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1. Range references

The various ranges of files contained in this catalogue can be located with the help of the following tabs which are to be found in the side margins of the summary and product pages:

<p>LP LP Type Precision files with tang Chain saw files</p>	<p>LO Tools without cut Engravers' graters Gravers - Scrapers Saw blades - Saw frames</p>
<p>LA LA Type Needle files Escapement files «Habilis» files</p>	<p>AL File handles</p>
<p>LR LR Type Rifflers</p>	<p>S Special custom-made files</p>
<p>V «Valtitan» range Precision files with tang Needle files Rifflers</p>	

2. Main dimensions

a) Length = L

The measuring points for length (L) vary from one type of file to another. It is therefore necessary to refer to the «Main dimensions» diagram at the beginning of each chapter. The length is given either in inches or mm, or in inches and mm. In this case, the mm are given for information only.

b) Width x thickness = A x B

Width and thickness are given by:
- **A** = as a rule length or diameter
- **B** = mainly thickness.

The A and B dimensions are always measured at the widest uncut section. They are expressed in mm, apart from some exceptions in LO chapter «Gravers» (refer to «Main dimensions» at the beginning of the chapter).

3. Tolerances

For all the files, it is important to take into account the following tolerances:

Round shapes		Pippin - Auriform - Slotting		
Ø	Tol.	A	B	Tol.
≤ 3	+ 0.15 / - 0.1	≤ 15 ± 0.5	≤ 4	± 0.5
> 3...6	+ 0.2 / - 0.1	> 15 ± 1	> 4	± 1
> 6	± 0.2			

Other shapes

A	Tol.	B	Tol.
≤ 4	+ 0.2 / - 0.3	≤ 2.5	+ 0.2 / - 0.3
> 4...15	+ 0.3 / - 0.5	> 2.5 — 4	+ 0.3 / - 0.5
> 15	+ 0.3 / - 0.7	> 4	+ 0.3 / - 0.7

Exceptions: see next page.



Exceptions

LP1185 Equalling special	Dimension B on cut according to the STUBS gauge
LP1265 Warding special	Dimension B on cut according to the STUBS gauge
LP1180 Ordinary equalling	Dimension B on cut ± 0.1
LP1170 Joint file round edges	Dimension B ± 0.1
LP1840 Screwhead with tang	Dimension B ± 0.1
LP1850 Screwhead without tang	Dimension B ± 0.1
Round for chain saws	Dimension B on cut $+ 0.2 / - 0.1$

4. Overthickness on the cut

For an exact measurement of the A and B dimensions on the cut part 0.01 to 0.4 mm should be added per cut side.

5. Subject to modification

Taking into account the constant technological and technical changes, we reserve the right to modify the illustrations, dimensions, designations and other information without prior notice.

6. Our trade marks



Hiebskala*
Scale of cuts*

Echelle de tailles*
Escala de picado*

Bestimmen der Zähnezahl [Z/cm]

To determinate number of teeth [Z/cm]

Détermination du nombre de dents [Z/cm]

Determinar el número de dientes [Z/cm]

Die Anzahl der Zähne (Z/cm) wird an der Hiebachse gemessen.

Die Zahlen in der nachstehenden Tabelle stimmen mit der Anzahl Zähne pro cm für einen bestimmten Hieb, Länge oder Typ überein.

Beispiel: Feile 6" in Hieb 2 = 31 Z/cm.

The number of teeth (Z/cm) is obtained by counting perpendicularly to the cut.

In the following table the figures correspond to the number of teeth per cm, for a given length and type of file.

For example, a file 6" in cut 2, shows 31 Z/cm.

Le nombre de dents (Z/cm) se compte perpendiculairement à la taille.

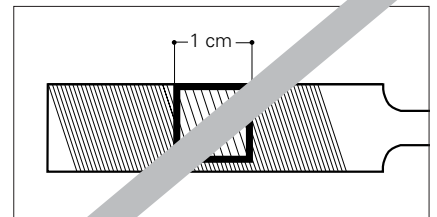
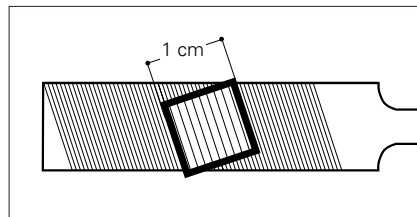
Dans le tableau ci-après les chiffres correspondent au nombre de dents par cm pour une taille donnée, dans une longueur ou un type donné.

Exemple: Lime de 6" en taille 2 = 31 Z/cm.

El número de dientes (Z/cm) se cuenta perpendicularmente al picado.

En la tabla las cifras corresponden al número de dientes por cm de un picado determinado, con un largo y tipo determinados.

Ejemplo: limas de 6" en picado 2 = 31 Z/cm.





