

ENGRAVING SOURCE BOOK

Your source for all engraving materials, supplies and fabrication services.



Gravotech, the Expression of Things : a culture of excellence

Gravotech is the world's leading manufacturer of marking solutions. Born from the merger of the Gravograph and Technifor brands, we offer a full range of equipments and technologies: rotary, dot peen and scribing engraving machines, CO2, Fiber, Green and Hybrid lasers as well as a wide selection of engraving materials, consumables and services.

This success is built on three fundamentals:

- · A primary focus on our customers' needs,
- · Continually delivering state of the art solutions,

• Efficient customer service with over 720 employees worldwide. Gravotech team members are based in over 40 countries around the world, working to provide you with the best possible solutions for your marking, engraving and cutting needs as quickly as possible.

The Gravotech difference is founded on:

• A complete solution approach: the Gravotech product offer lends itself to a full range of personalisation, signage and traceability applications,

• A complete technology solution: machines, software, accessories and consumables,

• A complete technical support solution: readily available in the field and by phone.

• A complete training solution: on-site training or on Gravotech premises, phone support from engraving experts.

The comprehensive Gravotech product line includes:

 \cdot The world's largest and most innovative range of CNC machines,

- \cdot CO2, Fiber, Hybrid and Green laser marking systems,
- · Versatile dot-peen engraving systems,

• Innovative software dedicated to the engraving industry, designed to optimize Gravotech machines,

• The most complete range of materials and engravables on the market,

Responsive in-house manufacturing services.

At Gravotech, we develop and market the world's most durable and highest quality marking solutions, while exceeding the engraving industry's standards for product and service performance.

Our quality management system ensures that our products and services are constantly improved and that all members of our team are committed to providing you with the best possible service.

Watch our video!



TABLE OF CONTENTS

GRAVOTECH, THE EXPRESSION OF THINGS

Gravotech engraving materials	6-7
Custom fabrication services	8
Custom materials on demand	9
Communication tools	10
Our YouTube videos & playlists	11
Selection guide (Laser & Rotary materials)	12-15
Symbols	16

17

39

LASER MATERIALS

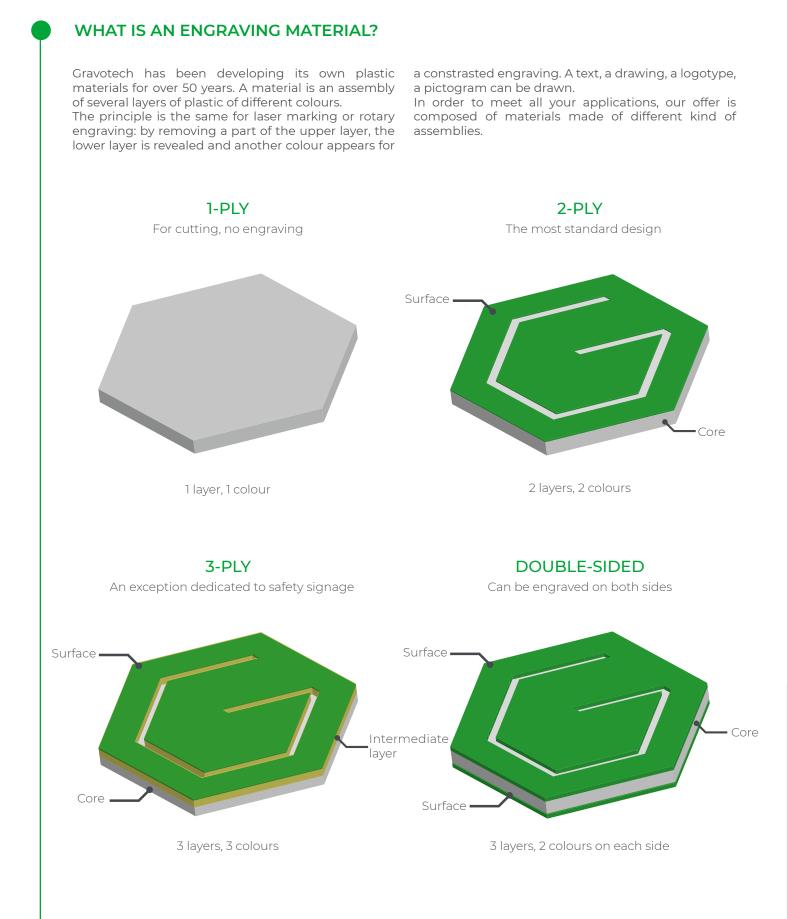
	Gravoply™ Laser	18
PLASTICS >	Gravoply™ Ultra	19
	Gravoply™ 2	20
	Gravoglas™ 1	21
ACRYLICS >	Acrylic Clear / Fluorescent / Frosted / Opaque	22-25
	Ecocut Laser	26
	Rubbalase™	27
FLEXIBLE FOILS >	Flexilase™	28
	Stickalase™	29
METALLICS >	Gravolase™ Metallics	30
	Colored Aluminum	31
METALS >	Gravoxal™ Matte / Glossy	32-33
METALS /	AlumaMark®	34
	DuraBlack®	35
PHENOLICS >	Gravostrat™	36
ADA >	Gravotac™Exterior	37
WOOD >	Laser Wood	38

ROTARY MATERIALS

	Gravoply™ 1	40
	Gravoply™ 2	41
PLASTICS >	$Gravoglas^{TM} 2-Plex^{TM}$ Surface Matte / Glossy / Textured	42-44
	Gravoply™ 3C	45
	Ecocut	46
ACRYLICS >	Gravoglas™ 2-Plex™ Subsurface Matte / Glossy	47
ACRILICS /	Acrylic Clear / Fluorescent / Frosted / Opaque	48-51
FLEXIBLE	Flexilase™	52
FOILS >	Gravofoil™	53
METALLICS >	Metallex™	54
METALLICS /	Metallex™ Hard Coat	55
	Gravometall™ Glossy / Satin	56-57
METALS >	Gravobrass™ Exterior	58
METALS /	Colored Aluminum	59
	Gravoxal™ Matte / Glossy	60-61
PHENOLICS >	Gravostral™	62
PHENULICS /	Gravostrat™	63
ADA >	Gravotac™	64

SIGNAGE		6
	Sign holders & base plates	66-67
	Our braille solution	68-69
ENGRAVING	SUPPLIES	7
	Colouring	72-75
	Cleaning	76
	Lubricating	77
	Fixing	78-79
	Mechanical fastenings	80-83
ENGRAVABL	ES	8!
	Create your own badge	86-87
	Door plates	88-89
	Medals	90-93
	Ornamental plates	94
	Key tags & ties	95
	Electrical identification	96-98
CUTTERS &	INSERTS	99
	Gravotech engraving cutters	100-101
TWINCUT	Conical, Cylindrical, Lips	102-105
	3.17 mm	106-107
ONECUT	4.36 mm	108-110
	6.35 mm	וון
	3.00 mm	112-113
PERCUT >	4.00 mm	114-115
	6.00 mm	116-117
	Diamonds	118-119
	Accessories	120
	Twincut starter kit	121-122
MACHINE A	CCESSORIES	123
	Cylindrical attachment jigs	124-125
	Flat jigs	125-129
	Regulating noses	130-132
	Spindles	133-134
AUXILIARIE	S	13!
	Chip collector	136
	Saws & guillotines	137-138
	Other accessories	139
MACHINES &	SOFTWARE	14
	Gravotech machine range	142-14:
	Gravostyle™ software	146-14
	CO2 laser parameters	148-149

Gravotech engraving materials

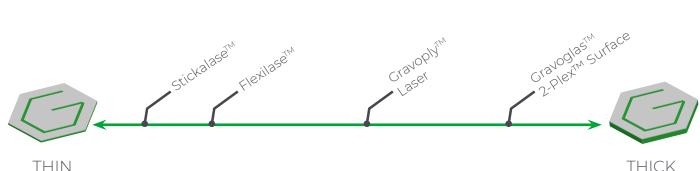


CONSTRUCTION

Flexible

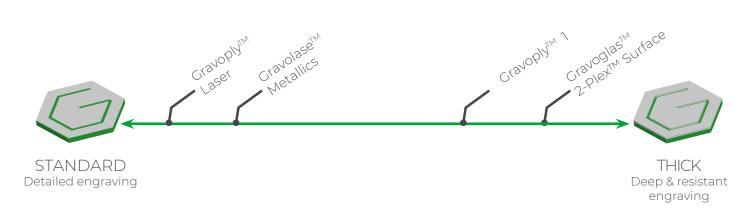
The lower layer is called the core and the upper layer the surface. By varying the thickness of the core and the surface, it is possible to achieve different engraving and cutting results to meet different requirements.

CORE THICKNESS



THICK Rigid & resistant

SURFACE THICKNESS



CORE COMPOSITION

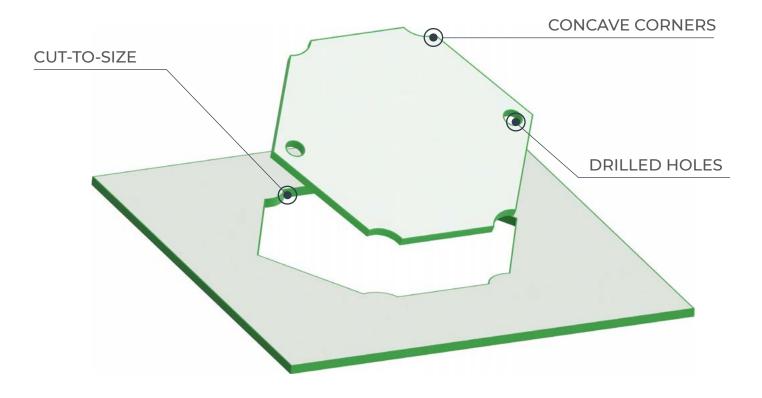
The base composition of the core is selected to provide specific properties.

PMMA cores are the most popular: versatile, they ensure a great longevity and resistance to the environment (weathering, industrial conditions...). They can be used with laser and mechanical machines.

ABS cores are more economical and provide a certain flexibility of the material. Dedicated to indoor use, they are usually rotary cut.

Custom fabrication services

Save time and money by using our custom fabrication services that will meet your most demanding needs.





Custom fabricated shapes made to your specifications on demand.



BEVELLING

Bevelling is cutting a border with an angular edge to obtain a better finish. Our standard angle is 45°.



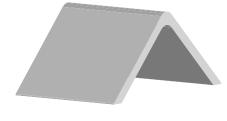
DRILLED HOLES

To accommodate your mounting needs in plastic and metal.



ROUNDED / CONCAVE CORNERS

We offer a wide selection of different radius for corners.



BENDING

Plastic materials can be bent into stand-up display signs, badges, etc. Maximum length of the bend is 500 mm (20").



Adhesive: 467MP or 468MP available depending on the roughness of the substrate.

Magnetic: For temporary mounting of information tags on metal shelves, we can apply magnetic backing to the plates, strips and sheets.

Custom materials on demand

Cannot find the plastic product you are looking for? Gravotech is able to supply material based on your specifications.

COLOUR MIXING



Gravotech provides any colours combination!

Mix any surface colour with any of our core colours. You can also provide us with a RAL or PANTONE $\ensuremath{\mathbb{R}}$ code to better match your needs.

SPECIFIC THICKNESS

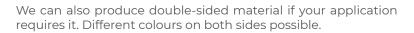
Your application requires a specific material thickness?

Let us know your requirements and we will produce a material adapted to your needs.



Choose from our 4 finishes, we can apply them to the majority of our plastic materials.

DOUBLE-SIDED AND 3-PLY MATERIAL



Our Gravoply[™] 3C range offers the most used colours. However we can produce up to 2,000 colour combinations on demand.

Quotation

For all these services, please ask your Gravotech partner for a quotation!

Lead-time

Fabrication times are only estimates, and may vary according to production load.

Return policy

All custom fabrication orders are non-returnable due to their custom nature. Please ensure that you provide accurate information when placing your fabrication order.

Communication tools

Gravotech offers a multitude of marketing tools to help you select the right engraving material for your needs and promote your business.



ENGRAVING SOURCE BOOK & E-CATALOG

Your source for all engraving materials, supplies and fabrication services.

Engraving Source Book: Ref. 86586





ENGRAVING MATERIALS POSTER

Wall poster with overview of our whole range of materials.

Ref. 71938



«SWATCHY» SAMPLES

Physical samples of Gravotech's key materials.

Gravoply™ Laser: **Ref. 86494** Gravolase™ Metallics: **Ref. 86497** Flexilase™: **Ref. 86495** Acrylic: **Ref. 86493** Laser Wood: **Ref. 86496**



TECHNICAL & SAFETY DATA SHEETS

Our materials have a technical datasheet and a safety datasheet. You can find these documents on a dedicated page on our website.



Our YouTube videos & playlists

Discover our consumables videos on our YouTube channel.



GRAVOGLAS[™] 1



GRAVOPLYTM LASER



ACRYLIC



GRAVOPLYTM ULTRA





LASER WOOD





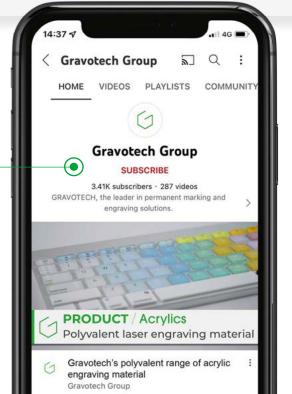
CONSUMABLES

OUR LATEST CONSUMABLES VIDEOS

Find our product releases, our news and our latest tips about our engraving materials and other consumable products in video on YouTube by flashing this QR code.



Subscribe to our YouTube channel to see more !



\Box
GRAVOTECH EXPRESSION OF THINGS

LASER MATERIALS

GRAVOTECH		PLASTICS			ACRYLICS			FLEXIBLE			
ЕХР	R E S S	ECTION GUIDE	Gravoply™ Laser	Gravoply™ Ultra	Gravoply™ 2	Gravoglas™ 1	Acrylic	Ecocut Laser	Rubbalase [™]	Flexilase TM	
ENGRAVING SYSTEM		2 laser engraving									
2AV STEN		2 laser cutting	•	•		•	•		•	•	_
NGP SY	Rot				-		•				
ш	_	Print	•	•	•	•	•	•		•	
	Surface finishing	Matte									
	inisł	Brushed								•	_
	ce f	Glossy					•			•	
٨S	urfa	Satin									_
SPECIFICATIONS	Ō	Textured									
-ICA		Acrylic	•	•		•	•			•	_
ECIF		ABS			•						
SPI	Composition	Aluminium									
	sod	Brass									
	yom.	PVC									
	0	Phenolic									
		Rubber							•		
		Natural Plywood									
		face engraving	•	•	•		•		•	•	
		surface engraving				•	•				
		erior	•	•	•	•	•		•	•	
		erior			- <i>i</i>	•	•			•	
	She		< 1.3 mm	< 1.3 mm	< 2.4 mm			< 1.3 mm		•	_
ES	Sav		•	•	•	•	•	•			
CAPABILITIES		-screen	•	•	•	•	•				
PAB		-stamping	•	•	-	•	•	•			
CAI		at bending	•	•	•		•	•			
		atch resistant		•		•	•				
		kible	•	•	•		_		•	•	
		ak resistant	_	_	-	_	•	_	•		
		resistant 1. temperature	-40°C (-40°F)	■ -40°C (-40°F)	-40°C (-40°F)	■ -40°C (-40°F)					
			-40°C (-40°F) 80°C (176°F)	-40°C (-40°F) 80°C (-176°F)	-40°C (-40°F) 80°C (176°F)						
		k. temperature	18	19	20	21	22-25	26	27	28	
Pag	е		10	15	20	21	22-23	20	27	20	

F	OILS	METALLICS		MET	ALS		PHENOLICS	ADA	WOOD
	Stickalase TM	Gravolase™ Metallics	Colored Aluminum	Gravoxal TM	AlumaMark®	DuraBlack®	Gravostrat™	Gravotac™ Exterior	Laser Wood
							•		•
		•						•	•
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	•	•		•	•		•	•	•
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					•			•	•
							-	-	
	-60°C (-76°F)	-40°C (-40°E)	-40°C (-40°E)	-40°C (-40°F)	-40°C (-40°E)	-40°C (-40°F)	-40°C (-40°E)	-40°C (-40°F)	-200°C (-328°E)
	200°C (392°F)	-40°C (-40°F) 80°C (176°F)	-40°C (-40°F) 100°C (212°F)	200°C (392°F)	-40°C (-40°F) 230°C (450°F)	-40°C (-40°F) 370°C (700°F)	-40°C (-40°F) 80°C (176°F)	-40°C (-40°F) 80°C (-176°F)	-200°C (-328°F) 100°C (212°F)
	29	30	31	32-33	34	35	36	37	38
	23	00	01	02 00					

ROTARY MATERIALS

GRAVOTECH				PLASTICS			ACRYLICS			
EXP	R E S	ECTION	Gravoply™ 1	Gravoply TM 2	Gravoglas™ 2-Plex™ Surface	Gravoply™ 3C	Ecocut	Gravoglas™ 2-Plex™ Subsurface	Acrylic	
U Z –	CO	2 laser engraving								
ENGRAVING SYSTEM	CO	2 laser cutting							•	
SYS	Rot	ary					-			
<u> </u>	UV	Print	•	•	•	•	•	•	•	
	ing	Matte								
	Surface finishing	Brushed	•			•				
	ce fi	Glossy			•					
S	urfa	Satin	•							
SPECIFICATIONS	ري ا	Textured			•					
ICA ⁻		Acrylic			•			•	•	
CIF	tion	ABS	•				•			
SPE		Aluminium								
	oosi	Brass								
	Composition	PVC								
		Phenolic								
		Rubber								
		Natural Plywood								
		face engraving	•	•	•	•			•	
		osurface engraving							•	
		erior	•	•	•	•	•	•	•	
		erior							•	
	She		< 2.4 mm	< 2.4 mm	< 1.3 mm	< 1.3 mm	< 2.4 mm	< 1.3 mm		
ШS	Sav						•		•	
CAPABILITIES		-screen	•		•	•	•		•	
AB		-stamping	•	•	•	•	•		•	
CAF		at bending	•	•	•	•	•	•	•	
		atch resistant	•		•				•	
		xible	•	•		•	•			
		ak resistant	•	•		•	-		•	
		resistant								
		n. temperature	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	
		x. temperature	80°C (176°F)	80°C (176°F)	80°C (176°F)	80°C (176°F)	80°C (176°F)	80°C (176°F)	80°C (176°F)	
Pag	je		40	41	42-44	45	46	47	48-51	

FLEXIBLE I	FOILS	METALLICS		MET	ALS		PHEN	OLICS	ADA
Flexilase TM	Gravofoil™	Metallex™	Gravometall™	Gravobrass [™] Exterior	Colored Aluminum	Gravoxa TM	Gravostral TM	Gravostrat™	Gravotac™
•		•						•	
•									
	•	•		•	•	•	•	-	•
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		-							
								-	
	-	-							-
	-	•		-			-	-	
	•					•			
-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
80°C (176°F)	80°C (176°F)	80°C (176°F)	200°C (392°F)	370°C (700°F)	100°C (212°F)	200°C (392°F)	80°C (176°F)	80°C (176°F)	80°C (176°F)
52	53	54-55	56-57	58	59	60-61	62	63	64

Symbols

To quickly identify and select the right material for your application, look out for the symbols indicating the main features of each Gravotech material range:

TECHNOLOGY



LASER ENGRAVING

This material can be engraved with a CO2 laser machine. In general, all our acrylic materials can be engraved and cut with a CO2 laser.



ROTARY ENGRAVING

This material can be engraved with a rotary machine. In general, all our materials made of ABS can be engraved and cut with a cutter.



UV PRINTING

This material supports UV printing on its surface.

ENGRAVING SIDE



SURFACE ENGRAVING

1-ply, 2-ply or 3-ply materials are either laser or rotary engraved to expose the core of the material, thereby giving a colour contrast between cap (surface layer) and core (base colour).



SUBSURFACE ENGRAVING

Applies to 1-ply and 2-ply clear base materials. The material is either laser or rotary engraved from the back. Once lasered or engraved, the characters and logos can be back-painted to achieve aesthetic colour contrast.

USE



OUTDOOR USE

This material has been designed to resist climatic variations and ultraviolet exposure. It is therefore suitable for outdoor use within the technical specifications given by Gravotech. The wide variety of applications does not allow us to define a shelf life for the product.



INDOOR USE

This material was designed for indoor use and does not require resistance to ultraviolet and climatic variations.

LASER MATERIALS

0



🔿 LASER MATERIALS

Flexibility and performance for indoor and outdoor applications



18

Curfooo		Thickness					
Surface colour	Core colour	0.8 mm (1/32'')	1.3 mm (0.050'')	1.6 mm (1/16'')			
white	red		51006	70005			
white	blue		51011				
white	black	51017	49971	69991			
yellow	red		51007	70006			
yellow	blue		51012				
yellow	black	51018	49973	69992			
orange	white	51035	51005	80767			
orange	black	51020	51001	80768			
red	white	51034	49988	69995			
red	yellow		51009				
burgundy	white	51043	49997	70004			
burgundy	gold		51016				
purple	white	67005	67006	80771			
apple green	white	51042	49996	70003			
pine green	white	51039	49995	70002			
sky blue	white	51037	49990	69997			
sky blue	black	51021	49979	69993			
blue	white	51036	49989	69996			
blue	yellow		51010				
air force blue	white	51038	49991	69998			
brown	white	51044	49993	70000			
grey	white	51046	49992	69999			
grey	black	51023	49974	80774			
black	white	51033	49987	69994			
black	yellow		51008				
black	gold		51014				

• The most versatile plastic material: indoor and outdoor, laser and rotary engraving and cutting.

- Microthin surface layer for detailed engraving.
- Cost effective: one product, one stock, many applications.

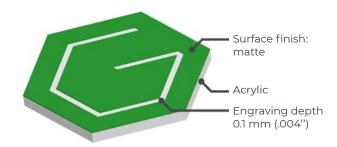
AVAILABLE SHEET SIZES



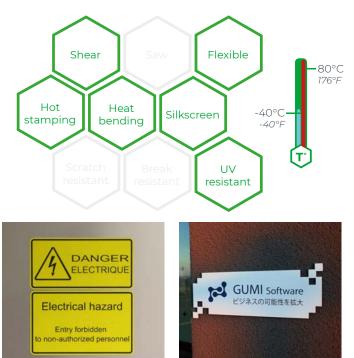


1	
0.0 //	305 mm
24 x 1	2"

MATERIAL SPECIFICITIES







Architectural signage

APPLICATIONS



Outdoor signage

Small labels and plates

GRAVOPLY™ ULTRA

Effectiveness, productivity, precision and durability



19

Curface		Thickness				
Surface colour	Core colour	0.5 mm (0.020'')	1.6 mm (1/16'')			
white	black	18946	18984			
yellow	black	18955	18993			
orange	white		19000			
orange	black		29499			
red	white	18949	18987			
red	black		29498			
burgundy	white		18980			
apple green	white	18970	19012			
forest green	white		19001			
pine green	white		29491			
sky blue	white		70953			
blue	white	18952	18990			
air force blue	white		29492			
navy blue	white		29494			
royal blue	white		19015			
brown	white		29495			
chocolate brown	white		29493			
light grey	black		29496			
taupe	white		29501			
black	white	18943	18981			
black	gold	18976				
glossy black	gold	18973				

Note: Black/gold Ref. 18973 has a glossy finish. · The most durable plastic material for exterior applications.

· Ideal for industrial applications: identification, electrical, signage, safety.

 \cdot Custom colours available on demand to match your graphic charter, logo...

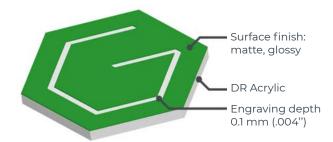
AVAILABLE SHEET SIZES



610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES

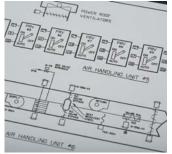


Outdoor signage

LASER MATERIALS

Small plate

APPLICATIONS



Industrial synoptic



Information label

GRAVOPLY™ 2

The affordable material for small plates and labels



Surface			Thick	kness	
colour	Core colour	0.8 mm (1/32'')	1.5 mm (1/16'')	1.5 mm (1/16'') *	2.4 mm (3/32'')
white	red		21928		
white	azure blue		21908		
white	black	21850	21919	22010	21982
yellow	red		21913		
yellow	black	21863	21936		21995
orange	white		52205		
red	white	21851	21921		21983
red	yellow		21910		
burgundy	white		21932		
purple	white		67007		
apple green	white	21838	21905		
pine green	white	21865	21938		21997
pine green	yellow		21916		
sky blue	white		21934		
sky blue	black		21895		
blue	white	21852	21923		21984
air force blue	white		21907		
brown	white		21930		
grey	white	21856	21927		
grey	black		21915		
black	white	21849	21917	22009	21981
black	yellow		21940		

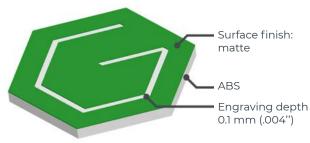
- Best value for money: good quality with a reduced budget.
- Microthin surface layer. Perfect for small characters and detailed logos.
- Wide choice of colours, ideal for your badges, ID plates & indoor signage engraving.

