HKH BROTHERS
SURGICAL

ADVANCED BONE SURGERY TOOLS

Precision in Every Bone Procedure

- Superior Sharpness
- Precision Crafted
- Durable Performance
- Trusted by Professionals



Amputations- und Resektionssägen
Amputating and resection saws
Scies à amputation et résection
Sierra para amputación y resección
Seghe per amputazione



1:3

CHARRIÈRE

350 mm – 13 ¾"
09-101-350



12 mm	09-102-920
15 mm	09-102-950
18 mm	09-102-980

Ersatzsägeblätter
Spare saw blades
Lames de rechange
Hojas de cambio
Lame di ricambio



1:3

HELFERICH-BIER

390 mm – 15 ½"
09-103-390



3 mm	09-103-003
5 mm	09-103-005
7 mm	09-103-007

Ersatzsägeblätter
Spare saw blades
Lames de rechange
Hojas de cambio
Lame di ricambio

Amputations- und Resektionssägen
Amputating and resection saws
Scies à amputation et résection
Sierra para amputación y resección
Seghe per amputazione



1:2

SATTERLEE

290 mm – 11 ½ "	09-104-290

09-104-290/1

Ersatzsägeblatt
Spare saw blade
Lame de rechange
Hoja de cambio
Lame di ricambio



LANGENBECK 1:2

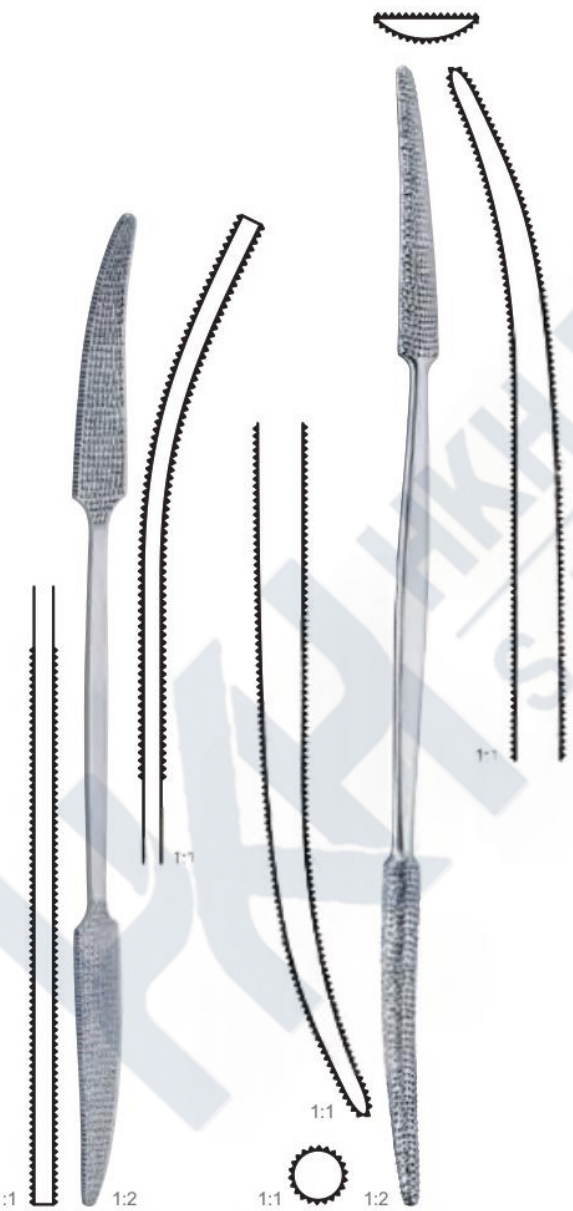
230 mm – 9 "	09-105-230



CHARRIÈRE

270 mm – 10 ¾ "	09-106-270
300 mm – 12 "	09-106-300
340 mm – 13 ½ "	09-106-340

Raspeln, f
Rasps, files
Râpes, limes
Escofinas, limas
Raspe, lime



PUTTI

270 mm – 10 ¾ "	09-107-270	
300 mm – 12 "		09-108-300



280 mm – 11 "
09-109-280

halbrund
semicircular
semi-ronde
semi-redonda
semi-rotonda



245 mm – 9 ¾ "
x = 13 mm
09-110-240

halbrund
semicircular
semi-ronde
semi-redonda
semi-rotonda



220 mm – 8 ¾ "
x = 20 mm
09-111-220

flach
flat
plate
plana
piatta

Hämmer
Mallets
Maillets
Martillos
Martelli



DOYEN

	195 mm – 7¾"
25 mm Ø – 120 g	09-112-120
30 mm Ø – 180 g	09-112-180
35 mm Ø – 260 g	09-112-260



COLLIN

	200 mm – 8"
30 mm Ø – 220 g	09-113-220



HAJEK

	215 mm – 8½"
27 mm Ø – 140 g	09-114-010



KIRK

	190 mm – 7½"
38 mm Ø – 750 g	09-115-750

Hämmer
Mallets
Maillets
Martillos
Martelli



PARTSCH 1:2

	180 mm – 7"
22 mm Ø – 200 g	09-116-200



LUCAE 1:2

	190 mm – 7 ½ "
19 mm Ø – 230 g	09-117-230
25 mm Ø – 260 g	09-117-260

Hämmer
Mallets
Maillets
Martillos
Martelli



BERGMANN

245 mm – 9 ¾ "	
45 mm Ø – 300 g	
09-118-300	



OMBREDANNE

240 cm – 9 ½ "	
40 mm Ø – 550 g	
09-119-230	



HEATH

40 mm Ø – 700 g	185 mm – 7 "	09-120-185
45 mm Ø – 1000 g	200 mm – 8 "	09-120-200

Kupferfüllung
Copper filled head
Rempli de cuivre
Llenado de cobre
Riempito di rame

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi





LAMBOTTE

	250 mm – 9 ¾ "	250 mm – 9 ¾ "
4 mm	09-148-004	09-149-004
6 mm	09-148-006	09-149-006
8 mm	09-148-008	09-149-008
10 mm	09-148-010	09-149-010
13 mm	09-148-013	09-149-013
15 mm	09-148-015	09-149-015
20 mm	09-148-020	09-149-020
25 mm	09-148-025	09-149-025
30 mm	09-148-030	09-149-030
38 mm	09-148-038	09-149-038
44 mm	09-148-044	09-149-044
50 mm	09-148-050	09-149-050

MINI-LAMBOTTE

	125 mm – 5 "	170 mm – 6 ¾ "
3 mm	09-150-030	09-151-530
4 mm	09-150-040	09-151-540
6 mm	09-150-060	09-151-560
8 mm	09-150-080	09-151-580
10 mm	09-150-100	09-151-600
12 mm	09-150-120	09-151-620
14 mm	09-150-140	
15 mm	09-150-150	09-151-650
18 mm	09-150-180	
20 mm	09-150-200	

Hämmer
Mallets
Maillets
Martillos
Martelli



1:2

190 mm – 7 ½ "
250 mm Ø – 205 g
09-121-140

Massiver Stahl, mit Kunststoffbacken
Solid steel, with plastic faces
Acier solid, avec plaques en plastique
Acero sólido, con placas en plástico
Accaio massiccio, con punte di plastica

09-121-990

Ersatzbacken, 1 Paar
Spare faces, 1 pair
Plaques de rechange, 1 paire
Placas de cambio, 1 par
Punte di ricambio, 1 paio



COTTLE 1:2

	240 g
185 mm – 7 ¼	"09-122-185

1 Seite flach / 1 Seite convex
1 side flat / 1 side convex
1 coté plat / 1 coté convex
1 lado plano / 1 lado convexo
1 lato piatto / 1 lato convesso



WILLIGER

	240 mm – 9 ½ "
26 mm Ø – 300 g	423-196-010
28 mm Ø – 340 g	423-196-020
30 mm Ø – 400 g	423-196-030

bleigefüllt
lead filled
rempli de plomb
llenado con plomo
riempito di piombo

Hämmer
Mallets
Maillets
Martillos
Martelli



1:2

165 mm – 6 ½ "
20 mm Ø – 150 g
09-124-150



MEAD 1:2

170 mm – 6 ¾ "
26 mm Ø – 320 g
09-125-320

Stahl massiv, mit Kunststoffbacken
Steel solid, with plastic faces
Acier solid, avec plaques en plastique
Acero sólido, con placas en plástico
Accaio massiccio, con punte di plastica

09-126-000

Ersatzbacken, 1 Paar
Spare faces, 1 pair
Plaques de rechange, 1 paire
Placas de cambio, 1 par
Punte di ricambio, 1 paio

Hämmer
Mallets
Maillets
Martillos
Martelli



1:2

225 mm – 8 ¾ "
37 mm Ø – 370 g
09-127-220

Kopf massiver Stahl, mit Ferrozellbacken
Head solid steel, with Ferrozell faces
Tête acier solid, avec plaques en Ferrozell
Cabeza acero sólido, con placas en Ferrozell
Testa accaio massiccio, con punte di Ferrozell



1:2

240 mm – 9 ½ "
30 mm Ø – 480 g
09-128-240

Kopf massiver Stahl, mit Ferrozellbacken
Head solid steel, with Ferrozell faces
Tête acier solid, avec plaques en Ferrozell
Cabeza acero sólido, con placas en Ferrozell
Testa accaio massiccio, con punte di Ferrozell

09-129-000

Ersatzbacken, 1 Paar
Spare faces, 1 pair
Plaques de rechange, 1 paire
Placas de cambio, 1 par
Punte di ricambio, 1 paio

Hämmer
Mallets
Maillets
Martillos
Martelli



1:2

	42 mm Ø – 250 g	42 mm Ø – 400 g
260 mm – 10 ¼"	09-130-250	09-130-400

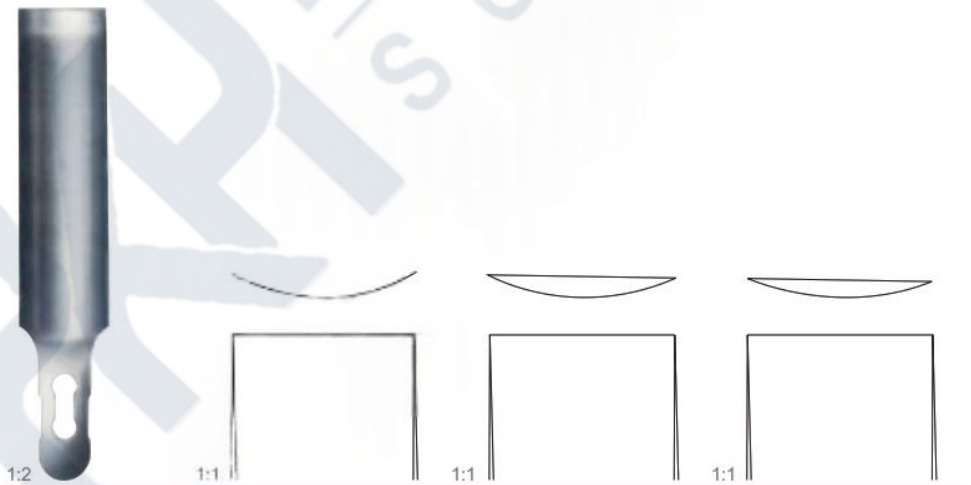
Ferrozell, ohne Blei — Kunststoff, bleigefüllt
Ferrozell, without lead — Plastic, lead filled
Ferrozell, sans plomb — Matière plastique, rempli de plomb
Ferrozell, sin plomo — Plástico, llenado con plomo
Ferrozell, senzo piombo — Plastica, riempito di piombo



1:2

	30 mm Ø – 450 g	50 mm Ø – 900 g
265 mm – 10 ½"	09-131-450	09-131-900

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



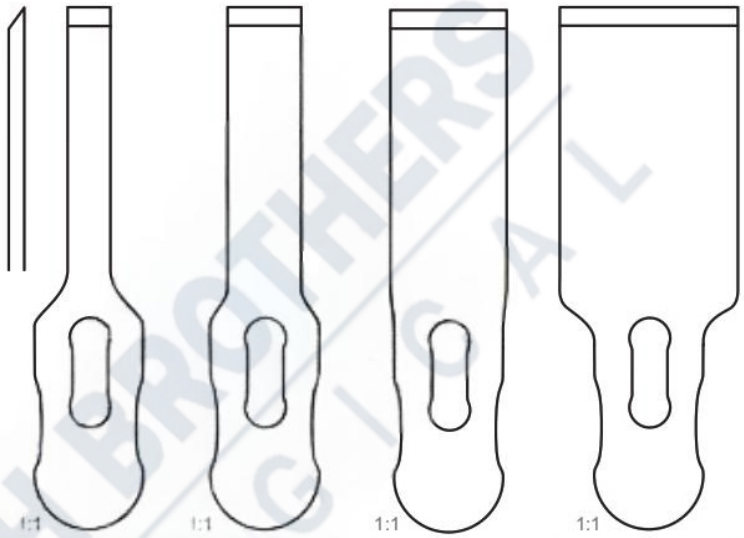
	25 mm (r = 50 mm)	25 mm (r = 60 mm)	25 mm (r = 70 mm)
135 mm – 5 ¼ "	09-133-500	09-133-600	09-133-700

Hohlmeißelklingen, auswechselbar
Gouge blades, interchangeable
Lames gouges, interchangeables
Hojas de gubia, intercambiables
Lame intercambiabili, concavo

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



185 mm – 7 ¼ "
09-134-000



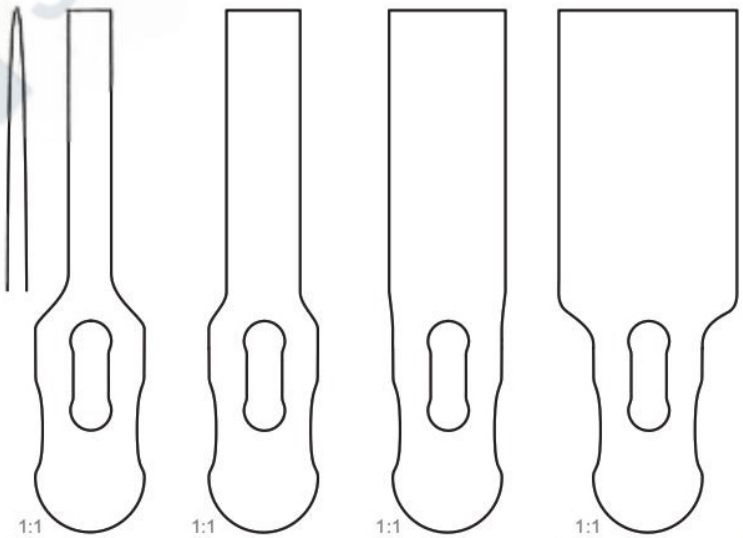
	5 mm	10 mm	16 mm	25 mm
85 mm – 3 ¼ "	09-134-050	09-134-100	09-134-160	09-134-250

Meißelklingen, auswechselbar
Chisel blades, interchangeable
Lames ciseaux-burin, interchangeables
Hojas de cincel, intercambiables
Lame, intercambiabili