Feilen-Typ - Type of file Type de lime - Tipo de lima	Hieb [Zähne/cm] - Cut [Teeth/cm] Taille [Dents/cm] - Picado [Dientes/cm]										
	000	00	0	1	2	3	4	5	6	7	8
Präzisionsfeilen, Längen 1" bis 3.5" <i>Precision files, lengths 1" to 3.5"</i> Limes de précision, longueurs 1" à 3.5" <i>Limas de precisión, largo 1" hasta 3.5"</i>		20	25	31	38	46	56	68	84	100	116
Präzisionsfeilen, Längen 4" bis 8" <i>Precision files, lengths 4" to 8"</i> Limes de précision, longueurs 4" à 8" <i>Limas de precisión, largo 4" hasta 8"</i>	12	16	20	25	31	38	46	56	68		
Präzisionsfeilen, Längen 10" bis 12" <i>Precision files, lengths 10" to 12"</i> Limes de précision, longueurs 10" à 12" <i>Limas de precisión, largo 10" hasta 12"</i>	9	12	16	20	25	31	38	(46)	(56)		
Nadelfeilen <i>Needle files</i> Limes aiguilles <i>Limas aguja</i>		20	25	31	38	46	56	68	84		
«Habilis»-Feilen <i>«Habilis» files</i> Limes «Habilis» <i>Limas «Habilis»</i>		18		25							
Hemmungsfeilen <i>Escapement files</i> Limes aux échappements <i>Limas de escape</i>		20	25	31	38	46	56	68	84	100	116
Riffelfeilen ¹ für Graveure <i>Die sinkers rifflers¹</i> Rifloirs ¹ pour graveurs <i>Codillos¹ para grabadores</i> (¹ LR12800 - LR12900)	16	20	25	31	38	(46)	56	(68)	(84)		
Riffelfeilen ² für Goldschmiede und Mechaniker <i>Die makers rifflers²</i> Rifloirs ² pour orfèvres et mécaniciens <i>Codillos² para orfebres y mecánicos</i> (² LR12400 - LR12600 - LR12700)	9	12	16	20	25	(31)	38	(46)	(56)		



Haupteigenschaften
Main characteristics

Caractéristiques principales
Características principales

Die Nadel- und die Hemmungsfeilen :

**Die echten Schweizer Feilen,
«Präzision und Qualität».**

Das vollständigste Angebot auf dem Markt :

- Nadelfeilen: 17 Formen, 5 Längen, Hiebe von 20 bis 84 Zähne/cm
- Hemmungsfeilen: 20 Formen, 4 Längen, Hiebe von 20 bis 116 Zähne/cm
- Scharfe Kanten, gehauene Spitzen
- Aus Chromstahl gefertigt
- Härte 66 HRc
- Zertifiziertes Qualitätssystem ISO 9001:2000

The needle files and the escapement files :

**The genuine Swiss Files «Precision and
Quality».**

This is the most complete range of these types of files available on the market :

- *Needle Files: 17 shapes, 5 lengths, cuts from 20 to 84 teeth/cm*
- *Escapement Files: 20 shapes, 4 lengths, cuts from 20 to 116 teeth/cm*
- *Sharp edges, fine pointes*
- *Made from chrome steel*
- *Hardness 66 HRc*
- *Certified quality management as to ISO 9001:2000*

LA

**La lime aiguille et
la lime aux échappements:**

**Les véritables limes suisses,
«Précision et Qualité».**

La gamme la plus complète du marché :

- Limes aiguilles: 17 formes, 5 longueurs, tailles de 20 à 84 dents/cm
- Limes aux échappements: 20 formes, 4 longueurs, tailles de 20 à 116 dents/cm
- Des angles vifs, des extrémités pointues et taillées
- Fabriquées à partir d'acier au chrome
- Dureté 66 HRc
- Système qualité certifié ISO 9001:2000

Lima tipo aguja y lima de escape:

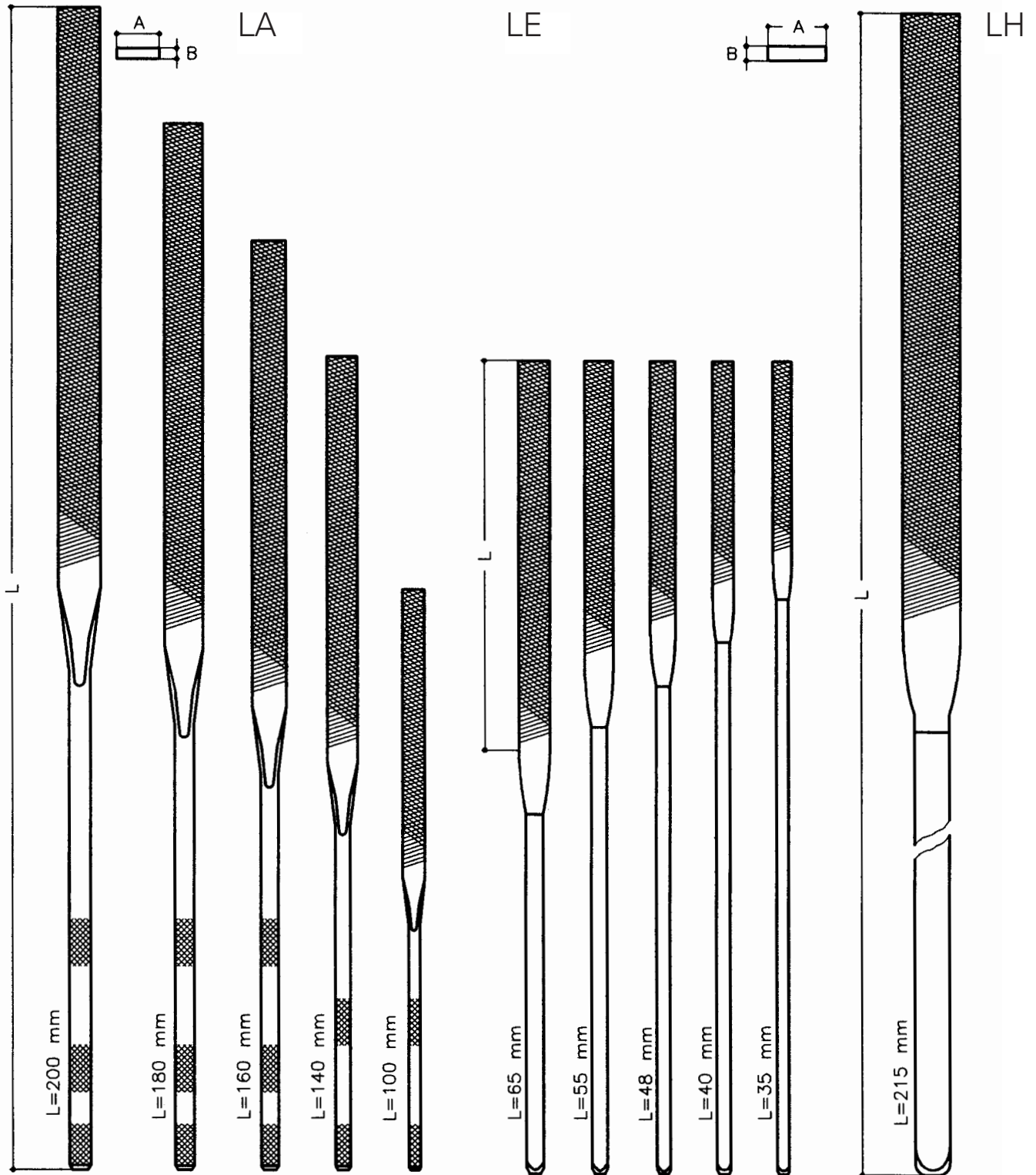
**Auténticas limas suizas que
reúnen «precisión y calidad».**

