APPLICATION NOTE





Glardon® buff files



THE GLARDON® BUFF FILE

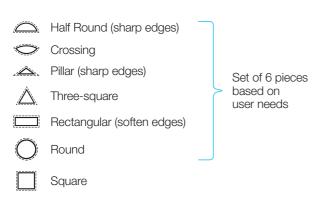




Characteristics

7 shapes

- Ergonomic shapes
- Already known and appreciated by professionals



2 sets of 6 pieces



The equivalence table has been created based on the feedback received from users.

Grit	180	240	500	900	1200	2000	4000	/
[µm]	80	60	30	20	15	9	5	3
			G10	fine				
				Deg	ussit			

ADVANTAGES





Precise work

The rigidity and the many available shapes allow precise work in small and difficult areas to reach.

Works on hard materials

Materials like Titanium, Steel and enamel can be worked on easily.

Shock-proof

(Not like stones)

Easy to use

Keeps its shape, no need to reshape/cut or change the tool continually.

Long service life

Thanks to its hard coating, the buff files have a much longer service life than current tools.

Anti-corrosive

Easy cleaning

The buff files are easy to clean with common jewellery equipment like ultrasound bath, benzine or with cleaning rubber/paste.

No limit date of use/storage

(No risk that the coating unsticks)

Surias made



THE GLARDON® BUFF FILE

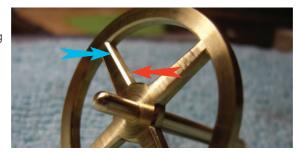




Applications

Various application in watchmaking, jewellery and fine mechanics

- Bevelling
- Flank finishing



• Suppressing of casting sprues



• Pre-polishing



- Precise adjustment
- Deburring
- Enamelling

ADVANTAGES





Bevelling focus

- Closed angle reachable
- Round edges avoidable
- Time saving: up to 4 pre-polishing steps with wooden buffs can be replaced by 1 Buff File step







Cleaning

- Regular cleaning during use with benzine, alcohol, cleaning rubber/paste
- Cleaning after work, at the end of the day with ultra-sonic bath and usual cleaning solution
- Enhance the service life, the quality of the surface worked



Re-shaping

- Many adapted shapes convenient for most applications
- Customization and re-shaping of the tool is possible.
 However the Buff File will lose its anti-corrosive properties. To be done with large grain abrasive but with risk of damaging the coating.
- To be done with caution (the tool must be kept cool)
- Grinding is not recommended

BUFF FILE FEATURES AND CURRENT TOOLS





History of the project

So far, Vallorbe is supplying files to the watchmaking and jewellery industry for preparation operations on various parts.

With this product, Vallorbe goes further and assist the users until finishing operations.

- Operation range extension of the «classic» file
- An alternative product to wooden buffs

The Glardon® buff File

Based on needle file (LA) and escapement file (LE) blanks

· Rigid and precise blanks

Abrasive composite coating design

- Optimal adhesion
- Anti-corrosive
- Adapted grain size and density

Allows to eliminate marks left by the finest «classic» file

• Competes with a wide range of buffs and stones

Current tools

Wooden buff, emery stick

- A piece of pre-shaped wood onto which an abrasive paper is glued
- Cut to size before and during use in order to fit the shape which is being worked on

Stones like Degussit

• Pre-shaped abrasive stone









Does the buff file G10 replace every grain of the wooden buffs covered by the black area in the equivalence table (grain 60 to 15 microns)?

Because the buff file is a totally new product, this table is based on users feedback. The result will vary depending on the application. Black area corresponds to grains that users have been able to replace with the buff file. Some of them succeeded in replacing one grain from this area, for instance: 30 microns. Some others replaced all four grains: from 60 to 15 microns with one buff file. Grey area corresponds to the limits reached by some users.

Is the coating made of diamond?

The coating is a composite coating including synthetic diamond particles.

How long is the service life compared with a buff?

Service life will depend on the way the Buff File is used and maintained. In a normal use, a Buff File can last 10 times longer than a wooden buff.

Why does the surface of the buff file not have the same roughness on all the shapes of the buff file (ex: grinding lines, polishing lines)?

The design of every shape of buff files has been developed to provide the best quality of the surface worked. For example: pillar shape is grinded before coating to get a perfectly flat surface and to provide a good abrasive effect, surface roughness on parts.

Is that normal that my file clogs?

The Buff File will clog more easily with soft materials like gold, brass. But it must not prevent you from working with it. If it's the case, it could be caused by a too hard pressure put on the file, you can clean it with US bath, cleaning paste...

Why should I use a buff file instead of a wooden buff?

The buff file is an alternative to the wooden buff. Its stiffness will allow you to make sharp edges. It saves your time and money compared to the wooden buff which clogs and wears easily. You can reach areas impossible to reach with wooden buffs. You don't need to reshape continually your tool. You may be able to save preparation steps according to the material worked, the required quality of the surface.

Can I replace all the wooden buffs by buff files?

At the moment, buff files are available in one size, so you can't get the same polishing surface as the finest wooden buff. However, if the surface does not have to be perfectly polished, you could be able to replace every wooden buff step by one buff file step.





Buff files, needle files

LAC2401

Pillar



G10	L = mm	$A \times B = mm$
LAC2401-140-G10	140	4.8 x 1

LAC2402

Halfround



G10	L = mm	$A \times B = mm$
LAC2402-140-G10	140	5.1 x 1.6

LAC2403

Crossing



G10	L = mm	$A \times B = mm$
LAC2403-140-G10	140	4.4 x 1.8

LAC2407

Three-square



G10	L = mm	A = mm
LAC2407-140-G10	140	3.5

LAC2408

Square



G10	L = mm	A = mm
LAC2408-140-G10	140	2.2





Buff files, needle files

LAC2410

Round



G10	L = mm	A = mm
LAC2410-140-G10	140	2.8

LAC2411

Barrette



G10	L = mm	$A \times B = mm$
LAC2411-140-G10	140	4.7 x 1.4

LAC2462

Set of 6 files











G10	L = mm
LAC2462-140-G10	140

Composed of LAC2401 - LAC2402 - LAC2403 - LAC2407 - LAC2410 -LAC2411





Buff files, escapement files

LEC3008

Halfround



G10	L = mm	$A \times B = mm$
LEC3008-55-G10	55	4 x 1.3

LEC3009

Crossing



G10	L = mm	$A \times B = mm$
LEC3009-55-G10	55	3.7 x 1.4

LEC3010

Barrette



G10	L = mm	$A \times B = mm$
LFC3010-55-G10	55	39×12

LEC3014

Three-square



G10	L = mm	A = mm
LEC3014-55-G10	55	2.8

LEC3017

Pillar



G10	L = mm	$A \times B = mm$
LEC3017-55-G10	55	3.6 x 0.8





Buff files, escapement files

LEC3020

Square



G10	L = mm	A = mm
LEC3020-55-G10	55	1.7

LEC3021

Round



G10	L = mm	A = mm
LEC3021-55-G10	55	1.5

LEC3062

Set of 6 files











G10	L = mm
LEC3062-55-G10	55

Composed of LEC3008 - LEC3009 - LEC3010 - LEC3014 - LEC3020 -LEC3021



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