90 mm – 3 ½ "
09-134-990

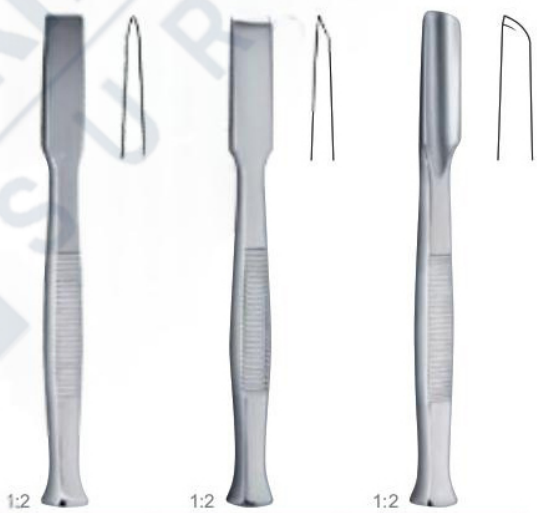
Spannschlüssel
Key
Clé
Llave
Chiave



	5 mm	10 mm	16 mm	25 mm
85 mm – 3 ¼ "	09-134-005	09-134-010	09-134-016	09-134-025

Osteotomklingen, auswechselbar
Osteotome blades, interchangeable
Lames d'osteotomos interchangeables
Hojas de osteótomo, intercambiables
Lame per osteotomia, intercambiabili

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



	135 mm – 5 ¼ "	135 mm – 5 ¼ "	135 mm – 5 ¼ "
4 mm			09-137-004
6 mm	09-135-006	09-136-006	09-137-006
8 mm	09-135-008	09-136-008	09-137-008
10 mm	09-135-010	09-136-010	09-137-010
12 mm	09-135-012	09-136-012	09-137-012
14 mm	09-135-014	09-136-014	09-137-014
16 mm	09-135-016	09-136-016	09-137-016

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



ALEXANDER

	180 mm – 7"	180 mm – 7"
4 mm	09-138-004	09-139-004
6 mm	09-138-006	09-139-006
8 mm	09-138-008	09-139-008
10 mm	09-138-010	09-139-010
12 mm	09-138-012	09-139-012
14 mm	09-138-014	09-139-014



LUCAS

	160 mm – 6 ¼"	160 mm – 6 ¼"
3 mm		09-141-003
4 mm	09-140-004	
6 mm	09-140-006	09-141-006
	Flachmeißel Chisel Ciseau burin Cincel Scalpello	Hohlmeißel Gouge Gouge Gubia Sgorbi

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi





PARTSCH

	115 mm – 4 ½ "	135 mm – 5 ¼ "	170 mm – 6 ¾ "
2 mm	09-142-020	09-143-002	09-144-020
3 mm	09-142-030	09-143-003	09-144-030
4 mm	09-142-040	09-143-004	09-144-040
5 mm	09-142-050	09-143-005	09-144-050
6 mm	09-142-060	09-143-006	09-144-060
7 mm	09-142-070	09-143-007	09-144-070
8 mm	09-142-080	09-143-008	09-144-080

115 mm – 4 ½ "	135 mm – 5 ¼ "	170 mm – 6 ¾ "
09-145-020	09-146-002	09-147-020
09-145-030	09-146-003	09-147-030
09-145-040	09-146-004	09-147-040
09-145-050	09-146-005	09-147-050
09-145-060	09-146-006	09-147-060
09-145-070	09-146-007	09-147-070
09-145-080	09-146-008	09-147-080

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi





LAMBOTTE

	250 mm – 9 ¾ "	250 mm – 9 ¾ "
4 mm	09-148-004	09-149-004
6 mm	09-148-006	09-149-006
8 mm	09-148-008	09-149-008
10 mm	09-148-010	09-149-010
13 mm	09-148-013	09-149-013
15 mm	09-148-015	09-149-015
20 mm	09-148-020	09-149-020
25 mm	09-148-025	09-149-025
30 mm	09-148-030	09-149-030
38 mm	09-148-038	09-149-038
44 mm	09-148-044	09-149-044
50 mm	09-148-050	09-149-050

MINI-LAMBOTTE

	125 mm – 5 "	170 mm – 6 ¾ "
3 mm	09-150-030	09-151-530
4 mm	09-150-040	09-151-540
6 mm	09-150-060	09-151-560
8 mm	09-150-080	09-151-580
10 mm	09-150-100	09-151-600
12 mm	09-150-120	09-151-620
14 mm	09-150-140	
15 mm	09-150-150	09-151-650
18 mm	09-150-180	
20 mm	09-150-200	

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



LEXER

	220 mm – 8 ¾ "	220 mm – 8 ¾ "
5 mm	09-152-005	09-153-005
7 mm	09-152-007	09-153-007
10 mm	09-152-010	09-153-010
15 mm	09-152-015	09-153-015
20 mm	09-152-020	09-153-020
25 mm	09-152-025	09-153-025
30 mm	09-152-030	09-153-030

Ferrozellgriff
Ferrozell handle
Manche en Ferrozell
Mango en Ferrozell
Manico di Ferrozell

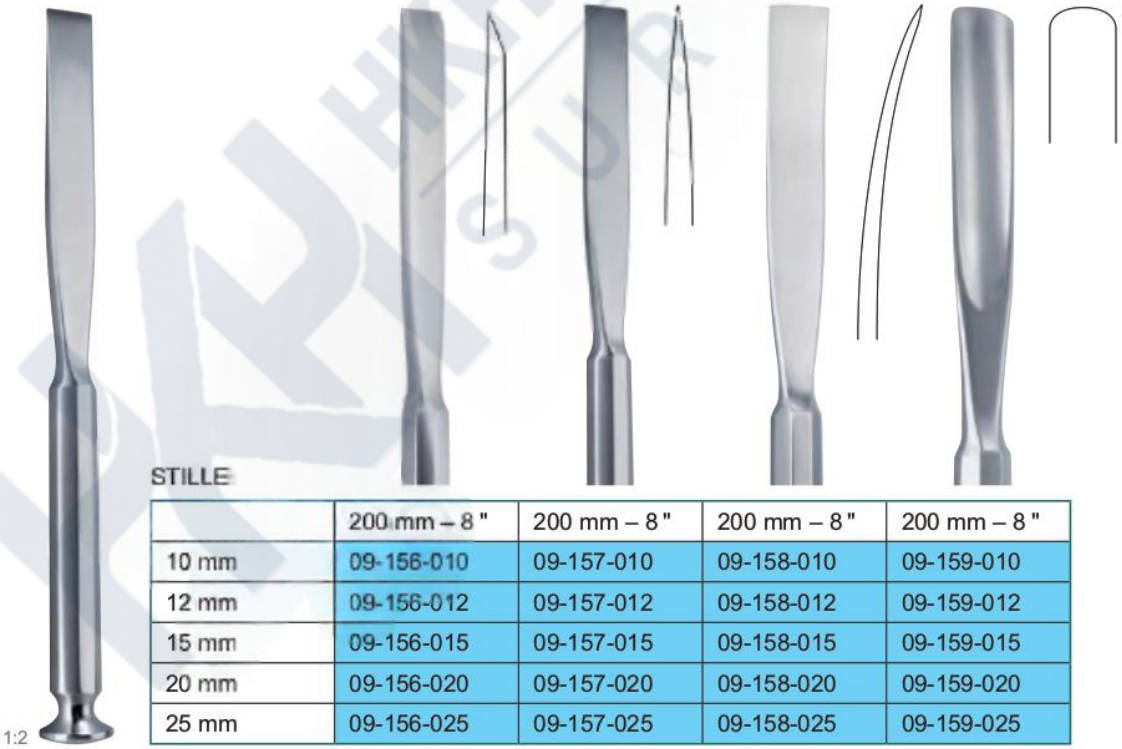


MINI-LEXER

	180 mm – 7 "	180 mm – 7 "
4 mm	09-154-040	09-155-040
6 mm	09-154-060	09-155-060
8 mm	09-154-080	09-155-080
10 mm	09-154-100	09-155-100
12 mm	09-154-120	09-155-120

Ferrozellgriff
Ferrozell handle
Manche en Ferrozell
Mango en Ferrozell
Manico di Ferrozell

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



STILLE

	200 mm – 8 "	200 mm – 8 "	200 mm – 8 "	200 mm – 8 "
10 mm	09-156-010	09-157-010	09-158-010	09-159-010
12 mm	09-156-012	09-157-012	09-158-012	09-159-012
15 mm	09-156-015	09-157-015	09-158-015	09-159-015
20 mm	09-156-020	09-157-020	09-158-020	09-159-020
25 mm	09-156-025	09-157-025	09-158-025	09-159-025

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi





SmitH-
PeteRSen

	200 mm – 8"	200 mm – 8"	200 mm – 8"	200 mm – 8"
6 mm	09-160-006	09-161-006		
9 mm	09-160-009	09-161-009	09-162-009	09-163-009
13 mm	09-160-013	09-161-013		
14 mm			09-162-014	09-163-014
16 mm	09-160-016	09-161-016	09-162-016	09-163-016
19 mm	09-160-019	09-161-019	09-162-019	09-163-019
25 mm	09-160-025	09-161-025	09-162-025	09-163-025
32 mm	09-160-032	09-161-032		

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



1:2

HIBBS

	240 mm – 9 ½"	240 mm – 9 ½"	240 mm – 9 ½"	240 mm – 9 ½"	240 mm – 9 ½"
6 mm	09-164-006	09-165-006	09-166-006	09-167-006	09-168-006
9 mm	09-164-009		09-166-009	09-167-009	09-168-009
13 mm	09-164-013	09-165-013	09-166-013	09-167-013	09-168-013
16 mm	09-164-016		09-166-016	09-167-016	09-168-016
19 mm	09-164-019	09-165-019	09-166-019	09-167-019	09-168-019
25 mm	09-164-025	09-165-025	09-166-025	09-167-025	09-168-025
32 mm	09-164-032	09-165-032	09-166-032	09-167-032	09-168-032

Knochenmeißel
Bone chisels and gouges
Ciseaux-burins, gouges
Cinceles, gubias
Scalpelli, sgorbi



FREER

	150 mm – 6 "	160 mm – 6 ¼ "
6 mm	09-169-006	
4 mm		09-170-004

Hohlmeißel
Gouge
Gouge
Gubia
Sgorbi

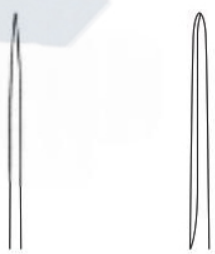
Flachmeißel
Chisel
Ciseau burin
Cincel
Scalpello



BALLENGER

	160 mm – 6 ¼ "
4 mm	09-171-040
6 mm	09-171-060
8 mm	09-171-080





MANNERFELT
MODIF.

	155 mm - 6 "	155 mm - 6 "
3 mm		09-173-003
4 mm	09-172-004	
6 mm	09-172-006	
8 mm	09-172-008	

Osteotome
Osteotomes
Ostéotomes
Osteótomos
Osteotomi

Hohlmeißel
Gouge
Gouge
Gubia
Sgorbi

meißel zur nasenplastik
Chisels, osteotomes for rhinoplastiy
Ostéotomes, ciseaux-burins pour rhinoplastique
Cinceles para rinoplastia
Scalpelli per plastica nasale



KILIAN

160 mm – 6 ¼ "
5 mm
09-174-005



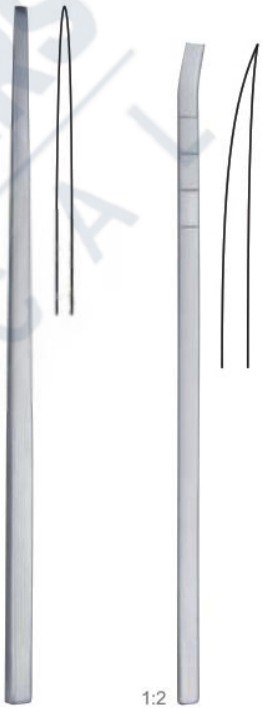
KILIAN-CLAUS

160 mm – 6 ¼ "
5 mm
09-175-005



COTTLE

	150 mm – 6 "
7 mm	09-176-007
9 mm	09-176-009
12 mm	09-176-012



COTTLE

	190 mm – 7 ½ "	180 mm – 7 "
4 mm	09-177-004	
6 mm		09-178-006





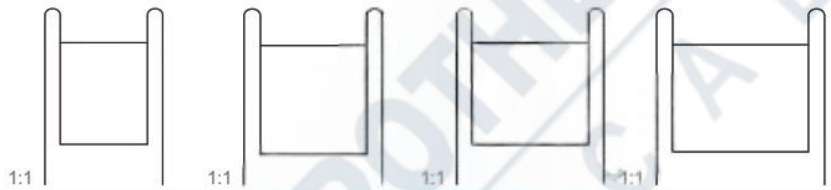
FOMON

	4 mm	5 mm	6 mm	7 mm	8 mm
170 mm – 6 ¾ "	09-179-004	09-179-005	09-179-006	09-179-007	09-179-008

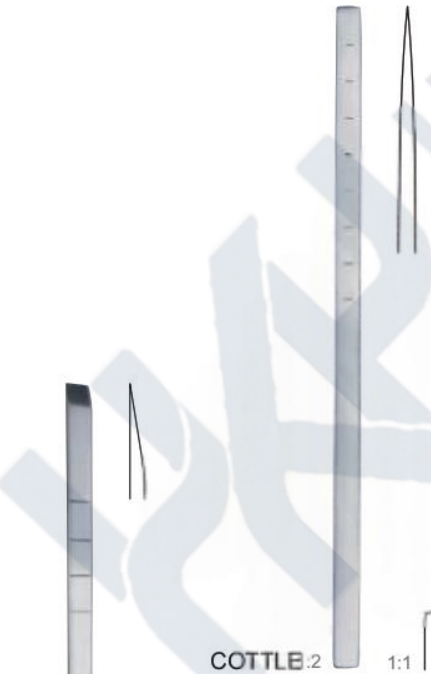
meißel zur nasenplastik
Chisels, osteotomes for rhinoplastiy
Ostéotomes, ciseaux-burins pour rhinoplastique
Cinceles para rinoplastia
Scalpelli per plastica nasale



CINELLI



	10 mm	12 mm	14 mm	16 mm
180 mm – 7"	09-180-100	09-180-120	09-180-140	09-180-160



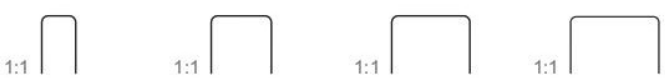
COTTLE



	4 mm	6 mm	7 mm	9 mm	10 mm	12 mm
180 mm – 7"	09-181-040	09-181-060	09-181-070	09-181-090	09-181-100	09-181-120

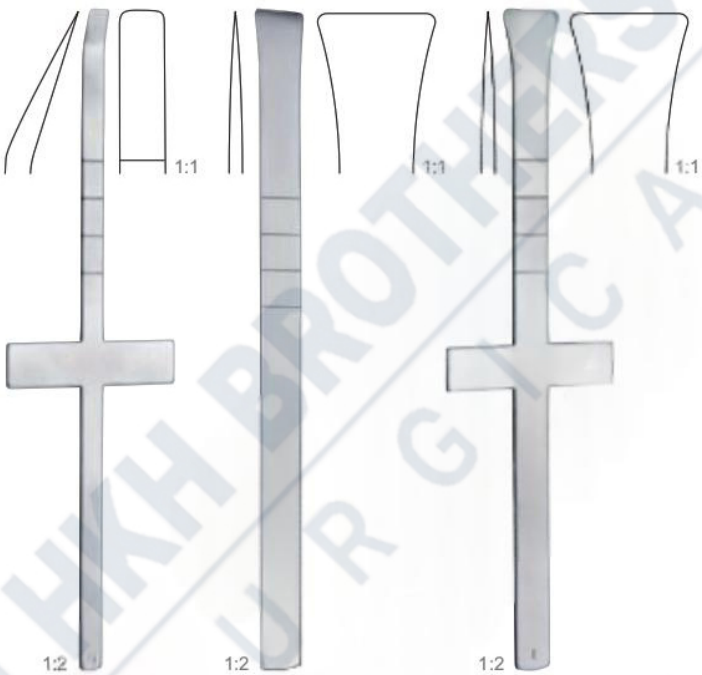


COTTLE



	4 mm	7 mm	9 mm	12 mm
180 mm – 7"	09-182-040	09-182-070	09-182-090	09-182-120

meißel zur nasenplastik
Chisels, osteotomes for rhinoplastiy
Ostéotomes, ciseaux-burins pour rhinoplastique
Cinceles para rinoplastia
Scalpelli per plastica nasale