El surtido más completo en el mercado :

- *Limas tipo aguja: 17 formas, 5 largos, picado 20 a 84 dientes/cm*
- *Limas de escape: 20 formas, 4 largos, grado de corte de 20 a 116 dientes/cm*
- *Cantos afilados, extremos puntiagudos*
- *Fabricadas de acero al cromo*
- *Dureza 66 HRc*
- *Sistema de calidad certificada ISO 9001:2000*

Wichtigste Massangaben
Main dimensions

Principales dimensions
Principales medidas



LA

Nadelfeilen mit rundem Stahlheft
Needle files with round handle

Limes aiguilles à manche rond
Limas aguja de mango redondo

L = mm	Hieb / Cut / Taille / Picado						
A x B mm	00	0	1	2	3	4	6

LA2401

Flachstumpf
Pillar
Pilier
Plana



100 mm		LA2401-100-0	LA2401-100-1	LA2401-100-2	LA2401-100-3	LA2401-100-4	
3.5 x 0.9 mm							
140 mm	LA2401-140-00	LA2401-140-0	LA2401-140-1	LA2401-140-2	LA2401-140-3	LA2401-140-4	LA2401-140-6
4.8 x 1.1 mm							
160 mm	LA2401-160-00	LA2401-160-0	LA2401-160-1	LA2401-160-2	LA2401-160-3	LA2401-160-4	LA2401-160-6
5.4 x 1.2 mm							
180 mm	LA2401-180-00	LA2401-180-0	LA2401-180-1	LA2401-180-2	LA2401-180-3	LA2401-180-4	LA2401-180-6
6 x 1.3 mm							
200 mm	LA2401-200-00	LA2401-200-0	LA2401-200-1	LA2401-200-2	LA2401-200-3	LA2401-200-4	
6.5 x 1.3 mm							

LA2402

Halbrund
Halfround
Mironde
Mediacaña



100 mm		LA2402-100-0		LA2402-100-2	LA2402-100-3	LA2402-100-4	
3.8 x 1.1 mm							
140 mm	LA2402-140-00	LA2402-140-0	LA2402-140-1	LA2402-140-2	LA2402-140-3	LA2402-140-4	LA2402-140-6
5.1 x 1.5 mm							
160 mm	LA2402-160-00	LA2402-160-0	LA2402-160-1	LA2402-160-2	LA2402-160-3	LA2402-160-4	LA2402-160-6
5.6 x 1.7 mm							
180 mm	LA2402-180-00	LA2402-180-0	LA2402-180-1	LA2402-180-2	LA2402-180-3	LA2402-180-4	
5.9 x 2 mm							
200 mm	LA2402-200-00	LA2402-200-0	LA2402-200-1	LA2402-200-2	LA2402-200-3	LA2402-200-4	
6.3 x 2 mm							

LA2403

Vogelzunge
Crossing
Feuille de sauge
Almendra



100 mm		LA2403-100-0		LA2403-100-2	LA2403-100-3	LA2403-100-4	
3.5 x 1.4 mm							
140 mm	LA2403-140-00	LA2403-140-0	LA2403-140-1	LA2403-140-2	LA2403-140-3	LA2403-140-4	
4.4 x 1.8 mm							
160 mm	LA2403-160-00	LA2403-160-0	LA2403-160-1	LA2403-160-2	LA2403-160-3	LA2403-160-4	LA2403-160-6
5.1 x 2 mm							
180 mm	LA2403-180-00	LA2403-180-0	LA2403-180-1	LA2403-180-2	LA2403-180-3	LA2403-180-4	
5.8 x 2.2 mm							
200 mm	LA2403-200-00	LA2403-200-0	LA2403-200-1	LA2403-200-2	LA2403-200-3	LA2403-200-4	
6 x 2.4 mm							

LA

Nadelfeilen mit rundem Stahlheft
Needle files with round handle

Limes aiguilles à manche rond
Limas aguja de mango redondo

L = mm	Hieb / Cut / Taille / Picado						
A x B mm	00	0	1	2	3	4	6

LA2405

Messer
Knife
Couteau
Cuchillo



100 mm		LA2405-100-0	LA2405-100-1	LA2405-100-2	LA2405-100-3	LA2405-100-4	
4 x 1.1 mm							
140 mm	LA2405-140-00	LA2405-140-0	LA2405-140-1	LA2405-140-2	LA2405-140-3	LA2405-140-4	LA2405-140-6
5 x 1.4 mm							
160 mm	LA2405-160-00	LA2405-160-0	LA2405-160-1	LA2405-160-2	LA2405-160-3	LA2405-160-4	LA2405-160-6
5.4 x 1.5 mm							
180 mm	LA2405-180-00	LA2405-180-0	LA2405-180-1	LA2405-180-2	LA2405-180-3	LA2405-180-4	
6 x 1.7 mm							
200 mm	LA2405-200-00	LA2405-200-0	LA2405-200-1	LA2405-200-2	LA2405-200-3	LA2405-200-4	
6.4 x 1.8 mm							