AVAILABLE SHEET SIZES

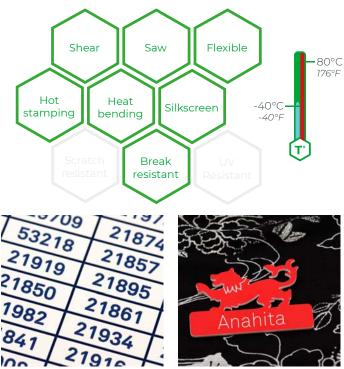


		11
		1.00
		1
1		1
610 x	305 i	mm
$24 \times 1^{\circ}$	2"	

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Small labels and plates

Badges

APPLICATIONS

Double-sided also available.

Note:

LASER MATERIALS



* References in green are double-sided

The surface layer of Gravoply™ 2 can be lasered

but the engraving quality may vary depending on the colour.

You can mix any surface and core colours on demand.

Braille signage



Indoor signage

GRAVOGLAS[™] 1

The outdoor acrylic material for upscale architectural signage



Currente		Thickness			
Surface colour		1.5 mm (1/16'')	3.0 mm (1/8'')	5.0 mm (0.20'')	
white	clear	18141	18193	18264	
red	clear		18201	18267	
blue	clear		18207	18270	
silver		18171	18244	18293	
gold	clear	18168	18235	18290	
old gold	clear	18174	18252	18296	
black	clear	18138	18183	18261	

Note:

Gravoglas™ 1 is also used for the identification of pipes in the industrial sector.

Laser engraving and cutting.

Subsurface engraving: produce multi-colour signage with paint fill.

- Particularly popular for the brilliance of its black, gold and silver colours.
- Excellent UV resistance. Easy to keep the surface clean. Resistant to chemical agents.

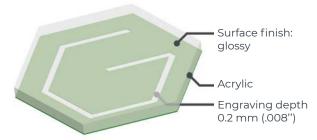
AVAILABLE SHEET SIZES



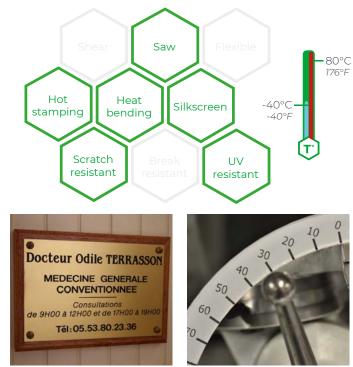
610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Professional plates

Measure tools

21

LASER MATERIALS

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COMPLEMENTARY PRODUCTS

See page 82



Spacers

APPLICATIONS



Visual communication



Stencil

ACRYLIC - CLEAR



	Thickness			
Core colour	3.0 mm (1/8'')	6.0 mm (0.20'')		
clear	83423	83424	83425	
translucent green	83426			
translucent blue	83427			

• Cast acrylic. A resistant material, both for indoor and outdoor use. Rotary and laser engraving and cutting. Perfect for UV printing.

• Glossy finish. White engraving. Clear Acrylic can also be used as a substrate.

• A real alternative to glass, lighter and more resistant. Perfect light transmission, easily associated with light/LED.

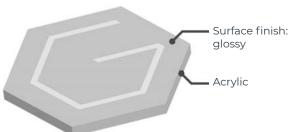
AVAILABLE SHEET SIZES



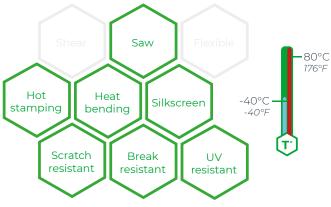
610 x	610 mm
24 x 2	4"

		1.1
1		
610 x	305	mm
24 x 12	2"	

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 82

Spacers

COMPLEMENTARY PRODUCTS



Gift and decoration



Promotional items



Light and illumination



Trophy and awards

ACRYLIC - FLUORESCENT

Let your creativity flow!



23

	Thickness	
Core colour	3.0 mm (1/8'')	
fluorescent yellow	83428	
fluorescent orange	83430	
fluorescent pink	83429	

· Discover the cast version of acrylic for a modern yet resistant finish.

· One-ply translucent material. Vivid and bright colours. Glossy finish.

• Can also be used as a substrate. For even more creative possibilities, combine it with the other Acrylic materials.

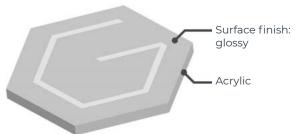
AVAILABLE SHEET SIZES



610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Display

COMPLEMENTARY PRODUCTS

See page 82

See page 80 See page 81



Spacers



steel ring

Nickel-plated





Decoration



Promotional items

Gifts



	Thickness
Core colour	3.0 mm (1/8'')
frosted white	83431
frosted light blue	83434
frosted sky blue	83438
frosted blue ocean	83435
frosted blue lagoon	83437
frosted green	83436
frosted yellow	83432
frosted pink	83439
frosted mauve	83433

COMPLEMENTARY PRODUCTS

See page 82

O

Screws

• Double-sided material: one side matte, one side glossy. Matte side relatively insensitive to fingerprints and scratches.

• Laser CO2 and mechanical engraving and cutting on both the front and the back. Can also be used as a substrate.

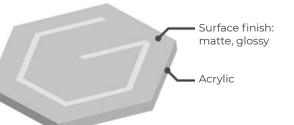
 \cdot Perfect for all your design and creative realisations.

AVAILABLE SHEET SIZES

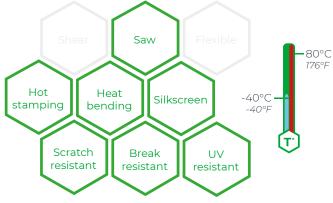


610 x 610 mm 24 x 24" 610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 82

Spacers

CV LASER MATERIALS



Decoration



Gifts and promotional items



Decoration

Creative signage

ACRYLIC - OPAQUE

Let your creativity flow!

	Thickness		
Core colour	3.0 mm (1/8'')	6.0 mm (0.20'')	
opaque white	83440	83441	
opaque black	83442	83443	

COMPLEMENTARY PRODUCTS

Note:

For even more colours and possibilities, combine Acrylic with Gravotac™ Exterior.



· Double-sided material: one side matte, one side glossy.

· Laser CO2 and mechanical engraving and cutting on both the front and the back. Can also be used as a substrate.

• Fine white contrast with CO2 laser on opaque black. Opaque white perfect for UV printing.

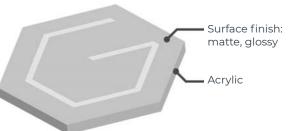
AVAILABLE SHEET SIZES



610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Indoor and outdoor signage

LASER MATERIALS

APPLICATIONS

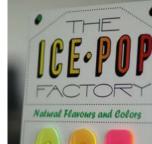
See page 78

Double-sided

19 mm



Decoration



Visual communication

Letter cut out

Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

25

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ECOCUT LASER

A very affordable material for laser cutting work

	Thickness			
Core colour	010 11111	0.8 mm (1/32'')	1.3 mm (0.050'')	1.6 mm (1/16'')
white	85985	85986	85987	85988
black	85989	86476	86477	86478

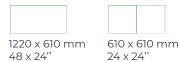
Note:

The surface of the Ecocut Laser is rough. It may include scratches and imperfections. Use only for cutting applications where the surface state does not matter. • Very affordable substrate that can be UV-printed.

 \cdot Make stencils for letters, numbers, logos and more.

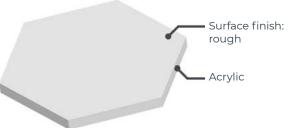
• 4 thicknesses for any cutting work.

AVAILABLE SHEET SIZES



610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 76

Gravoclean

COMPLEMENTARY PRODUCTS

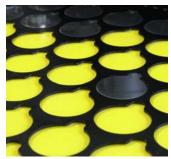
See page 78

Adhesive

mounting tape



Cutting shapes



Cutting-out template

Industrial stencil

Paint filling

RUBBALASETM

The laserable material made of natural rubber

	Thickness
Core colour	2.2 mm (0.087'')
natural rubbalase	19897
odourless rubbalase	48542

Note:

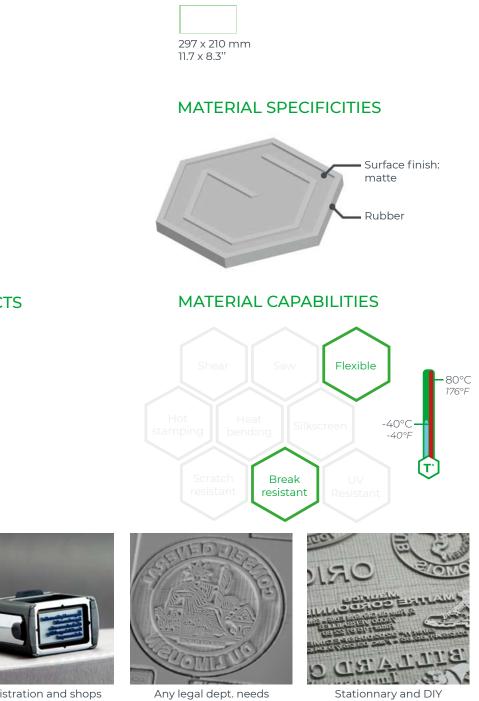
The hardness of elastomers is measured on the scale «Shore A»; Rubbalase is measured at 60 «Shore A».

· Exclusively for lasering with CO2 laser engraving machines to create inking stamps.

• Its thickness of 2.2 mm (0.087'') and its hardness (60 Shore) ensure a high definition result.

• Texts, numbers, logos, detailled pictures... from the most conventional to the most creative stamp.

AVAILABLE SHEET SIZES



COMPLEMENTARY PRODUCTS

See page 79



APPLICATIONS

Any professional stamps

Administration and shops

27

🔿 LASER MATERIALS

FLEXILASETM

The flexible material for high-definition engraving

28

Surface	face	
colour	Core colour	0.25 mm (0.010'')
white	black	66984
yellow	black	66985
orange	black	66986
red	white	66997
purple	white	67002
apple green	white	67001
pine green	white	71673
sky blue	white	67000
blue	white	71670
air force blue	white	71671
brown	white	67004
brushed aluminum	black	66991
glossy silver	black	66990
matt aluminum	black	67558
european		66000
gold	black	66989
	black	66989
gold		

Note:

LASER MATERIALS

Purple, pine green and grey surfaces are subject to premature colourfading.

You can mix any surface and core colours on demand.

• Very thin and flexible, excellent for indoor and outdoor labels on flat or curved surfaces.

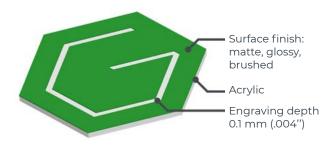
• Surface layer of just a few microns for fine laser CO2 engraving and cutting.

• Delivered with adhesive backing. Metallic colours for cups and trophies to be personalised.

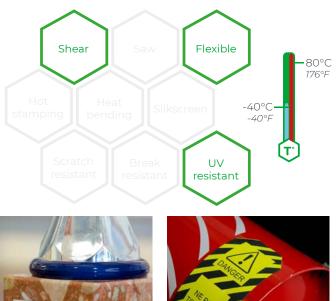
AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS



Industrial labels



Labels for personalization

Trophy plates

Club Is

1st pr

Labels for curved surfaces

STICKALASETM

The ultimate ultra fine laserable material

Surface colour		Thickness	
	Core colour	0.09 mm (0.004")	
silver	black	19872	
black	white	19871	

Note:

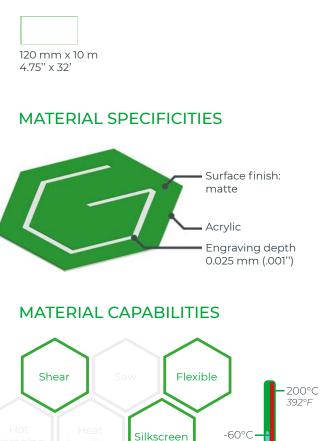
For a larger choice of colours, see Flexilase™.

• Our thinnest material: surface layer of 0.09 mm (0.004") for fine engraving and clean cut when using a CO2 laser.

• Very good material for small labels on curved surface.

• Delivered in 10 metres (32') roll, with adhesive backing.

AVAILABLE SHEET SIZES



Break resistant -76°F

APPLICATIONS



Small labels to stick



Inventory labels

Barcode

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GRAVOLASE™ METALLICS

Laser material for a high-end metallic finish

30

Surface					
colour	Core colour	0.5 mm (0.020'')	0.8 mm (0.030'')	1.3 mm (0.050'')	1.6 mm (1/16'')
radiant silver	black		51026	49986	
glossy silver	black	29548	51027	49980	
brushed silver	black	18961			19003
brushed aluminum	black		51025	49981	77657
matt aluminum	black		51024	51002	
brushed bronze	black	29544		51004	
copper	black	29546			29556
radiant gold	black		51028	49983	
brushed gold	black	18960		49985	19002
european gold	black	29542		49982	29552
glossy gold	black	29543		49984	

Note:

For a thinner laser metallic aspect material, see Flexilase™. Other thicknesses available on demand.

COMPLEMENTARY PRODUCTS

See page 78



Gravofix



Double-sided 50mm



Coloured badges plastic frames

See page 87

• The CO2 laser engraving and cutting plastic with a metallic aspect, cheaper than metal.

• 0.025 mm (0.001") surface layer for detailed engraving.

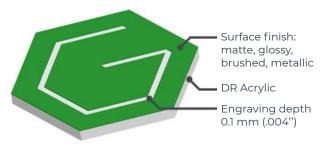
· Large range of metallic colours in a glossy, brushed or matte finish.

AVAILABLE SHEET SIZES

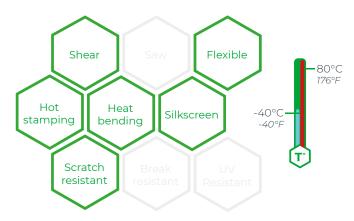


610 x	305 n	۱m
24 x 12	2"	

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES







Trophy plates



Award plates

Badges

Indoor signage

COLORED ALUMINUM

The coloured aluminium for a striking contrast

Curfage		Thickness	
Surface colour	Core colour	0.6 mm (0.025'')	
red	silver	34528	
blue	silver	34497	
satin gold		34595	
glossy gold	silver	34596	
satin silver	silver	34625	
glossy silver	silver	34626	
black	silver	34455	

• Ideal metal for labels, small plates and indoor signage.

• Great for creativity: astonishing contrast after rotary or fibre laser engraving. Also sublimable.

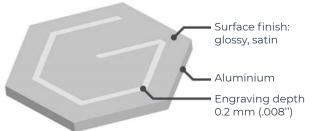
• Thin aluminium: easy to cut and shear.

AVAILABLE SHEET SIZES

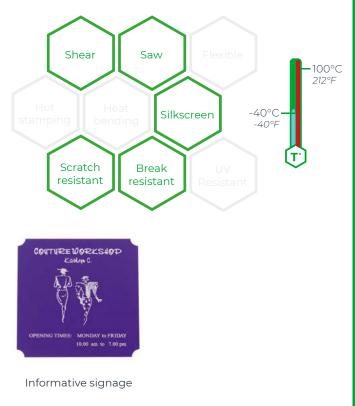


610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



COMPLEMENTARY PRODUCTS

See page 78



APPLICATIONS



Directional signage



Name plate

LASER MATERIALS

The multipurpose anodised aluminium range

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32

Surface	Core colour	Thickness				
colour			1.0 mm (0.040'')		2.0 mm (1/12'')	3.0 mm (1/8'')
champagne	aluminum		18581			
red	aluminum		18577	18591		
green	aluminum		18583	18597		
blue	aluminum		18579	18593		
silver		18385	22055	18386	22057	22059
gold	aluminum	18571	18575	18589	18603	
bronze	aluminum		18585	18599		
black	aluminum	18569	18573	18587	18601	18614

Note:

Protective film on one side.

Due to the process, there can be stains in the corners of aluminium sheets.

Laser engraving on all colours except silver. The engraving contrast may vary according to the colour.

Size 2000 x 1000 mm (78 x 39") on request.

Gravoxal™ Matte silver also available in 4 mm (1/6"): Ref. 18388.

· Strong anodisation for a durable protection of the material.

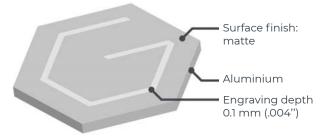
· Ideal for the manufacture of front panels, the engraving of nameplates and industrial signage.

• High-definition laser engraving to be carried out even at greyscales.

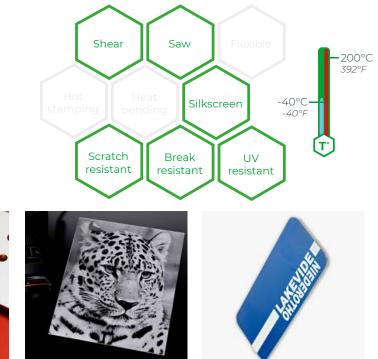
AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Pictures

Small plates

APPLICATIONS



Large signage



Control panels

GRAVOXAL[™] - GLOSSY

The multipurpose anodised aluminium range

Currente		Thickness			
Surface colour	Core colour	1.0 mm (0.040'')	1.5 mm (1/16'')	2.0 mm (1/12'')	
champagne	aluminum	18640			
red	aluminum	18636	18658		
green	aluminum	18642	18664		
blue	aluminum	18638	18660		
silver		18618	18646	18668	
steel look		30381	30382	30383	
gold	aluminum	18630	18654	18674	
black	aluminum	18624	18650	18671	

Note:

Protective film on one side.

Due to the process, there can be stains in the corners of aluminium sheets.

Laser engraving on all colours except silver. The engraving contrast may vary according to the colour.

Size 2000 x 1000 mm (78 x 39") on request.

· Strong anodisation for a durable protection of the material.

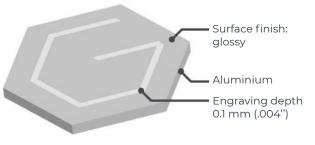
· Ideal for the manufacture of front faces, the engraving of nameplates and industrial signage.

• High-definition laser engraving to be carried out even at greyscales.

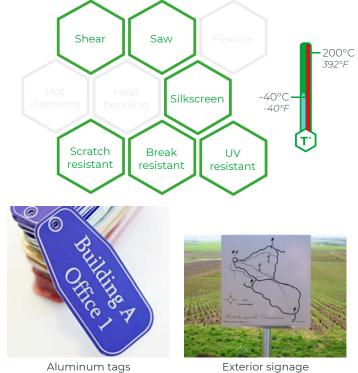
AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS



Control panel



Indoor signage

Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

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LASER MATERIALS

ALUMAMARK®

Black marking on aluminum with CO2 engraving

34

		Thickness			
Surface colour	Core colour	*0.5 mm (0.020'')	*0.127 mm (0.005'')	0.5 mm (0.020'')	
satin silver	black	27419	27414	27417	
satin gold	black	27416		27415	
satin brass	black	45878		45879	

Note:

Power sensitive material.

If the image is too dark, reduce the power. If the image is too light, increase the power. Engraving quality is improved using 50% speed. Laser power: 6 - 10 watts.

Full sheets size depending on colours and thicknesses. Different sizes for:

- Ref. 27414: 305 x 254 mm (12 x 10'')

- Ref. 45878: 510 x 305 mm (20 x 12")
- Ref. 45879: 610 x 510 mm (24 x 20")
- * Delivered with adhesive backing.

• Natural black marking thanks to a thermal reaction with the heat of any CO2 laser.

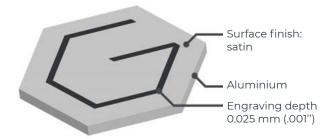
 \cdot No oxidation, chemical product or paint fill needed to get the contrast.

 \cdot Fine details and shades of grey, ideal for photos.

AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

LASER MATERIALS



Small plates and labels



Picture reproductions

ID plates

DURABLACK®

Anodised aluminium for harsh environments

Surface colour	Core colour	Thickness	
		*0.5 mm (0.020'')	
black	silver	71922	

Note:

Meets several government, industrial and military standards including MIL-STD 130N, A-A-50271 (MIL-P-514D), MIL-STD-15024F, Type L, MIL-STD-810G for withstanding 96 hours of exposure to corosive chemicals, ASTM B117 30 days exposure to salt fog.

* Delivered with adhesive backing.

COMPLEMENTARY PRODUCTS

See page 79

Gravogrip™

· CO2 laser markable aluminium for durable marking for harsh operating environments.

· Ideal metal for durable, high-resolution barcode, pictures, placards, stock tags and signage.

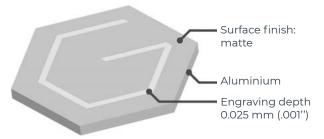
• Resistant to UV, abrasion, high temperatures, salt spray and chemical exposure.

AVAILABLE SHEET SIZES



508 x 305 mm 20 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



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LASER MATERIALS

GRAVOSTRATTM

An economical material for demanding applications



Surface		Thickness		
colour	Core colour	1.4 mm (0.055'') *	2.5 mm (0.087'') *	
white	black	22042	22049	
yellow	black	22044	22051	
red	white	22043	22050	
cool grey	black	22047		
black	white	22041	22048	

* References in green are double-sided

COMPLEMENTARY PRODUCTS

See page 81

Nickel-plated

steel ring

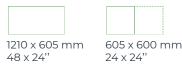
Note:

Gravostrat™ can be laser engraved but not laser cut. Gravostrat™ may be subject to slight variations in thickness. • Double-sided rigid phenolic material with a glossy finish.

 \cdot Ideal choice for all industrial identification needs.

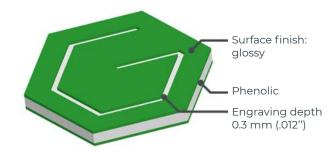
• Resistant to chemicals and solvents, nonflammable, conforms to military specifications ASTM D 709 ES-1, ES-2, ES-3, electrically nonconductive.

AVAILABLE SHEET SIZES



600 x 300 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 80

Ball chains

ASER MATERIALS



Indoor signage



Safety sign

Duch buttor

PHINY

NYŁA

Push button

Industrial identification

GRAVOTAC™ EXTERIOR

The outdoor laserable braille material

	Thickness			
Core colour	0.8 mm (1/32'')	1.6 mm (1/16'')	3.2 mm (1/8'')	
clear	29918	29935		
white	29919	29936	31237	
red		29939		
pine green	29927			
blue		29945		
silver grey		29946	32187	
black	29920	29937	31257	

· The necessary product for braille and tactile signs cut with your laser machine.

· Profile available without or with adhesive backing.

• Matte finish. Compliant with the Americans with Disabilities Act (ADA) and Disability Discrimination Act (DDA) legislations which states that all information must be accessible to people with disabilities.

AVAILABLE SHEET SIZES



610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

Surface finish: matte

> 80°C 176°F

> > 🔿 LASER MATERIALS

DR Acrylic

-40°C

-40°F

Flexible

UV

resistant

MATERIAL SPECIFICITIES

MATERIAL CAPABILITIES

Saw

Break

resistant

Silkscreen

Heat

bending

THE GRAVOTAC[™] PROCESS



1°) Adhere 0.8 mm (1/32") profile material to 1.6 mm (1/16") or 3.2 mm (1/8") substrate.

2°) Engrave using outline font.

3°) Peel excess profile material off substrate.

For better visibility, choose contrasted colours.

COMPLEMENTARY PRODUCTS

See page 76



APPLICATIONS



Icons and pictograms



Braille and tactile signage



Scratch

resistant

Hot

stamping



Outdoor signage

Tactile signage

Natch our videos!



LASER WOOD



* References in green are double-sided



Packaged by 5.

Wood is a natural organic material. Thickness, colour and aspect can vary from one sheet to another. Let the material acclimatise to the end-use conditions before using it.

Apply the masking paper on the sheet to avoid dust and fumes during CO2 laser cutting. Maintain the sheet flat on the honeycomb table using clamps.

STARTER KIT - REF. 83925



Starter kit contains : Refs. 82741, 84742, 82747, 82749, 82746

COMPLEMENTARY PRODUCTS

Clamps



See page 79





Masking paper

APPLICATIONS

Transfer



· Safe composition, respect of both nature and people.

Natch our videos!

• From thin and flexible 0.4 mm (1/64") to thick and rigid wood 4.5 mm (11/64").

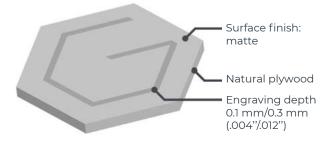
 \cdot 0.4 mm (1/64") as thin as paper, for flexible applications.

· Mix with other materials like Acrylic and aluminum for modern and trendy creations!

AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Interior signage

Personalized cards and DIY



Decoration and gifts



Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample

Architectural models



ROTARY MATERIALS

GRAVOPLY™ 1

Our universal & historical material



Surface .		Thickness				
colour	Core colour	0.8 mm (1/32'')	1.6 mm (1/16'')	1.6 mm (1/16'') *	2.4 mm (3/32'')	3.2 mm (1/8'') *
white	green		17313			
white	black	17263	17331	29578	22030	29700
almond	black		32293			
yellow			29564			
yellow	black	17273	17366	29579	17478	17525
orange	white		17407			
orange	black		17404			
red	white	17267	17506	29580	17472	29702
red	black		17454			
burgundy	white		17463			
dark purple	white		17436			
apple green	white		17442			
pine green	white		17410			
azure blue	white	17270	17353	29603	17475	29705
air force blue	white		17428			
navy blue	white		29581			
brown	white		17388			
silver grey	white		29584			
silver grey	black		17379			
black	white	17250	17319	29604	17467	17521

* References in green are double-sided

• The acrylic surface and its smooth satin finish makes Gravoply™ 1 particularly scratch resistant.