COTTLE

	6 mm	16 mm	16 mm
180 mm – 7 "	09-183-060	09-184-160	09-185-160





RUBIN

	10 mm	12 mm	14 mm
180 mm – 7 "	09-186-100	09-186-120	09-186-140

meißel zur nasenplastik
Chisels, osteotomes for rhinoplastiy
Ostéotomes, ciseaux-burins pour rhinoplastique
Cinceles para rinoplastia
Scalpelli per plastica nasale



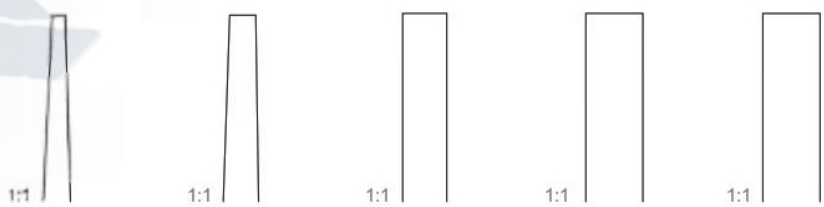
WALTER



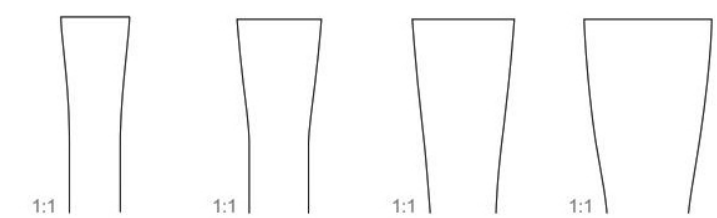
	3 mm	4.5 mm
190 mm – 7 ½ "	09-187-030	09-187-040



SHEEHAN



	2 mm	4 mm	6 mm	7 mm	8 mm
160 mm – 6 ¼ "	09-188-020	09-188-040	09-188-060	09-188-070	09-188-080



10 mm	12 mm	15 mm	18 mm
09-188-100	09-188-120	09-188-150	09-188-180

meißel zur nasenplastik
Chisels, osteotomes for rhinoplastiy
Ostéotomes, ciseaux-burins pour rhinoplastique
Cinceles para rinoplastia
Scalpelli per plastica nasale

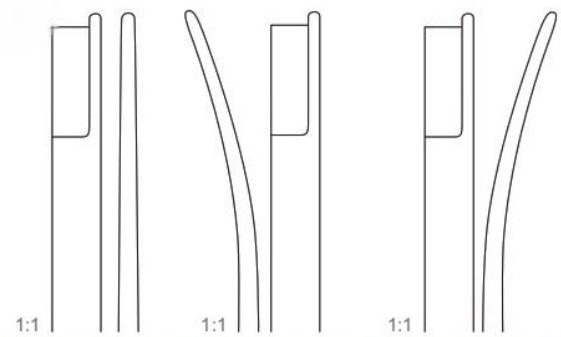

1:2


1:1 1:1 1:1

SILVER

180 mm – 7"	09-189-010	09-189-020	09-189-030
	gerade straight droit recta retta	rechts right droite derecha destra	links left gauche izquierda sinistra


1:2


1:1 1:1 1:1

NEIVERT-
ANDERSON

200 mm – 8"	09-190-010	09-190-020	09-190-030
	gerade straight droit recta retta	rechts right droite derecha destra	links left gauche izquierda sinistra

meißel für die Kieferchirurgie
Osteotomes for maxillo-facial surgery
Ostéotomes pour la chirurgie maxillo-faciale
Cinceles para la cirugía maxilofacial
Scalpelli per chirurgia massilofaciale



OBWEGESER

	8 mm	11 mm	13 mm
235 mm – 9¼"	09-192-080	09-192-110	09-192-240



OBWEGESER

	7 mm	10 mm
215 mm – 8½"	09-191-007	09-191-010

Stößel
Tampers
Pilons
Punzones
Pestoni



	1:1 ○ 2 mm Ø	1:1 ○ 3 mm Ø	1:1 ○ 4 mm Ø	1:1 ○ 5 mm Ø	1:1 ○ 6 mm Ø	1:1 ○ 8 mm Ø	1:1 ○ 10 mm Ø
155 mm – 6 "	09-193-020	09-193-030	09-193-040	09-193-050	09-193-060	09-193-080	09-193-100



PASSOW

	1:1 □ Fig. 1	1:1 □ Fig. 2	1:1 □ Fig. 3
	2.5 mm x 2.5 mm	3.5 mm x 3.5 mm	4.5 mm x 4.5 mm
120 mm – 4 ¾ "	09-194-001	09-194-002	09-194-003



CASPAR

	1:1 ● 3 mm Ø	1:1 ● 5 mm Ø	1:1 ● 8 mm Ø
200 mm – 8 "	09-195-030	09-195-050	09-195-080

	1:1 ● 12 mm Ø	1:1 ● 14 mm Ø	1:1 ● 16 mm Ø
200 mm – 8 "	09-196-120	09-196-140	09-196-160



Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti



VOLKMANN



	Fig. 0000	Fig. 000	Fig. 00	Fig. 0	Fig. 1
170 mm – 6 ¾ "	09-197-000	09-197-001	09-197-002	09-197-003	09-197-010



Fig. 2	Fig. 3	Fig. 4	Fig. 5	Fig. 6
09-197-020	09-197-030	09-197-040	09-197-050	09-197-060



SCHEDE



	Fig. 000	Fig. 00	Fig. 0	Fig. 1	Fig. 2
170 mm – 6 ¾ "	09-198-001	09-198-002	09-198-003	09-198-010	09-198-020



Fig. 3	Fig. 4
09-198-030	09-198-040

Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti



SPRATT

	Fig. 0000	Fig. 000	Fig. 00
170 mm – 6¾"	09-199-004	09-199-001	09-199-002

Fig. 0	Fig. 1	Fig. 2
09-199-003	09-199-010	09-199-020

Fig. 3	Fig. 4	Fig. 5
09-199-030	09-199-040	09-199-050



BRUNS

	Fig. 000	Fig. 00	Fig. 0
160 mm – 6¼"	09-200-001	09-200-002	09-200-003

Fig. 1	Fig. 2	Fig. 3
09-200-010	09-200-020	09-200-030

Fig. 4	Fig. 5	Fig. 6
09-200-040	09-200-050	09-200-060

Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti



VOLKMANN

	Fig. 0000	Fig. 000	Fig. 00	Fig. 0	Fig. 1	Fig. 2
185 mm – 7 ¼ "	09-201-400	09-201-300	09-201-200	09-201-100	09-201-010	09-201-020

oval, mit Kunststoffgriff
oval, with plastic handle
ovale, avec manche en matière plastique
ovalada, con mango plástico
ovale, con manico in plastica

	Fig. 3	Fig. 4	Fig. 5	Fig. 6
190 mm – 7 ½ "	09-201-030	09-201-040	09-201-050	09-201-060

	Fig. 0	Fig. 1	Fig. 2	Fig. 3	Fig. 4
275 mm – 10 ¾ "	09-202-100	09-202-010	09-202-020	09-202-030	09-202-040

Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti


1:2

HALLE


1:1


1:1


1:1

	Fig. 1	Fig. 2	Fig. 3
210 mm – 8 ¼ "	09-203-010	09-203-020	09-203-030

flexibel
flexible
flexible
flexible
flessibile


1:2


1:2

1:1


1:1

UFFENORDE

	Fig. 1	Fig. 2
170 mm – 6 ¾ "	09-204-001	09-204-002

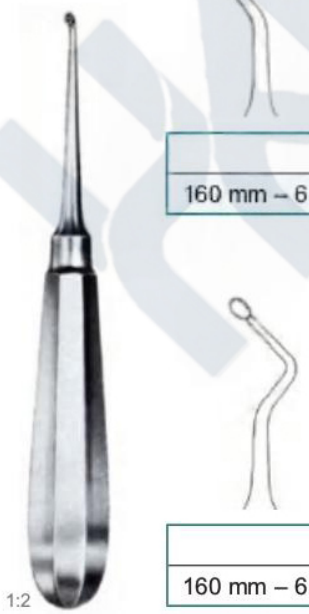
Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti



	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5	Fig. 6
160 mm – 6 ¼ "	09-205-010	09-205-020	09-205-030	09-205-040	09-205-050	09-205-060



	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5
160 mm – 6 ¼ "	09-206-010	09-206-020	09-206-030	09-206-040	09-206-060



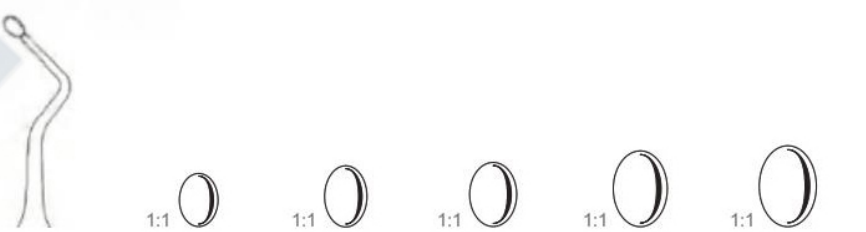


	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5
160 mm – 6 ¼ "	09-207-010	09-207-020	09-207-030	09-207-040	09-207-060

Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti

BRUNS









		Fig. 00	Fig. 0	Fig. 1	Fig. 2
230 mm – 9"	gerade straight droit recta retto	09-208-002	09-208-003	09-208-010	09-208-020
230 mm – 9"	gebogen curved courbe curva curvo	09-209-002	09-209-003	09-209-010	09-209-020

massiv
solid
solide
macizo
massicio











		Fig. 3	Fig. 4	Fig. 5	Fig. 6
230 mm – 9"	gerade straight droit recta retto	09-208-030	09-208-040	09-208-050	09-208-060
230 mm – 9"	gebogen curved courbe curva curvo	09-209-030	09-209-040	09-209-050	09-209-060

massiv
solid
solide
macizo
massicio

Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti



SCHROEDER







	Fig. 1	Fig. 2	Fig. 3
300 mm – 12 "	09-210-001	09-210-002	09-210-003

scharf / fest
sharp / rigid
tranchante / rigide
cortante / rigida
tagliente / rigido







Fig. 4	Fig. 5	Fig. 6
09-210-004	09-210-005	09-210-006



SIMON













	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5	Fig. 6
240 mm – 9 ½ "	09-211-010	09-211-020	09-211-030	09-211-040	09-211-050	09-211-060

scharf / fest
sharp / rigid
tranchante / rigide
cortante / rigida
tagliente / rigido

SIMON







	Fig. 1	Fig. 2	Fig. 3
250 mm – 9 ¾ "	09-212-001	09-212-002	09-212-003

scharf / fest
sharp / rigid
tranchante / rigide
cortante / rigida
tagliente / rigido







Fig. 4	Fig. 5	Fig. 6
09-212-004	09-212-005	09-212-006

Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti


1:2



1:1

1:1

1:1

1:1

	Fig. 000	Fig. 00	Fig. 0	Fig. 1
	3.6 mm	4.4 mm	5.2 mm	6.8 mm
250 mm – 9¾"	09-213-360	09-213-440	09-213-520	09-213-600

gerade
straight
droit
recta
retto


1:1

1:1

1:1

1:1

	Fig. 000	Fig. 00	Fig. 0	Fig. 1
	3.6 mm	4.4 mm	5.2 mm	6.8 mm
250 mm – 9¾"	09-214-360	09-214-440	09-214-520	09-214-600

gebogen
curved
courbe
curva
curvo


1:2


DAUBENSPECK

1:1

1:1

1:1

1:1

	Fig. 00	Fig. 0	Fig. 1	Fig. 2
	2.8 mm	3.6 mm	4.4 mm	5.2 mm
200 mm – 8"	09-216-990	09-215-000	09-215-010	09-215-020

Scharfe löffel
Bone curettes
Curettes tranchantes
Cucharillas cortantes
Cucchiai taglienti


1:2

SCOVILLE


1:1

1:1

1:1

	Fig. 1	Fig. 2	Fig. 3
250 mm – 9¾"	09-218-250	09-219-250	09-220-250

oval
oval
ovale
ovalada
ovale


1:2

LEMPERT


1:1

1:1

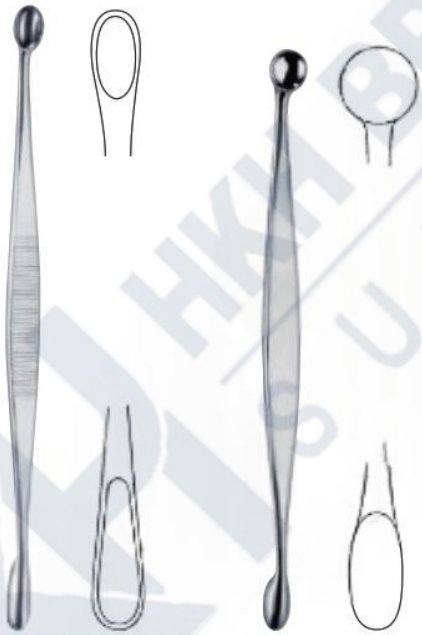
1:1

1:1

1:1

	Fig. 00000	Fig. 0000	Fig. 000	Fig. 00	Fig. 0
	1.8 mm	2.0 mm	2.4 mm	2.6 mm	2.8 mm
215 mm – 8½"	09-221-500	09-221-400	09-221-300	09-221-200	09-221-100

Scharfe doppellöffel
Bone curettes, double-ended
Curettes doubles
Cucharillas de doble extremo
Curette doppie



VOLKMANN

130 mm – 5 "	09-222-130	09-223-130
140 mm – 5 ½ "	09-222-140	
160 mm – 6 ¼ "		09-223-160
170 mm – 6 ¾ "	09-222-170	
200 mm – 8 "		09-223-200
	oval / oval oval / oval ovale / ovale ovalada / ovalada ovale / ovale	rund / oval round / oval ronde / ovale redonda / ovalada rotondo / ovale



210 mm – 8 ¼ "	09-224-210
	rund / oval round / oval ronde / ovale redonda / ovalada rotondo / ovale

Scharfe doppellöffel
Bone curettes, double-ended
Curettes doubles
Cucharillas de doble extremo
Curette doppie



MARTINI



	Fig. 00	Fig. 0	Fig. 1
	Fig. 0	Fig. 1	Fig. 2
135 mm – 5 ¼ "	09-225-000	09-225-001	09-225-012



MARTINI



	Fig. 00	Fig. 0	Fig. 1
	Fig. 0	Fig. 1	Fig. 2
155 mm – 6 "	09-226-000	09-226-100	09-226-110