LA2406

Flachspitz
Warding
Entrée



Plana de punta

100 mm		LA2406-100-0		LA2406-100-2	LA2406-100-3	LA2406-100-4	
3.4 x 0.9 mm							
140 mm		LA2406-140-0	LA2406-140-1	LA2406-140-2	LA2406-140-3	LA2406-140-4	
4.8 x 1.1 mm							
160 mm	LA2406-160-00	LA2406-160-0	LA2406-160-1	LA2406-160-2	LA2406-160-3	LA2406-160-4	LA2406-160-6
5.4 x 1.2 mm							
180 mm	LA2406-180-00	LA2406-180-0	LA2406-180-1	LA2406-180-2	LA2406-180-3	LA2406-180-4	
6 x 1.2 mm							
200 mm		LA2406-200-0	LA2406-200-1	LA2406-200-2	LA2406-200-3	LA2406-200-4	
6.5 x 1.4 mm							

LA2407

Dreikant
Three square
Triangulaire
Triangular



100 mm		LA2407-100-0	LA2407-100-1	LA2407-100-2	LA2407-100-3	LA2407-100-4	
2.8 mm							
140 mm	LA2407-140-00	LA2407-140-0	LA2407-140-1	LA2407-140-2	LA2407-140-3	LA2407-140-4	LA2407-140-6
3.5 mm							
160 mm	LA2407-160-00	LA2407-160-0	LA2407-160-1	LA2407-160-2	LA2407-160-3	LA2407-160-4	LA2407-160-6
3.8 mm							
180 mm	LA2407-180-00	LA2407-180-0	LA2407-180-1	LA2407-180-2	LA2407-180-3	LA2407-180-4	
4.2 mm							
200 mm	LA2407-200-00	LA2407-200-0	LA2407-200-1	LA2407-200-2	LA2407-200-3	LA2407-200-4	
4.4 mm							

Nadelfeilen mit rundem Stahlheft
Needle files with round handle

Limes aiguilles à manche rond
Limás aguja de mango redondo

L = mm A = mm	Hieb / Cut / Taille / Picado						
	00	0	1	2	3	4	6

LA2408

Vierkant
Square
Carrée
Cuadrada



100 mm		LA2408-100-0	LA2408-100-1	LA2408-100-2	LA2408-100-3	LA2408-100-4	
1.7 mm							
140 mm	LA2408-140-00	LA2408-140-0	LA2408-140-1	LA2408-140-2	LA2408-140-3	LA2408-140-4	
2.2 mm							
160 mm	LA2408-160-00	LA2408-160-0	LA2408-160-1	LA2408-160-2	LA2408-160-3	LA2408-160-4	LA2408-160-6
2.4 mm							
180 mm	LA2408-180-00	LA2408-180-0	LA2408-180-1	LA2408-180-2	LA2408-180-3	LA2408-180-4	
2.6 mm							
200 mm	LA2408-200-00	LA2408-200-0	LA2408-200-1	LA2408-200-2	LA2408-200-3	LA2408-200-4	
2.8 mm							

LA

L = mm A x B mm	Hieb / Cut / Taille / Picado				
	0	1	2	3	4

LA2409

Oval
Oval
Ovale
Oval



100 mm			LA2409-100-2		
2.6 x 1.8 mm					
140 mm	LA2409-140-0	LA2409-140-1	LA2409-140-2		LA2409-140-4
3.5 x 2.4 mm					
160 mm	LA2409-160-0	LA2409-160-1	LA2409-160-2	LA2409-160-3	LA2409-160-4
3.9 x 2.5 mm					
180 mm	LA2409-180-0		LA2409-180-2		
4.2 x 2.8 mm					
200 mm	LA2409-200-0	LA2409-200-1	LA2409-200-2		LA2409-200-4
4.4 x 2.9 mm					

L = mm Ø mm	Hieb / Cut / Taille / Picado						
	00	0	1	2	3	4	6

LA2410

Rund
Round
Ronde
Redonda



100 mm		LA2410-100-0	LA2410-100-1	LA2410-100-2	LA2410-100-3	LA2410-100-4	
2.1 mm							
140 mm	LA2410-140-00	LA2410-140-0	LA2410-140-1	LA2410-140-2	LA2410-140-3	LA2410-140-4	LA2410-140-6
2.8 mm							
160 mm	LA2410-160-00	LA2410-160-0	LA2410-160-1	LA2410-160-2	LA2410-160-3	LA2410-160-4	LA2410-160-6
2.9 mm							
180 mm	LA2410-180-00	LA2410-180-0	LA2410-180-1	LA2410-180-2	LA2410-180-3	LA2410-180-4	
3.2 mm							
200 mm	LA2410-200-00	LA2410-200-0	LA2410-200-1	LA2410-200-2	LA2410-200-3	LA2410-200-4	
3.5 mm							

Nadelfeilen mit rundem Stahlheft
Needle files with round handle

Limes aiguilles à manche rond
Limas aguja de mango redondo

L = mm	Hieb / Cut / Taille / Picado						
A x B mm	00	0	1	2	3	4	6

LA2411

Barett
Barrette
Barrette
Barrete



100 mm		LA2411-100-0		LA2411-100-2	LA2411-100-3	LA2411-100-4	
3.7 x 1.4 mm							
140 mm	LA2411-140-00	LA2411-140-0	LA2411-140-1	LA2411-140-2	LA2411-140-3	LA2411-140-4	LA2411-140-6
4.7 x 1.7 mm							
160 mm	LA2411-160-00	LA2411-160-0	LA2411-160-1	LA2411-160-2	LA2411-160-3	LA2411-160-4	LA2411-160-6
5.1 x 1.8 mm							
180 mm	LA2411-180-00	LA2411-180-0	LA2411-180-1	LA2411-180-2	LA2411-180-3	LA2411-180-4	
5.4 x 2 mm							
200 mm	LA2411-200-00	LA2411-200-0	LA2411-200-1	LA2411-200-2	LA2411-200-3	LA2411-200-4	
5.8 x 2.2 mm							