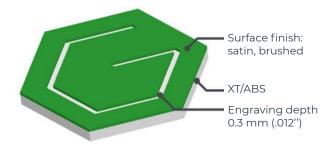
• The right rotary product for every industrial or architectural identification indoor applications.

• Most popular colour combinations also available in double-sided version.

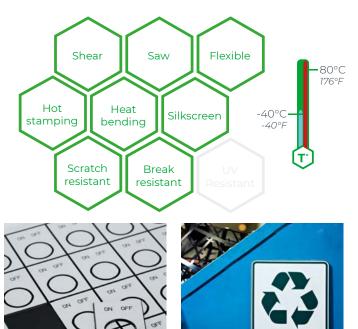
AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS



Indoor signage



Key tags

Push buttons

Industrial signage

GRAVOPLY[™] 2

The affordable material for small plates and labels

Conference			Thick	kness	
Surface colour	Core colour	0.8 mm (1/32'')	1.5 mm (1/16'')	1.5 mm (1/16'') *	2.4 mm (3/32'')
white	red		21928		
white	azure blue		21908		
white	black	21850	21919	22010	21982
yellow	red		21913		
yellow	black	21863	21936		21995
orange	white		52205		
red	white	21851	21921		21983
red	yellow		21910		
burgundy	white		21932		
purple	white		67007		
apple green	white	21838	21905		
pine green	white	21865	21938		21997
pine green	yellow		21916		
sky blue	white		21934		
sky blue	black		21895		
blue	white	21852	21923		21984
air force blue	white		21907		
brown	white		21930		
grey	white	21856	21927		
grey	black		21915		
black	white	21849	21917	22009	21981
black	yellow		21940		

* References in green are double-sided

Note:

The surface layer of Gravoply™ 2 can be lasered but the engraving quality may vary depending on the colour.

You can mix any surface and core colours on demand. Double-sided also available.

· Best value for money: good quality with a reduced budget.

• Microthin surface layer. Perfect for small characters and detailed logos.

• Wide choice of colours, ideal for your badges, ID plates & indoor signage engraving.

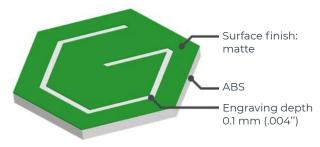
AVAILABLE SHEET SIZES



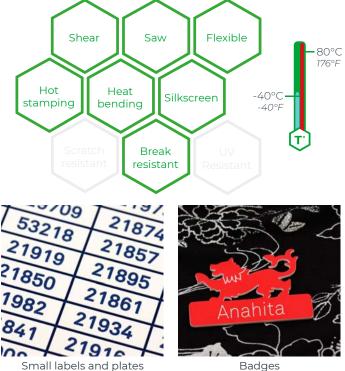
610 x 610 mm 24 x 24''



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Badges

APPLICATIONS



Braille signage



Indoor signage

41

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GRAVOGLAS™ 2-PLEX™ - MATTE SURFACE

A strong acrylic material for outdoor use

42

Surface colour		Thickness			
	Core colour	1.6 mm (1/16'')	3.2 mm (1/8'')	3.2 mm (1/8'') *	
white	red	29627			
white	blue	29628			
white	black	17875	29904	29912	
yellow	black	17881			
orange	black	29633			
orange	white	47230			
red	white	17877	29905		
apple green	white	17885	29906		
azure blue	white	17879	29907		
silver grey	black	17887	29908		
gold	black	29642	29910		
black	white	17873	29911	29913	
black	gold	29643			

* References in green are double-sided

· Matte aspect. Ideal for outdoor signage and directional signs.

- High resistance to UV and scratches thanks to its thick surface.
- Recommended for deeply engraved signage.

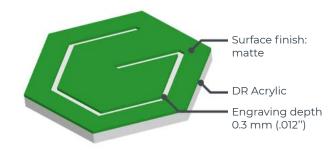
AVAILABLE SHEET SIZES



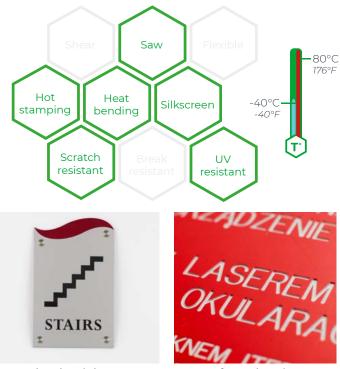
610 x 24 x 2	 mm

		11 - L
		4
1		- i
610 x	305 i	mm
24 x 1	2"	

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Directional signage

Information plate

COMPLEMENTARY PRODUCTS

See page 76

See page 82 See page 83





Gravoclean Spacers



APPLICATIONS



Legend plate



ZONE DE CONTRÔLE

Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

ROTARY MATERIALS

F

GRAVOGLAS[™] 2-PLEX[™] - GLOSSY SURFACE

A strong acrylic material for outdoor use

Currente		Thickness		
Surface colour	Core colour	1.6 mm (1/16'')	3.2 mm (1/8'')	
white	red	17907	18063	
white	black	17892	18051	
yellow	black	17901	18060	
red	white	17895	18054	
apple green	white	17910	18066	
pine green	white	17918		
azure blue	white	17898	18057	
silver grey	black	17930	18078	
gold	black	17927	18075	
black	white	17889	18048	

· Glossy aspect. Ideal for outdoor signage and directional signs.

- High resistance to UV and scratches thanks to its thick surface.
- Recommended for deeply engraved signage.

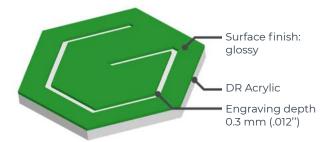
AVAILABLE SHEET SIZES



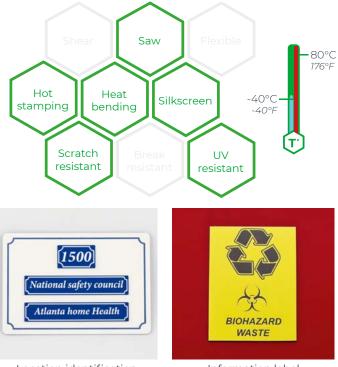
610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Location identification

Information label

🔿 ROTARY MATERIALS

COMPLEMENTARY PRODUCTS

See page 82

See page 76





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See page 82

Gravoclean



Screws

APPLICATIONS



Professional plate



Outdoor signage

GRAVOGLAS™ 2-PLEX™ - TEXTURED SURFACE

A strong acrylic material for outdoor use

44

Surface colour		Thickness
	Core colour	1.6 mm (1/16'')
white	black	18304
yellow	black	18334
red	white	18307
pine green	white	18343
azure blue	white	18310
silver grey	black	18322
black	white	18301

· Textured aspect. Ideal for outdoor signage and industrial applications.

· High resistance to UV, scratches and fingerprints thanks to its thick and textured surface.

• Recommended for deeply engraved signage.

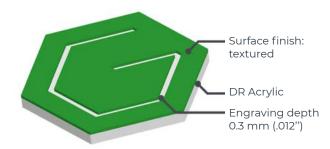
AVAILABLE SHEET SIZES



610 x 610 mm 24 x 24"

610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Electrical identification

COMPLEMENTARY PRODUCTS

See page 76

See page 80 See page 81





Industrial Degraising Spray



S-Hook rings

APPLICATIONS

ROTARY MATERIALS

F



Industrial signage



Indoor and outdoor signage

Security sign

GRAVOPLY™ 3C

The only comprehensive range offering 3 levels of colour

Surface	Second		Thickness
colour	surface colour	Core colour	1.6 mm (1/16'')
white	red	black	23957
yellow		black	23949
yellow	red	black	23954
red	white	black	23955
apple green	white	black	23953
blue	white	black	23956
blue	red	white	23952
brushed aluminum	black	white	23951
radiant gold	black	white	23950
black	red	white	23948

Note:

Other colour combinations available on demand.

• Get a 3 colours sign without adding any colouring afterwards.

 \cdot Use just one tool to obtain 3 different colours simply by changing the engraving depth.

• Ideal for plates with logos, safety signs and badges.

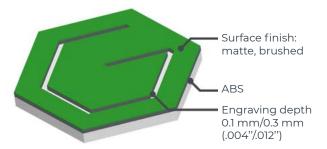
AVAILABLE SHEET SIZES



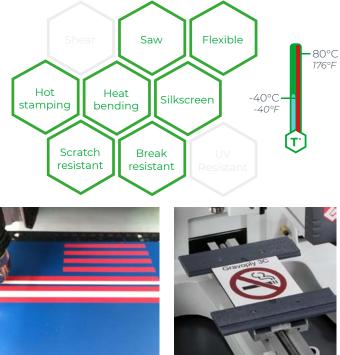
610 x 600 mm 24 x 24''

600 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Logos and pictures

Pictograms

45

🔿 ROTARY MATERIALS

COMPLEMENTARY PRODUCTS

See page 76

See page 78



Gravoclean

Double-Sided Adhesives 50mm







Signage

Safety sign

ECOCUT

A very affordable material for rotary cutting work

è	

	Thickness		
Core colour	0.8 mm (1/32'')	1.5 mm (1/16'')	
white	85981	85982	
black	85983	85984	

Note:

The surface of the Ecocut is rough. It may include scratches and imperfections. Use only for cutting applications where the surface state does not matter.

For CO2 laser cutting, we suggest the use of Ecocut Laser.

· Specific low-priced plastic for cutting applications.

 \cdot Make stencils for letters, numbers, logos and more.

• Create positioning templates to hold parts or place cut-out letters.

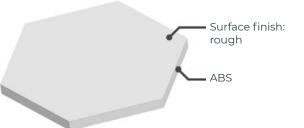
AVAILABLE SHEET SIZES



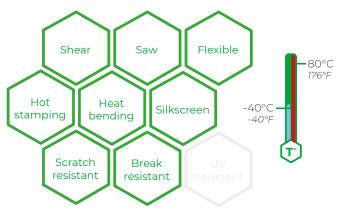
610 X	610 m	۱m
2	111	
24 x 2	.4	



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 76

Gravoclean

💎 ROTARY MATERIALS



COMPLEMENTARY PRODUCTS

See page 78

Adhesive

mounting tape

Cutting-out template



Paint filling





Stencil for safety

Cutting shapes

GRAVOGLAS[™] 2-PLEX[™] **SUBSURFACE**

The reverse outdoor acrylic material

MATTE

Surface		Thickness		
colour	Core colour	1.6 mm (1/16'')	3.2 mm (1/8'')	
clear	clear	17941	18082	
white	clear	17947	18086	
yellow	clear	17956		
red	clear	17950		
azure blue	clear	17953		
silver grey	clear	17961	34406	
black	clear	17944	18084	

GLOSSY

Surface	Core colour	Thickness		
colour		1.6 mm (1/16'')	3.2 mm (1/8'')	4.8 mm (0.20'')
white	clear		18021	18101
yellow	clear	18003		
red	clear	17997		
silver grey	clear	29656		
gold	clear	17982	18091	
black	clear	17991	18024	18104

COMPLEMENTARY PRODUCTS See page 82

See page 73





Wooden

support



See page 82

Gravolaque

Screws

APPLICATIONS



Outdoor signage



Small pieces

• Engrave the back, so the front always protects the engraving.

- After mechanical reverse engraving, can be paint filled.
- \cdot Resists to fingerprints, scratches and UV.

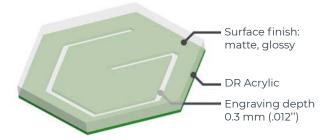
AVAILABLE SHEET SIZES



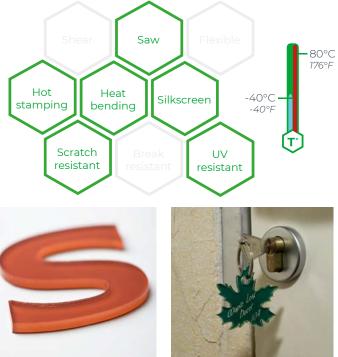
610 x 610 mm 24 x 24''



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Letter cut out

Gift and decoration

47

ACRYLIC - CLEAR

	Thickness		
Core colour	3.0 mm (1/8'')	6.0 mm (0.20'')	10.0 mm (0.40'')
clear	83423	83424	83425
translucent green	83426		
translucent blue	83427		

• Cast acrylic. A resistant material, both for indoor and outdoor use. Rotary and laser engraving and cutting. Perfect for UV printing.

• Glossy finish. White engraving. Clear Acrylic can also be used as a substrate.

• A real alternative to glass, lighter and more resistant. Perfect light transmission, easily associated with light/LED.

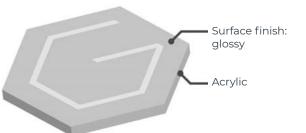
AVAILABLE SHEET SIZES



610 x	610 mm
24 x 2	

610 x	305	mm
24 x 12	2"	

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 73

Gravolaque



COMPLEMENTARY PRODUCTS

See page 73

Application Kit

See page 82

Spacers

Gift and decoration



Promotional items



Light and illumination

Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

Trophy and awards

ACRYLIC - FLUORESCENT

Let your creativity flow!



49

	Thickness
Core colour	3.0 mm (1/8'')
fluorescent yellow	83428
fluorescent orange	83430
fluorescent pink	83429

· Discover the cast version of acrylic for a modern yet resistant finish.

· 1-ply translucent material. Vivid and bright colours. Glossy finish.

• Can also be used as a substrate. For even more creative possibilities, combine it with the other Acrylic materials.

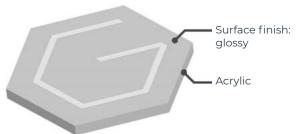
AVAILABLE SHEET SIZES



610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Display

🔿 ROTARY MATERIALS

COMPLEMENTARY PRODUCTS

See page 82

See page 80 See page 81



Spacers



Ball chains

Nickel-plated steel ring





Decoration



Promotional items



ACRYLIC - FROSTED



	Thickness	
Core colour	3.0 mm (1/8'')	
frosted white	83431	
frosted light blue	83434	
frosted sky blue	83438	
frosted blue ocean	83435	
frosted blue lagoon	83437	
frosted green	83436	
frosted yellow	83432	
frosted pink	83439	
frosted mauve	83433	

COMPLEMENTARY PRODUCTS

See page 82

O

Screws

• Double-sided material: one side matte, one side glossy. Matte side relatively insensitive to fingerprints and scratches.

• Laser CO2 and mechanical engraving and cutting on both the front and the back. Can also be used as a substrate.

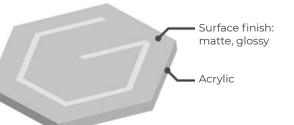
• Perfect for all your design and creative realizations.

AVAILABLE SHEET SIZES

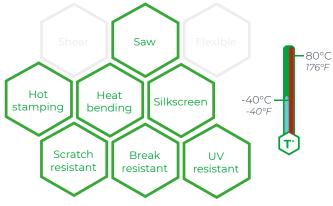


610 x 610 mm 24 x 24" 610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 82

Spacers

🔿 ROTARY MATERIALS



Decoration



Gifts and promotional items



Decoration

Creative signage

ACRYLIC - OPAQUE

Let your creativity flow!

	Thickness		
Core colour	3.0 mm (1/8'')	6.0 mm (0.20'')	
opaque white	83440	83441	
opaque black	83442	83443	

Note:

For even more colours and possibilities, combine Acrylic with Gravotac™ Exterior.



· Double-sided material: one side matte, one side glossy.

· Laser CO2 and mechanical engraving and cutting on both the front and the back. Can also be used as a substrate.

• Fine white contrast with CO2 laser on opaque black. Opaque white perfect for UV printing.

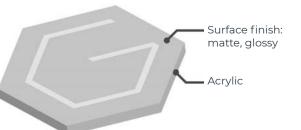
AVAILABLE SHEET SIZES



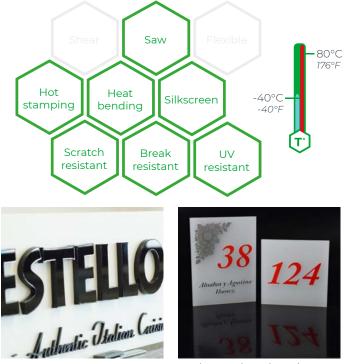
610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Indoor and outdoor signage

 $\langle \oplus \rangle \langle \oplus$ $\widehat{\uparrow}$

COMPLEMENTARY PRODUCTS

See page 73





Gravolaque



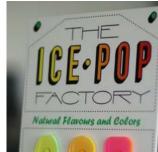
19 mm







Decoration



Visual communication

Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

Letter cut out

FLEXILASETM

The flexible material for high-definition engraving

52

Surface		Thickness
colour	Core colour	0.25 mm (0.010")
white	black	66984
yellow	black	66985
orange	black	66986
red	white	66997
purple	white	67002
apple green	white	67001
pine green	white	71673
sky blue	white	67000
blue	white	71670
air force blue	white	71671
	white white	71671 67004
blue		
blue brown brushed	white	67004
blue brown brushed aluminum	white black	67004 66991
blue brown brushed aluminum glossy silver matt	white black black	67004 66991 66990
blue brown brushed aluminum glossy silver matt aluminum european	white black black black	67004 66991 66990 67558
blue brown brushed aluminum glossy silver matt aluminum european gold	white black black black black black	67004 66991 66990 67558 66989

Purple, pine green and grey surfaces are subject to premature

You can mix any surface and core colours on demand.

· Very thin and flexible, excellent for indoor and outdoor labels on flat or curved surfaces.

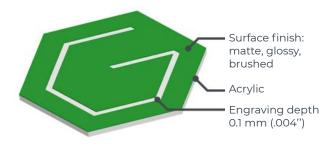
· Surface layer of just a few microns for fine laser CO2 engraving and cutting.

· Delivered with adhesive backing. Metallic colours for cups and trophies to be personalised.

AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Note:

colourfading.

Industrial labels



Labels for personalization

Trophy plates

Club It

1st pr

Labels for curved surfaces

GRAVOFOILTM

The reference for thin material dedicated to industrial signage

Surface		Thickness	
colour	Core colour	0.2 mm (0.008'')	
white	black	18448	
yellow	black	18456	
red	white	18450	
green	white	18460	
blue	white	18452	
grey	white	18454	
black	white	18446	

Note:

For CO2 laser engraving, we suggest the use of Flexilase[™].

• Follows the pipe identification colours for the industrial market.

• Excellent resistance to acids and solvents.

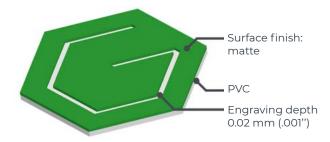
• Very flexible. Comes with adhesive backing, can be easily placed on curved surfaces.

AVAILABLE SHEET SIZES

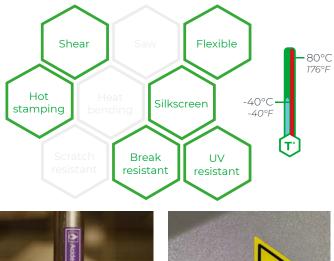


480 x 330 mm 18 x 12.5"

MATERIAL SPECIFICITIES







APPLICATIONS



Pipes and valves identification



Permanent labels





Pipes identification

and the second

C ROTARY MATERIALS

 $(-) \langle D \rangle \langle D \rangle$

Industrial labels

METALLEXTM

Metallic appearance for a high-end finish

54

Surface		Thickness		
colour	Core colour	0.8 mm (1/32'')	1.5 mm (1/16'')	2.4 mm (3/32'')
radiant silver	black	21825	21889	21957
matt aluminum	black	21867	21941	21999
brushed aluminum	black	21830	21898	21965
glossy silver	black	21823	21887	21955
new gold	black	21846	21914	21978
radiant gold	black	21824	21888	21956
european gold	black	21836	21903	21969
glossy gold	black	21822	21886	
brushed bronze	black		21904	

Note:

The surface layer of the Metallex[™] can be lasered but the quality of the engraving may vary depending on the colours. Laser cutting is not recommended.

On demand pre-cut tags available, ideal for machines or to enhance productivity.

With it smooth and supergloss finish, the Hard Coat version of Metallex[™] has a surface layer that is even more resistant to scratches and fingerprints.

COMPLEMENTARY PRODUCTS

See page 78

See page 79



APPLICATIONS





Coloured badges plastic frames

· A metallic aspect material with the advantages of plastic: easily cut and cheaper than metal.

• Fast engraving thanks to the very thin surface layer.

· Ideal for badges, trophy plates and awards and indoor applications.

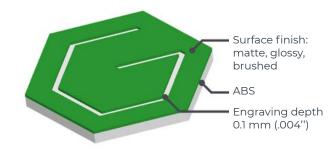
AVAILABLE SHEET SIZES



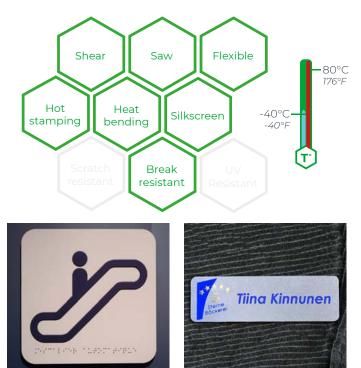
610 x 610 mm 24 x 24"



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Badges

Pictograms



Trophy plates

Indoor signage

METALLEX™ - HARD COAT

Metallic appearance for a high-end finish

Surface		Thickness	
colour	Core colour	1.5 mm (1/16'')	
radiant silver	black	21892	
brushed aluminum	black	21883	
glossy silver	black	21882	
radiant gold	black	21891	
european gold	black	21884	
glossy gold	black	21881	

Note:

The surface layer of the Metallex™ Hard Coat can be lasered but the quality of the engraving may vary depending on the colours. Laser cutting is not recommended.

On demand pre-cut tags available, ideal for machines or to enhance productivity.

• The Hard Coat version of Metallex™ has a surface layer that is even more resistant to scratches and fingerprints.

• Metallex™ Hard Coat has a smooth, super glossy finish.

· Ideal for badges, trophy plates, various awards and all indoor applications.

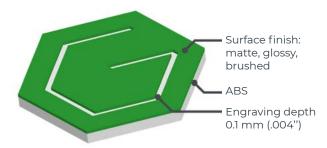
AVAILABLE SHEET SIZES



610 x 610 mm 24 x 24''

610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS



Ornamental plates

Indoor signage

Badges

🔿 ROTARY MATERIALS

GRAVOMETALL[™] - GLOSSY

The high quality brass material

	Conference		Thick	kness
	Surface colour	Core colour	0.5 mm (0.020'')	1.2 mm (0.050'')
[]	gold	gold	18407	18435
		tary and burnish and lacquered.	n engravin	g.

Note:

Diamond, rotary and burnish engraving. Pre-polished and lacquered. Apply clear lacquer after engraving to avoid tarnishing. For contrasting lettering, use Gravoxide or paint.

· Ideal for ornamental plaques, trophy plates and high-end indoor signage.

· For outdoor use, add a protective varnish after engraving.

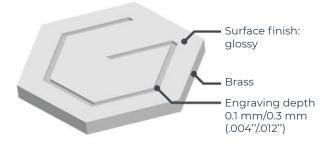
· High quality brass and high-end rendering with a shiny aspect.

AVAILABLE SHEET SIZES

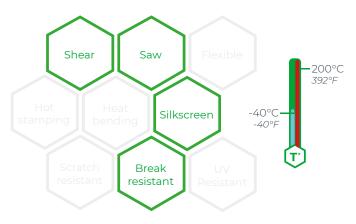


610 x 305 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 73

Gravoxide

ROTARY MATERIALS

COMPLEMENTARY PRODUCTS

See page 73

Gravolaque



Trophy plates



Indoor signage

GRAVOMETALL[™] - SATIN

The high quality brass material

Surface colour	Core colour	Thickness			
		0.0	1.2 mm (0.050'')	1.6 mm (1/16'')	
gold	gold	18423	18438	18441	
silver	gold	18429			

Note:

Diamond, rotary and burnish engraving.

Pre-polished and lacquered.

Apply clear lacquer after engraving to avoid tarnishing. For contrasting lettering, use Gravoxide or paint.

COMPLEMENTARY PRODUCTS

See page 73

Gravolaque

• Ideal for ornamental plaques, trophy plates and high-end indoor signage.

• For outdoor use, add a protective varnish after engraving.

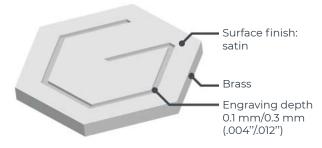
• Nice gold engraving contrast on the satin silver Gravometall™.

AVAILABLE SHEET SIZES

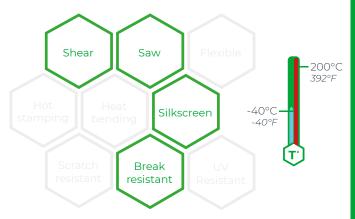


610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS

See page 73

Gravoxide



Indoor signage



Architectural signage

57



GRAVOBRASS™ EXTERIOR

The watchmaking-quality brass for outdoor use

	Thickness				
Core colour	1.0 mm (0.040'')	1.5 mm (1/16'')	2.0 mm (1/12'')	3.0 mm (1/8'')	
shiny polished brass	22032	22034	22036	22038	
solid brass	22031	22033	22035	22037	

Note:

Brass oxidation is a natural phenomenon. Clean your Gravobrass™ Exterior regularly to preserve its brightness or add a protective varnish after engraving. Solid brass is unpolished and may feature surface defects.