WILLIGER



	Fig. 00	Fig. 0	Fig. 1
	Fig. 0	Fig. 1	Fig. 2
135 mm – 5 ¼ "	09-227-000	09-227-001	09-227-012



WILLIGER



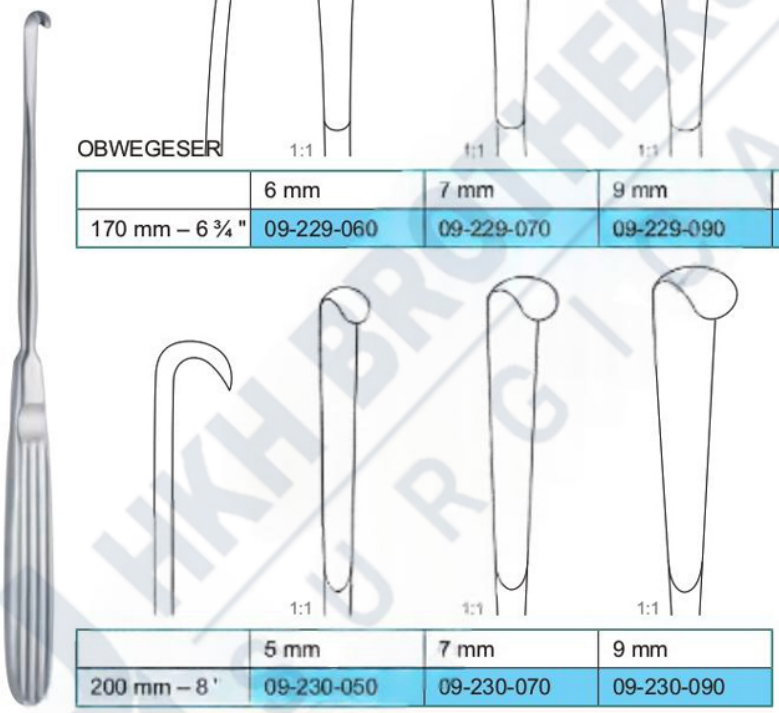
	Fig. 00	Fig. 0	Fig. 1
	Fig. 0	Fig. 1	Fig. 2
155 mm – 6 "	09-228-000	09-228-100	09-228-110

Raspatorien für die Kieferchirurgie
Periosteal elevators for maxillo-facial surgery
Rugines – Décolleurs pour la chirurgie maxillo-faciale
Periostótomos para la cirugía máxilofacial
Raspatori per chirurgia massilofaciale



OBWEGESER

	6 mm	7 mm	9 mm	11 mm
170 mm – 6 ¾ "	09-229-060	09-229-070	09-229-090	09-229-110



	5 mm	7 mm	9 mm
200 mm – 8 '	09-230-050	09-230-070	09-230-090



OBWEGESER-FREER

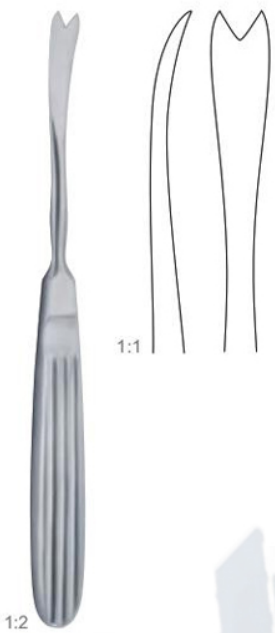
210 mm – 8 ¼ "	09-231-210



OBWEGESER-FREER

210 mm – 8 ¼ "	09-232-210

Raspatorien und Ahlen für die Kieferchirurgie
Periosteal elevators and awls for maxillo-facial surgery
Rugines, décolleurs el passe-fils pour chirurgie maxillo-faciale
Periostótomos y leznas para la cirugia máxilofacial
Raspatori, punteruoli per chirurgia massilofaciale



OBWEGESER

175 mm – 7"	09-233-020



OBWEGESER

230 mm – 9"	09-234-230



OBWEGESER

180 mm – 7"	09-235-180
230 mm – 9"	09-235-230
280 mm – 11"	09-235-280



OBWEGESER

130 mm – 5"	09-236-130

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori

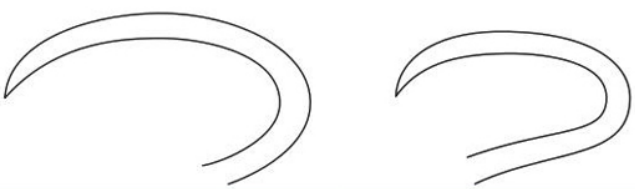




DOYEN

170 mm – 6 ¾ "	09-237-170	09-238-170
240 mm – 9 ½ "	09-237-240	
links left gauche izquierda sinistra	für Erwachsene for adults pour adultes para adultos per adulti	für Kinder for children pour enfants para niños per bambini

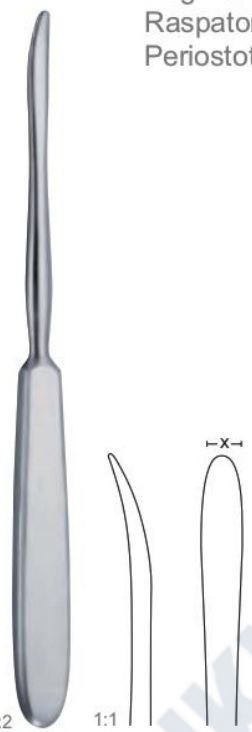




DOYEN

170 mm – 6 ¾ "	09-239-170	09-240-170
240 mm – 9 ½ "	09-239-240	
rechts right droite derecha destra	für Erwachsene for adults pour adultes para adultos per adulti	für Kinder for children pour enfants para niños per bambini

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



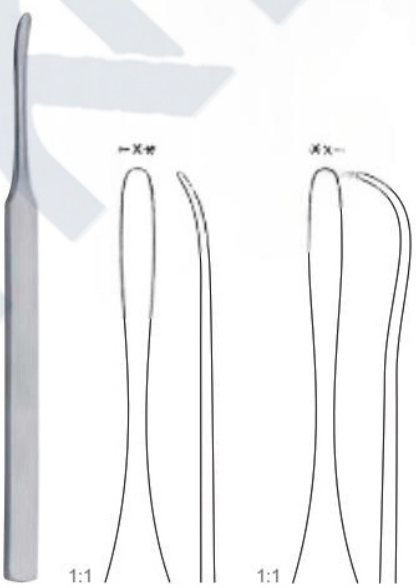
QUERVAIN

	x = 6 mm
195 mm – 7 ¾"	09-241-200



TRELAT

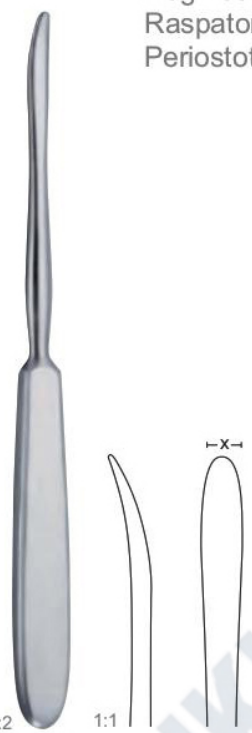
	x = 8 mm
150 mm – 6"	423-445-140



KÖNIG

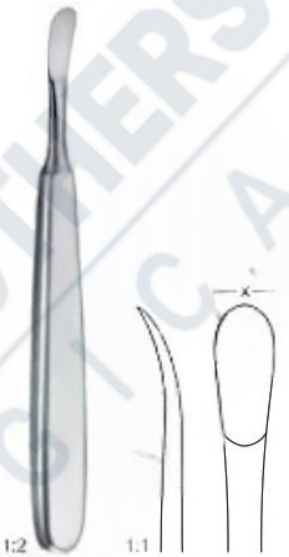
	x = 4.5 mm	x = 4.5 mm
155 mm – 6"	09-243-150	09-244-150

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



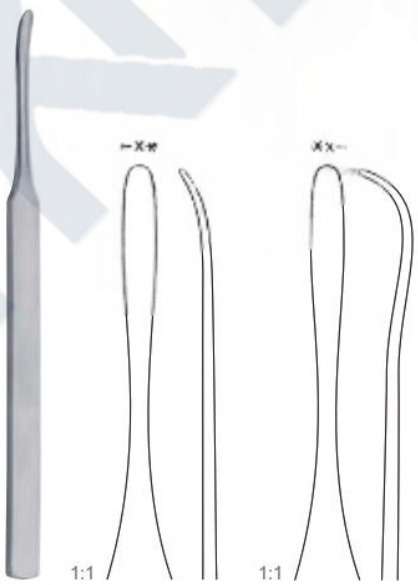
QUERVAIN

	x = 6 mm
195 mm – 7 ¾"	09-241-200



TRELAT

	x = 8 mm
150 mm – 6"	423-445-140



KÖNIG

	x = 4.5 mm	x = 4.5 mm
155 mm – 6"	09-243-150	09-244-150

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



FARABEUF

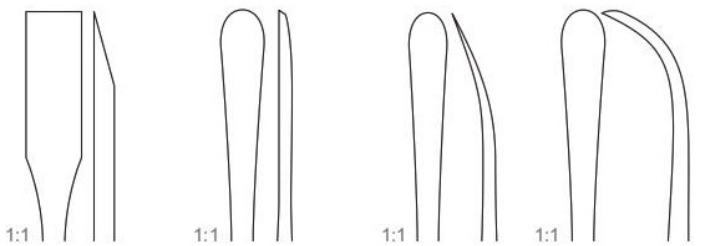
150 mm – 6 "	09-251-150	09-252-150
	gerade straight droit recta retto	gebogen curved courbe curva curvo



LAMBOTTE

	210 mm – 8 ¼ "
x = 5 mm	09-253-050
x = 10 mm	09-253-100
x = 15 mm	09-253-150
x = 20 mm	09-253-200
x = 25 mm	09-253-250

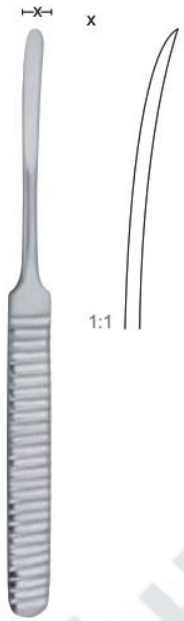




ADSON

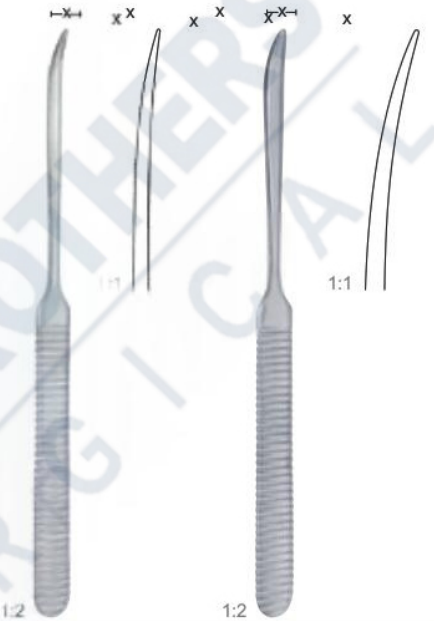
	Fig. 1	Fig. 2	Fig. 3	Fig. 4
170 mm – 6 ¾ "	09-254-170	09-255-170	09-256-170	09-257-170

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



WILLIGER

	160 mm – 6 ¼ "
x = 4 mm	09-258-160
x = 5 mm	09-259-160



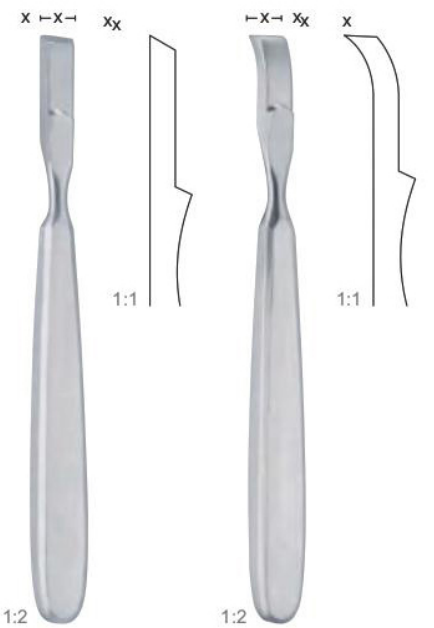
WILLIGER

	x = 5 mm	x = 6.5 mm
160 mm – 6 ¼ "	09-260-160	09-261-170



WILLIGER

	x = 5 mm
130 mm – 5 "	09-263-130



FARABEUF-COLLIN

	x = 11 mm	x = 11 mm
160 mm – 6 ¼ "	09-264-160	09-265-160

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



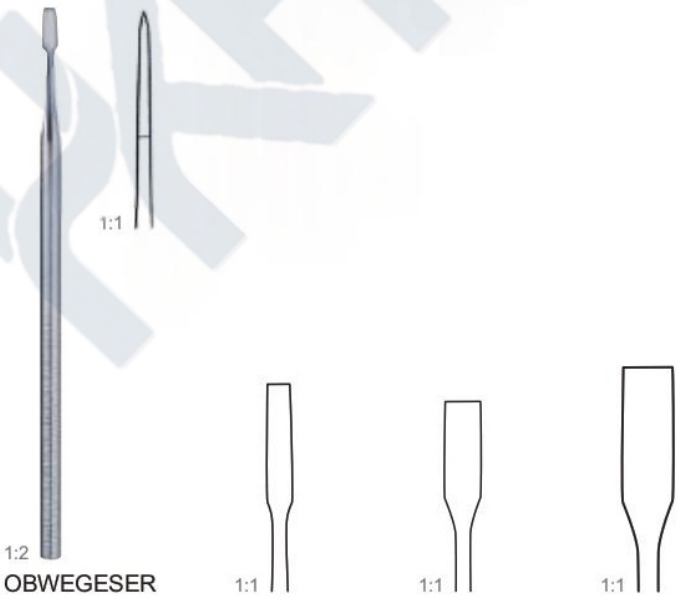
OBWEGESER 1:2

185 mm – 7 ¼"	09-266-190



OBWEGESER 1:2

185 mm – 7 ¼"	09-267-190



OBWEGESER

	2.5 mm	4 mm	6.5 mm
150 mm – 6"	09-268-020	09-268-040	09-268-060

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



SEMB 1:2 1:2 1:2 1:2 1:2 1:2

175 mm – 7 "	210 mm – 8 ¼ "	175 mm – 7 "	210 mm – 8 ¼ "	225 mm – 8 ¾ "	220 mm – 8 ¾ "
12 mm	12 mm	13 mm	13 mm	13 mm	15 mm
09-269-010	09-269-020	09-269-030	09-269-040	09-269-050	09-269-090

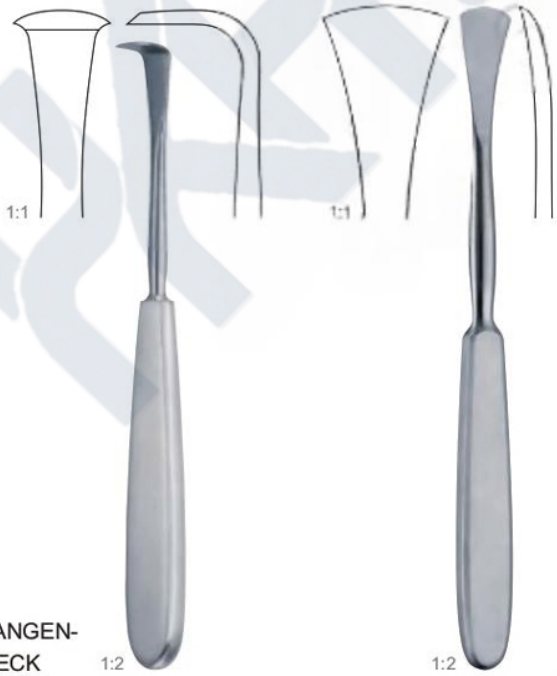
Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