LA2413

Schwert spitz
Sword
Epée
Espada



160 mm			LA2413-160-0		LA2413-160-2		LA2413-160-4
5.3 x 2.2 mm							

LA2414

Schwert parallel
Slitting
A fendre
Para ranurar



100 mm		LA2414-100-0		LA2414-100-2	LA2414-100-3	LA2414-100-4	
4.6 x 1.6 mm							
140 mm		LA2414-140-0	LA2414-140-1	LA2414-140-2	LA2414-140-3	LA2414-140-4	
5.5 x 1.9 mm							
160 mm		LA2414-160-0	LA2414-160-1	LA2414-160-2		LA2414-160-4	LA2414-160-6
6.1 x 2.1 mm							

LA2415

Flachspitz runden Kanten
Crochet
Crochet
Gancho



100 mm		LA2415-100-0		LA2415-100-2		LA2415-100-4	
3.7 x 1 mm							
140 mm		LA2415-140-0	LA2415-140-1	LA2415-140-2	LA2415-140-3	LA2415-140-4	
4.8 x 1.2 mm							
160 mm	LA2415-160-00	LA2415-160-0	LA2415-160-1	LA2415-160-2	LA2415-160-3	LA2415-160-4	LA2415-160-6
5.4 x 1.3 mm							
180 mm	LA2415-180-00	LA2415-180-0	LA2415-180-1	LA2415-180-2	LA2415-180-3	LA2415-180-4	
5.9 x 1.4 mm							
200 mm		LA2415-200-0	LA2415-200-1	LA2415-200-2			
6.5 x 1.5 mm							

Nadelfeilen mit rundem Stahlheft
Needle files with round handle

Limes aiguilles à manche rond
Limas aguja de mango redondo

L = mm	Hieb / Cut / Taille / Picado						
A x B mm	00	0	1	2	3	4	6

LA2416

Flachstumpf runden Kanten
Pillar round edges
Pilier bords ronds
Plana de bordes redondos



100 mm		LA2416-100-0		LA2416-100-2		LA2416-100-4	
3.8 x 1 mm							
140 mm		LA2416-140-0	LA2416-140-1	LA2416-140-2	LA2416-140-3	LA2416-140-4	
4.8 x 1.2 mm							
160 mm	LA2416-160-00	LA2416-160-0	LA2416-160-1	LA2416-160-2	LA2416-160-3	LA2416-160-4	
5.4 x 1.3 mm							
180 mm	LA2416-180-00	LA2416-180-0	LA2416-180-1	LA2416-180-2	LA2416-180-3	LA2416-180-4	
6 x 1.4 mm							
200 mm	LA2416-200-00	LA2416-200-0	LA2416-200-1	LA2416-200-2		LA2416-200-4	
6.5 x 1.5 mm							

LA2417

Scharnierfeile mit runden Kanten
Joint file round edges
Coulisse bords ronds
Plana sol.bordes con picado



100 mm					LA2417-100-3	LA2417-100-4	
3.8 x 1 mm							
140 mm				LA2417-140-2	LA2417-140-3	LA2417-140-4	
4.8 x 1.2 mm							
160 mm		LA2417-160-0	LA2417-160-1	LA2417-160-2		LA2417-160-4	LA2417-160-6
5.4 x 1.3 mm							

LA2418

Halbrund nur Rücken gehauen
Halfround, cut on back only
Mirondes, dos seul taillé
Mediacañia, solo lomo con picado



100 mm					LA2418-100-3	LA2418-100-4	
3.8 x 1.2 mm							
140 mm				LA2418-140-2	LA2418-140-3	LA2418-140-4	
5.1 x 1.5 mm							
160 mm		LA2418-160-0	LA2418-160-1	LA2418-160-2		LA2418-160-4	LA2418-160-6
5.6 x 1.8 mm							

LA2420

Kontaktfeile
Contact point file
Lime pour contact
Lima para platinos



130 mm		LA2420-130-0		LA2420-130-2			
8 x 0.9 mm							

L = mm	Hieb / Cut / Taille / Picado		
Ø mm	1	2	3

LA2423

Rund sehr dünn
Round extra slim
Ronde très effilée
Redonda muy aguda



100 mm	LA2423-100-1	LA2423-100-2	LA2423-100-3
1 mm			

Nadelfeilen mit rundem Stahlheft
Needle files with round handle

Limes aiguilles à manche rond
Limas aguja de mango redondo

L = mm	Hieb / Cut / Taille / Picado
	0 2



LA

LA2442 / LA2443 / LA2444 / LA2445

Satz zu 6 Feilen in Tasche

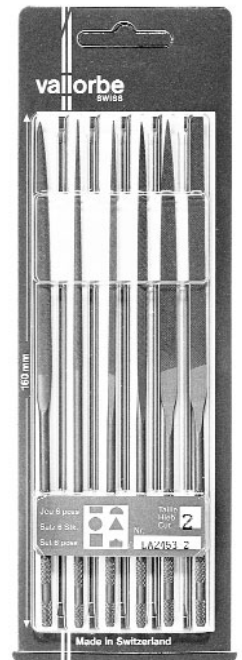
Set of 6 files in pouch

Jeu de 6 limes en étui

Juego de 6 limas en estuche

140 mm	LA2442-0	LA2442-2
160 mm	LA2443-0	LA2443-2
180 mm	LA2444-0	LA2444-2
200 mm	LA2445-0	LA2445-2

