prevent rust, corrosion, and stiff joints.

TC INSTRUMENTS

Tungsten carbide instruments are more sensitive to chemicals and require special care. They should never be exposed to chemical substances or to any other corrosive chemicals.

SHARPENING

Regular sharpening will enhance the life of your cutter and will improve the quality of your work.

ULTRASOUND CLEANING

It is not recommended for scissors, needle holders, bone forceps and all tungsten carbide instruments.

RINSE AND CLEAN

Immediately after surgery, rinse instruments under warm running water (NOT HOT). Use only neutral detergent (pH=7).

ULTRASONIC CLEANING

It is recommended for regular instruments such as hand instruments and extraction forceps, following this procedure:

- Sort instruments carefully so as to include only instruments compatible with ultrasonic cleaning. Do not combine different metals (stainless, copper, chrome plated, etc.).
- Place instruments in open position. Make certain sharp edges are not touching other instruments.
- Change solution frequently to avoid accumulation of micro organisms.
- After rinsing and before sterilization, inspect and dry the instruments thoroughly.

⚠ Ultrasonic cleaning does not sterilize. Do not use for TC instruments, sharp and delicate instruments.

STERILIZATION

Autoclave (Steam Sterilization)

Time: 4 - 20 min. / Temperature: 130° - 134°C (266° / 273°F)

Chemiclave (Chemical Sterilization)

Time: 4 - 20 min. / Temperature: 130° - 134°C (266° / 273°F)

Dry Heat Sterilization (not recommended)

Time: 60 - 90 min. / Temperature: 160° - 170°C (320° / 340°F)

⚠ Sterilization cannot substitute cleaning.

CARE OF SHARPENING STONES

After use, wipe the stone with a clean cloth to remove metal particles. Then, clean the stone by scrubbing or using ultrasound to remove lubricant before sterilization. After sterilization, lubricate with DB-OL before each use.

⚠ Be sure to use entire stone to prevent "grooving".



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AS-23	2	FO-322	5	FO-393	5				
AS-24	2	FO-323	5	FO-394	5				
AS-25	2	FO-324	5	FO-395	5				
AS-26	2	FO-325	5	FO-396	5				
AS-27	2	FO-326	5	FO-397	5				
AS-28	2	FO-327	5	FO-398	5				
AS-29	2	FO-328	5	FO-401	7				
AS-30	3	FO-329	6	FO-402	7				
AS-31	3	FO-330	6	FO-403	7				
AS-32	3	FO-331	6	FO-404	7				
AS-33	3	FO-332	6	FO-405	7				
AS-34	3	FO-333	6	FO-406	7				
AS-35	3	FO-334	6	FO-407	7				
AS-36	4	FO-335	6	FO-408	7				
AS-37	4	FO-336	6	FO-409	7				
AS-38	4	FO-337	6	FO-410	7				
AS-39	4	FO-340	5	FO-411	7				
AS-40	4	FO-341	5	FO-412	7				
AS-60	1	FO-342	5	FO-413	7				
AS-61	1	FO-343	5	FO-414	7				
AS-62	1	FO-344	5	FO-415	7				
AS-63	1	FO-345	5	FO-416	7				
AS-64	1	FO-346	5	FO-417	7				
AS-65	1	FO-347	5	FO-418	7				
AS-66	1	FO-348	5	FO-419	7				
AS-67	1	FO-350	9	FO-420	7				
AS-68	1	FO-351	9	FO-421	7				
AS-69	1	FO-352	9	FO-422	7				
AS-70	1	FO-353	9	FO-423	7				
BS-59	11	FO-354	9	FO-424	7				
BS-60	11	FO-355	9	FO-425	7				
BS-61	11	FO-356	9	FO-426	7				
CT-555N	11	FO-357	9	FO-427	7				
CT-560N	11	FO-358	9	FO-428	8				
CT-565N	11	FO-359	9	FO-429	8				
DB-07	11	FO-360	9	FO-430	8				
DB-08	11	FO-365	9	FO-431	8				
DB-1L	11	FO-366	9	FO-432	8				
DB-10M	11	FO-367	9	FO-433	8				
DB-11	11	FO-370	5	FO-434	8				
DB-12	11	FO-371	5	FO-435	8				
DB-15	11	FO-372	5	FO-436	8				
DB-50M	11	FO-373	5	FO-437	8				
DB-941	11	FO-374	5	FO-438	8				
DB-942	11	FO-375	5	FO-439	8				
FO-301	10	FO-376	5	FO-440	8				
FO-302	10	FO-377	5	FO-441	8				
FO-303	10	FO-378	5	FO-442	8				
FO-304	10	FO-379	6	FO-443	8				

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