· High quality engraver's brass.

· Outdoor use: ideal for professional plaques and high-end signage.

· For contrasting lettering, paint fill with Gravotech paint.

AVAILABLE SHEET SIZES

6

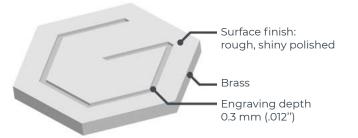
2



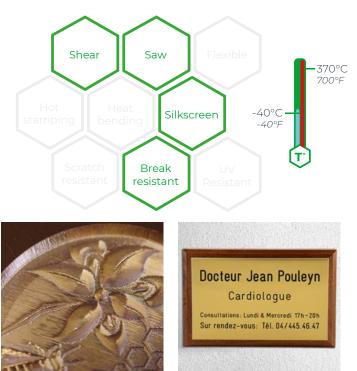
70 x	670 mm
6 x 2	6"

		1.1
1		1.1
670 x	335	mm
00 7		
26 x 1.	5''	

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



High quality signage

Professional plaques

COMPLEMENTARY PRODUCTS

See page 73









Engravolube solution

Application Kit

See page 73



APPLICATIONS

🔿 ROTARY MATERIALS



Architectural signage



Company name plaques

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COLORED ALUMINUM

The coloured aluminium for a striking contrast

Surface		Thickness	
colour	Core colour	0.6 mm (0.025'')	
red	silver	34528	
blue	silver	34497	
satin gold		34595	
glossy gold	silver	34596	
satin silver	silver	34625	
glossy silver	silver	34626	
black	silver	34455	

Note: Black, blue and red have a glossy finish. • Ideal metal for labels, small plates and indoor signage.

• Great for creativity: astonishing contrast after rotary or fibre laser engraving. Also sublimatable.

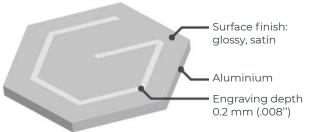
• Thin aluminium: easy to cut and shear.

AVAILABLE SHEET SIZES

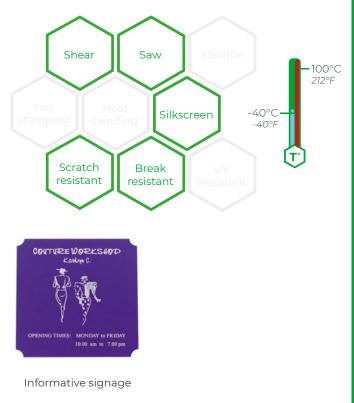


610 x 305 mm 24 x 12"

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



COMPLEMENTARY PRODUCTS



Surfex®

lubricant







Universal Cleaner

Double-sided 19 mm

APPLICATIONS



Directional signage



Name plate

59

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GRAVOXAL[™] - MATTE

The multipurpose anodised aluminium range

ò
$\tilde{\bigtriangleup}$

Surface	Core colour	Thickness					
colour		0.0	1.0 mm (0.040'')		2.0 mm (1/12'')	3.0 mm (1/8'')	
champagne	aluminum		18581				
red	aluminum		18577	18591			
green	aluminum		18583	18597			
blue	aluminum		18579	18593			
silver		18385	22055	18386	22057	22059	
gold	aluminum	18571	18575	18589	18603		
bronze	aluminum		18585	18599			
black	aluminum	18569	18573	18587	18601	18614	

Note:

Protective film on one side.

Due to the process, there can be stains in the corners of aluminium sheets.

Laser engraving on all colours except silver. The engraving contrast may vary according to the colour.

Size 2000 x 1000 mm (78 x 39") on request.

Gravoxal™ Matte silver also available in 4 mm (1/6"): Ref. 18388.

· Strong anodisation for a durable protection of the material.

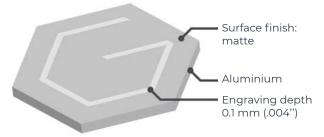
· Ideal for the manufacture of front panels, the engraving of nameplates and industrial signage.

• High-definition laser engraving to be carried out even at greyscales.

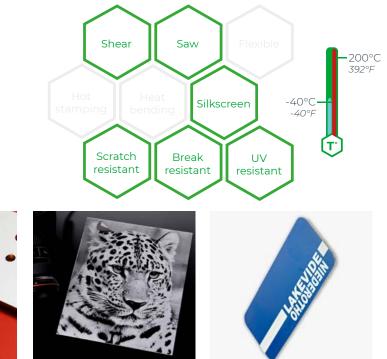
AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Pictures

Small plates

C ROTARY MATERIALS **APPLICATIONS**



Large signage



Control panels

GRAVOXAL[™] - GLOSSY

The multipurpose anodised aluminium range

Currente		Thickness			
Surface colour	Core colour	1.0 mm (0.040'')	1.5 mm (1/16'')	2.0 mm (1/12'')	
champagne	aluminum	18640			
red	aluminum	18636	18658		
green	aluminum	18642	18664		
blue	aluminum	18638	18660		
silver		18618	18646	18668	
steel look		30381	30382	30383	
gold	aluminum	18630	18654	18674	
black	aluminum	18624	18650	18671	

Note:

Protective film on one side.

Due to the process, there can be stains in the corners of aluminium sheets.

Laser engraving on all colours except silver. The engraving contrast may vary according to the colour.

Size 2000 x 1000 mm (78 x 39") on request.

· Strong anodisation for a durable protection of the material.

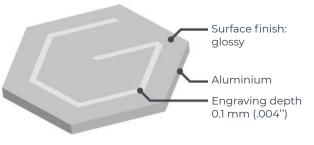
· Ideal for the manufacture of front faces, the engraving of nameplates and industrial signage.

• High-definition laser engraving to be carried out even at greyscales.

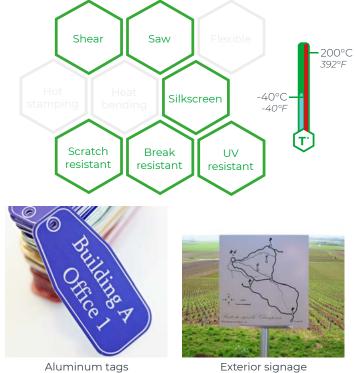
AVAILABLE SHEET SIZES



MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES





Control panel



Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

Indoor signage

C ROTARY MATERIALS

GRAVOSTRALTM

The advantages of aluminium combined with those of a phenolic base

Currente		Thickness		
Surface colour	Core colour	1.5 mm (1/16'') *	3.0 mm (1/8") *	
brushed gold	black	18472	18482	
silver	black	18471		

* References in green are double-sided

Note:

Black engraving. One side gold and one side silver (Ref. 18472 & 18482), or silver on both sides (Ref. 18471).

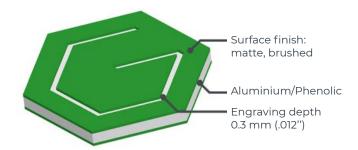
- Aluminium surface on both sides.
- · Black phenolic core, no paint filling required.
- \cdot Ideal for professional indoor signage.

AVAILABLE SHEET SIZES



605 x 305 mm 23 x 12"

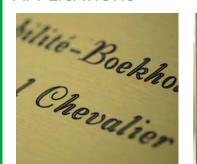
MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



APPLICATIONS



Professional plaques



Identification plates

Signs for shops

Interior signage

Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

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GRAVOSTRATTM

An economical material for demanding applications

Surface		Thickness		
colour	Core colour		2.5 mm (0.087'') *	
white	black	22042	22049	
yellow	black	22044	22051	
red	white	22043	22050	
cool grey	black	22047		
black	white	22041	22048	

* References in green are double-sided

Note:

Gravostrat™ can be laser engraved but not laser cut. Gravostrat[™] may be subject to slight variations in thickness. · Double-sided rigid phenolic material with a glossy finish.

· Ideal choice for all industrial identification needs.

· Resistant to chemicals and solvents. nonflammable, conforms to military specifications ASTM D 709 ES-1, ES-2, ES-3, electrically nonconductive.

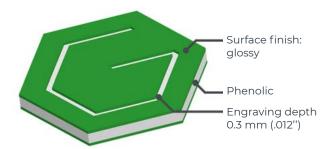
AVAILABLE SHEET SIZES



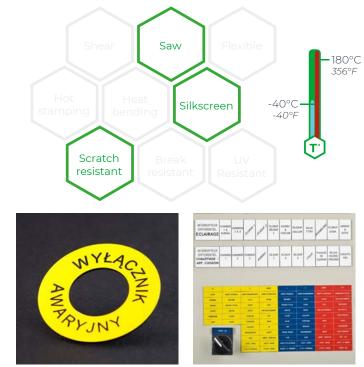
605 x 600 mm 24 x 24''

600 x 300 mm 24 x 12''

MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES



Push button

COMPLEMENTARY PRODUCTS

See page 76







Industrial Degraising Spray

Ball chains



Nickel-plated steel ring

APPLICATIONS



Indoor signage

Safety sign

Sheet sizes may vary slightly. Printed colours for indication only. Cannot serve as a substitute for real material sample.

ROTARY MATERIALS ()

Industrial identification

GRAVOTACTM

The indoor material for ADA compliant braille and tactile signage



	Thickness			
Core colour	0.8 mm (1/32'')	1.6 mm (1/16'')	3.2 mm (1/8")	
clear	32729			
bright white	37042	29879		
white	37033	29880	31236	
almond		29882		
yellow	24998			
red		29885		
taupe	37047	29890		
brown	31631			
pine green	37060			
navy blue	69712	29898		
candlewick		29899		
silver grey		29900		
slate	37065	29901		
black	37037	29902	31256	

THE GRAVOTAC™ PROCESS



1°) Put a 0.8 mm (1/32") profile material to 1.6 mm (1/16") or 3.2 mm (1/8") substrate. 2°) Engrave using outline font.

3°) Peel excess profile material off substrate.

For better visibility, choose contrasted colours.

COMPLEMENTARY PRODUCTS





Gravoclean

ROTARY MATERIALS

APPLICATIONS



Indoor signage



Pictograms

• Matte finish. Complies with Americans with Disabilities Act (ADA) and Disability Discrimination Act (DDA).

· Ideal for signage in buildings open to the public.

 \cdot Save time and order your sheets with adhesive backing.

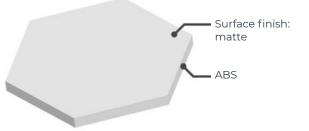
AVAILABLE SHEET SIZES



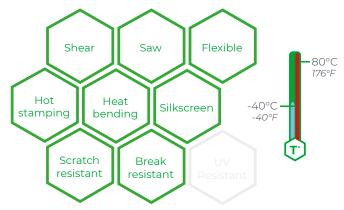




MATERIAL SPECIFICITIES



MATERIAL CAPABILITIES







Shape cutting

Braille and tactile signage

SIGNAGE

SIGN HOLDERS & BASE PLATES

COUNTER AND DESK BASES

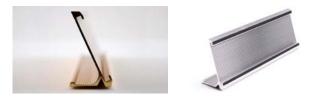
Ideal to support small to medium-sized inserts. Supplied without signage plate.



	Insert thickness	Insert dimensions	Colour	Ref.
Plate stand	1.6 mm (0.06")	200 x 100 mm max. (8 x 3.94'' max.)	silver	19480

DESK HOLDERS

Ready to be placed on a table, a desk or a counter to identify a person, a function or a department. Supplied without signage plate.



	Insert thickness	Insert dimensions	Colour	Ref.
Clinalina plata haldar		silver	silver	30072
Slimline plate holder		178 x 25 mm (7 x 1'')	gold	30073
	1.6 mm (0.06'')	203 x 51 mm (8 x 2'')	silver	30076
Standard plate holder		254 x 51 mm (10 x 2'')	silver	19479
		254 x 51 mm (10 x 1.26")	gold	34820

DOUBLE-SIDED HOLDERS

Ideal for open/close signage or to indicate any changing information. Supplied without signage plate.



	Insert thickness	Insert dimensions	Colour	Ref.
Double-sided plate holder	1.6 mm (0.06'')	152 x 32 mm (6 x 1.26'')	silver	30074

WALL BRACKETS

Designed to identify a department or an office. Two finishing available available: bevelled borders or square borders. Use double-sided tape or screws to fix. Supplied without nameplate.



Bevelled border finish

Square border finish

	Insert thickness	Insert dimensions	Fixation type	Colour	Ref.
				gold	19476
		203 x 51 mm (8 x 2'')	screws &	silver	19485
			adhesive	gold	30069
Wall plate holder with bevelled border		254 x 51 mm (10 x 2'')		silver	30068
	1.6 mm (0.06'')	102 x 25 mm (4 x 1'')	adhesive	silver	19482
		152 x 25 mm (6 x 1'')		silver	30066
		203 x 38 mm (8 x 1.5'')	screws	silver	34888
Wall plate holder with bevelled border to be glued	-	203 x 25 mm (8 x 1'')	adhesive	silver	19483
Wall plate holder with square border		254 x 51 mm (10 x 2")	screws	silver	65929

CORRIDOR BRACKETS

Perfect to create a directional signage in corridors where the public flow needs strategic indications. Supplied with screws and cap nuts but without any signage plate.

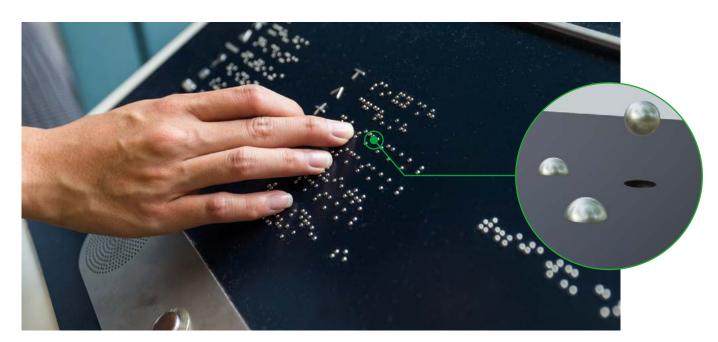




	Insert thickness	Insert dimensions	Fixation type	Colour	Ref.
Wall bracket	7.0 mama (0.17'')	51 mm min. (2" min.)		silver	19486
	3.2 mm (0.13'')	102 mm min. (4" min.)	screws	silver	19487

Our braille solution

braille is a system of tactile writing and reading for the use of blind and visually impaired people. There is no single universal braille system: different standards are used across the world, where sizes, character spacing and line spacing are specific to each individual language.



COMPATIBLE WITH



IS400 Engraving area: 305 x 210 mm (12 x 8")



IS8000 Engraving area: 610 x 1220 mm (24 x 47'') **IS7000** Engraving area: 610 x 810 mm (24 x 32'')

IS6000 Engraving area: 610 x 410 mm (24 x 16'')

SOFTWARE

The Gravostyle™ braille option allows the transcription of text into braille:



- 127 languages available.
- Totally automated procedure involving drilling followed by the insertion of beads (optional):
 - Customised cleaning and bead insertion speed.
 - Specific parameters for Gravotac[™], laminates, aluminum and plastics (ABS, PMMA)

DRILLING TOOLS

Refer to the selection guide to pick the right drilling tool reference, depending on the beads and support materials.

	BRAILLE TOOL SELECTION GUIDE				
	Adhesive-fr	Materials with adhesive			
Support Material	Steel beads	Acrylic beads	All beads		
Metals	48767	48767	48768		
Acrylics	48767	48767	48768		
Gravotac™	48766	48766	48768		
Phenolic	48767	48767	48768		
ABS + 2Ply	48686	48686	48767		

Ref: 48686 - Tool width 1.500 mm Ref: 48766 - Tool width 1.550 mm Ref: 48767 - Tool width 1.565 mm Ref: 48768 - Tool width 1.580 mm

BRAILLE BEADS

Ref.	Description	
49933	Stainless steel beads (x10 000)*	
49935	Clear acrylic beads (x10 000)	
49937	White acrylic beads (x10 000)	
49936	Black acrylic beads (x10 000)	



* Stainless steel beads are recommended when using our semi-automatic or automatic beads dispensers.

BEAD DISPENSER

Automatic and semi-automatic braille kit.



Ref.	Description
70711	Automatic braille for IS400
70713	Automatic braille for IS 6/7/8000 IQ
70714	Automatic braille for IS 6/7/8000 XP
49959	Semi-automatic braille kit for IS400 & ISx000

MICROPEL



Antistatic solution for acrylic braille beads. Ref. 76254

Did you know that we have several datasheets for our products?



WHAT ARE TECHNICAL OR SAFETY DATASHEETS?

The technical datasheet (TDS) provides information on the composition, technical characteristics and conditions of use of our products.

The safety datasheet (SDS) is a document that includes the information necessary to prevent accidents and ensure safety when using a preparation or a hazardous (chemical) substance. This document informs professionals who use this type of product in their daily work of the risks involved. Provided by the supplier or distributor, this document must be available for all hazardous products sold.

The regulation on hazardous substances requires the provision of the safety data sheet to the end user. Gravotech goes even further in its requirement to provide information to end users and has decided to provide safety data sheets even for materials intended for engraving (not subject to hazardous substances).

You can find SDS for the following items:

- Materials for laser engraving: plastics, acrylics, metallics and wood.
- Materials for mechanical engraving: plastics, metallics, phenolics.
- Engraving supplies: lubricants, cleaning agents, adhesives and colouring products.

SDS are the responsibility of Gravotech and must be translated by an accredited institution*.

*Information is provided as a guide only.



ENGRAVING SUPPLIES

COLOURING Laser metal marking

METAL MARKER G

The Metal Marker G is a metal black laser marking product for CO2 laser engravers. It allows a black marking on aluminum, brass, mild or stainless steel, magnesium and copper.

The liquid form of the Metal Marker G ensures a non-volatile application reducing the need for personal protective equipment (PPE) to the simple use of gloves. Unlike aerosol products, it is not necessary to wear a protective mask.



	Packaging type	Colour	Ref.
Metal Marker G	Bottle - 90 mL (3 oz)	black	86424*



THERMARK®

Water-based for a fast clean up. A thin coat of material can be sprayed onto the metal, then left to dry for less than 2 minutes and engraved with your laser.

The excess water-based material can easily be washed off to reveal the final black mark.

	Packaging type	Ref.
	Aerosol - 170 g (6 oz)	67120*
TherMark® LMM 14	Bottle - 50 g (1.76 oz)	67119
TherMark® LMM 6018LF1	Tape - 2.54 cm x 15 m (1" x 50')	71866
TherMark® LMM 6018LF2	Tape - 5 cm x 15 m (2'' x 50')	67121



ENGRAVING SUPPLIES

CERMARK®

Solvent-based for easy handling before marking. This range contains a hardener that allows the products to be easily handled prior to marking with your laser (ideal for high production quota).

	Packaging type	Ref.
CerMark® LMM 6000	Aerosol - 340 g (12 oz)	68880*
	Paste - 50 g (1.76 oz)	68878*
	Paste - 250 g (8.82 oz)	68879*
	Paste - 500 g (17.64 oz)	69974*

Caution before use: these colouring products require special security measures. Use them in well ventilated rooms only and wear suitable protective clothing and gloves.



Paints

GRAVOLAQUE

Polyurethane, ultra shine paint, available in 6 colours. Gravolaque is designed to colour Gravoglas™ 1, Gravoglas™ 2-PLEX™ subsurface, anodised aluminium and brass. For other colours, please contact us.

Bottle delivered with 1 spout for a direct & precise application and use of appropriate quantity.



Watch our videos!



	Packaging type	Colour	Ref.
Gravolaque		black	72194*
		white	72195*
	Bottle with spout - 250 mL (8.45 oz)	red	72196*
		blue	72197*
		gold	72198*
		green	72199*
Spare spout for Gravolaque	Spout - 1 unit	N/A	72204



NITROLAQUE

Versatile and fast drying, for colouring rotary engraving on metal, steel and plastic (except Gravoglas™ 1).

	Packaging type	Colour	Ref.
Nitrolaque	Bottle - 250 mL	white	30373*
	(8.45 oz)	black	30374*

APPLICATION KIT

Pack - 1 unit



Ref. 72886

- Application kit including:
- Spatula 75 x 60 mm (2.95 x 2.36'') (Ref. 72885)
- Rubafix roll (Ref. 16248)
- Tissues (Ref. 24296)
- (items can be ordered separately)

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CLEANING DILUTER FOR TOOLS

Bottle - 1 L (33.8 oz) **Ref. 19468***

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APPLICATION DILUTER

Bottle - 1 L (33.8 oz) Ref. 19469*

Oxydising agents

GRAVOXIDE

Bottle with application pad - 90 mL (3 oz)

Ref. 21129*

Designed to blacken fine engraving on Gravometall. Rotary engraving only. Bottle delivered with application cotton bud.

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ALOXIDE

Bottle with application pad - 90 mL (3 oz)

Ref. 21130* Designed to blacken fine engraving on glossy anodised aluminium. Rotary engraving only. Bottle delivered with application cotton bud.

Wax sticks

COLD WAX STICKS



Suitable for colouring small characters. Range of 6 colours available.

	Packaging type	Colour	Ref.
Cold wax sticks	Box - 5 sticks	silver	20214
		white	20215
		blue	20216
		black	20218
		gold	20219
		red	20220

GILDING WAX

Very fine metallic particles, coated with a wax binder. Suitable for glass and metal. The use of gilding waxes allows to create a beautiful high value contrast.



	Packaging type	Colour	Ref.
Empire	Unit - 30 mL (1 oz)	gold	86550
Silver		silver	86551



ODORLESS MINERAL SPIRIT

Bottle - 245 mL (8.3 oz)

Ref. 86552

This spirit helps remove gilding wax surplus around the engraving and clean the tools (spatula, brushes).

Odorless, it presents no risk of irritations or allergies.

CLEANING

GRAVOCLEAN

Multi-use green cleaner. Ideal to remove marks on plates before or after engraving. Non-agressive to acrylics and ABS. Suitable for Gravogrip™ cleaning.



Gravoclean

LASER OPTICS CLEANER

Box - 50 wipes



Pack - 125 mL (4.22 oz)

Ref. 26327*

Keeps your laser lens clean by removing dust and particles. Increases the optics lifetime, reduces power loss and lens heating.

Ref.

73180

73181



UNIVERSAL CLEANER

Bottle - 1 L (33.8 oz)

Ref. 23913* Ideal for cleaning metal and plastic surfaces (except ABS). Apply with a tissue.



INDUSTRIAL DEGREASING SPRAY

Spray - 500 mL (16.9 oz) Ref. 23912* To remove glue leftover on metal. Manual spraying.

76

LUBRICATING

ENGRAVING GEL

Water-based solution, Engraving gel is a non-irritating and odourless lubricant for glass, aluminium and soft steel engraving. Perfect for in-store use.



Natch ou videos!



Bottle with spout - 200 mL (6.76 oz) 83957



SOLUBLE OIL

Bottle - 1 L (33.8 oz)

Ref. 12913

For glass engraving only. Automatic dispensing with M40 Gift lubricating device.



ENGRAVOLUBE SOLUTION

Bottle with spout - 240 mL (8 oz)

Ref. 26887

Engravolube is a special lubricant which increases cutters lifetime and ensures a clean and smooth engraving.



Ref.

VARGOL

Bottle - 500 mL (16.9 oz)

Ref. 21780

Lubricant for VA circular saws. Synthetic oil for use with metals. Application with Vargol dispenser.



VARGOL BOTTLE DISPENSER

Unit - 1 unit

Ref. 21781

Vargol dispenser for VARGA saws, allows to set the lubricant flow according to the thickness of the material to cut.



TARFIL[™] AT

Bottle - 215 g (7.58 oz)

Ref. 19526

Designed for ferrous metal engraving with local manual application.



VECTOLUB™ LUBRICANT OIL

Bottle - 2 L (67.6 oz)

Ref. 23494

For non ferrous metal engraving. Automatic dispensing with Gravotech Spray mist lubricating device.



POLYCOUPE™ LUBRICANT SPRAY

Spray - 250 mL (8.45 oz)

Ref. 19527*

Apply manually on the tool tips, for non ferrous metal engraving.



SURFEX® LUBRICANT

Bottle - 1 L (33.8 oz)

Ref. 30368

For aluminium engraving and cutting only. Manual dispensing.

FIXING Double-sided tapes



DOUBLE-SIDED 14 MM

Unit - 14 mm x 50 m (0.55'' x 55 yds)

Ref. 30369

For long-term mounting of engraved plates. Use on smooth surfaces. Can be used to fix Braille beads.

Special tapes



DOUBLE-SIDED 19 MM

Unit - 19 mm x 50 m (0.75'' x 55 yds)

Ref. 85904

For long-term mounting of engraved plates. Ideal for smooth surfaces.



DOUBLE-SIDED 50 MM

Unit - 50 mm x 50 m (1.97'' x 55 yds)

Ref. 30372

For long-term mounting of engraved plates. Ideal for electrical switchboards.



PROTECTIVE ADHESIVE TAPE

Unit - 50 mm x 100 m (1.97'' x 109 yds)

Ref. 19528

To protect jewelry and brass plates while engraving.



ADHESIVE MOUNTING TAPE

Unit - 25 mm x 25 m (0.98'' x 27 yds)

Ref. 20151*

For temporary mounting of plates.



TRANSFER

Unit - 20 mm x 30 m (0.79'' x 33 yds)

Ref. 21121

For long-term mounting of engraved plates. Ideal for curved surfaces, instant adhesion.

Fixing glue



GRAVOFIX

Bottle - 250 mL (8.45 oz)

Ref. 19360*

Tin of solvent especially designed to fix plasticbacked pins to badges.