Bestehend aus: / *Composed of:* / *Composé de:* / *Compuesto de:* LA2401 LA2402 LA2406 LA2407 LA2408 LA2410



LA2452 / LA2453 / LA2454

Satz zu 6 Feilen in Blister

Set of 6 files Blister pouched

Jeu de 6 limes Blister

Juego de 6 limas embalaje Blister

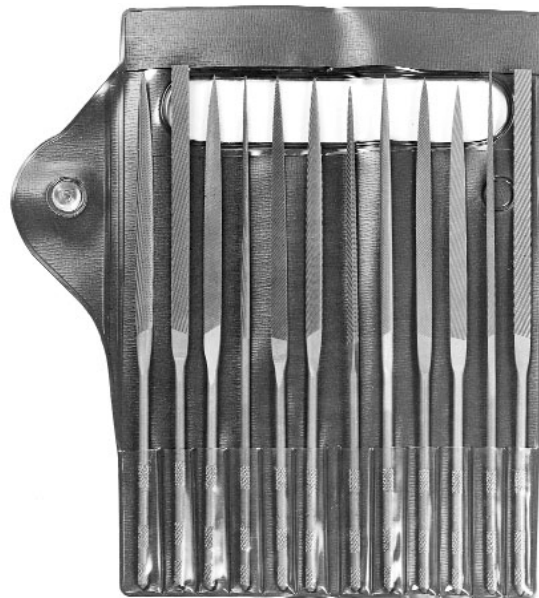
140 mm	LA2452-0	LA2452-2
160 mm	LA2453-0	LA2453-2
180 mm	LA2454-0	LA2454-2

Bestehend aus: / *Composed of:* / *Composé de:* / *Compuesto de:* LA2401 LA2402 LA2406 LA2407 LA2408 LA2410

Nadelfeilen mit rundem Stahlheft
Needle files with round handle

Limes aiguilles à manche rond
Limas aguja de mango redondo

L = mm	Hieb / Cut / Taille / Picado			A = Assortierte Hiebe / Assorted cuts / Tailles assorties / Picados surtidos
	0	2	4	



LA

LA2482 / LA2483 / LA2484 / LA2485

Satz zu 12 Feilen in Tasche

Set of 12 files in pouch

Jeu de 12 limes en étui

Juego de 12 limas en estuche

140 mm	LA2482-0	LA2482-2	LA2482-4	LA2482-A
160 mm	LA2483-0	LA2483-2	LA2483-4	LA2483-A
180 mm	LA2484-0	LA2484-2		LA2484-A
200 mm	LA2485-0			LA2485-A

Bestehend aus: / *Composed of:* / *Composé de:* / *Compuesto de:*

LA2401 LA2402 LA2403 LA2405 LA2406 LA2407 LA2408 LA2409 LA2410 LA2411 LA2415 LA2416

LA2492 / LA2493

Satz zu 12 Feilen in Plastikbox

Set of 12 files in plastic box

Jeu de 12 limes en boîte plastique

Juego de 12 limas caja de plástico

140 mm	LA2492-0	LA2492-2	LA2492-4	LA2492-A
160 mm	LA2493-0	LA2493-2	LA2493-4	LA2493-A

Bestehend aus: / *Composed of:* / *Composé de:* / *Compuesto de:*

LA2401 LA2402 LA2403 LA2405 LA2406 LA2407 LA2408 LA2409 LA2410 LA2411 LA2415 LA2416



Nadelraspeln
Needle rasps

Limes aiguilles râpes
Limas aguja escofina

L = mm A x B mm	Hieb / Cut / Taille / Picado 4	
RA2501 Flachstumpf <i>Pillar</i> Plier <i>Plana</i> 140 mm 5 x 2 mm		
RA2502 Halbrund <i>Halfround</i> Mironde <i>Mediacaña</i> 140 mm 6.2 x 2.5 mm		
RA2506 Flachspitz <i>Warding</i> Entrée <i>Plana de punta</i> 140mm 5.5 x 2.2 mm		
RA2507 Dreikant <i>Three square</i> Triangulaire <i>Triangular</i> 140 mm 3.8 mm		
RA2508 Vierkant <i>Square</i> Carrée <i>Cuadrada</i> 140mm 3.3 mm		
RA2510 Rund <i>Round</i> Ronde <i>Redonda</i> 140 mm 3.7 mm		

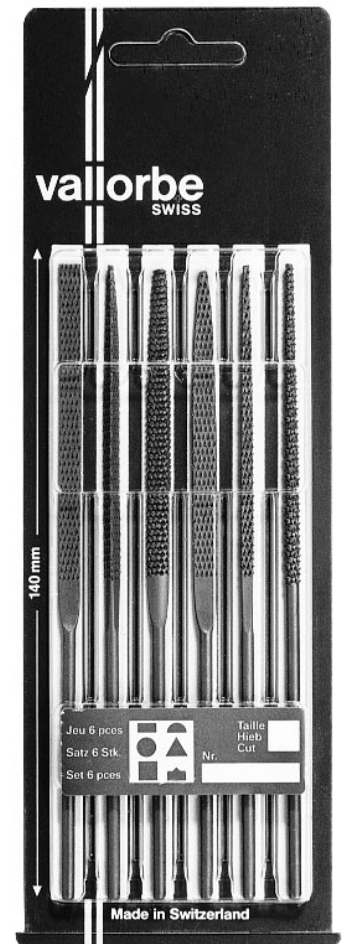
LA

Nadelraspeln
Needle rasps

Limes aiguilles râpes
Limas aguja escofina

L = mm	Hieb / Cut / Taille / Picado 4
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LA