HOWARTH

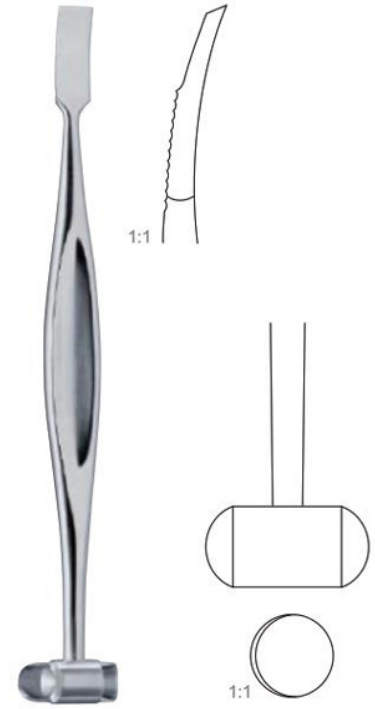
215 mm – 8 ½ "	09-270-210

scharf / stumpf
sharp / blunt
pointu / mousse
aguda / roma
acuta / smussa



LANGEN-BECK

180 mm – 7 "	190 mm – 7 ½ "
09-271-180	09-272-190



ALEXANDER

160 mm – 6 ¼ "	09-273-160
200 mm – 8 "	09-273-200

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



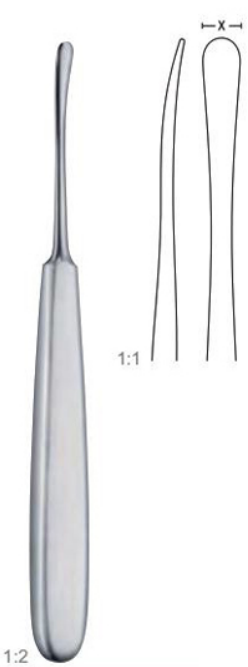
LANGENBECK

	x = 8 mm	x = 10 mm
200 mm – 8"	09-274-200	09-275-200



175 mm – 7"	09-276-170

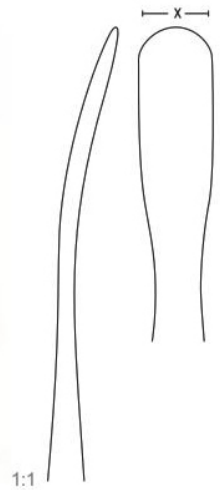
extrem leicht
extremely light
extrémement leger
extremadamente ligero



SEBILEAU

	x = 5 mm
175 mm – 7"	09-277-170

Raspatorien – elevatorien
Periosteal raspatories – Elevators
Rugines – Elévateurs
Raspatorios – Elevadores
Periostotomi – Elevatori



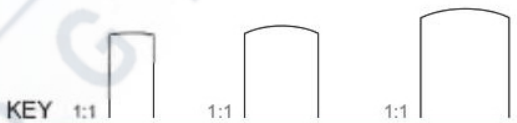


COBB

	290 mm – 11 ½"
x = 8 mm	09-278-008
x = 10 mm	09-278-010
x = 12 mm	09-278-012
x = 13 mm	09-278-013
x = 19 mm	09-278-019
x = 25 mm	09-278-025

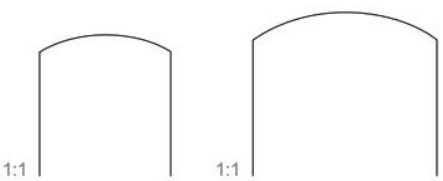
Wirbelsäulen-Raspatorium
Spinal raspatory
Rugine vertebral
Raspador vertebral
Periostotomo vertebrale





KEY

180 mm – 7"	190 mm – 7 ½"	190 mm – 7 ½"
x = 6 mm	x = 9 mm	x = 12 mm
09-279-060	09-279-090	09-279-120



200 mm – 8"	210 mm – 8 ¼"
x = 19 mm	x = 25 mm
09-279-190	09-279-250

Raspatorien
Periosteal raspatories
Rugines
Raspatorios
Periostotomi


1:2

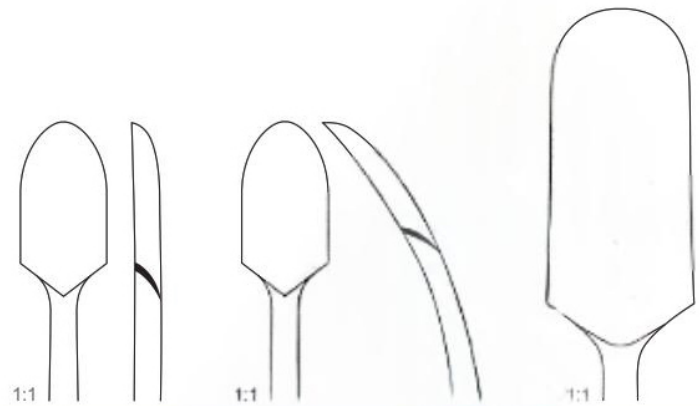


	Fig. 1	Fig. 2	Fig. 3
	14 mm	14 mm	20 mm
200 mm – 8"	09-280-140	09-281-140	09-282-200
Ferrozellgriff Ferrozell handle Manche en Ferrozell Mango en Ferrozell Manico di Ferrozell	gerade straight droit recta retto	gebogen curved courbe curva curvo	gerade straight droit recta retto


1:2

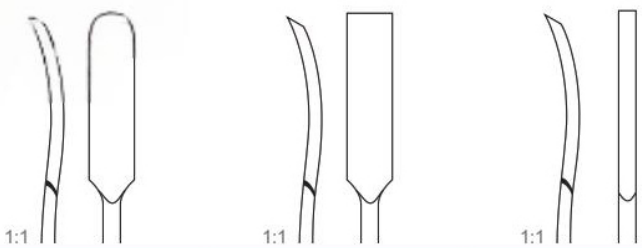


	Fig. 1	Fig. 2	Fig. 3
	6 mm	3 mm	6 mm
180 mm – 7"	09-283-060	09-284-060	09-285-030

Ferrozellgriff
Ferrozell handle
Manche en Ferrozell
Mango en Ferrozell
Manico di Ferrozell

Knochenhebel
Bone levers
Leviers à os
Elevadores para huesos
Elevatori per ossa



HOHMANN

220 mm – 8 ¾ "	240 mm – 9 ½ "	240 mm – 9 ½ "	240 mm – 9 ½ "
x = 8 mm	x = 18 mm	x = 43 mm	x = 70 mm
09-286-008	09-286-018	09-286-043	09-286-070

Knochenhebel
Bone levers
Leviers à os
Elevadores para huesos
Elevatori per ossa



HOHMANN

245 mm – 9 ¾ "	260 mm – 10 ¼ "	280 mm – 11 "	265 mm – 10 ½ "	260 mm – 10 ¼ "
x = 43 mm	x = 22 mm	x = 33 mm	x = 24 mm	x = 22 mm
09-287-043	09-287-022	09-287-033	09-288-240	09-289-220

Knochenhebel
Bone levers
Leviers à os
Elevadores para huesos
Elevatori per ossa



MINI-
HOHMANN





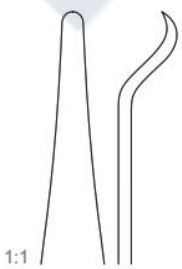
	6 mm	8 mm
160 mm – 6 ¼"	09-290-006	09-290-008

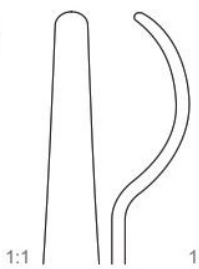


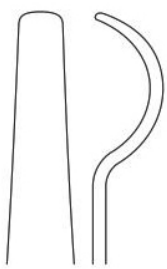
BRISTOW

230 mm – 9 "	09-291-230









	2.8 mm	4.5 mm	6 mm
140 mm – 5 ½ "	09-292-050	09-292-060	09-292-065



LANE

210 mm – 8 ¼ "	09-293-270

Knochenhebel
Bone levers
Leviers à os
Elevadores para huesos
Elevatori per ossa



BENNETT 1:2

	240 mm – 9 ½ "
x = 43 mm	09-294-240
x = 60 mm	09-295-710

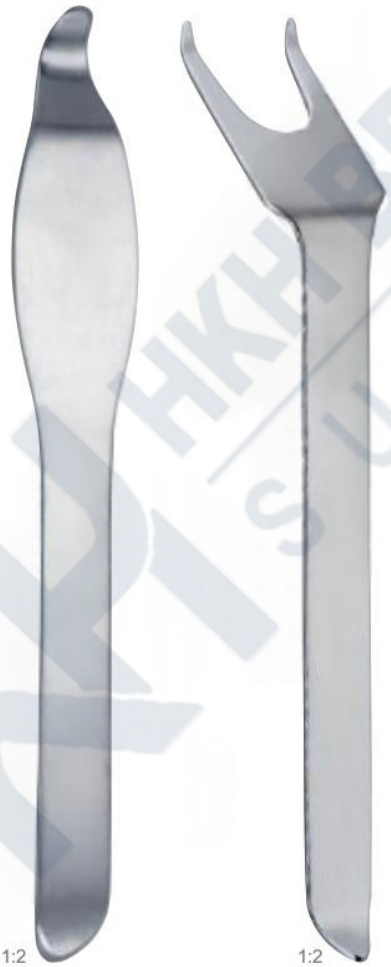


MURPHY-LANE 1:2

340 mm – 13 ½ "	09-296-300

Luxationshebel
Luxation lever
Levier de luxation
Palanca de luxación
Leva per luxazione

Knochenhebel
Bone levers
Leviers à os
Elevadores para huesos
Elevatori per ossa



BLOUNT

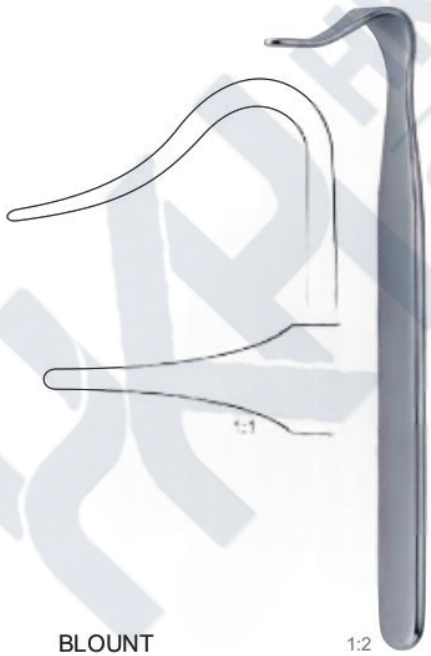
260 mm – 10 ¼ "	09-297-260	09-298-260



LANGE-
HOHMANN MOD.

265 mm – 10 ½ "	280 mm – 11 "
x = 30 mm	x = 33 mm
09-299-300	09-299-340

Knochenhebel
Bone levers
Leviers à os
Elevadores para huesos
Elevatori per ossa



BLOUNT 1:2

175 mm – 7 "	09-300-170



TAYLOR

	165 mm – 6 ½ "
a = 75 mm – b = 30 mm	09-301-160
a = 100 mm – b = 30 mm	09-302-160

meniskotome
Meniscotomy knives
Bistouries à ménisques
Bisturíes para meniscós
Bisturi per menisco



BIRCHER 1:2

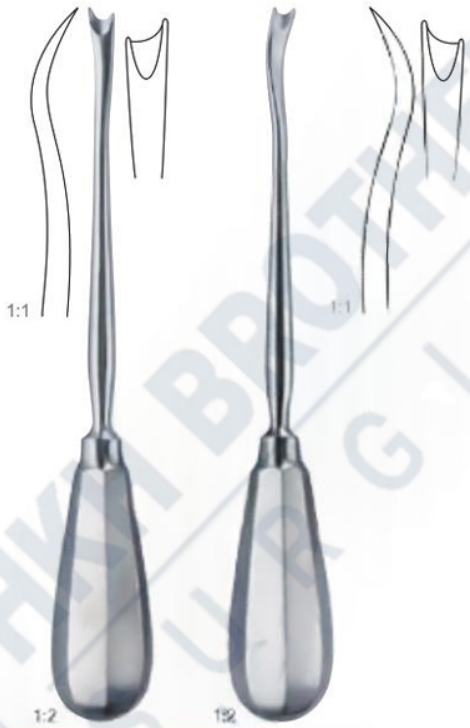
190 mm – 7 ½ "	09-303-190



SMILLIE

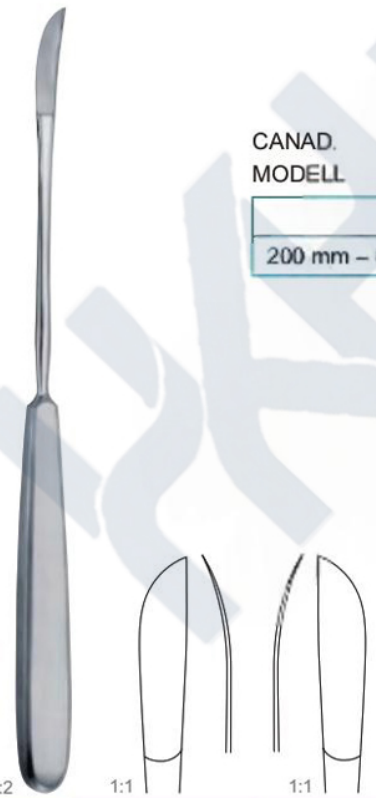
170 mm – 6 ¾ "	09-304-001	09-304-002	09-304-003

meniskotome
Meniscotomy knives
Bistouries à ménisques
Bisturíes para meniscós
Bisturi per menisco



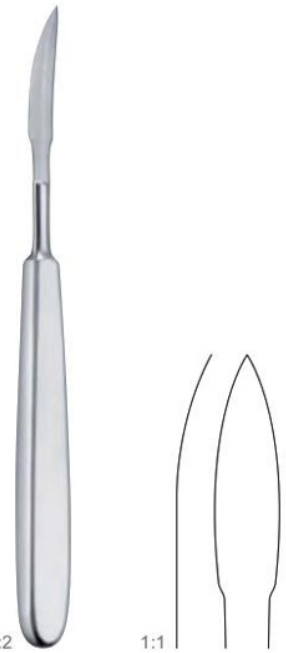
CANAD.
MODELL

	Fig. 1	Fig. 2
200 mm – 8 "	09-305-200	09-306-200



NEFF

220 mm – 8 ¾ "	09-307-220	09-308-220
	links lvra	rechts right droite derecha destra



180 mm – 7 "	09-309-175

Sehnenfasszangen
Tendon strippers
Instruments à écorcher les tendons
Enucleadores de tendones
Scollatendini



	1:1 4.0 mm Ø	1:1 4.5 mm Ø	1:1 5.5 mm Ø
230 mm – 9"	09-310-400	09-310-450	09-310-550