Always clean the surface before applying the glue to ensure a perfect adhesion.

GRAVOGRIPTM

Ref. 78056

Our famous flexible material, to be placed under the part to mark or cut. Ensures a strong grip to maintain the part, faster and easier to use than jigs. For IM3, M20, M40 & IS200 use a support table.

SEMI-ADHESIVE

Spray - 500 mL (16.9 oz)

Aerosol for non-permanent

fixing and repositioning of lightweight materials.

Not recommended with

expanded polystyrene.

SPRAY GLUE

Ref. 23914

Cut to size on request.

Available sheet sizes

1220 x 610 mm 48 x 24"



610 x 610 mm



610 x 305 mm

24 x 12"

Laser Wood accessories



MASKING PAPER

Unit - 1 unit

Ref. 83057

Protect your Laser Wood sheets before laser cutting with this masking paper.

Prevents contact of fume and dust while the laser is cutting, ensuring a neat result.



CLAMPS

Pack - 6 units

Ref. 83366

Spring clamps designed to fasten plates such as Laser Wood to the honeycomb table. Prevents warping. Can be used with many other materials, thin or thick.



Watch our video!

MECHANICAL FASTENINGS Ball chains





3 colours available.

To attach tags, medals or any drilled item to a wide range of objects (suitcase, pipe, key ring, valve, etc.). Made of coloured stainless steel bead of 2.42 mm (0.095"), it measures 114 mm (4.5") long.

	Packaging type	Colour	Ref.
Ball chain	Pack - 10 units	silver	69880
		gold	69883
		black	69452







NICKEL-PLATED BRASS W/ FASTENER

Pack - 100 units

Ref. 19534

Beads of 2.25 mm (0.088'') diameter and 150 mm (5.91'') length.

NICKEL-PLATED BRASS W/O FASTENER

Pack - 10 units

Ref. 19535

Beads of 2.25 mm (0.088") diameter and 1.5 m (59") length.

FASTENERS

Box - 100 units

Ref. 19536

To attach beads and close ball chains. Use with 2.25 mm (0.088") diameter ball chains.

80

Ties



S-HOOK RINGS

Ideal to fix all your medals and tags.



	Packaging type	Colour	Ref.
S-Hook 21 mm (0.82'')		golden	30152
S-Hook 26 mm (1.02")	Pack - 25 units	zinc- plated	30151

NICKEL-PLATED STEEL RING



Ideal to fix all your medals and tags.

	Packaging type	Colour	Ref.
Steel ring Ø 13 mm (0.51'')	Pack - 100 units nickel- plated	19532	
Steel ring Ø 20 mm (0.78'')			19530

Wooden supports



WOODEN SUPPORT

Unit - 1 unit

Ref. 19470

Wooden support to enhance engraved plates. Dimensions: 340 x 240 x 20 mm (13.4 x 9.45 x 0.79"). Composition: tropical hardwood. Indoor & outdoor use.

Screws and spacers

SCREWS



Includes screws and screw covers. Ensures a very high quality finishing of the mounted plates.

	Packaging type	Colour	Ref.
Screws 4 x 20 mm	(0.16 x 0.79") Pack - 100 units	gold	25731
(0.16 x 0.79'')		silver	25732
Screws 4 x 30 mm (0.16 x 1.18'')		gold	25733
		silver	25734

SPACERS



The ideal fasteners to add a finishing touch to professional plates, hotel signage etc.

	Packaging type	Outside diameter	Distance from wall	Possible material thickness	Inside diameter	Colour	Ref.
Rounded	Pack - 4	15 mm	26 mm	0-14 mm	9 mm (0.35")	golden	19471
spacers	units	(0.59'')	(1.02'')	(0-0.55'')		silver	19472

82

Stainless steel support

STAINLESS STEEL PIPE SUPPORT



When gluing labels on hot pipes is not possible due to high temperatures (i.e over 70° C / 158° F), fixing them becomes very easy with a stainless support. Rounded corners. Hole diameter 3.2 mm (0.125'').

	Packaging type	Ref.
Pipe support 80 x 40 mm (3.15 x 1.6'')	Pack - 10 units	19547
Pipe support 120 x 60 mm (4.72 x 2.36'')		19548



COLLARS & HEADS

Unit - 25 m (27 yds) & 50 heads

Ref. 19551

This kit contains collars and heads to attach the stainless steel support and its sign directly onto any pipe. Delivered in a 25 m (27 yds) roller including 50 attach heads.

Plant label holder



ALUMINIUM PLANT LABEL HOLDER

Unit - 1 unit

Ref. 30149

Composed of 300 mm (11.81") long shaft and a flat slanted support able to receive a 120 x 53 mm (4.72 x 2.08") sized label. Suitable for 1.6 mm (1/16") thick material.



ZINC-PLATED STEEL PLANT LABEL HOLDER

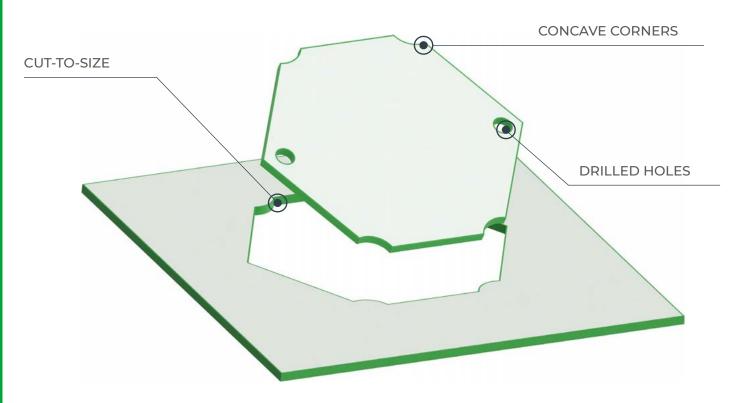
Unit - 1 unit

Ref. 30150

Composed of 600 mm (23.62") long shaft and a flat slanted support can hold a 120 x 48 mm (4.72 x 1.89") sized label. Suitable for 1.6 mm (1/16") thick material.

Is your machine not available to handle this new and urgent order?

We provide custom-made plates according to your specifications, from one unit to series.





Custom shapes made to your specifications.



BEVELLING

Bevelling is cutting the edges with a 45° angle to create a slope all around the part.



DRILLED HOLES

To accommodate your metal and plastic mounting needs, diameter and position are customisable.



ROUNDED / CONCAVE CORNERS

We offer a wide selection of profiles and radiuses for corners.



BENDING

Plastic materials can be bent into stand-up display signs, badges, etc. Maximum length of the bend is 500 mm (20").



Adhesive: 467MP or 468MP available depending on the roughness of the substrate.

Magnetic: Ideal for metallic shelves, magnetic backing can be applied to to plates, strips and sheets.



CREATE YOUR OWN BADGES

Make your own badges with any Gravotech engraving material by simply adding a fixing device.

Badges hardware with adhesive back

LARGE MAGNETIC

45 x 15 mm (1.77 x 0.59'')

FASTENER

Pack - 10

Ref. 30365





COMPACT MAGNETIC

25 x 15 mm (0.98 x 0.59")

FASTENER

Box - 10

Ref. 19362



SAFETY PIN Pack - 50 42 x 9 mm (1.65 x 0.35") Ref. 30364



CLIP WITH SAFETY PIN

Pack - 50 24 x 12 mm (0.94 x 0.47'') Ref. 19358

Badges hardware for heat fusing





SAFETY PIN	
Unit - 1	
Ref. 30355	

CLUTCH Unit - 1 Ref. 30358



Badges hardware to be glued

These fasteners need to be glued to the badges with Gravofix. Only works with ABS material.







CLUTCH BAR Pack - 20 Ref. 30362 SAFETY PIN Pack - 50 42 x 8 mm (1.65 x 0.31'') Ref. 19345

PIN WITH CLUTCH

Pack - 50 Ø 11 mm (Ø 0.43'') Ref. 30363

GRAVOFIX

Tin of solvent especially designed to fix plastic-backed pins to badges.

Always clean the surface before applying the glue to ensure a perfect adhesion.



	Packaging type	Ref.
Gravofix	Bottle - 250 mL (8.45 oz)	19360*



BADGES COLOURED PLASTIC

FRAMES

Enhance any badge by adding a golden or silver effect frame. Ideal with a 0.8 mm (1/32") thick material. Delivered without fastener.

	Packaging type	Colour	Ref.
Gold plastic frame		gold	19354
Silver plastic frame	Pack - 50	silver	19355

DOOR PLATES

Premium solid brass door plates

Large variety of shapes available. These solid brass door plates are all varnished to prevent oxidation. Use Gravotech colouring products to create a contrasted engraving.





MODEL B



MODEL C



MODEL D

66 x 37 mm (2.60 x 1.46'')	
Unit - 1	Ref. 27487
Pack - 6	Ref. 78939

105 x 42 mm (4.14 x 1.65")	
Unit - 1	Ref. 21812
Pack - 6	Ref. 78927

105 x 54 mm (4.14 x 2.13'')	
Unit - 1	Ref. 22088
Pack - 6	Ref. 78929

100 x 40 mm (3.94 x 1.58'')	
Unit - 1	Ref. 22089
Pack - 6	Ref. 78935



83 x 48 mm (3.27 x 1.89")

Ref. 22090

Ref. 78932







MODEL E

Unit - 1

Pack - 6

MODEL A

MODEL F

135 x 65 mm (5.32 x 2.
1.1	D.6.00

135 x 65 mm (5.32 x 2.56'')			
	Unit - 1	Ref. 22091	
	Pack - 6	Ref. 78931	

Maldi

MODEL G	

130 x 30 mm (5.12 x 1.18'')	
Unit - 1	Ref. 22092
Pack - 6	Ref. 78938

MO	DF	н
1.10		

97 x 33 mm (3.82 x 1.30'')	
Unit - 1	Ref. 22093
Pack - 6	Ref. 78936



MODEL I

160 x 60 mm (6.30 x 2.36'')	
Unit - 1 Ref. 22094	
Pack - 6	Ref. 78926



100 x 28 mm ((3.94 x 1.10'')
Unit - 1	Ref. 22095
Pack - 6	Ref. 78930





MODEL K

122 x 42 mm (4.81 x 1.65'')		
Unit - 1	Ref. 22096	
Pack - 6	Ref. 78928	

MODEL L

115 x 40 mm (4.53 x 1.58'')		
Unit - 1	Ref. 30085	
Pack - 6	Ref. 78933	

Gold'n door plates

Brass door plates coated with ultra resistant varnish and golden effect. Easy to install thanks to the glued back.

Use Gravotech colouring products to create a contrasted engraving.

SALLE DES MARIAGES	EINGANG	Actel &	Dr Yaniss CONTI MEDECINE SPORTIVE
MODEL U.1.	MODEL U.2.	MODEL V.1.	MODEL V.2.
150 x 50 mm (5.61 x 1.97") Unit - 1 Ref. 48336	150 x 50 mm (5.61 x 1.97") Unit - 1 Ref. 48335	145 x 45 mm (5.71 x 1.77") Unit - 1 Ref. 48338	145 x 45 mm (5.71 x 1.77") Unit - 1 Ref. 48337
Carolyn Woods Solicitor	LAUNDRY	• Rose Garden •	
MODEL W.1.	MODEL W.2.	MODEL X.	
135 x 65 mm (5.32 x 2.56") Unit - 1 Ref. 48334	135 x 65 mm (5.32 x 2.56")Unit - 1Ref. 48333	150 x 85 mm (5.91 x 3.35'')Unit - 1Ref. 48339	

GRAVOLAQUE

Polyurethane, ultra shine paint, available in 6 colours. Gravolaque is designed to colour Gravoglas™ 1, Gravoglas™ 2-PLEX™ subsurface, anodised aluminium and brass. For other colours, please contact us.

Bottle delivered with 1 spout for a direct & precise application and use of appropriate quantity.







	Packaging type	Colour	Ref.
		black	72194*
		white	72195*
Consideration	Bottle with spout - 250 mL (8.45 oz)	red	72196*
Gravolaque		blue	72197*
		gold	72198*
		green	72199*
Spare spout for Gravolaque	Spout - 1 unit	N/A	72204

MEDALS Anodized aluminium medals

Anodized aluminium medals with hole. Can be diamond dragged, milled or laser engraved. Golden and silver medals will result in a non-contrasting engraving with a CO2 laser.

Packaged by 10.



MEDAL A - LARGE BONE

Colour	Ref.
silver	69285
gold	69286
blue	69287
light blue	69288
red	69289
green	69290
purple	69291
pink	69293
black	69294

MEDAL B - SMALL BONE

Colour	Ref.
silver	69295
gold	69296
blue	69297
light blue	69298
red	69299
green	69300
purple	69301
pink	69303
black	69304

Colour	Ref.
silver	69305
gold	69306
blue	69307
red	69309

Colour	Ref.
silver	69315
blue	69317
red	69319
pink	69323
black	69324

MEDAL C - LARGE PAW MEDAL D - SMALL PAW

MEDAL E - LARGE HEART

Colour	Ref.
pink	69273
red	69269
gold	69266
silver	69265

MEDAL F - SMALL HEART

Colour	Ref.
silver	69275
gold	69276
red	69279
pink	69283

MEDAL G - SMALL CIRCLE

Colour	Ref.
silver	69325
gold	69326
blue	69327
red	69329
black	69334

MEDAL H - MILITARY TAG

Colour	Ref.
gold	69366
silver	69365
blue	69367
light blue	69368
red	69369
green	69370
orange	69372
black	69374

MEDAL I - CLOVER

Colour	Ref.
green	69420

MEDAL J - LARGE CIRCLE

Colour	Ref.
gold	69336
blue	69337
red	69339
black	69344



BALL CHAINS

To attach tags, medals or any drilled item to a wide range of objects (suitcase, pipe, key ring, valve, etc.). Made of coloured stainless steel bead of 2.42 mm (0.095"), it measures 114 mm (4.5") long.

	Packaging type	Colour	Ref.
	Ball chain Pack - 10 units	silver	69880
Ball chain		gold	69883
		black	69452

ENGRAVABLES

Brass medals

Brass medal with effect «shiny gold» or «nickel-plated». Includes one or several holes for fixing. Can be diamond dragged, milled or laser engraved.

Use Gravotech colouring products to create a contrasted engraving.

Reyes -34 \$35 354 4(4)

MODEL A

Colour	Dimensions	Hole diameter	Packaging type	Ref.
golden	30 x 31 mm (1.18 x 1.22'')	3.5 mm (0.14'')	Pack - 10	23906

MODEL B

153 E Pearson Street Chicago 01 57 32 71 28	Colour	Dimensions	Hole diameter	Packaging type	Ref.
	nickel-plated	15 x 71 mm (0.59 x 2.79'')	3 mm (0.12'')	Pack - 10	47820

MODEL C

Colour	Dimensions	Hole diameter	Packaging type	Ref.
golden	12 x 61 mm	3 mm	Pack - 10	47818
nickel-plated	(0.47 × 2.40'')	(0.12'')	Pack - 10	47819

MODEL D

Colour	Dimensions	Hole diameter	Packaging type	Ref.
golden	Ø 33 mm	4 mm	Pack - 10	47813
nickel-plated	(Ø 1.29'')	(0.16'')	Pack - 10	47810

MODEL E

Colour	Dimensions	Hole diameter	Packaging type	Ref.
golden	Ø 25 mm 4 mm	Pack - 10	47812	
nickel-plated	(Ø 0.98'')	(0.16'')	Pack - 10	47809

MODEL F

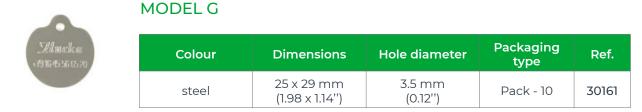
Ho	ne	'W	
1000		-	
×	-		

Colour	Dimensions	Hole diameter	Packaging type	Ref.
golden	Ø 22 mm	4 mm	Pack - 10	47811
nickel-plated	(Ø 0.86'')	(0.16'')	Pack - 10	47808

Stainless steel medals

Recommended for harsh environment, ideal for industrial applications or any application with an extended lifetime.

Use Gravotech colouring products to create a contrasted engraving.



MODEL H



MODEL I

Colour	Dimensions	Hole diameter	Packaging type	Ref.
steel	30 x 31 mm (1.18 x 1.22'')	3.5 mm (0.12'')	Pack - 10	23907

Hotel key rings

Hotel key ring made from anodized aluminum with a rubber shock ring to prevent scratches. Can be diamond dragged, milled or laser engraved.

Delivered individually.

RECTANGULAR HOTEL KEY RINGS

Welcome to the	Colour	Dimensions	Ref.
Sunshine Lott	silver	29 x 88 mm	30132
	gold	(1.15 x 3.4'')	30133

ROUNDED HOTEL KEY RINGS

50	Colour	Dimensions	Ref.
stay!	silver	29 x 80 mm	30134
	gold	(1.15 × 3.15'')	30135

ORNAMENTAL PLATES

Ornamental metallic plates

Natural steel or golden aspect ornamental plates. Can be diamond dragged, milled or laser engraved. Includes 2 holes on the sides for fixing. Dedicated to high value gifting, awards or artistic signage. Packaged by 50 units.

GRAVOXAL™, NATURAL STEEL ASPECT

Pablo de Valladolid, 1635•	Gravotech material	Colour	Dimensions	Hole diameter	Ref.
			71 x 15 mm (2.80 x 0.59'')		30125
	Gravoxal™, steel look 1.0 mm (0.040'')	steel	89 x 15.9 mm (3.51 x 0.63'')	3 mm (1/8'')	30123
			61 x 12 mm (2.40 x 0.47'')		30124

GRAVOMETALL™, GOLDEN ASPECT

• Orages-C.Monel •	Gravotech material	Colour	Dimensions	Hole diameter	Ref.
		satin gold	61 x 12 mm		58786
	Gravometall™	glossy gold	(2.40 × 0.47'')	3 mm	58785
	0.6 mm (0.025")		71 x 15 mm	(1/8")	58788
			(2.80 x 0.59'')		58787

METALLEXTM

🔹 Σαντορίνη 📀	Gravotech material	Colour	Dimensions	Hole diameter	Ref.
	Metallex™ 1.5 mm (1/16'')	matte silver/ black	63.5 x 9.5 mm (2.50 x 0.37'')	3 mm (1/8'')	30112

Auto-adhesive ornamental plates

Small rounded shaped Gravometall[™] plates with adhesive back. Can be diamond dragged, milled or laser engraved. Dedicated to high value gifting, awards or artistic signage. Packaged by 50 units.

Cheers

Ile de la Réna

SELF-ADHESIVE GRAVOMETALL™

Gravotech material	Colour	Dimensions	Ref.
Gravometall™	satin silver	40 x 10 mm	49125
0.6 mm (0.025'')	satin gold	40 x 10 mm (1.58 x 0.39'')	61323

¢

KEY TAGS Aluminium tags

Suitable for milling or laser engraving.

Initially dedicated to key tags but also very popular in industrial identification and signage. Packaged by 10 units.



ROUNDED ALUMINIUM KEY TAGS

Colour	Dimensions	Hole diameter	Ref.
blue			30138
green	30 mm (1.18'')	4 mm	30139
gold	((0.15'')	30136
red	38 mm (1.49'')		30141

SHAPED ALUMINIUM KEY TAGS

here o	Colour	Dimensions	Hole diameter	Ref.
	red			19193
	blue	65 x 30 mm	4 mm	19194
	green	(2.55 x 1.18'')	(0.15'')	19195
	gold			19196

RECTANGULAR ALUMINIUM KEY TAGS

ABINET Nº2	Colour	Dimensions	Hole diameter	Ref.
	red			19189
	blue	40 x 16 mm (1.57 x 0.62'')	4 mm (0.15")	19190
	green			19191
	gold			19192

Ties

FILING CA

NICKEL-PLATED STEEL RING

Colour	Dimensions	Packaging type	Ref.
	Ø 13 mm (Ø 0.51'')	Pack - 100	19532
nickel-plated	Ø 20 mm (Ø 0.78'')	Pack - 100	19530

ELECTRICAL IDENTIFICATION

Legend plates type 440

To identify electrical and industrial switches. Packaged by 50 units.



TYPE 440 BLACK WHITE

Gravotech material	Colour	Dimensions	Hole diameter	Ref.
Gravoply™ 1 1.6 mm (1/16")			22.5 mm (0.88'')	19243
Gravoply™ 2	black/white	30 x 40 mm (1.18 x 1.57'')		22071
0.8 mm (1/32'')		. ,	24.5 mm (0.96'')	19240

TYPE 440 WHITE BLACK

BETRIEB EIN AUS

Gravotech material	Colour	Dimensions	Hole diameter	Ref.
Gravoply™ 1 1.6 mm (1/16'')			22.5 mm	19244
	white/black	30 x 40 mm (1.18 x 1.57'')	(0.88'')	22072
Gravoply™ 2 0.8 mm (1/32")		(24.5 mm (0.96'')	19241

TYPE 440 RED WHITE

Gravotech material	Colour	Dimensions	Hole diameter	Ref.
Gravoply™ 1 1.6 mm (1/16")			22.5 mm	19245
Gravoply™ 2	red/white	30 x 40 mm (1.18 x 1.57'')	(0.88'')	22073
0.8 mm (1/32'')			24.5 mm (0.96'')	22066

TYPE 440 BLACK WHITE RED

Gravotech material	Colour	Dimensions	Hole diameter	Ref.
Gravoply™ 2	/ / .	30 x 40 mm	22.5 mm (0.88'')	22075
double-sided 0.8 mm (1/32'')	black/white/red	(1.18 × 1.57'')	24.5 mm (0.96'')	22068

ensions

40 mm

x 1.57")

Hole diameter

24.5 mm

(0.96'')

Ref.

22069

TYPE 440 WHITE BLACK YELLOW

MOTOR			
4 2	Gravotech material	Colour	Dime
	Gravoply™ 2 double-sided 0.8 mm (1/32'')	white/black/ yellow	30 x (1.18



BETRIEB EIN AUS

Strips for electrical cabinets

To identify item lines on electrical cabinet doors or boards. Minimum of order: 25 units.

Other dimensions, colors or materials available on demand.

ng Kitchen Study Plug m 1* floor

STRIPS 610 X 10 MM

Oven	Gravotech material	Colour	Dimensions	Ref.
	Gravoply™ 2 1.5 mm (1/16") with adhesive back	black/white		19283
		white/black	610 x 10 mm	19287
		red/white	(24 x 0.39'')	19291
		blue/white		19295

STRIPS 610 X 15 MM

Gravotech material	Colour	Dimensions	Ref.
Gravoply™ 2 1.5 mm (1/16")	white/black		19272
	black/white	610 x 15 mm (24 x 0.59'')	19284
Gravoply™ 2	white/black		19288
1.5 mm (1/16'') with adhesive back	red/white		19292
	blue/white		19296

STRIPS 610 X 20 MM

Gravotech material	Colour	Dimensions	Ref.
Gravoply™ 2 1.5 mm (1/16")	white/black		19273
	black/white	610 x 20 mm (24 x 0.79'')	19285
Gravoply™ 2	white/black		19289
1.5 mm (1/16") with adhesive back			19293
	blue/white		19297

STRIPS 610 X 30 MM

Gravotech material	Colour	Dimensions	Ref.
Gravoply™ 2 1.5 mm (1/16") with adhesive back	black/white		19286
	white/black	610 x 30 mm	19290
	red/white	(24 x 1.18'')	19294
	blue/white		19298

ENGRAVABLES

Labels for electrical items

Unitary identification of a device, inside or outside the electrical cabinet. Packaged by 50 units.



LABELS 60 X 15 MM

Gravotech material	Colour	Dimensions	Ref.
Gravoply™ 2	black/white	60 x 15 mm	19255
1.5 mm (1/16") with adhesive back	white/black	(2.36 x 0.59'')	19256

Ref.

19251

19252

LABELS 60 X 20 MM

Gravotech material	Colour	Dimensions	Ref.
Gravoply™ 2	black/white	60 x 20 mm	19259
1.5 mm (1/16") with adhesive back	white/black	(2.36 x 0.79'')	19260

LABELS 80 X 40 MM

Gravotech material	Colour	Dimensions	Ref.
Gravoply™ 2	black/white	80 x 40 mm	19263
1.5 mm (1/16") with adhesive back	white/black	(3.15 × 1.57'')	19264

98

CUTTERS

Gravotech cutters: engraving & cutting

TWINCUT SOLUTION

COMPOSE YOUR TOOL



The Twincut interchangeable cutters are designed to be used with a single tool holder.

Twincut has a wide range of inserts (carbide cutters) that covers all cutting and engraving applications, in plastic and metal, including stainless steel engraving and precious metal cutting.

Save up to 30% of your total rotary engraving tool cost.

ONECUT



Efficient and convenient

Most standard cutters are available with either a HSS (High Speed Steel) shaft or a micrograin carbide shaft.

PERCUT



Productivity and endurance

Short tools for demanding machining applications requiring a collet or high-speed spindle.

DIAMONDS



Delicacy and precision

For scribing or dot marking metals and glass. Rotating or tracing diamonds are available in the Onecut and Twincut ranges.