RA2526

















Satz zu 6 Raspeln in Blister
Set of 6 rasps Blister pouched
Jeu de 6 râpes Blister
Juego de 6 codillos embalaje Blister
140 mm

RA2526-140-4

Bestehend aus: / Composed of: / Composé de: / Compuesto de: RA2501 RA2502 RA2506 RA2507 RA2508 RA2510

















Hemmungsfeilen
Escapement files

Limes aux échappements
Limas de escape

L = mm	Hieb / Cut / Taille / Picado						
	0	2	3	4	5	6	8
LE3001							
Für Spindeln <i>Dovetail</i> Aux verges <i>Para husillos</i>							
							
35 mm		LE3001-35-2		LE3001-35-4		LE3001-35-6	
LE3004							
Messer spitz <i>Knife pointed</i> Couteau pointu <i>Cuchillo punta</i>							
							
55 mm	LE3004-55-0	LE3004-55-2		LE3004-55-4	LE3004-55-5	LE3004-55-6	LE3004-55-8
LE3007							
Barett 3 Seiten gehauen <i>Barrette 3 sides cut</i> Barrette 3 cotés taillés <i>Barrete con 3 lados picado</i>							
							
55 mm		LE3007-55-2		LE3007-55-4		LE3007-55-6	
LE3008							
Halbrund <i>Halfround</i> Mironde <i>Mediacaña</i>							
							
40 mm	LE3008-40-0	LE3008-40-2	LE3008-40-3	LE3008-40-4	LE3008-40-5	LE3008-40-6	LE3008-40-8
55 mm	LE3008-55-0	LE3008-55-2	LE3008-55-3	LE3008-55-4	LE3008-55-5	LE3008-55-6	LE3008-55-8
LE3009							
Vogelzunge <i>Crossing</i> Feuille de sauge <i>Almendra</i>							
							
40 mm		LE3009-40-2		LE3009-40-4		LE3009-40-6	LE3009-40-8
55 mm		LE3009-55-2		LE3009-55-4	LE3009-55-5	LE3009-55-6	LE3009-55-8
LE3010							
Barett <i>Barrette</i> Barrette <i>Barrete</i>							
							
40 mm	LE3010-40-0	LE3010-40-2	LE3010-40-3	LE3010-40-4		LE3010-40-6	LE3010-40-8
55 mm	LE3010-55-0	LE3010-55-2	LE3010-55-3	LE3010-55-4	LE3010-55-5	LE3010-55-6	LE3010-55-8
LE3011							
Barett parallel <i>Barrette parallel</i> Barrette parallèle <i>Barrete paralela</i>							
							
48 mm		LE3011-48-2		LE3011-48-4		LE3011-48-6	
LE3012							
Wälzfeile <i>Rounding off</i> Arrondir <i>De redondear</i>							
							
40 mm		LE3012-40-2		LE3012-40-4		LE3012-40-6	

Hemmungsfeilen
Escapement files

Limes aux échappements
Limas de escape

L = mm	Hieb / Cut / Taille / Picado						
	0	2	3	4	5	6	8
LE3014							
Dreikant Three square Triangulaire Triangular							
							
40 mm		LE3014-40-2		LE3014-40-4		LE3014-40-6	
55 mm	LE3014-55-0	LE3014-55-2	LE3014-55-3	LE3014-55-4	LE3014-55-5	LE3014-55-6	LE3014-55-8
LE3015							
Ankergabelfeile Watch anchor Entrée de fourchette Para horquillas de ancora							
							
55 mm						LE3015-55-6	LE3015-55-8
LE3016							
Flachspitz Warding Entrée Plana de punta							
							
55 mm		LE3016-55-2		LE3016-55-4		LE3016-55-6	
LE3017							
Flachstumpf Pillar Pilier Plana							
							
55 mm		LE3017-55-2		LE3017-55-4		LE3017-55-6	LE3017-55-8
65 mm	LE3017-65-0	LE3017-65-2	LE3017-65-3	LE3017-65-4	LE3017-65-5	LE3017-65-6	LE3017-65-8
LE3019							
Vierkant 3 Seiten gehauen Square 3 sides cut Carrée 3 côtés taillés Cuadrada 3 lados picado							
							
65 mm		LE3019-65-2		LE3019-65-4		LE3019-65-6	
LE3020							
Vierkant Square Carrée Cuadrada							
							
55 mm	LE3020-55-0	LE3020-55-2	LE3020-55-3	LE3020-55-4	LE3020-55-5	LE3020-55-6	LE3020-55-8
65 mm	LE3020-65-0	LE3020-65-2	LE3020-65-3	LE3020-65-4	LE3020-65-5	LE3020-65-6	LE3020-65-8
LE3021							
Rund Round Ronde Redonda							
							
55 mm	LE3021-55-0	LE3021-55-2	LE3021-55-3	LE3021-55-4	LE3021-55-5	LE3021-55-6	LE3021-55-8
65 mm	LE3021-65-0	LE3021-65-2	LE3021-65-3	LE3021-65-4	LE3021-65-5	LE3021-65-6	LE3021-65-8
LE3026							
Vogelzunge mit scharfem Rücken Balance wheel Feuille de sauge à côtes Almendra con lomo afilado							
							
35 mm		LE3026-35-2		LE3026-35-4		LE3026-35-6	

LA

Hemmungsfeilen
Escapement files

Limes aux échappements
Limas de escape

L = mm	Hieb / Cut / Taille / Picado	2	4	6
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LE3029