Schaft biegsam
Malleable shaft
Tige malléable
Flecha maleable
Asta malleabile



BUNNELL

	1:1 Fig. 1	1:1 Fig. 2	1:1 Fig. 3
150 mm – 6"	09-311-001	09-311-002	09-311-003

1:1 Fig. 4	1:1 Fig. 5
09-311-004	09-311-005

Sehnenstripper
Tendon strippers

Instruments à écorcher les tendons
Enucleadores de tendones
Scollatendini



FISCHER 1:2

310 mm – 12 ¼"	09-312-310



BUNNELL 1:2

230 mm – 9"
09-313-230

Sehnendurchzugsonde
Tendon passer
Sonde conductrice pour tendons
Sonda conductora de tendones
Sonda conduttrice per tendini



1:2

KLEINERT-KUTZ

200 mm – 8"
20 mm Ø
09-314-200

HKH BROTHERS SURGICAL

Sehnenfasszangen
Tendon holding forceps
Pinces pour saisir les tendons
Pinzas para coger tendones
Pinze per afferrare tendini





BRAND		
150 mm – 6 "	190 mm – 7 1/2 "	240 mm – 9 1/2 "
09-315-150	09-315-190	09-315-240



130 mm – 5 "	09-316-130



150 mm – 6 "	09-317-150	09-318-150

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie

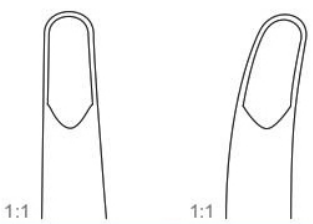

1:2


1:1 1:1

LUER

	Fig. 1	Fig. 2
150 mm – 6"	09-319-150	09-320-150


1:2


1:1 1:1

LUER

170 mm – 6¾"	09-321-170	09-322-170


1:2

1:1

MINI-
FRIEDMANN

120 mm – 4¾"	09-323-120


1:2

1:1

FRIEDMANN

140 mm – 5½"	09-324-140

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie


1:2

BLUMENTHAL



	Fig. 1	Fig. 2	Fig. 3
155 mm – 6"	09-325-155	09-326-155	09-327-155


1:2

JANSEN

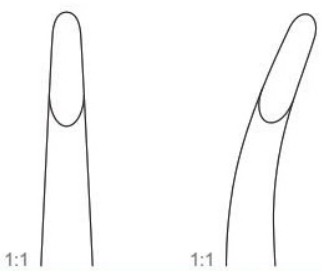
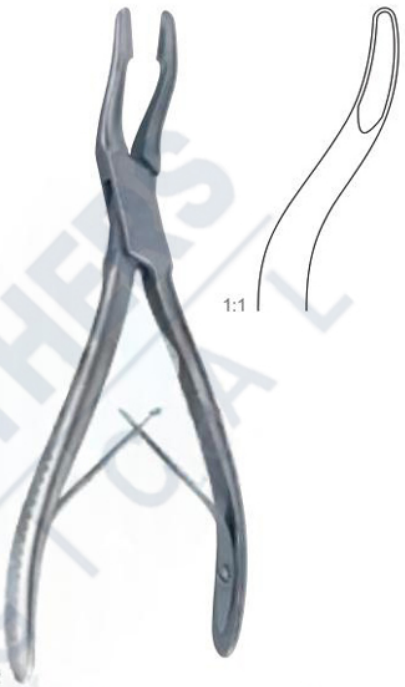


	Fig. 1	Fig. 2
180 mm – 7"	09-328-180	09-329-180

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



JANSEN 1:2

190 mm – 7 ½"	332-163-190



ADSON 1:2

200 mm – 8 "	332-138-200



1:2

BACON

210 mm – 8 ¼"	09-332-200

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie







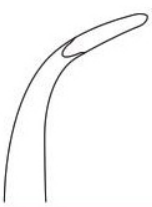
LEMPERT		
160 mm – 6 ¼ "	09-333-160	09-334-160
190 mm – 7 ½ "	09-335-190	09-336-180



1:2



1:1



1:1

STELLBRINK		
175 mm – 7 "	09-337-170	09-338-170
	leicht gebogen slightly curved légèrement courbe ligeramente curvada legermente curvata	stark gebogen strongly curved très courbe fuertemente curvada fortemente curvata

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



OLIVECRONA

205 mm – 8"	09-339-200



HARTMANN

175 mm – 7"	09-340-180

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



MEAD 1:2

165 mm – 6 ½ "	09-341-165



CLEVELAND 1:2

170 mm – 6 ¾ "	09-342-170



CLEVELAND 1:2

140 mm – 5 ½ "	09-343-140

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



1:2



1:1



1:1

BÖHLER

150 mm – 6 "	09-344-150	09-345-155



1:2

1:1

ZAUFAL-JANSEN

180 mm – 7 "	09-346-180



1:2

1:1

MARQUARDT

200 mm – 8 "	09-347-200

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



BEYER

180 mm – 7 "	09-348-180



RUSKIN

180 mm – 7 "	09-349-180	09-350-180

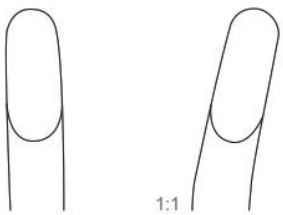


MAYFIELD

175 mm – 7 "	09-351-170

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie





STILLE-RUSKIN		
230 mm – 9"	09-352-230	09-353-230



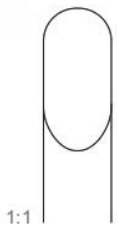


STILLE	4 mm	6 mm	8 mm
230 mm – 9"	09-354-230	09-355-230	09-356-230

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



STILLE-LUER





220 mm – 8 ¾ "	09-357-220	09-358-220



LEKSELL







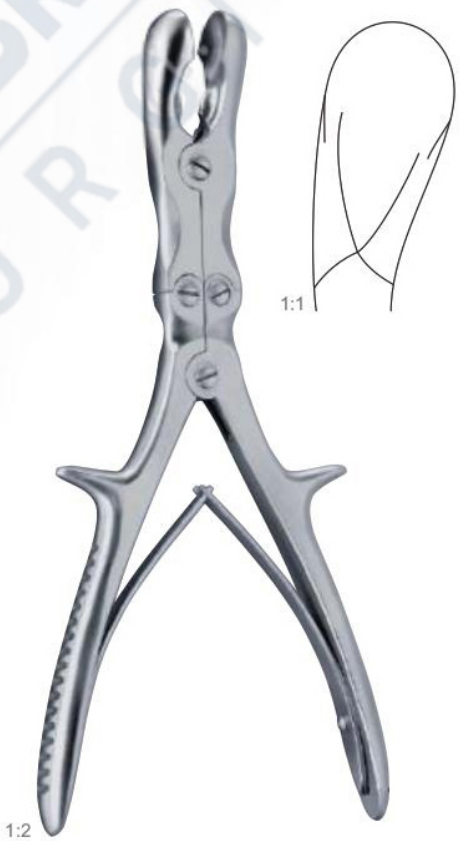
	4 mm	5 mm	8 mm
240 mm – 9 ½ "	09-359-040	09-359-050	09-359-080

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



RÖTTGEN-
RUSKIN

230 mm – 9"	09-350-230



SEMB

225 mm – 9"	09-360-220

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie





ECHLIN

	2 mm	3 mm	4 mm
230 mm – 9 "	09-361-020	09-361-030	09-361-040





FRYKHOLM

240 mm – 9 ½ "	09-362-240

Hohlmeißelzangen
Bone rongeurs
Pinces gouges
Pinzas gubias
Pinze sgorbie



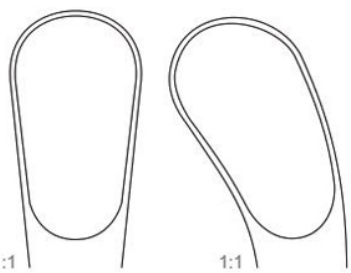
1:2

SAUERBRUCH 1:1



	Fig. 1	Fig. 2
300 mm – 12"	09-363-300	09-364-300





LUER-STILLE 1:1 1:1

230 mm – 9"	09-365-230	09-366-230
270 mm – 10¾"	09-365-270	09-366-270

Knochensplitterzangen
Bone cutting forceps

Pinces coupantes à os
Pinzas cortantes para huesos
Cesoie per ossa



1:2



1:1

COTTLE-
KAZANJIAN

190 mm – 7 ½ "	09-367-190







LISTON

140 mm – 5 ½ "	09-368-140	09-369-140
170 mm – 6 ¾ "	09-368-170	09-369-170
190 mm – 7 ½ "	09-368-190	09-369-190
220 mm – 8 ¾ "	09-368-220	09-369-220

Knochensplitterzangen
Bone cutting forceps
Pinces coupantes à os
Pinzas cortantes para huesos
Cesoie per ossa



1:2



1:1



1:1

BÖHLER		
150 mm – 6 "	09-370-150	09-371-150



1:2



1:1

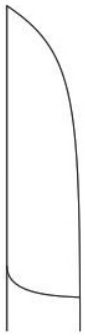


1:1

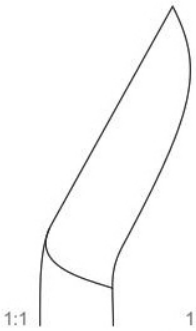
RUSKIN-LISTON		
185 mm – 7 ¼ "	09-372-185	09-373-185



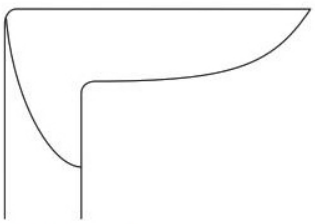
1:2



1:1



1:1



1:1

STILLE-LISTON			
270 mm – 10 ¾ "	09-374-270	09-375-270	09-376-270

Knochensplitterzangen
Bone cutting forceps
Pinces coupantes à os
Pinzas cortantes para huesos
Cesoie per ossa



SEMB

240 mm – 9 ½ "	09-377-240



LISTON-KEY HORSLEY

270 mm – 10 ¾ "	09-378-270

Knochenhalteklammern – Knochenhaltezangen
Bone holding clamps – Bone holding forceps
Daviers à os – Daviers porte-os
Pinzas porta huesos – Pinzas para huesos
Tenaglie per ossa



GERSTER-LOWMANN

130 mm – 5"	x = 22 mm	09-379-130
180 mm – 7"	x = 28 mm	09-379-180
200 mm – 8"	x = 35 mm	09-379-200
220 mm – 8¾"	x = 40 mm	09-379-220



GERSTER

150 mm – 6"	09-380-150

Knochenhaltezangen – Repositionszangen
Bone holding forceps – Reposition forceps
Daviers porte-os – Pinces de reposition
Pinzas para huesos – Pinzas para reposición
Tenaglie per ossa – Pinze per riposizioni



135 mm – 5 ¼ "	09-381-140

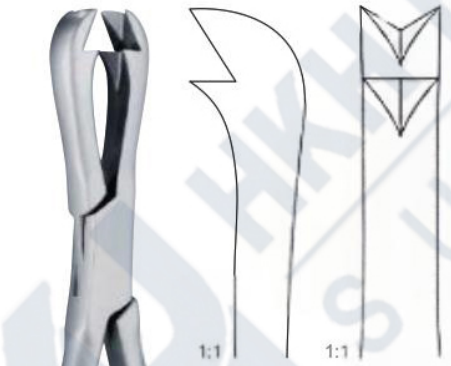


175 mm – 7 "	09-382-175



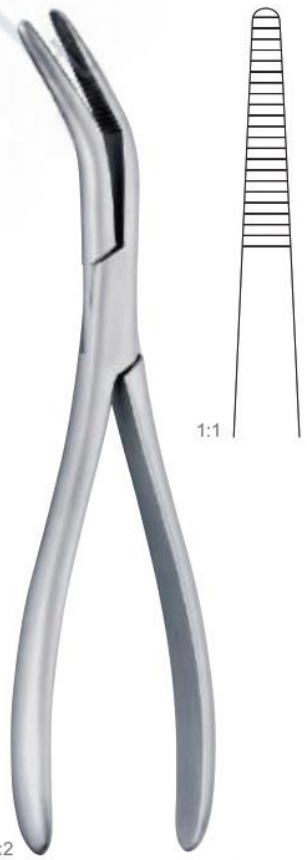
140 mm – 5 ½ "	09-383-140

Knochenhalteklammern – Knochenhaltezangen
Bone holding clamps – Bone holding forceps
Daviers à os – Daviers porte-os
Pinzas porta huesos – Pinzas para huesos
Tenaglie per ossa



FERGUSSON 1:2

210 mm – 8 ¼ "	09-384-210



VAN BUREN 1:2

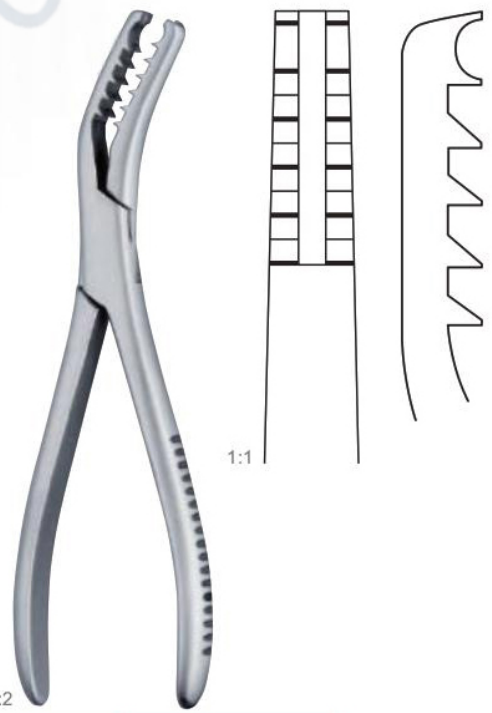
230 mm – 9 "	09-385-230

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa



LANGENBECK 1:2

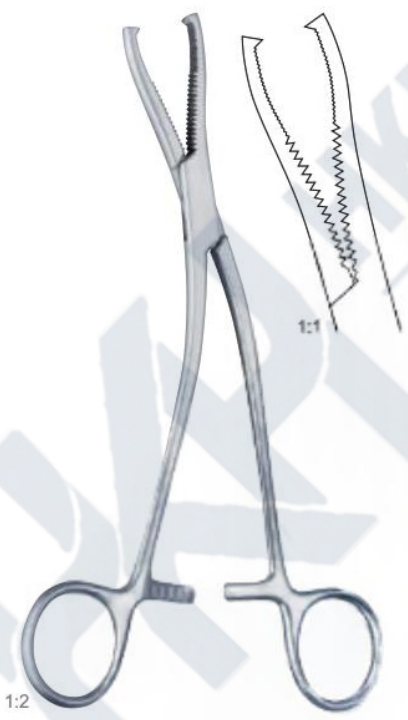
210 mm – 8 ¼ "	09-386-210



SEMB 1:2

190 mm – 7 ½ "	09-387-190

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa



DINGMANN

190 mm – 7 ½ "	09-388-190



200 mm – 8 "	09-389-200	09-390-200

Sequesterzange
Sequestrum forceps
Pince pour Sequestrum
Pinza para Sequestrum
Pinza per Sequestrum