FIND THE RIGHT RANGE FOR YOUR MACHINE

	Engraving / Cutting / Drilling	Scribing (Diamond dragging)
M10	N/A	Twincut
M20/IM3	Onecut	3.17 mm
M20 V3 M40 IS200	Twincut Onecut 4.36 mm	Twincut Onecut 4.36 mm
IS400	Twincut (with collet or high frequency spindles) Onecut 4.36 mm Onecut 6.35 mm Percut (with collet or high frequency spindles)	Twincut (with collet or high frequency spindles) Onecut 4.36 mm Onecut 6.35 mm (with collet spindle)
ISx000	Twincut (with collet or high frequency spindles) Onecut 6.35 mm Percut (with collet or high frequency spindles)	Onecut 6.35 mm (with collet spindle) Twincut (with collet or high frequency spindles)

FIND THE RIGHT SHAPE FOR YOUR WORK

	Engraving	Cutting	Drilling	Scribing (Diamond dragging)				
Twincut	Conical Conical double cone Flat end cylindrical 1/4 Rounded cylindrical Round end cylindrical	Single lip Double lips	Drilling	Faceted rotative 120° Conical non-rotative 126.5°				
Onecut 3.17 mm	Conical Flat end cylindrical Round end cylindrical	N/A		Faceted rotative 90° Faceted rotative 110° Conical non-rotative 126.5° Diamond insert non- rotative				
Onecut 4.36 mm	Conical Flat end cylindrical 1/4 Rounded cylindrical Round end cylindrical	Helical Helical (braille)		Faceted rotative 110° Faceted rotative 120° Faceted rotative 126.5° Conical non-rotative 130° Diamond ball				
Onecut 6.35 mm	Conical	N/A		Conical non-rotative 130°				
Percut 3.00 mm	3/4 Conical	Conical helical Single lip Double lips Triple lips						
Percut 4.00 mm	Conical with double recess	Single lip Double lips Triple lips		N/A				
Percut 6.00 mm	Conical with double recess	Conical helical Single lip Double lips Triple lips Four lips		Single lip Double lips Triple lips		Single lip Double lips Triple lips		

CUTTERS & INSERTS

102 TWINCUT

Conical 22.5°

Solid carbide cutting profile for signage and personalization engraving Recor on plastics and non ferrous metals.

т	inch	mm	Ref.
	carl	bide	
	0.010"	0.25	48608
	0.013"	0.32	48609
	0.020"	0.50	48610
	0.030"	0.75	48611
	0.040"	1.00	48612
	0.050"	1.25	48613
	0.060"	1.50	48614
	0.069"	1.75	48615
	0.080"	2.00	48616
	0.100"	2.50	48617
	0.120"	3.00	48618

Recommended for

Phenolic, aluminium, brass

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic



Conical 30.0°

Solid carbide sharpening profile for jewellery personalization applications: gold, silver and nickeled metals. Made of carbide grade medium grain size very hard with excellent wear resistance.

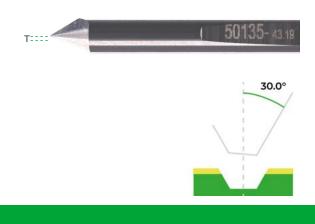
Т	inch	mm	Ref.
	carl	bide	
	0.010"	0.25	50135
—	0.013"	0.32	50136
—	0.020"	0.50	50137
—	0.030"	0.75	50138

Recommended for

Gold, silver

Suitable for

Aluminium, brass and nickeled metal



Conical 35.0°

Solid carbide cutting profile for marking & identification on ferrous metals (copper, steel and stainless steel). Cutting angle is ideal to engrave multi and simple lines font characters.

Recommended for

Steel, stainless steel and copper

Suitable for

Aluminium, brass and nickeled metal

	inch	mm	Ret.				
	carbide						
_	0.010"	0.25	48629				
-	0.013"	0.32	48630				
-	0.020"	0.50	48631				
-	0.030"	0.75	48632				
	0.040"	1.00	48633				
	0.050"	1.25	48634				
	0.060"	1.50	48635				



TWINCUT 103

Conical 15.0°

Т

Sharpening profile designed for Recommended for plastics & non ferrous metal. Ideal for finishing, bevelling, thin caracteres engraving and jewellery cutting.

carbide

0.32

15.0°

48713

0.013"

Aluminium, brass, gold, silver

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic

Conical 45.0°

Solid carbide sharpening profile designed for plastics & non ferrous metals for finishing and bevelling. Suitable for engraving job using

Intaglio.

Т	inch	mm	Ref.
	cark	oide	
	0.013"	0.32	48925
		45.0°	1
		X	
	~		

Recommended for

Aluminium, brass, phenolic

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic



1/4 rounded conical

Sharpening profile specifically designed for marking applications into ferrous metals (copper, steel and stainless steel). This cutter is suitable for all characters fonts.

	R	lec	om	m	en	de	d for
--	---	-----	----	---	----	----	-------

Copper, steel, stainless steel

Suitable for

Acrylics, aluminium, brass and nickeled metal

Т	inch	mm	Ref.
	carl	bide	
	0.010"	0.25	48636
	0.013"	0.32	48637
—	0.020"	0.50	48638
—	0.030"	0.75	48639
	0.040"	1.00	48640
	0.050"	1.25	48641
	0.060"	1.50	48642
	0.069"	1.75	48643
	0.080"	2.00	48644

Т::: 40.0°

Conical double cone

Profile designed for identification on hard metals like copper, steel and stainless steel. Profile produces a cut suitable for single line font characters.

Т	inch	mm	Ref.
	carl	bide	
	0.010"	0.25	48645
—	0.013"	0.32	46646
—	0.020"	0.50	44647
—	0.030"	0.75	42648
_	0.040"	1.00	40649
	0.050"	1.25	38650

Recommended for

Copper, cast iron, steel, stainless steel

Suitable for

Acrylics, aluminium, brass



/

104 TWINCUT

Flat end cylindrical

Sharpening profile specifically designed for large characters and logos engraving. Also suitable for cutting with straight edges.

т	inch	mm	Ref.
	carl	bide	
_	0.040"	1.00	48619
	0.060"	1.50	48620
	0.080"	2.00	48621
	0.100"	2.50	48622
	0.120''	3.00	48623

Recommended for

Phenolic, aluminium, brass

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic



Round end cylindrical

carbide

1.00

150

2.00

2.50

3.00

0.040"

0.060'

0.080"

0.100"

0.120"

Sharpening profile produces a round print, ideal for 3D profile as well as hollow. Mainly used for acrylics reverse engraving, when grooves are colour-filled.

Ref.

48624

48625

48626

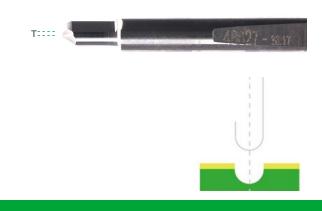
48627

48628

Recommended for Acrylic

Suitable for

Aluminium, brass



Drilling

Т

Solid carbide double lip upward spiral profile designed for drilling plastics and non ferrous metals.

Ideal with Gravostyle drilling function into CAM Module.

Ref. carbide 0.020" 0.50 48661 0.030" 0.75 48682 0.040" 48683 1.00 0.047" 120 48684 0.055" 1.40 48685 0.060" 1.50 48686 0.080" 2.00 48687 2.50 0.100" 48688

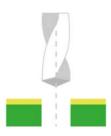
Recommended for

Aluminium, brass or ACM (Aluminium composite), HPL panels (High Pressure Laminate)

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic





Single lip

TWINCUT 105

Solid carbide single lip upward spiral.

Designed for cutting with straight edges, as well as finishing on aluminium, plastics, composites, laminates and non ferrous metals.

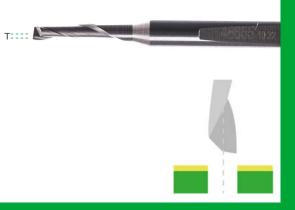
т	inch	mm	Ref.
	carl	bide	
	0.030"	0.75	48653
_	0.040"	1.00	48654
	0.080"	2.00	48655
	0.100"	2.50	48656

Recommended for

Aluminium, brass or ACM (Aluminium composite), HPL panels (High Pressure Laminate)

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic



Double lips

Solid carbide double lips upward spiral. Specifically designed for cutting with straight, as well as finishing on aluminium, plastics, composites & laminates.

т	inch	mm	Ref.
	carl	bide	
_	0.030"	0.75	48657
_	0.040"	1.00	48658
	0.080"	2.00	48659
	0.100"	2.50	48660

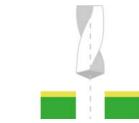
Recommended for

Aluminium, brass or ACM (Aluminium composite), HPL panels (High Pressure Laminate)

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic





Multilips

Multilips profile specifically designed for engraving & milling operations Recommended for into Epoxy resin of Printed Circuit Board (PCB) but also suitable for others resins.

Phenolic, epoxy





106 ONECUT 3.17 MM

Conical 22.5°

HSS or Solid carbide cutting profile designed for signage and personalisation engraving into plastics and non ferrous metal materials.

т	inch	mm	Ref.	
	carl	oide		
	0.010"	0.25	48793	-
—	0.013''	0.32	48794	-
—	0.020"	0.50	48795	-
—	0.030"	0.75	48796	-
_	0.040"	1.00	48797	-
	0.050"	1.25	48798	•
	0.060"	1.50	48799	•
	0.080"	2.00	48800	•
	0.120"	3.00	48801	

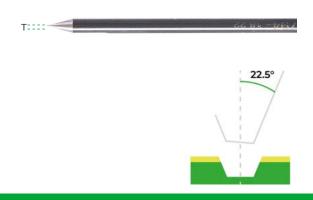
Т	inch	mm	Ref.
	HSS	steel	
	0.004"	0.10	48773
	0.010"	0.25	48774
	0.013"	0.32	48775
	0.020"	0.50	48776
	0.030"	0.75	48777
	0.040"	1.00	48778
	0.050"	1.25	48779
	0.060''	1.50	48780
	0.080"	2.00	48781

Recommended for

Gold, silver & phenolic for carbide

Suitable for

 $\label{eq:GravoplyTM} Gravoply^{TM}, Metallex^{TM}, Gravoplas^{TM}, Acrylic, \ aluminium, \ brass$



Conical 37.0°

HSS sharpening profile designed for plastics & non ferrous metals. Ideal for finishing, bevelling, cutting and thin character engraving.

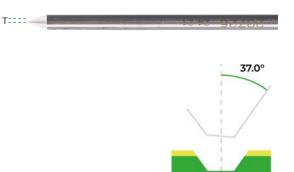
Т	inch	mm	Ref.
HSS steel			
_	0.013"	0.32	20171

Recommended for

Polypropylen(PP or PPI) toothbruch handle or others grades of floppy plastic

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic



Conical 15.0°

HSS (High Speed Steel) sharpening profile specifically designed for toothbrush plastic handle personalisation. Also suitable for other soft plastic materials.

Т	inch	mm	Ref.
	HSS	steel	
	0.010"	0.25	48802

15.0°

Recommended for

Gravoply™, Metallex™, Gravoglas™, Acrylic

Suitable for

Gold, silver, aluminium, brass



Solid carbide profile designed for plastics & non ferrous metals for finishing and bevelling. Excellent wear resistance.



Recommended for

Phenolic, Gravoply™, Metallex™, Gravoglas™, Acrylic

Suitable for

Gold, silver, aluminium, brass

ONECUT 3.17 MM 107

Flat end cylindrical

HSS or solid carbide cutting profile, suitable for most applications. This col produces flat bottom and a straight edge cut.

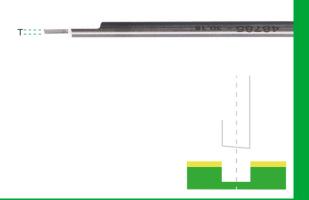
Т	inch	mm	Ref.	
carbide				
	0.120"	3.00	51372	
	HSS	steel		
	0.040"	1.00	48783	
	0.080"	2.00	48785	
	0.120"	3.00	48787	

Recommended for

Gold, silver, aluminium, brass, phenolic for carbide

Suitable for

Gravoply $^{\rm TM},$ Metallex $^{\rm TM},$ Gravoglas $^{\rm TM},$ Acrylic, gold, silver, aluminium, brass



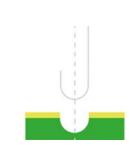
Round end cylindrical

Sharpening profile produce a round print, ideal for 3D profile as well as hollow. Mainly used for acrylics reverse engraving, when grooves are colour-filled.

Recommended for Gravoglas[™], Acrylic

T

т	inch	mm	Ref.
	HSS	steel	
_	0.040"	1.00	48788
	0.060"	1.50	48789
	0.080"	2.00	48790
	0.120"	3.00	48792



Ready to grind

Semi-finished cutter exclusively in carbide, to be sharpened. Can be made for technical jobs requiring specific profile.

Tool length	Cutting length	Ref.
105 mm (4.134'')	13.00 mm (0.511")	30046
50 mm (1.968'')	13.00 mm (0.511")	73011



ONECUT 4.36 MM 108

Conical 22.5°

HSS or solid carbide cutting profile designed for signage and personalisation engraving into plastics and non ferrous metals.

Т	inch	mm	Ref.
	carl	bide	
	0.004"	0.10	48820
	0.010"	0.25	48821
	0.013"	0.32	48822
—	0.020"	0.50	48823
	0.030"	0.75	48824
	0.040"	1.00	48825
	0.050"	1.25	48826
	0.060"	1.50	48827
	0.080"	2.00	48828
	0.120"	3.00	48829

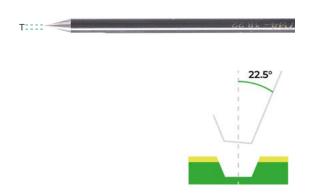
Т	inch	mm	Ref.
	HSS	steel	
	0.004"	0.10	48808
—	0.010"	0.25	48809
—	0.013"	0.32	48810
—	0.020"	0.50	48811
—	0.030"	0.75	48812
-	0.040"	1.00	48813
-	0.050"	1.25	48814
	0.060''	1.50	48815
	0.080"	2.00	48816
	0.120"	3.00	48818

Recommended for

Gold, silver, aluminium, brass, phenolic for carbide cutter

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic, gold, silver, aluminium, brass



Conical 15.0°

Sharpening profile designed for Recommended for plastics & non ferrous metals. Ideal for finishing, bevelling, thin caracteres engraving and jewellery cutting.

HSS steel

0.25

15.09

0.010"

Gravoply™, Metallex™, Gravoglas™, Acrylic

Suitable for

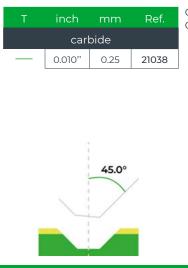
Ref.

48830

Gold, silver, aluminium, brass



Solid carbide sharpening profile designed for plastics & non ferrous metals for finishing and bevelling. Suitable for engraving job using Intaglio.



Recommended for

Gold/silver, aluminium, brass, phenolic

Suitable for

Gravoply™, Metallex™, Gravoglas[™], Acrylic



1/4 rounded conical

Solid carbide profile designed for marking & identification on ferrous metals (copper, steel and stainless steel). Cutting angle suitable for multi-lines font.

Recommended for

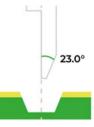
T::::

Copper, stainless steel & steel

Suitable for

Acrylic, anodized aluminium

	inch	ILILL	Rei.	
carbide				
	0.013"	0.32	51373	
	0.020"	0.50	51374	
	0.030"	0.75	51375	
	0.050"	1.25	51376	



Flat end cylindrical

Cutting profile in HSS designed for most applications on plastics and non ferrous metals. This tool will produce flat bottom, also suitable for straight edge cutting.

Recommended for

Gravoply™, Metallex™, Gravoglas™, Acrylic

ONECUT 4.36 MM

109

Suitable for

Gold, silver, aluminium, brass

т	inch	mm	Ref.
	HSS	steel	
	0.040"	1.00	51355
	0.060"	1.50	51356
	0.080"	2.00	51358
	0.100"	2.50	51359
	0.120"	3.00	51360
	0.160"	4.00	48834

Round end cylindrical

This cutter profil in HSS (High Speed Steel) creates a round print, ideal for 3D profile as well as hollow. Mainly used for acrylic reverse engraving, when grooves are colour-filled.

Т	inch	mm	Ref.
	HSS	steel	
_	0.040"	1.00	51362
	0.060"	1.50	51363
	0.080"	2.00	51364
	0.100"	2.50	51365
	0.120"	3.00	51366
	0.140"	3.50	51367

Recommended for Gravoglas[™], Acrylic

TITI

Helical

1 lip helical profile specifically designed for regular cutting and milling in ABS, acrylics, aluminium/brass and laminated.





Recommended for

Aluminium, brass and laminated

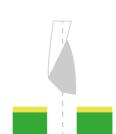
Suitable for

ABS, acrylics

Helical (Braille)

Helical cutters made of solid carbide dedicated to the drilling process of ADA Signage where bead will be inserted.

Т	inch	mm	Ref.
	carl	oide	
	0.061"	1.550	48766
	0.062"		48767
0.063"		1.580	48768



Recommended for Acrylics

Suitable for

ABS, phenolic, anodized aluminium



110 ONECUT 4.36 MM

Ready to grind

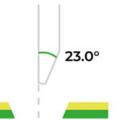
Semi-finished cutter exclusively in carbide, needs to be sharpened to match any profile, for technical jobs.

Tool length	Cutting length	Ref.
160 mm (6.299'')	13.00 mm (0.511")	28082
50 mm (1.968'')	13.00 mm (0.511")	73012

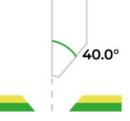
GRINDER

CG30 grinder allows to resharpen your engraving and cutting tools. It achieves a variety of shapes (see below) with an exceptional precision and quality. Collets not included.









CG30 Grinder

Conical

Flat end cylindrical

1/4 rounded conical

Dimensions (L x W x H)	Noise	Power	Key features	Ref.
360 x 300 x 212 mm (14.17 x 11.81 x 8.35'')	≤ 70 dB	90 W	EU plug	22797
			UK plug	22798
			US plug	20906
			Swiss plug	22799
			Japan plug	22800

ONECUT 6.35 MM 111

Conical 23.0°

Solid carbide cutting profile designed for signage and personalisation engraving into plastics and non ferrous metals.

т	inch	mm	Ref.
	carl	bide	
_	0.013"	0.32	48836
—	0.020"	0.50	48837
—	0.030"	0.75	48838
	0.050"	1.25	48839
	0.080"	2.00	48840
	0.125"	3.17	48841
	0.236"	6.00	48842

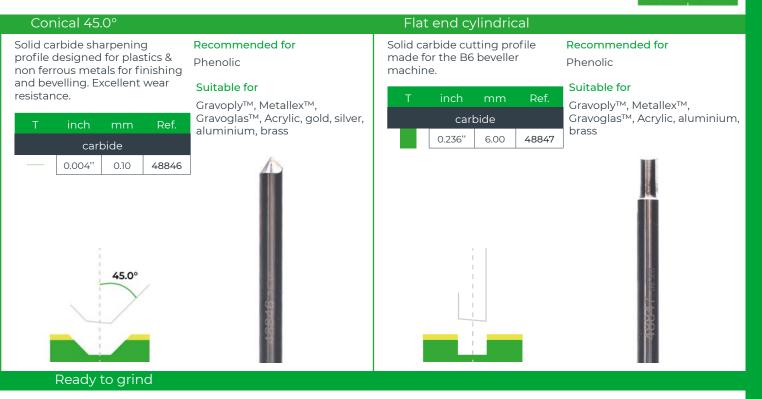
Recommended for

Phenolic

Suitable for

GravoplyTM, MetallexTM, GravoglasTM, Acrylic, gold, silver, aluminium, brass

T::::-



Semi-finished cutter exclusively in carbide designed for the sharpening system owners who need to engrave technical jobs where precise cotation has to be respected, imposing you to create the perfect tool according to the technical requests.

Tool length	Cutting length	Ref.
50 mm (1.968'')	16.00 mm (0.630'')	73013

and the second	
	73013-39-

112 PERCUT 3.00 MM

3/4 conical

3/4 conical cutter designed for industrial identification or jewellery customisation. Thanks to its revolutionary technical design, this type of cutter is very effective for fine marking and shows a high level of wear resistance.

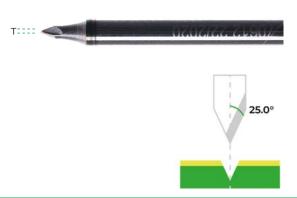
Т	inch	mm	Tool length	Ref.
		carb	ide	
	0.002"	0.05	38 mm (1.496'')	70613
	0.005"	0.15	38 mm (1.496'')	70612

Recommended for

Steel (highly allied or not), stainless steel, cast iron and these alloy, copper and these alloy, gold & silver

Suitable for

Aluminium, plastics, graphits



Conical helical

Solid carbide upward spiral developed for deep engraving of soft materials. Standard cutting profile produces a 30° cut into plastics and non ferrous metals.

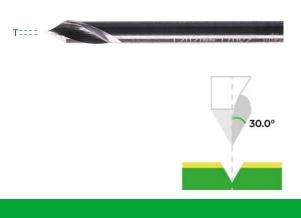
Т	inch mm Tool length		Ref.			
carbide						
	0.005"	0.15	38 mm (1.260'')	23077		

Suitable for

Recommended for

Aluminium, brass

 $\label{eq:Gravoply} \ensuremath{\mathsf{Gravoply}}^{\textsc{tm}}, \ensuremath{\mathsf{Metallex}}^{\textsc{tm}}, \ensuremath{\mathsf{Gravoply}}^{\textsc{tm}}, \ensuremath{\mathsf{Acrylic}}, \ensuremath{\mathsf{phenolic}}, \ensuremath{\mathsf{gold}}, \ensuremath{\mathsf{silver}}$



Single lip (plastics)

Solid carbide single lip upward spiral specifically designed for cutting and milling into plastics and Stratified (HPL) with straight edge finishing.

Cutting Tool length Ref. length carbide 4.00 mm 39 mm 0.040' 1.00 48736 (1.535'') (0.160'') 8.00 mm 39 mm 0.080" 2.00 48737 (1.535'') (0.315") 39 mm 10.00 mm 0.120" 3.00 48738 (1.535'')(0.400'')

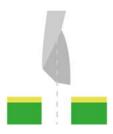
Recommended for

Gravoply™, Metallex™, Gravoglas™, Acrylics

Suitable for

Aluminium, brass or ACM (Aluminium composite), HPL panels (High Pressure Laminate)





PERCUT 3.00 MM 113

Single lip (metals)

Solid carbide single lip upward spiral specifically designed for cutting and milling metals with straight edge finishing.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
_	0.040"	1.00	38 mm (1.496'')	3.00 mm (0.120'')	48739
	0.080"	2.00	38 mm (1.496'')	5.00 mm (0.197'')	48740
	0.120"	3.00	50 mm (1.968'')	8.00 mm (0.315'')	48741

Recommended for

Aluminium, brass

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic



Double lips

Solid carbide double lips upward spiral for cutting and milling into plastics & non ferrous metals with straight edges.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.040"	1.00	38 mm (1.496'')	2.00 mm (0.080'')	48752
	0.060"	1.50	38 mm (1.496'')	3.00 mm (0.120'')	48753
	0.080"	2.00	38 mm (1.496'')	4.00 mm (0.160'')	48755
	0.120"	3.00	38 mm (1.496'')	6.00 mm (0.236'')	48769
	0.077"	1.95	38 mm (1.496'')	1.95 mm (0.077'')	80341

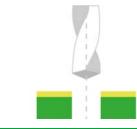
Recommended for

Aluminium for all references excepted Ref. 80341 which is specialised for brass & copper and their alloys.

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic





Triple lips (alu/brass)

Solid carbide triple lips upward spiral for cutting and milling into aluminium & alloys with straight edges.

Recommended for

Suitable for

Aluminium, brass or ACM (Aluminium composite), HPL panels (High Pressure Laminate) Gravoply™, Metallex™, Gravoglas™, Acrylic

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	38 mm (1.496'')	4.00 mm (0.160'')	70611
			14		

Triple lips (steel)

Solid carbide triple lips upward spiral for cutting and milling into aluminium & alloys with straight edges.

Recommended for

Steel, stainless steel

Suitable for

Aluminium, brass



PERCUT 4.00 MM 114

Conical with double recess

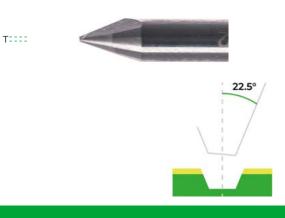
Profile designed for most plastics & non ferrous metals. Recommended Recommended for for signage and personalisation with a cutting angle of 22.5°.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.010''	0.25	50 mm (1.968'')	6.00 mm (0.236'')	48757
	0.013"	0.32	50 mm (1.968'')	6.00 mm (0.236'')	48758
—	0.020"	0.50	50 mm (1.968'')	6.00 mm (0.236'')	48759
—	0.030"	0.75	50 mm (1.968'')	6.00 mm (0.236'')	48760
	0.050"	1.25	50 mm (1.968'')	6.00 mm (0.236'')	48761

Gravoply™, Metallex™, Gravoglas™, Acrylic, phenolic

Suitable for

Aluminium, brass, gold, silver



Single lip (plastics)

Solid carbide single lip upward spiral for cutting and milling into plastics with straight edges.