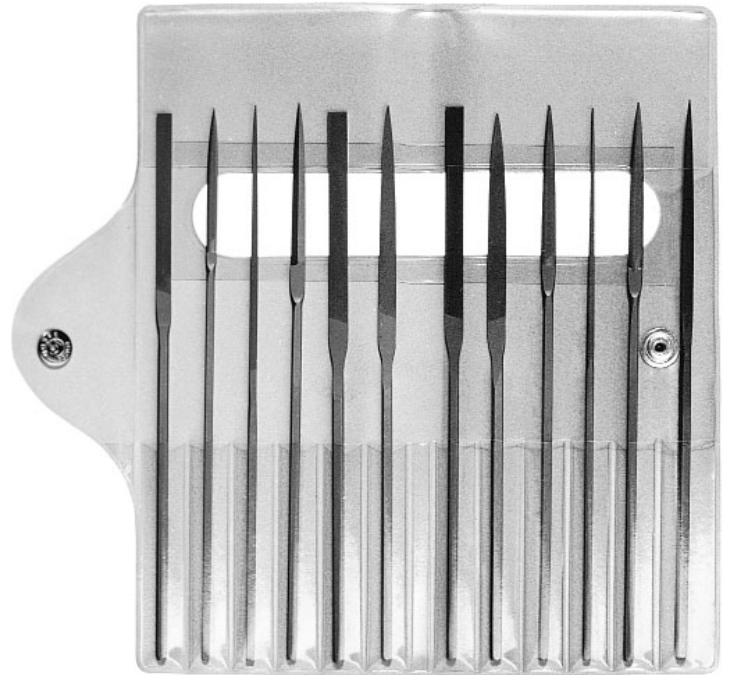
Ausstreich
Equalling
Egalir
De igualar
55 mm



| LE3029-55-2-DT | LE3029-55-4-DT | LE3029-55-6-ST

DT = Doppelhieb / *Double cut* / Double taille / *Doble picado*
ST = Einfacher Hieb / *Simple cut* / Simple taille / *Simple picado*

	Hieb / Cut / Taille / Picado	4	6	A = Assortierte Hiebe / Assorted cuts / Tailles assorties / Picados surtidos
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LA

LE3091

Satz zu 12 Feilen
Set of 12 files
Jeu de 12 limes
Juego de 12 limas

| LE3091-4 | | LE3091-A

Bestehend aus: / *Composed of:* / Composé de: / *Compuesto de:*
LE3001 LE3010 LE3016 LE3018 LE3020 LE3022 LE3023 LE3024 LE3026 LE3028 LE3029 LE3030

LE3092













Satz zu 12 Feilen
Set of 12 files
Jeu de 12 limes
Juego de 12 limas

| LE3092-4 | LE3092-6 | LE3092-A

Bestehend aus: / *Composed of:* / Composé de: / *Compuesto de:*
LE3004 LE3008 LE3009 LE3010 LE3011 LE3014 LE3016 LE3017 LE3020 LE3021 LE3026 LE3029

«Habilis»-Feilen
«Habilis» files

Limes «Habilis»
Limas «Habilis»

L = mm A x B mm	Hieb / Cut / Taille / Picado 00	1
LH2601 Flachstumpf <i>Pillar</i> Pilier <i>Plana</i> 215 mm 10 x 2.6 mm		
	LH2601-00	LH2601-1
LH2602 Halbrund <i>Halfround</i> Mironde <i>Mediacaña</i> 215 mm 12.2 x 3.4 mm		
	LH2602-00	LH2602-1
LH2607 Dreikant <i>Three square</i> Triangulaire <i>Triangular</i> 215 mm 9.4 mm		
	LH2607-00	LH2607-1
LH2608 Vierkant <i>Square</i> Carrée <i>Cuadrada</i> 215 mm 5.8 mm		
	LH2608-00	LH2608-1
LH2610 Rund Round Ronde Redonda 215 mm 6.5 mm		
	LH2610-00	LH2610-1
LH2901 «Habilis» «Multifile» Flachstumpf «Habilis» pillar «Multifile» Pilier «Habilis» «Multifile» Plana «Habilis» «Multifile» 215 mm 10 x 3.2 mm		
	LH2901-00	

LA

«Habilis»-Feilen
«Habilis» files

Limes «Habilis»
Limas «Habilis»

L = mm	Hieb / Cut / Taille / Picado
	00 1



LA

LH2627

Satz zu 5 Feilen «Habilis»

Set of 5 files «Habilis»

Jeu 5 limes «Habilis»

Juego de 5 limas «Habilis»

215 mm

LH2627-00

LH2627-1

Bestehend aus: / Composed of: / Composé de: / Compuesto de: LH2601 LH2602 LH2607 LH2608 LH2610

«Habilis»-Raspeln
«Habilis» rasps

Râpes «Habilis»
Limas escofina «Habilis»

L = mm	A x B mm	Hieb / Cut / Taille / Picado 3
RA2701		
«Habilis» Flachstumpf «Habilis» pilar Pilier «Habilis» Plana «Habilis»		
205 mm	10 x 4 mm	RA2701-3
RA2702		
«Habilis» Halbrund «Habilis» halfround Mironde «Habilis» Mediacaña «Habilis»		
205 mm	13.5 x 4.5 mm	RA2721-3
RA2707		
«Habilis» Dreikant «Habilis» three square Triangulaire «Habilis» Triangular «Habilis»		
205 mm	10 mm	RA2707-3
RA2708		
«Habilis» Vierkant «Habilis» square Carrée «Habilis» Cuadrada «Habilis»		
205 mm	7.5 mm	RA2708-3
RA2710		
«Habilis» Rund «Habilis» round Ronde «Habilis» Redonda «Habilis»		
205 mm	7.8 mm	RA2710-3

LA



RA2727
Satz zu 5 Raspeln «Habilis»
Set of 5 files «Habilis»
Jeu 5 râpes «Habilis»
Juego de 5 limas escofina «Habilis»

205 mm | RA2727-3

Bestehend aus: / Composed of: / Composé de: / Compuesto de: RA2701 RA2702 RA2707 RA2708 RA2710