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa



FARABEUF

230 mm – 9 "	09-391-230
260 mm – 10 ¼ "	09-391-260



FARABEUF-LAMBO TTE

260 mm – 10 ¼ "	09-392-260

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa





MARTIN

160 mm – 6 ½ "	09-393-160
190 mm – 7 ½ "	09-393-190



1:2

BIRCHER-
GANSKE





200 mm – 8 "	09-394-200	09-395-200

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa

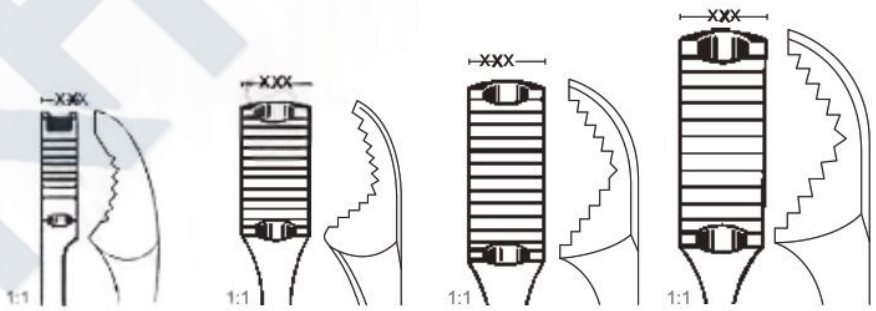


HEY GROVES

210 mm – 8 ¼ "	x = 6.5 mm	09-396-210
270 mm – 10 ¾ "	x = 7.5 mm	09-396-270
305 mm – 12 "	x = 8.5 mm	09-396-305

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa





VERBRUGGE

175 mm – 7 "	250 mm – 10 "	260 mm – 10 ¼ "	270 mm – 10 ¾ "
x = 5.0 mm	x = 9.5 mm	x = 10.5 mm	x = 12.0 mm
09-397-175	09-397-250	09-397-260	09-397-270

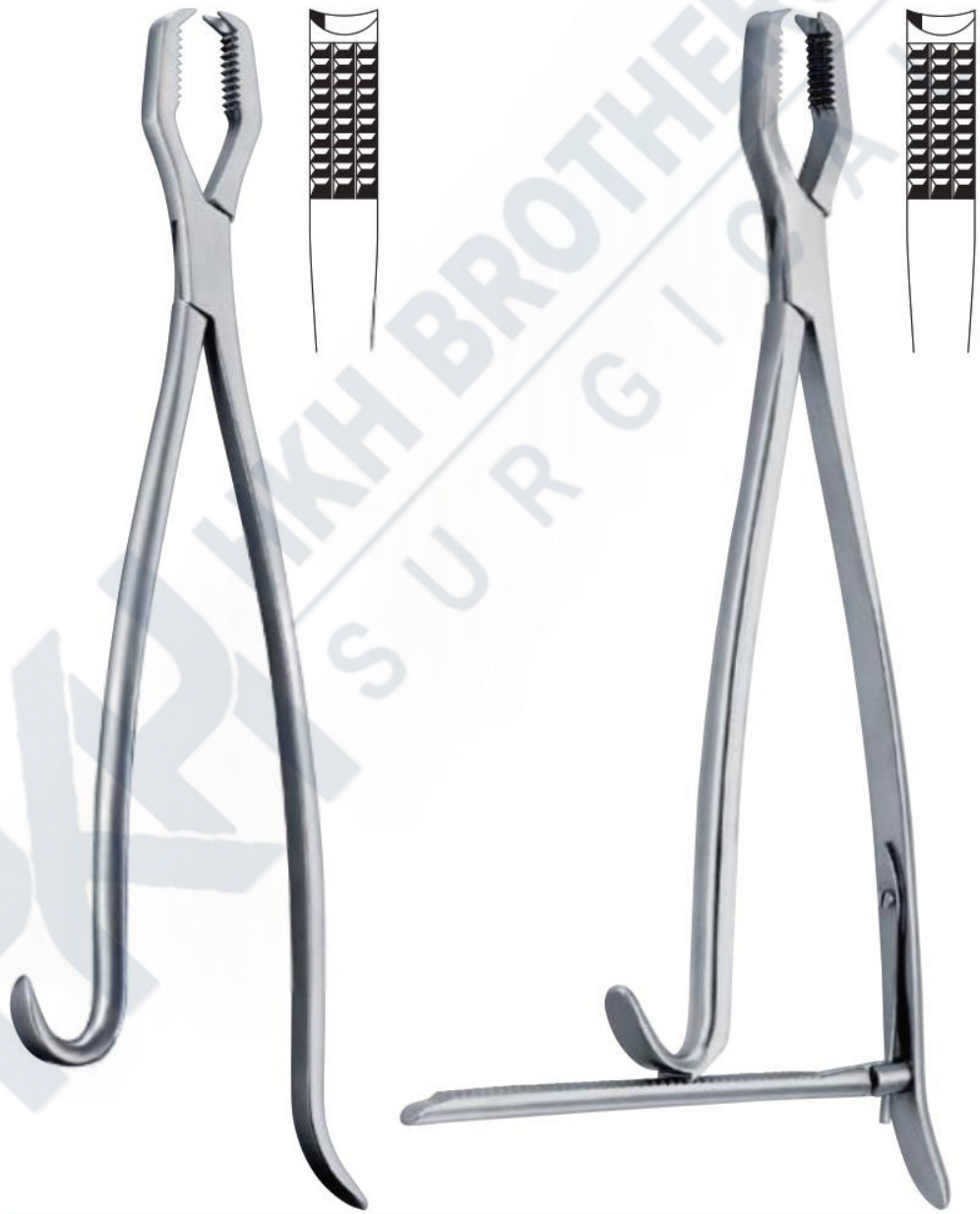
Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa



KERN

170 mm – 6 ¾ "	09-398-170	09-399-170
210 mm – 8 ¼ "	09-398-210	09-399-210

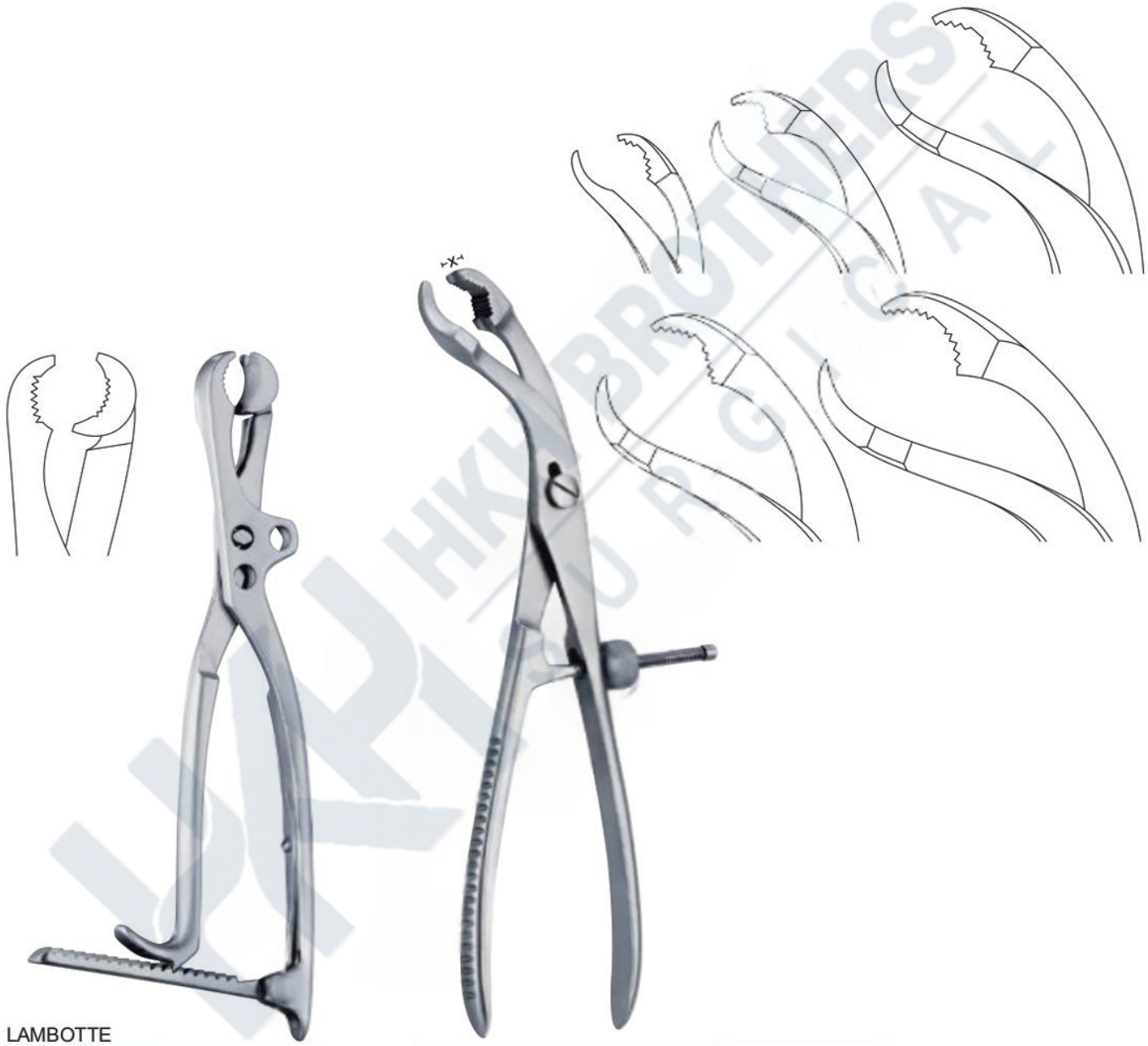
Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa



LANE

330 mm – 13 "	09-400-330	09-401-330
450 mm – 17 ¾ "	09-400-450	09-401-450

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa



LAMBOTTE

220 mm – 8 ¾ "	09-402-220
270 mm – 10 ¾ "	09-402-270
300 mm – 12 "	09-402-300

ein Maulteil beweglich
one jaw mobile
un mors mobile
una boca movible
una parte del morso mobile

150 mm – 6 "	x = 2.5 mm	09-403-150
190 mm – 7 ½ "	x = 6.5 mm	09-403-190
240 mm – 9 ½ "	x = 9.5 mm	09-403-240
260 mm – 10 ¼ "	x = 10.0 mm	09-403-260
280 mm – 11 "	x = 11.0 mm	09-403-280

selbstzentrierend
self-centering
auto-centreur
autocentrante
autocentrante

Knochenhaltezangen
Bone holding forceps
Daviers porte-os
Pinzas para huesos
Tenaglie per ossa





ULRICH

230 mm – 9 "	09-404-230	09-406-230
250 mm – 9 ¾ "	09-404-250	09-406-250
280 mm – 11 "	09-404-280	09-406-280

kniegebogen
angular
coudée
acodada
angolata

160 mm – 6 ¼ "	09-405-160
240 mm – 9 ½ "	09-405-240

Knochenhaltezangen – Repositionszangen
Bone holding forceps – Reposition forceps
Daviers porte-os – Pinces de reposition
Pinzas para huesos – Pinzas para reposición
Tenaglie per ossa – Pinze per riposizione



135 mm – 5¼"	09-407-135



170 mm – 6¾"	09-408-170



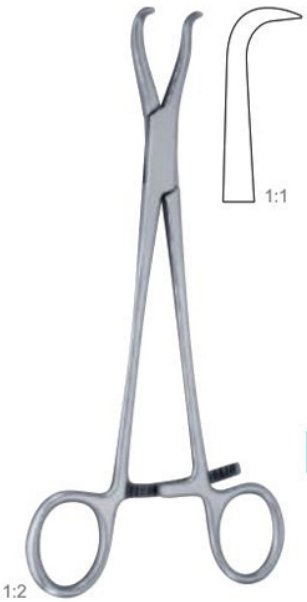
200 mm – 8"	09-409-200



135 mm – 5¼"	09-410-135

für Kieferreposition
for maxillary reposition
pour reposition mandibulaire
para reposición mandibular
per reposizione mandibulare

Repositionszangen
Reposition forceps
Pinces de reposition
Pinzas para reposición
Pinze per riposizione



HAASE

165 mm – 6½"	09-411-165

für Unterkieferfrakturen
for mandibular fractures
pour fractures mandibulaires
para fracturas del mandibul
per fratture mandibulare



95 mm – 3¾"	09-412-095



185 mm – 7¼"	09-413-180

Patellazange
Patella forceps
Pince pour la rotule
Pinza para la rótula
Pinza per rotula



210 mm – 8¼"	
09-414-210	

Knöchelfasszange
Malleolar forceps
Pince pour la malléole
Pinza para el maleólo
Pinza per malleolo

draht-instrumentarium
Wire instruments

Instruments pour cerclage
Instrumental para cerclaje
Strumenti per filo di cerchiaggio



DEMEL 1:2

	280 mm – 11 "
x = 32 mm	09-415-010
x = 45 mm	09-415-020
x = 62 mm	09-415-030



DEMEL 1:2

280 mm – 11 "	09-416-280

draht-instrumentarium
Wire instruments

Instruments pour cerclage
Instrumental para cerclaje
Strumenti per filo di cerchiaggio



LOUTE 1:2

210 mm – 8 ¼ "	09-417-210



0.2 mm Ø	09-418-020
0.3 mm Ø	09-418-030
0.4 mm Ø	09-418-040
0.5 mm Ø	09-418-050
0.6 mm Ø	09-418-060
0.7 mm Ø	09-418-070
0.8 mm Ø	09-418-080
0.9 mm Ø	09-418-090
1.0 mm Ø	09-418-100
1.2 mm Ø	09-418-120
1.5 mm Ø	09-418-150

Knochendraht, weich, in Ringen à 10 m
Bone wire, soft, in coils of 10 m
Fil de cerclage, souple, de 10 m
Alambre de cerclaje, blando, de 10 m
Filo per ossa, morbida, anelli da 10 m



1:2

130 mm – 5 "
09-419-000

drahtschneidezangen
Wire cutting forceps
Pinces coupantes
Alicates para cortar alambre
Pinze taglia filo

TC





1:2

185 cm – 7 ¼ "	09-420-180

Kopfschneider, durchbohrt für harte Drähte bis 1.6 mm Ø
Wire cutting forceps for hard wires up to 1.6 mm Ø
Pince coupante pour fils durs à 1.6 mm Ø
Alicate para alambres duros hasta 1.6 mm Ø
Pinza taglia fili per fili duri fino a 1.6 mm Ø

	TC
470 mm – 18 ½ "	09-421-470
570 mm – 22 ½ "	09-421-560

für Kirschner Drähte und Steinmann Nägel bis 6 mm Ø
for Kirschner wires and Steinmann pins up to 6 mm Ø
pour des broches Kirschner et clous Steinmann à 6 mm Ø
para agujas de Kirschner y clavos de Steinmann hasta 6 mm Ø
per fili Kirschner e chiodi Steinmann fino a 6 mm Ø

TC
09-421-470/1

Hartmetallplättchen alleine
tungsten carbide inlay only
plaquettes de carbure de tungstene
inserto de carburo de tungsteno
inserti carburo di tungsteno

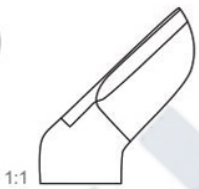
drahtschneidezangen
Wire cutting forceps
Pinces coupantes
Alicates para cortar alambre
Pinze taglia filo

TC



	TC
220 mm – 8 ¾"	09-422-220

für harte Drähte bis 2.2 mm Ø, für weiche Drähte bis 3 mm Ø
for hard wires up to 2.2 mm Ø, for soft wires up to 3 mm Ø
pour fils durs à diam. 2.2 mm Ø, pour fils souples à 3 mm Ø
para alambres duros hasta 2.2 mm Ø, y alambres blandos de 3 mm Ø
per fili duri fina 2.2 mm Ø, per fili morbidi fino a 3 mm Ø