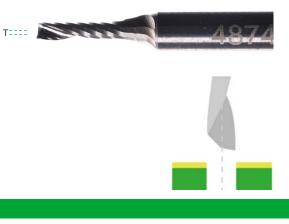
т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	38 mm (1.496'')	8.00 mm (0.315")	48742
	0.120"	3.00	38 mm (1.496'')	10.00 mm (0.400")	48743
	0.160"	4.00	50 mm (1.968'')	20.00 mm (0.800")	48744

Recommended for

Gravoply™, Metallex™, Gravoglas™, Acrylic

Suitable for

Aluminium, brass or ACM (Aluminium composite), HPL panels (High Pressure Laminate)



Single lip (metals)

Solid carbide single lip upward spiral or cutting and milling into non ferrous metals with straight edges.

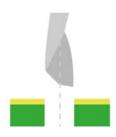
т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	38 mm (1.496'')	3.00 mm (0.120'')	48745
	0.120"	3.00	38 mm (1.496'')	6.00 mm (0.236'')	48746
	0.160"	4.00	50 mm (1.968'')	9.00 mm (0.354'')	48747

Recommended for Aluminium, brass

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic





PERCUT 4.00 MM 115

Double lips (plastics)

Solid carbide double lips upward spiral for cutting and milling into plastics & non ferrous metals with straight edges.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.160''	4.00	50 mm (1.968'')	12.00 mm (0.472'')	23072

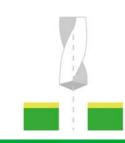
Recommended for

Gravoply™, Metallex™, Gravoglas™, Acrylic and other composites as HPL

Suitable for

Aluminium, brass and others aluminium derived products (ACM)





Double lips (metals)

Solid carbide double lips upward spiral for cutting and milling into non ferrous metals with straight edges.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	38 mm (1.496'')	4.00 mm (0.160'')	48770
	0.120"	3.00	38 mm (1.496'')	14.00 mm (0.551")	48771
	0.160"	4.00	50 mm (1.968'')	16.00 mm (0.630'')	23073

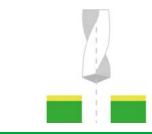
Recommended for

Aluminium, brass and other aluminium derived products (ACM)

Suitable for

Gravoply™, Metallex™, Gravoglas™, Acrylic and other composites as HPL





Triple lips

Solid carbide triple lips upward spiral for cutting and milling into aluminium & brass with straight edges.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	25 mm (0.984'')	4.00 mm (0.160'')	23079

Recommended for Aluminium

Suitable for

Brass





116 PERCUT 6.00 MM

Conical helical

Solid carbide upward spiral for deep engraving of soft materials. Standard cutting profile produces a 30° cut into plastics and non ferrous metals.

т	inch	mm	Tool length	Ref.			
carbide							
	0.005"	0.15	57 mm (2.244'')	23091			

Recommended for

Aluminium, brass

Suitable for

Gravoply ${}^{\rm TM}$, Metallex ${}^{\rm TM}$, Gravoglas ${}^{\rm TM}$, Acrylic, phenolic, gold, silver



Conical with double recess

Profile designed for most plastics & non ferrous metals, signage and personalisation.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
_	0.013"	0.32	57 mm (2.244'')	8.00 mm (0.315'')	48762
—	0.020"	0.50	57 mm (2.244'')	8.00 mm (0.315'')	48763
	0.050"	1.25	57 mm (2.244'')	8.00 mm (0.315'')	48765

Recommended for

Phenolic, Gravoply^{\rm TM}, Metallex^{\rm TM}, Gravoglas^{\rm TM}, Acrylic, aluminium, brass

Suitable for

Aluminium, brass, gold, silver



Single lip

Solid carbide single lip upward spiral for cutting and milling into plastics & non ferrous metals with straight edges.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	50 mm (1.968'')	7.00 mm (0.275")	48748
	0.120"	3.00	50 mm (1.968'')	10.00 mm (0.400'')	48749
	0.160"	4.00	50 mm (1.968'')	12.00 mm (0.472'')	48750
	0.236"	6.00	50 mm (1.968'')	15.00 mm (0.590'')	48751

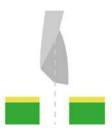
Recommended for

Gravoply™, Metallex™, Gravoglas™, Acrylic

Suitable for

Aluminium, brass or ACM (Aluminium composite), HPL panels (High Pressure Laminate)





PERCUT 6.00 MM 117

Double lips

Solid carbide double lips upward spiral for cutting and milling into non ferrous metals & plastics with straight edges.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	50 mm (1.968'')	6.00 mm (0.236'')	48772
	0.120"	3.00	50 mm (1.968'')	6.00 mm (0.236'')	70610
	0.160"	4.00	50 mm (1.968'')	8.00 mm (0.315'')	70614

Recommended for

Aluminium, brass and other aluminium derived products (ACM)

Suitable for

GravoplyTM, MetallexTM, GravoglasTM, Acrylic and other composites as HPL





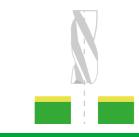
Solid carbide triple lips upward spiral for cutting and milling into ferrous Recommended for metals with straight edges.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	50 mm (1.968'')	4.00 mm (0.160'')	71765
	0.120"	3.00	50 mm (1.968'')	6.00 mm (0.236'')	71766
	0.160"	4.00	50 mm (1.968'')	8.00 mm (0.315'')	71761

Steel, stainless steel and other ferrous metals

Suitable for Aluminium, brass





Four lips

Solid carbide four lips upward spiral for cutting and milling into ferrous metals with straight edge.

т	inch	mm	Tool length	Cutting length	Ref.
			carbide		
	0.080"	2.00	50 mm (1.968'')	4.00 mm (0.160'')	71768
	0.120"	3.00	50 mm (1.968'')	8.00 mm (0.315'')	71769
	0.160"	4.00	50 mm (1.968'')	11.00 mm (0.433'')	71770

Recommended for

Steel, stainless steel





118 DIAMONDS

3	DIAMONDS										
	Conical rotative 90°				Faceted rotative 110°						
	Onecut 3.17 mm Mostly used for engravi gold, silver as well as gl		iterials s	uch as platir	num,	Onecut 3.17 mm Dedicated to glass and crystal bottles engraving, this 110° faceted rotative diamond cutter is widely used for personalising perfume					
	Recommended for Suitable for			bottles with paint or wax filling afterwards.					enume		
	Gold, silver, aluminium, brass Glass, mirror, steel, stainless steel			Recommended forSuitable forGlass, crystalMirror							
	Rotating diamond:	T inch	mm	Tool length	Ref.	Rotating diamond:	Т	inch	mm	Tool length	Ref.
	Designed for Feather Touch use	0.004"	0.10	106 mm (4.173'')	20149	Designed for Feather Touch use		0.005"	0.127	106 mm (4.173'') 106 mm	52163
				77-11	- 6 h 1 2 2		-	0.010"	0.254	(4.173'') 	52183
	Conical non-rotativ	e 126.5°				Diamond insert no	on-rot	ative			
	Designed for thin engra	aving on the m	ost delia	ate materia	ls such	Diamond insert dedic	ated to	jewelerv	and gift	personaliza	ation.
	as glass, platinum, gold	l, silvēr, brass ar	nd more	·.		Recommended for			able for		
	Recommended for Gold, silver		able for ninium,	brass, glass,	mirror	Gold, silver, aluminiun	n, brass	Glas stee		, steel, stain	less
	Rotating diamond:	T inch	mm	Tool length	Ref.	Rotating diamond:	Т	inch	mm	Tool length	Ref.
	Designed for Feather Touch use	0.004"	0.10	106 mm (4.173'')	33954	NOT designed for Feather Touch use		0.004"	0.10	7 mm (0.275") 21.5 mm	28187
				-53	11-nS6			0.004"	0.10		33827
	Faceted rotative 110)°				Faceted rotative 12 Onecut 4.36 mm	20°				
	Faceted diamond cutte certain depth and for fi	ne detailed line	es. A swi			Mostly used on glass a also suitable to persor					vings,
	recommended to ensu		able for			Recommended for		Suit	able for		
	Glass, mirror, aluminiur			ss steel		Glass, crystal, mirror		Alur	ninium,	brass, gold, :	silver
	Rotating diamond:	T inch	mm	Tool length	Ref.	Rotating diamond:	Т	inch	mm	Tool length	Ref.
	Designed for Feather Touch use	0.010"	0.254	160 mm (6.299")	34122	Designed for Feather Touch use		0.004"	0.10	160 mm (6.299'')	12909
	rouch use	0.015"	0.38	160 mm (6.299") 160 mm	34123	rouch use		0.004"	0.10	130 mm (5.118")	84894
		0.030"	0.78 0.254	(6.299'') 130 mm	34124 77659						
]			a. Carl II and a subsection	(5.118'')	S					. An Anna dhe nan Albana ing a	-22-h1-6

Facatad vatative 120 F0		119			
Faceted rotative 126.5°	Conical non-rotative 130° Onecut 4.36 mm				
Onecut 4.36 mm Mostly used for ferrous & non ferrous metal engraving. This 126.5° faceted rotative diamond cutter is mainly dedicated to metallic gift item personalisation and metallic parts identification.	130° conical non rotative diamond cutter is mainly used for gift personalisation and mechanical part identification in aluminium, brass, nickeled metals, steel and stainless steel.				
Recommended for Suitable for	Recommended for Suitable for				
Aluminium, brass, nickeled, Glass, mirror steel, stainless steel	Aluminium, brass, gold, silver Glass, crystal, steel, stainless steel				
Rotating diamond: Tool Tool Ref.	Rotating diamond: T inch mm Iength Ref.				
Designed for 0.020" 0.50 160 mm (6.299") 34095	Observed for 0.020'' 0.50 160 mm (6.299'') 34094				
Feather Touch use	Feather Touch use 0.020" 0.50 160 mm (6.299") 84975				
9 DFG	8.5 DEG				
Diamond ball	Conical non-rotative 130°				
Onecut 4.36 mm	Onecut 6.35 mm				
Diamond round burr dedicated to engraving and carving of granite, stone and glass. This typical cutter needs to operate	Mainly used in gift personalisation and mechanical part identification on precious metals.				
under permanent water or oil based lubrication.	Recommended for Suitable for				
Recommended for Suitable for	Precious, ferrous, non ferrous Glass, crystal, mirror				
Granite Glass, mirror, stone	metals				
Rotating diamond: Tool Doc	Rotating diamond:				
T inch mm loof Ref.	T inch mm length Ref.				
0.063" 1.60 160 mm (6.299") 20932	0.004" 0.10 178 mm 34261				
eather Touch use	NOT designed for (7.000) Feather Touch use				
0.063" 1.60 (6.299") 20933					
Faceted rotative 120° Twincut	Conical non-rotative 126.5° Twincut				
120° faceted diamond insert of the Twincut family, dedicated to engraving a wide variety of ferrous and non-ferrous metals, glass & more. Twincut diamond insert removes material when it rotates.	126.5° conical diamond insert of the Twincut family, dedicated to engraving a wide variety of ferrous and non-ferrous metals, glass and crystal, mirrors and more. Diamond dragging works by repelling material when engraver rotation is off.	DTC			
Recommended for Suitable for	Recommended for Suitable for				
Aluminium, brass, nickeled Steel, stainless steel, glass netals	Gold/silver Aluminium, brass, steel, stainless steel	U Z			
Rotating diamond: Tool Ref.	Rotating diamond: T inch mm Tool Ref.	0			
0.004" 0.10 15 mm (0.590") 23060					
10157 77 00.610		Ţ			





CUTTERS & INSERTS

Stylus for test prior to engraving

ASSEMBLED STYLUS BIT

Unit - 1 unit

Ref. 21679

Intended for a final check before engraving, the assembled stylus bit replaces the cutter and fits into the top-loading spindle. This stylus can easily be refilled when empty.

CROSS STYLUS REFILL

Unit - 1 unit

Ref. 12374

Cross stylus refill is delivered as spare part for assembled stylus bit. Easy to change thanks to the removable cap and spring. Take out the worn refill and proceed to the replacement.

Twincut starter kits

TOOL HOLDER



Tool holder is a central part of the Twincut concept called "non-active part". It holds the engraving insert, the "active part". This tool holder has been coated to avoid scratches and rust.

	Packaging type	Ref.
M20 V3/M40 L = 120 mm		69729
IS series, L = 150 mm	Box - 1 unit	22987

EJECTOR

Use the ejector to remove the cutter from the tool holder.

	Packaging type	Ref.
M20 V3/M40		69727
IS series	Unit - 1 unit	69724

120



KNOB KEY

Unit - 1 unit

Ref. 10016

The cutter knob key is an indispensable tool for installing and disassembling the cutter from any rotary engraver. This tool allows you to unscrew the cutter's knob screw that holds the cutter in the spindle.



CUTTER KNOB

The cutter knob connects

spindle so that it becomes a

single entity. This assembly

allows the tool to be fixed at

the end of the Z-reference's

setting and to maintain

it during the engraving

the cutter shank to the

Unit - 1 unit

Ref. 12335

Unit - 1 unit

Ref. 13798

STEEL BLOCK

The steel block serves as an anvil, used in the assembly process of the Twincut insert. Just strike the base of the cutter shaft when inserting the cutter to secure it.



121

BRUSH

Unit - 1 unit

Ref. 11791

Use the brush to sweep away chips or dust that may still be present at the end of the engraving process.

M20 V3, M40 & IS ENGRAVING STARTER KITS

process.

There are 2 Twincut starter kits dedicated to our rotary engravers: M range (M20 v3 & M40) or IS range (IS200, IS400, IS6000, IS7000 & IS8000). These kits brings you the accessories you need to use our Twincut concept and to 2 inserts to start engraving immediately.



Watch our videos!



	Packaging type	Ref.
M20 v3, M40 Twincut starter kit	Box - 1 unit	69723
IS Twincut starter kit		69722

Discover the Twincut tools with our starter kit

What's in the kit?



Moving towards a first engraving: step by step



Place the insert in the tool holder.



Gently tap on the steel block.



Install your tool in the machine.



Adjust your z-axis and tighten with the Allen knob key



Use the ejector to push the insert out of the tool holder.

Keep the box to store your tools!

See our video



MACHINE ACCESSORIES

10

CYLINDRICAL ATTACHMENT JIGS Jigs for jewel rotary device

PREMIUM RING JIGS

Machine compatibility:

Inside and outside use.

Designed for a wide range of round rings, perfect for

M20 Jewel, M20 v3 Jewel,

Ref. 49951

WeLase™

Pack of 3

wedding rings.



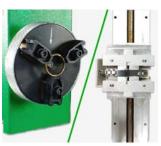
STANDARD RING JIGS Ref. 12500

Machine compatibility: M20 Jewel, M20 v3 Jewel, WeLase™

Pack of 1

Inside use. Designed to fix a ring or a wedding ring topped with a diamond.

Dedicated kits



JEWEL KIT Ref. 81993,81993

Machine compatibility: M20 v3 Pen

Includes a chuck for rings up to 27 mm (1.06") diameter and a jewel jig (Ref. 28192).



PEN KIT Ref. 81377

Machine compatibility: M20 v3 Jewel

Includes pinches for pens and a tailstock.

To engrave any pen of any diameter.



BOTTLE KIT Ref. 46674

Machine compatibility: M40, M40 DV

Diameter: 38 - 110 mm (1.5 -4.33'')

To engrave bottles and cups up to 110 mm (4.33") diameter.



LARGE CYLINDER CHUCK Ref. 23527

Machine compatibility: IS400 Volume

Diameter: 110 - 350 mm (4.33" - 13.78")

Designed to engrave large cylindrical items up to 350 mm (13.78") diameter.

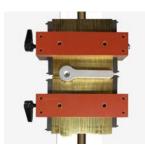


OUTSIDE RING KIT

Easily and perfectly allows a deep engraving outside of the ring.

Key features	Material	Machine compatibility	Ref.
Includes a ring holder	plastic	M20 v3 Pen	49514
Includes a ring holder and a counterpin	plastic	M20 v3 Jewel	81994

FLAT JIGS
Easy clamping



UNIVERSAL JIGS Ref. 20196

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Sliding pins & lateral stop.

Multiform vice: the most versatile jig to hold any shape.



GRAVOFOIL™ JIGS Ref. 22868

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Metallic plate with 2 magnets.

Engrave very flexible materials like Gravofoil™ or Flexilase™.



ROUGH CELERON JIGS Ref. 10179

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Shape your own jigs.

Jigs to be machined to the desired shape.

mm (3.15") diameter i.e. metal cup, drinking glass etc. tures Material Machine Ref.

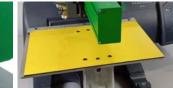
Engrave cylindrical items up to 80

Key features	Material	Machine compatibility	Ref.
Includes a chuck and rubber cones.	rubber	M20 v3 Pen	81978
Includes a counterpin and rubber cones	rubber	M20 v3 Jewel	81977

CUP KIT

126

Double-sided, flexible and naturally adhesive material: no need for clamping, tape nor vacuum table. A time saver tool for engraving and cutting jobs on plastic or metallic materials.



Gravogrip™ table M20

Gravogrip™ table M40

	Key features	Machine compatibility	Ref.
Gravogrip™ table M20		M20 v3, M20	70997
Gravogrip™ table M40	mm		45697
	inch	M40, M40 DV	72182
Gravogrip™ table IS200	mm	10000	71116
	inch	IS200	73401

Signage - Electrical



MEDIUM PLASTIC JIGS Ref. 27215

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Length: 150 mm (5.9'')

For badges, labels or electrical strips.



MEDIUM CELERON JIGS Ref. 10165

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Length: 150 mm (5.9") with very precise graduation.

For delicate flat items: labels, medals.



ELECTRICAL JIGS Ref. 21131

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Length: 240 mm (9.5'')

For electrical applications: cable identification, electrical strips. Can hold any long flat items.



EXTRA LARGE ALUMINIUM JIGS Ref. 20191

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Length: 310 mm (12.2")

For large plates (any material). Ideal for professional plate engraving (300 x 200 mm - 11.8 x 7.9").

Jewelry



SMALL PLASTIC JIGS Ref. 48091

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Length: 90 mm (3.54'')

For small object and jewellery personalisation. Small footprint around the vice.



WATCHES JIGS Ref. 10182

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

For round and rectangular objects, engrave watches and medals without the risk of scratching.



STANDARD JEWELLERY JIGS Ref. 28192

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

The protection tray for chains is available in option (Ref. 48074).

Versatile jewellery vice: pendants, curved bangles, adult and baby chain bracelets.

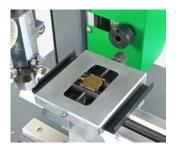


RIGID BRACELET JIGS Ref. 77961

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

To install on the right or left of the vice. For rigid bracelets that

cannot be held in standard jigs.



PREMIUM JEWELLERY JIGS Ref. 22870

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Automatically center the product in X and Y.

The ideal jewellery vice: the best fit with the most versatility. Perfect positioning for tiny jewels like babies chain bracelets.



SIGNET RING JIGS Ref. 20194

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Includes rubber protection strips.

Easily engrave signet rings without the risk of scratching.



127

CHAIN PENDANTS JIGS Ref. 77320

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Holes to pass the chain through.

Dedicated to pendants with chains, also works with chain bracelets.



CUTTING JIGS Ref. 84897

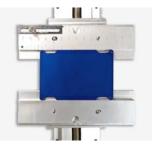
Machine compatibility: M20 v3, M20, M20 Jewel, M20 v3 Jewel, M20 Pen, M20 v3 Pen, WeLase™

Includes 4 holding flanges and 3 martyr plates. Max. plate size: 80 x 120 mm (3.15 x 4.72"), thickness: 8 mm (0.31").

For cutting thin metal plates.

128

Gift and small items



MEDIUM ALUMINIUM JIGS Ref. 20189

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

l = 150 mm (5.9")

Flat metallic parts and small metallic items. Hold plates firmly.



COSMETIC JIGS

Ref. 81152

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Designed to easily clamp perfume bottles and cosmetics.



GLASS FRAME JIGS Ref. 20190

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Screws to set 2 different widths along the jigs.

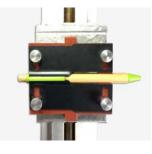
Designed especially for eyeglass frame. Adjustment for flared temples.



PEN JIGS Ref. 10169

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

For pen bodies or tubular items.



CLIP PEN JIGS Ref. 20842

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Specific feature for the pen clips.

Engraving of clip and pen body.



SWISS ARMY KNIFE JIGS Ref. 28067

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Designed to engrave the sides of Swiss army knives.

Funerary



FUNERARY JIGS Ref. 47697

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

l = 164 mm (6.5'')

Dedicated to funeral applications: • Side 1: coffin plate

• Side 2: funerary inters

Tableware



SILVERWARE JIGS Ref. 20129

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Includes stops to adjust length and width.

Dedicated to silverware.



TABLEWARE JIGS Ref. 22370

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Includes 4 relocatable pins.

Suitable for various tableware item shapes and sizes: plates, silverware, etc.



PLATTERS JIGS Ref. 20192

Machine compatibility: IM3, M20 v3, M20, M40, IS200, IS400, ISx000, WeLase™

Includes 4 relocatable pins.

For platter or any large flat item.

REGULATING NOSES

STANDARD NOSES SMALL FONT

		Key features	Max. truncation	Recommended max. tool cone	Machine compatibility	Ref.
Nose 0.7 mm	Ş	For very small fonts	0.25 mm (0.010'')			20130
Nose 1.5 mm	Ţ,	Recommended for Metallex™	0.32 mm (0.013")	22.5°	IM3, M20 v3, M20, M40, IS200, IS400, ISx000	20131
Nose 2.3 mm		General use	0.75 mm (0.030'')			20132

STANDARD NOSES LARGE FONT

	Key features	Max. truncation	Recommended max. tool cone	Machine compatibility	Ref.
Nose 2.5 mm	For bevelling and medium fonts	0.75 mm (0.030'')	45° - 60°		20936
Nose 4.7 mm	For fonts up to 60 mm (2.36''). Compact for intaglio engraving	3.00 mm (0.120")		IM3, M20 v3, M20, M40,	12215
Nose 7.0 mm	For large fonts	3.75 mm (0.015")	All tools	IS200, IS400, ISx000	20937
Nose large diameter	For very large fonts or large flat tint on plastic	3.75 mm (0.015'')			20960

PRODUCTIVITY NOSES

		Key features	Max. truncation	Recommended max. tool cone	Machine compatibility	Ref.
Vacuum nose 1.5 mm		East and II faints	0.25-0.75 mm (0.010 - 0.030'')	22.5%		21674
Vacuum nose 3.3 mm	Şa	For small fonts	0.25-2.5 mm (0.010 - 0.100'')	22.5°	IM3, M20 v3, M20, M40, IS200, IS400, ISx000	21672
Vacuum nose 8 mm		Maximum chip suction. For small fonts	0.25-3 mm (0.010 - 0.118'')	All tools		21673
Extraction noses kit		Supplied with suction hose and 3 noses: 21674/21672/21673	N/A	N/A		23657

CURVED ITEM NOSES

		Key features	Max. truncation	Recommended max. tool cone	Machine compatibility	Ref.
Vacuum swivel nose 2.5 mm	F	To follow shapes on glass bottle engraving. Rotating or non- rotating diamond.	0.75 mm (0.030")		IM3, M20 v3, M20, M40, IS200, IS400, ISx000	22464
Vacuum swivel nose 5 mm			1.50 mm (0.059'')	22.5°		13058

COLLET SPINDLE NOSES

	Key features	Max. truncation	Recommended max. tool cone	Machine compatibility	Ref.
Swivel vacuum nose 2.50 mm	To perfectly follow the profile of the part on hard materials. Small font.	0.75 mm (0.030")			64189
Swivel vacuum nose 5.00 mm	To perfectly follow the profile of the part on hard materials. Medium font.	1.50 mm (0.059")	All tools	IS400, ISx000	64188
HF 750 W spindle vacuum nose	Mealum font. Connect directly to the IS chip collector to vacuum chips when using the HF 750 W spindle.			ISx000	79596

132

FRAGILE ITEM NOSES

		Key features	Max. truncation	Recommended max. tool cone	Machine compatibility	Ref.
Depth teflon nose 3.0 mm		Avoid matting on metallic plates and tags. Small fonts.	1.50 mm (0.059")	22.52		20133
Vacuum swivel teflon nose 3.5 mm		Softer than polished steel nose: less scratch. Small fonts.		22.5°	IM3, M20 v3, M20, M40,	22481
Vacuum swivel teflon nose 5 mm		Softer than polished steel nose: less scratch. Medium fonts.	1.25 mm (0.050")	35.0°	IS200, IS400, ISx000	42165
Long vacuum teflon nose 12 mm	g um nose Engrave in grooves up to 11 mm (0.43'').		1.75 mm (0.069")	45.0°		28061

SPECIFIC NOSES

		Key features	Recommended max. tool cone	Machine compatibility	Ref.
Diamond nose	ġ	Integrated diamond. Picture engraving by points and scribing.	N/A	IM3, M20 v3, M20, M40, IS200, IS400, ISx000	22884
Electronic		Automatize machine Z settings for each character to get the desired		IS200	65413
sensor nose	tronic each character to get the desired		All tools	IS400, ISx000	51310

FEATHER TOUCH

	Key features	Recommended max. tool cone	Machine compatibility	Ref.
Feather Touch 4.36 - M range	Mainly used for glass. Very soft pressure applied by the diamond on the part.		M20 v3, M40	81950
Feather Touch 4.36 - IS range	Avoid nose scratches.	Diamond use mostly	IS200, IS400, ISx000	78465
Feather Touch 3.17	Mainly used for glass. Very soft pressure applied by the diamond on the part.		M20	81898

MACHINE ACCESSORIES

SPINDLES

TOP LOAD SPINDLES

Tool clamped from the top, only one diameter. Possibility to use depth nose. IM3, M20 v3, M40, IS200, IS400 and ISx000 IQ 90W are delivered with a top load spindle in standard.