	TC
220 mm – 8 ¾"	09-423-220

für harte Drähte bis 2.2 mm Ø, für weiche Drähte bis 2.8 mm Ø
for hard wires up to 2.2 mm Ø, for soft wires up to 2.8 mm Ø
pour fils durs à 2.2 mm Ø, pour fils souples à 2.8 mm Ø
para alambres duros hasta 2.2 mm Ø, y alambres blandos de 2.8 mm Ø
per fili duri fina 2.2 mm Ø, per fili morbidi fino a 2.8 mm Ø



	TC
230 mm – 9"	09-424-230

für harte Drähte bis 2.2 mm Ø, für weiche Drähte bis 3 mm Ø
for hard wires up to 2.2 mm Ø, for soft wires up to 3 mm Ø
pour fils durs à 2.2 mm Ø, pour fils souples à 3 mm Ø
para alambres duros hasta 2.2 mm Ø, y alambres blandos de 3 mm Ø
per fili duri fina 2.2 mm Ø, per fili morbidi fino a 3 mm Ø

drahtschneidezangen
Wire cutting forceps

Pinces coupantes
Alicates para cortar alambre
Pinze taglia filo

TC



REILL 1:2

	TC
180 mm – 7 "	09-425-170

für harte Drähte bis 1.5 mm Ø, für weiche Drähte bis 2 mm Ø
for hard wires up to 1.5 mm Ø, for soft wires up to 2 mm Ø
pour fils durs à 1.5 mm Ø, pour fils souples à 2 mm Ø
para alambres duros hasta 1.5 mmØ, y alambres blandos de 2 mm Ø
per fili duri fina 1.5 mm Ø, per fili duri morbidi fino a 2 mm Ø



1:2

	TC
180 mm – 7 "	09-426-180

für harte Drähte bis 1.7 mm Ø, für weiche Drähte bis 2 mm Ø
for hard wires up to 1.7 mm Ø, for soft wires up to 2 mm Ø
pour fils durs à 1.7 mm Ø, pour fils souples à 2 mm Ø
para alambres duros hasta 1.7 mm Ø, y alambres blandos de 2 mm Ø
per fili fina 1.7 mm Ø, per fili morbidi fino a 2 mm Ø



1:2

	TC
150 mm – 6 "	09-427-150

für harte Drähte bis 1 mm Ø, für weiche Drähte bis 1.5 mm Ø
for hard wires up to 1 mm Ø, for soft wires up to 1.5 mm Ø
pour fils durs à 1 mm Ø, pour fils souples à 1.5 mm Ø
para alambres duros hasta 1 mm Ø, y alambres blandos de 1.5 mm Ø
per fili duri fina 1 mm Ø, per fili morbidi fino a 1.5 mm Ø



1:2

	TC
145 mm – 5 ¾ "	09-428-140

für harte Drähte bis 1 mm Ø
for hard wires up to 1 mm Ø
pour fils durs à 1 mm Ø
para alambres duros hasta 1 mm Ø
per fili duri fino a 1 mm Ø

drahtschneidezangen
Wire cutting forceps
Pinces coupantes
Alicates para cortar alambre
Pinze taglia filo

TC



1:2

	TC
260 mm – 10 ¼"	09-429-260

für harte Drähte bis 3 mm Ø
for hard wires up to 3 mm Ø
pour fils durs à 3 mm Ø
para alambres duros hasta 3 mm Ø
per fili duri fino a 3 mm Ø

Technis che zangent

Technical forceps

Pinces téchniques
Pinzas técnicas
Pinze tecniche

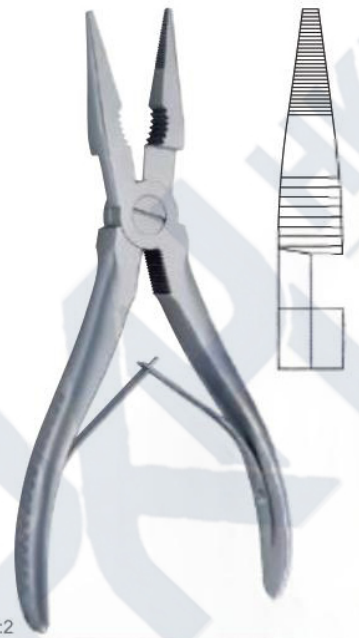


130 mm – 5"	09-430-130
180 mm – 7"	09-430-180



130 mm – 5"	09-431-130
170 mm – 6¾"	09-431-170

technische zangen
Technical forceps
Pinces techniques
Pinzas técnicas
Pinze tecniche



1:2

170 mm – 6¾ "	09-432-170



1:2

190 mm – 7½ "	09-433-190

Technische Zange, verstellbar
Technical forceps, adjustable
Pince téchnique, ajustable
Pinza técnica, ajustable
Pinza tecnica, regolabile

Technis che zangent
Technical forceps
Pinces téchniques
Pinzas técnicas
Pinze tecniche



185 mm – 7 ¼ "	09-434-170

Drahtbiegezange
Wire bending forceps
Pince à couder
Pinza para torcer
Pinza per piegare



185 mm – 7 ¼ "	09-435-180

Flachzange mit Seitenschneider, parallel-fassend, für harte Drähte bis 1.6 mm Ø
Flat nose plier, parallel grip, incorporated cutter, for hard wires up to 1.6 mm Ø
Pince à couder avec coupe latéral, pour des fils durs à de 1.6 mm Ø
Pinza para torcer con corte lateral, para alambres hasta 1.6 mm Ø
Pinza, morso piatto parallelo e taglia fili laterale fino a 1.6 mm Ø



180 mm – 7 "	09-436-180
200 mm – 8 "	09-436-200
240 mm – 9 ½ "	09-436-240

Feststellzange
Locking plier
Pince à caler
Pinza de fijar
Pinza bloccante

Technis che zangent

Technical forceps

Pinces téchniques
Pinzas técnicas
Pinze tecniche



200 mm – 8 "	09-440-001

Plattenbiegezange für Knochenplatten bis 2.7 mm Stärke
Plate bending plier for plates up to 2.7 mm
Pince à couder pour des plaques de 2.7 mm
Pinza para torcer, placas hasta 2.7 mm
Pinza piega placche fino a 2.7 mm

240 mm – 9 ½ "	09-440-002

Plattenbiegezange für Knochenplatten bis 4 mm Stärke
Plate bending plier for plates up to 4 mm
Pince à conder pour des plaques de 4 mm
Pinza para torcer, para placas hasta 4 mm
Pinza piega placche fino a 4 mm

technische zangen
Technical forceps
Pinces téchniques
Pinzas técnicas
Pinze tecniche

TC



1:2

		TC
	180 mm – 7"	180 mm – 7"
x = 3 mm		09-443-010
x = 5 mm	09-441-180	09-443-020
x = 7 mm	09-442-180	09-443-030


1:2

	TC
220 mm – 8¾"	09-444-220

Grip-Zange, kombiniert mit TC-Schneider
Grip forceps, combined with TC-Cutter
Pince grip, avec partie coupante TC
Pinza grip, combinada con TC
Pinza grip, con morso tagliente a TC

extensionsbügel
Extension bows
Etriers pour extension
Estribos para extensión
Archi per estensione



180 mm – 7"	09-445-020

Spannschlüssel für Kirschner Drähte
Wire strainer for Kirschner wires
Tendeur pour fils de Kirschner
Tensor para agujas de Kirschner
Chiave per estensione di fili Kirschner



09-446-002

Fixierscheiben für Bohrdrähte alleine (Paar)
Fixation discs only (pair)
Disques de fixation seul (paire)
Disos de fijación sólo (par)
Disco di fissare solo (paio)

09-447-001

Zughaken klein, alleine
Traction hooks, only
Crochets de traction, seul
Ganchos de tracción, sólo
Ganci di trazione, solo



KIRSCHNER

x = 95 mm y = 70 mm	09-448-095
x = 100 mm y = 100 mm	09-448-105
x = 120 mm y = 120 mm	09-448-120
x = 155 mm y = 155 mm	09-448-155
x = 200 mm y = 155 mm	09-448-200

mit 3 Zughaken
with 3 traction hooks
avec 3 crochets d'attelage
con 3 ganchos de tracción
con 3 ganci di trazione

09-447-002

Zughaken groß alleine
Traction hooks big, only
Crochets de traction grand, seul
Ganchos de tracción grande, sólo
Ganci di trazione grande, solo

KIRSCHNER

x = 130 mm	09-449-160
x = 185 mm	09-449-200
x = 220 mm	09-449-220

mit 3 Zughaken
with 3 traction hooks
avec 3 crochets d'attelage
con 3 ganchos de tracción
con 3 ganci di trazione

extensionsbügel
Extension bows
Etriers pour extension
Estribos para extensión
Archi per estensione



1:2

KIRSCHNER

x = 180 mm y = 100 mm	09-450-140
x = 270 mm y = 160 mm	09-450-220

mit 3 Zughaken
with 3 traction hooks
avec 3 crochets d'attelage
con 3 ganchos de tracción
con 3 ganci di trazione


1:2

BÖHLER

x = 75 mm y = 90 mm	09-451-090
x = 90 mm y = 160 mm	09-451-160
x = 110 mm y = 210 mm	09-451-210
x = 150 mm y = 210 mm	09-451-211


1:2

	14 mm / 17 mm
190 mm – 7 ½ "	09-452-190

Gabelschlüssel
Wrench
Clé de serrage
Llave de tuercas
Chiave per madreviti

Amputationsretraktor – Komprimeter
Amputation retractor – Comprimeter

Rétracteur pour amputation – Comprimètre
Retractor para amputación – Comprímetro
Retrattore per amputazione – Comprimetro



PERCY

09-453-000

Griffe abnehmbar, einfaches Modell
Handles detachable, simple pattern
Manches à détacher, modèle simple
Mango desmontable, modelo simple
Manici demontabili, modello semplice



09-454-000

Komprimeter, bestehend aus Arm- und Oberschenkelmanschette, Manometer justiert bis 700 mm Hg und Metallpumpe
Comprimeter, consisting of arm and upper thight cuff, manometer calibrated up to 700 mm Hg, with metal pump
Comprimètre se composant du brassard pour bras et cuisse, manomètre calibré jusqu'a 700 mm Hg, avec pompe métallique
Comprímetro, compuesto de brazalete para brazo y muslo, manómetro calibrado hasta 700 mm Hg, con bomba métálica
Comprimetro, composto da torniquete, due bracciali e pompa d'aria e manometro graduato fino a 700 mm Hg

Handbohrapparate
Hand drills
Perforateurs à main
Perforadores de mano
Perforatori a mano



1:2

Leichtmetallgehäuse
Light metal housing
Carcasse en métal léger
Carcasa en metal ligero
In scatola di alluminio

Längsdurchbohrt
Longitudinally cannulated
À perforation axiale
Acanalado longitudinalmente
Forato longitudinalmente

BUNNELL

160 mm – 6 ¼ "	09-455-000

Öffnung bis 4 mm Ø
Opening up to 4 mm Ø
Ouverture jusqu'à 4 mm Ø
Apertura hasta 4 mm Ø
Apertura fino à 4 mm Ø

09-455-000/1

Ersatzschlüssel für 09-455-000
Spare key for 09-455-000
Clé de réchange pour 09-455-000
Llave de recambio para 09-455-000
Chiave di ricambio per 09-455-000



1:2

Leichtmetallgehäuse
Light metal housing
Carcasse en métal léger
Carcasa en metal ligero
In scatola di alluminio

Längsdurchbohrt
Longitudinally cannulated
À perforation axiale
Acanalado longitudinalmente
Forato longitudinalmente

RALK

160 mm – 6 ¼ "	09-456-000

Öffnung bis 6,35 mm Ø
Opening up to 6.35 mm Ø
Ouverture jusqu'à 6.35 mm Ø
Apertura hasta 6.35 mm Ø
Apertura fino à 6.35 mm Ø

Handbohrapparate
Hand drills
Perforateurs à main
Perforadores de mano
Perforatori a mano


1:2

STILLE

200 mm – 8 "	09-457-100

komplett mit 7 Bohrern (Fig. 1 – Fig. 9)
complete with 7 twist drills (Fig. 1 – Fig. 9)
complèt avec 7 Mèches (Fig. 1 – Fig. 9)
completa con 7 fresas (Fig. 1 - Fig. 9)
completa con 7 frese (Fig. 1 – Fig. 9)

09-457-000	

Handbohrapperat alleine
Hand drill only
Perforateurs à main seul
Perforadores de mano sólo
Perforatori a mano solo


1:2 1:2 1:2 1:2

Fig. 1	Fig. 2	Fig. 3	Fig. 4
2.5 mm Ø	3.0 mm Ø	3.5 mm Ø	4.0 mm Ø
09-457-010	09-457-020	09-457-030	09-457-040


1:2 1:2 1:2

Fig. 7	Fig. 8	Fig. 9
8.0 mm Ø	12.0 mm Ø	16.0 mm Ø
09-457-070	09-457-080	09-457-090


1:2 1:2 1:2

Fig. 10	Fig. 11	Fig. 12
1.0 mm Ø	1.5 mm Ø	2.0 mm Ø
09-457-001	09-457-002	09-457-003

Handbohrapparate
Hand drills
Perforateurs à main
Perforadores de mano
Perforatori a mano



JACOBS

280 mm – 11 "	09-458-060

Öffnung bis 6.35 mm Ø
Opening up to 6.35 mm Ø
Ouverture jusqu'à 6.35 mm Ø
Apertura hasta 6.35 mm Ø
Apertura fino à 6.35 mm Ø



09-459-000

Öffnung bis 6.35 mm Ø
Opening up to 6.35 mm Ø
Ouverture jusqu'à 6.35 mm Ø
Apertura hasta 6.35 mm Ø
Apertura fino à 6.35 mm Ø



280 mm – 11 "
09-460-000

Handbohrapparat, rostfrei, beweglicher Griff, mit „Jacobs"-Spannfutter und Schlüssel
Hand drill, stainless, adjustable handle, with "Jacobs"-chuck and key
Perceuse méchanique en acier inox, manche mobile, avec mandrin «Jacobs» et clé
Taladro manual, mango mobil, acero inoxidable, porta brocas "Jacobs" y llave
Perforatore a mano, inossidabile, manico da movere, con morso "Jacobs" e chiave

Spiralbohrer – Pfrieme
Twist drills – Reamers
Mèches – Alênes
Taladros espirales – Escariadores
Punte a spirale – Perforatori a mano



1.0 mm Ø		09-462-100
1.5 mm Ø		09-462-150
2.0 mm Ø	09-461-200	09-462-200
2.5 mm Ø	09-461-250	09-462-250
2.8 mm Ø		09-462-280
3.0 mm Ø	09-461-300	09-462-300
3.2 mm Ø	09-461-320	09-462-320
3.5 mm Ø	09-461-350	09-462-350
4.0 mm Ø	09-461-400	09-462-400
5.0 mm Ø	09-461-500	09-462-500
6.0 mm Ø	09-461-600	09-462-600
7.0 mm Ø	09-461-700	09-462-700
	AO Schaft AO shank Raccord AO Connector AO Attaco AO	Rundschaft Round shank Tige ronde Flecha redonda Asta rotondo



PERTHES

180 mm – 7 "	09-463-160
210 mm – 8 ¼"	09-463-210



140 mm – 5 ½"
09-464-140



140 mm – 5 ½"
09-465-140