IM3 spindle

M series spindle



IS series spindle

	Tool diameter	Machine compatibility	Ref.
IM3	3.17 mm (0.12'')	IM3	21690
M range	4.36 mm (0.17'')	M20 v3, M40	80895
IS200	4.36 mm (0.17'')	IS200	22915
Other IS range	4.36 mm (0.17'')	IS400, ISx000	22220

COLLET SPINDLE

Hold the tool tightly to prevent play and tool breakage. For hard materials or precise machining. ISx000 IQ 200W, ISx000 XP 200W and ISx000 XP milling are delivered with a collet spindle in standard.

Machine compatibility: IS400, ISx000

Ref. 14763



HIGH FREQUENCY SPINDLE - 150 W

Can be installed on IS400. Max speed of 60 000 rpm. Precise 2D, 2,5D and 3D machining. Recommended for aluminium or plastic front panels.

	Machine compatibility	Key features	Ref.
		Europe	47474
		UK	47475
HF spindle - 150 W	IS400, ISx000	Switzerland	47476
		US/Japan	47477
		China	76289



HIGH FREQUENCY SPINDLE - 750 W

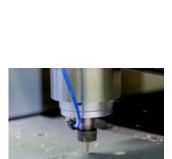
Highest torque in the range. Includes a set of clamps (type ER11) to use different tool sizes. Precise 2D, 2,5D and 3D machining. Repetitive cutting and engraving work in plastic or soft materials. Repetitive marking in hard materials such as steel and stainless steel.

	Machine compatibility	Ref.
HF spindle IQ - 750 W	ISx000 IQ 90W, ISx000 IQ 200W	80051
HF spindle XP - 750 W	ISx000 XP 200W	80052

HIGH FREQUENCY SPINDLE - 1 KW

Max rotation = 90000 rpm (can be used for very thin tools <1.0 mm). Only spindle compatible with the automatic tool changer. ISx000 XP milling is delivered with a HF spindle 1kW in standard.

	Machine compatibility	Key features	Ref.
		Europe	50707
		UK	50780
		Switzerland	50781
HF spindle - 1 kW	ISx000	US	51732
		Japan	51733
		China	76290



AUXILIARIES

29

LAME SCIE REF 16807

Chip collectors

COMPACT CHIP COLLECTOR

Connects directly to the spindle nose. A must-have accessory to keep the machine and workplace clean and ensure a neat engraving result.

Weight	Dimensions (L x W x H)	Max. static pressure	Max. air flow	Machine compatibility	Key features	Ref.
					EU plug	47642
	155 x 100 x 180	2.2 kPa	20 m³/h	m ³ /h M20, M40, IS200	UK plug	47643
1.3 kg (2.87 lb)	mm				Swiss plug	47644
	(2.37 lb) (6 x 4 x 7")				US Plug	47645
					China plug	76107



LARGE CHIP COLLECTOR

Floor stand unit.

Connects directly to the spindle nose. A must-have accessory to keep the machine and workplace clean and ensure a neat engraving result.

Weight	Dimensions (L x W x H)	Max. static pressure	Max. air flow	Machine compatibility	Key features	Ref.
					EU plug	49262
	23 kg 290 x 290 x		25 m³/h		UK plug	49263
23 kg				IS200, IS400,	Swiss plug	49264
(50.71 lb)	540 mm (11.4 x 11.4 x 21'')	7.3 kPa		ISx000	US Plug	49265
					Japan plug	64939
					China plug	76108



Saws

We offer three saws with various capabilities on the material size and thickness to cut. Our saws can cut most materials (i.e. plastic, acrylic, brass, aluminum, etc). Chip extractor is included in the machine.

VA10 SAW

Dimensions: 830 x 550 x 250 mm (33 x 22 x 10")

Max. cutting length	Max. plastics thickness	Max. metals thickness	Max. Gravostrat™ thickness	Key features	Ref.
				EU plug	21770
620 mm	6.3 mm	4 mm	6.3 mm	US plug	21771
(24'')	(24'') (0.248'') (1/6''	(1/6'')	(0.248'')	China plug	76111
				Japan plug	80888



VA10/11

VA11 SAW

Dimensions: 910 x 550 x 250 mm (36 x 22 x 10'')

Max. cutting length	Max. plastics thickness	Max. metals thickness	Max. Gravostrat™ thickness	Key features	Ref.
				EU plug	21764
665 mm		5 mm	7 mm	US plug	21765
(26'')		(0.20'')	(0.276'')	China plug	76112
				Japan plug	80889



VA10/11

VA21-15 SAW

Dimensions: 1280 x 551 x 250 mm (51 x 22 x 10")

Max. cutting length	Max. plastics thickness	Max. metals thickness	Max. Gravostrat™ thickness	Key features	Ref.
				EU plug	21768
1030 mm			7 mm	US plug	21769
(40'')			(0.276'')	China plug	76114
				Japan plug	80891



VA21-15

SAW BLADES

		Key features	Ref.
24 teeth blade	VAT	Fast cutting of plastic and aluminium	21773
36 teeth blade		Precise clean cutting of aluminium and plastic	21796

GUILLOTINES

138

Guillotines are an alternative to saws, their benefits are cutting precision and quality, speed of operation, noise and possibility to cut very small pieces.

However, they can be used only with certain types of thin plastic and metals.

	Dimensions (L x W x H)	Max. plastics thickness	Max. metals thickness	Ref.	
CSP	530 x 380 x 240 mm (21 x 15 x 9.5")	2.4 mm (3/32'')	N/A	20198	
CSM	530 x 380 x 240 mm (21 x 15 x 9.5")	N/A	1 mm (0.040'')	20199	
CSC	240 x 150 x 120 mm (9.5 x 6 x 4.5'')	3 mm (1/8'')	0.8 mm (1/32")	23588	
Ref. 14500	Ref.	14501	Ref. 1	4502	Ref. 14508
R : 3.2 mm	(1/8'') R: 6	5.3 mm (1/4")	R:7.	9 mm (5/1	6") R : 9.5 mm (3/8")

VA2 BEVELLER

Bevelled (or rounded) edges make plates and badges look smart, providing the finishing touch customers are looking for.

The VA2 beveller includes a chip extractor and can handle materials up to 4.5 mm (0.16") thick. Bevelling angle is 45°.

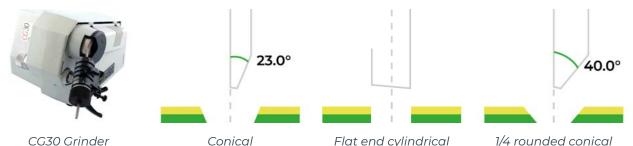
Max. cutting length	Max. plastics thickness	Max. metals thickness	Key features	Ref.
			EU plug	19927
N/A	N/A 4.5 mm 4.5 mm (0.16'')		US plug	19928
	(0.10)	(0.10)	China plug	76109



OTHER ACCESSORIES

GRINDER

CG30 grinder allows to resharpen your engraving and cutting tools. It achieves a variety of shapes (see below) with an exceptional precision and quality. Collets not included.



CG30 Grinder



Dimensions (L x W x H)	Noise	Power	Key features	Ref.
			EU plug	22797
	≤ 70 dB		UK plug	22798
360 x 300 x 212 mm (14.17 x 11.81 x 8.35'')		90 W	US plug	20906
(14.17 × 11.01 × 0.55)			Swiss plug	22799
			Japan plug	22800

GRINDING WHEEL

The right grinding wheel depends on the cutter raw material to resharpen.

For carbide cutters, use diamond wheel and choose between the two particle sizes available:

• D16 (16 microns) for mirror finish.

• D46 (46 microns) for polish finish.

For steel cutters, use Corundum wheel.

	Ref.
Diamond grinding wheel D16 for carbide cutters	22806
Diamond grinding wheel D46 for carbide cutters	20125
Corundum grinding wheel for steel cutters	20126



COLLET FOR CG30

Collet is a precision item used to accurately center the cutter to grind, it ensures a perfect sharpening. CG30 grinder accepts 3 collet diameters: 3.17 mm (1/8"), 4.6 mm (11/64") and 6.35 mm (1/4").

	Ref.
CG30 collet - Ø = 3.17 mm (1/8'')	20890
CG30 collet - Ø = 4.36 mm (11/64'')	20891
CG30 collet - Ø = 6.35 mm (1/4'')	20892



Gravotech service offer

Gravotech is dedicated to provide you with the best warranties, services contracts and local support.

COMMISSIONING

AT YOUR DOORSTEP Set up and fine-tuning of your equipment by a Gravotech technician.



TRAINING

TAILORED SESSIONS Standard or customized training sessions, at your place or online.



SERVICING

EXPERTISE Machine fleet audit and maintenance recommandations.

PREVENTIVE SERVICES Necessary care to maximize your machine lifetime.



TECHNICAL SUPPORT

PHONE ASSISTANCE Gravotech experts dedicated to support and guide you.

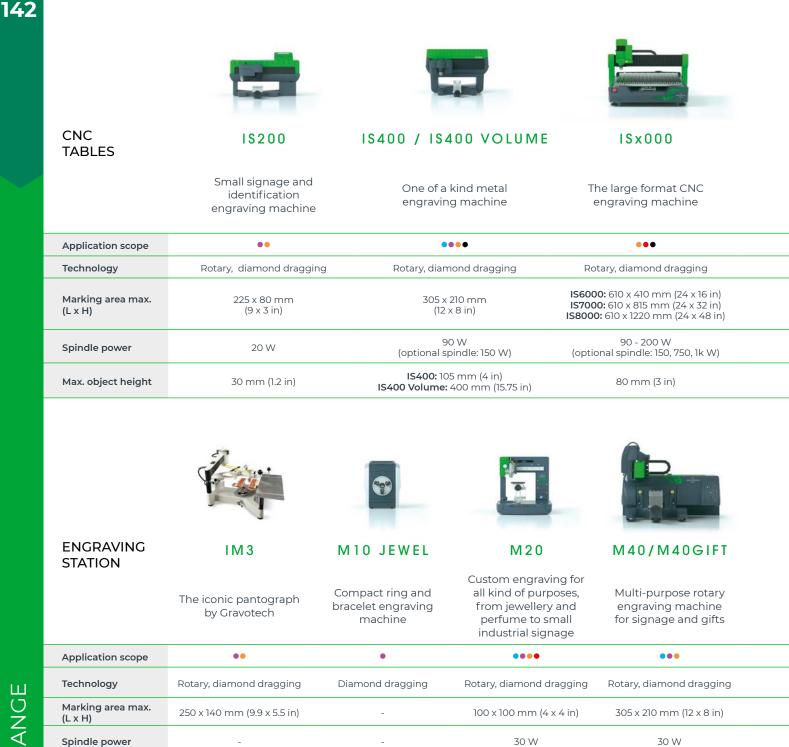
REMOTE ASSISTANCE Video or screen sharing sessions available on demand.

Your machine accessories can also be covered, contact us for more information.

Our services



141 MACHINES & SOFTWARE MACHINES **& SOFTWARE**



APPLICATION SCOPE :

Identification

Max. object height

Dimensions

 $(L \times W \times H)$

Personalisation

50 mm (2 in)

580 x 510 x 280 mm

(22.8 x 20 x 11 in)



ø 12.5 - 80 mm (0.5 x 3.15 in)

230 x 293 x 290 mm

(9 x 11.5 x 11.4 in)





100 mm (4 in)

375 x 350 x 360 mm

(14.8 x 14 x 14.2 in)

Manufacturing

110 mm (4.3 in)

550 x 510 x 320 mm

(27.7 x 20 x 12.6 in)



CRAVOTECH MACHINE RANGE





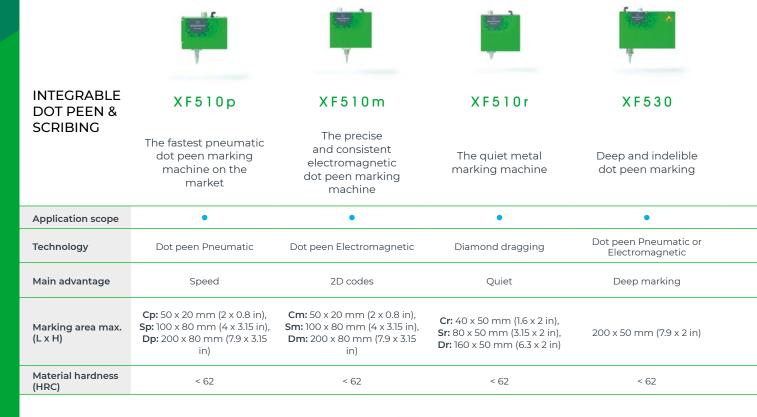
LASER TABLES	LS100	LSIOOEX	L\$900	LSIOOOXP
	CO2 laser engraver for signage, creative cutting, and personalisation	The signage and small series laser engraving machine	The large laser engraver that can do everything	Large laser engraving and cutting machine for high productivity
Application scope	•••	•••	•••	••••
Laser source	CO2	CO2, Fiber	CO2, Fiber, Edge	CO2
Power (W)	25 - 40 - 60	CO2: 25 - 40 - 60 CO2 Energy: 25 Fiber: 20 - 30	CO2: 40 - 60 - 80 Fiber: 20 - 30 - 50 Edge: (CO2: 40 / Fiber: 20 - 30 - 50)	60 - 80 - 100 - 150
Marking area max. (L x H)	460 x 305 mm (18 x 12 in)	610 x 305 mm (24 x 12 in)	610 x 610 mm (24 x 24 in)	1220 x 610 mm (48 x 24 in)
Lenses (in)	1.5 - 2.0 - 2.5 - 3.0 - 3.5 - 4.0	1.5 - 2.0 - 2.5 - 3.0 - 3.5 - 4.0	1.5 - 2.0 - 2.5 - 3.0 - 3.5 - 4.0	2.0 - 3.0 - 4.0
Max. object height	145 mm (5.7 in)	145 mm (5.7 in)	250 mm (9.8 in)	300 mm (11.8 in)
LASER STATIONS	WELASE™	LW 2	DOT PEEN STATION	IMPACT
	Small laser engraving station	Fully automated laser marking station		Benchtop dot peen marking station
Application scope	••	••	Application scope	•
Laser source	Fiber, Hybrid, Green, CO2	Fiber, Hybrid, Green	Technology	Dot peen, Pneumatic or Electromagnetic
Use rate	Adapted for small to medium batches	Fully automatic Adapted for high use rate	Software	Integrated traceability software with colour touchscreen
Marking area max. (L x H)	110 x 110 mm (4.3 x 4.3 in)	Up to 205 x 205 mm (8 x 8 ir	n) Marking area max. (L x H)	100 x 120 mm (4 x 4.7 in)
Max object Height	Fiber, Hybrid, Green: 100 mm (4 in) CO2: 180 mm (7 in)	Up to 322 mm (12.7 in)	Z axis stroke	300 mm (11.8 in)
Max object Weigth	3 kg (6.6 lbs)	25 kg (55 lbs)	Z axis type	Manual or Motorized & programmable



RANGE OF INTEGRATED EXHAUST



DEVICES	ES MINI	E\$10	E S 3 0	LE120HP/ LE140HP	LE150HP	LN1900	LE190HP
Max. air flow (m³/h)	190-220	200	360	400	400	240	700
Static pressure (kPa)	3	4	9	10	10	22	10
Active carbon (L)	-	13	30	20	40	42	40
Compatible	WeLase TM	With fu	ll range	LS100	LS100Ex	LS900	LS1000XP





CONTROL UNIT

CONNECTED TOUCH-SCREEN CONTROLLER

XCOM is the solution to pilot dot-peen and scribing machines and to control their integration on production lines. Connected to the main 4.0 industrial environments, XCOM is the most communicative and autonomous control unit on the market.

INTEGRABLE LASER	FIBER	HYBRID	GREEN	C O 2		
MARKERS	Integrated laser marking system for metal and plastic parts	The best compromise between versatility, high quality and high speed to meet all your marking needs	Integrated laser marking system to mark highly reflective materials and sensitive plastic materials	High-speed laser engraver: the best to mark organic materials and coated surfaces		
Application scope	••	••	••	••		
Wavelength (nm)	1064	1064	532	10 600		
Power (W)	Fiber Premium: 20 - 30 - 50 Fiber Standard: 20 - 30 Fiber Energy: 20 - 30	10 - 20	5 - 10	30		
Process automation		Industrial Ethernet Network	s: PROFINET / ETHERNET IP			
Embedded intelligence	Autonomous / Programmable by PLC / No PC required / Traceability Management					
Laser classification	Class 4 Laser system, possib	pility to switch in Class 1 for inte	gration on a station or equipp	ped with Mini Inline module.		

APPLICATION SCOPE :

Look around you and you'll notice that most objects around you are marked, engraved or customized. Find them and you'll find Gravotech!

Identification









• Manufacturing

Our applications



GRAVOSTYLE \bigcirc

		OF OF OF OF OF DISCOVERY Laser + Rotary DE DE	A STARTSON OF STARTSON				
LEVELS	Features	Co hybrid. Drive laser & rotary technology. • Matrix and variable lists • Import of vector files (DXF, EPS, HPGL) and images (BMP, JPG, PNG and TIF) • Plate Point & Shoot: makes it possible to define the engraving area directly on the machine • PDF import & files export (PDF, DXF, EPS, HPGL) • Alignment & transformation tools • Geometric shapes • Laser driving capabilities with presets • Extensive choice of symbols • Calibration wizard: one-step process to establish optimal laser settings • On-screen preview	 Productivity package Scanning and vectorisation Point mode and bitmap editor 2D recess by colour Retail font pack (incl. over 100 fonts) Scripting (macro function capabilities 				
	Options	 braille production Font editor <u>Personalisation pack</u> : Handwriting stroked engraving fonts Photo processing capabilities Additional stroked engraving fonts 	• Text on a curve				
	Applications	 Plate serialisation Badges, nameplates & doorplates Photo touch-ups Jewellery & gifts Variable list of names Funeral plates Rubber stamps Pet tags & key rings Legend plates 	 Logo scanning and editing Trophy plates Plates with text and logos Signage with text and logos 				
IN ALL LEVELS	Features	 Computip feature to recommend the most efficient tools Support for Automatic Plate Feeding applications Support for cylindrical engraving Customisation of working environment 	 Post-it function to take notes while you engrave Hot keys Favourites toolbar Object freezing 				

146

THE UNIQUE SOFTWARE FOR LASER AND ROTARY ENGRAVING MACHINES

INDUSTRY	CRAPHIC	3D			
Laser + Rotary	Laser + Rotary	Laser + Rotary			
Power, precision & productivity	Unleash creativity	Take your engraving to a new dimension			
 Dials and scales Scripting (macro function capabilities) Long Plate management Measurement tools Batch import External data import (CSV, TXT, Excel®, SQL, ODBC) Shape duplication tools 	 Nesting (material optimisation) CAM module (advanced tool management) Powerful on-screen simulation and rendering Advanced braille toolpath management Print & Cut module LED positioning function Photo lasering optimisation function Moulds and dies Shading (3D effect) 	 Surface creation and manipulation tools Styl'Art 3D modeling module 3D texturing Sculpture tool 3D CAM advanced toolpaths 3D visualisation tools Includes all 2.5D functions 			
• Barcodes, Datamatrix, QR Code® and UID - unique identification with variables management	 2.5D toolpath for jewellery/metal stamps and intaglio for signage Laser toolpath management for deep marking 				
 Rating plates Control panels Part identification & traceability Circuit boards Linear and 2D barcodes Paper and cardboard cutouts with laser 	 Advanced photo lasering Model making Marquetry Hot stamping Award design and production Printed signage cutout Signs conception 	 3D signage Displays Embossing/debossing dies Food molds Furniture decoration Models & prototypes Award & recognition Commemorative 			



Learn more :

CO2 laser parameters for: LS100, LS100EX (40 W)



This document provides a base of engraving parameters to be used on Gravotech laserable materials. They are indicative values that can be subject to modification, that are recommended by professional engravers and have been tested and verified for the LS100Ex & LS100 40 W.

LASER MATERIALS

	Power	Speed	Passes	Focus	Refocus	Air	Туре	Dpi	Thickness	Comments
	10%	100%	1	-	Before	no	Vector	500	-	
Gravoply™	40%	100%	1	-	Before	no	Raster	500	-	
Laser	80%	30%	1	-	Before	yes	Cutting	500	0.8 mm (.030")	
	100%	28%	1	-	Before	yes	Cutting	500	1.3 mm (.050")	
	10%	100%	1	-	Before	no	Vector	500	-	
	40%	100%	1	-	Before	no	Raster	500	-	
Gravoply™ Ultra	70%	40%	1	-	Before	yes	Cutting	500	0.5 mm (.020")	
Oltia	100%	25%	1	-	Before	yes	Cutting	500	1.6 mm (1/16")	
	100%	10%	1	-	Before	yes	Cutting	500	-	
	10%	100%	1	-	Before	no	Vector	500	-	
Gravoply™ 2	50%	100%	1	-	Before	no	Raster	500	-	
	80%	40%	1	-	Before	no	Vector	500	-	Subsurface engraving
	80%	40%	1	3.0mm (1/8")	Before	no	Raster	500	-	Subsurface engraving
Gravoglas™ 1	100%	18%	1	-	Before	yes	Cutting	500	1.5 mm (1/16")	Keep the plastic film on
	100%	10%	1	-	Before	yes	Cutting	500	3.0 mm (1/8")	Keep the plastic film on
	100%	5%	1	-	Before	yes	Cutting	500	5.0 mm (.20")	Keep the plastic film on
	30%	100%	1	-	Before	no	Vector	500	-	
	60%	100%	1	-	Before	no	Raster	500	-	
Acrylic	100%	8%	1	-	Before	yes	Cutting	500	3.0 mm (1/8")	
	100%	5%	1	-	Before	yes	Cutting	500	6.0 mm (.20")	
	100%	1%	1	-	Before	yes	Cutting	500	10 mm (.40")	
Gravotac™	50%	20%	1	-	Before	yes	Cutting	500	0.8 mm (.030")	
Exterior	100%	25%	1	-	Before	yes	Cutting	500	1.6 mm (1/16")	
	10%	100%	1	-	Before	no	Vector	500	-	
Flexilase™	30%	100%	1	-	Before	no	Raster	500	-	Gravogrip advised
	100%	5%	1	-	Before	yes	Cutting	500	0.25 mm (.01")	
	10%	100%	1	-	Before	no	Vector	500	-	
Stickalase™	40%	100%	1	-	Before	no	Raster	500	-	Gravogrip advised
	20%	30%	1	-	Before	yes	Cutting	500	0.09 mm (.004")	
	50%	60%	1	-	Before	no	Vector	500	-	
Gravostrat™	100%	60%	1	-	Before	no	Raster	500	-	
	100%	20%	1	-1.5mm (-1/16")	Before	no	Vector	500	-	
Rubbalase™	100%	20%	1	-1.5mm (-1/16")	Before	yes	Raster	500	-	
	100%	5%	1		Before	yes	Cutting	500	2.2 mm (.087")	
	40%	70%	1	-2.0	Before	no	Raster	400	-	
	100%	40%	1	-	Before	yes	Cutting	400	0.4 mm (1/64")	
Laser Wood	100%	35%	1	-	Before	yes	Cutting	400	1.0 mm (3/64")	
	100%	12%	1	-	Before	yes	Cutting	400	2.5 mm (3/32")	
	10070									

The purpose of this document is to help each engraver get an idea as to how to engrave on Gravotech laserable materials. The parameters are sorted by product range. Every material can have up to 3 different types of engraving process:

- Vector, for lightweight linear tracing
- Raster, for heavy marking
- Cutting

Some materials may not be engraved with a certain type of engraving process: if the specific type is not in the grid of the material, then it's most likely that it we do not recommend this engraving method on the indicated material.

	Power	Speed	Passes	Focus	Refocus	Air	Туре	Dpi	Thickness	Comments
	10%	100%	1	-	Before	no	Vector	500	-	
Gravolase™	40%	100%	1	-	Before	no	Raster	500	-	
Metallics	70%	40%	1	-	Before	yes	Cutting	500	0.5 mm (.020")	
	100%	25%	1	-	Before	yes	Cutting	500	1.6 mm (1/16")	
MatallayTM	10%	100%	1	-	Before	no	Vector	500	-	
Metallex™	40%	100%	1	-	Before	no	Raster	500	-	All Metallex™ material surfaces
	30%	100%	1	-	Before	no	Vector	500	-	All Gravoxal™ material surfaces
Gravoxal™	50%	100%	1	-	Before	no	Raster	500	-	All Gravoxal™ material surfaces
	30%	50%	1	-	Before	no	Vector	500	-	
AlumaMark®	30%	80%	1	-	Before	no	Raster	500	-	
DuraBlack®	20%	80%	1	-	Before	no	Raster	500	-	

METALLICS MATERIALS

TECH TIPS

Floating pin table cutting - When using a floating pin table, place an aluminium plate under the strips to avoid laser reflection to prevent engraving under the material.

Gravogrip[™] :

- Use Gravogrip[™] when engraving on thin materials as they can have uneven surfaces.
- Avoid using too much power when engraving to prevent damage to the Gravogrip[™] plate.

Note : in case of unexpected behavior during the engraving process, please refer to the machine's User Manual for troubleshooting.



149



Global reach

A global leader in the engraving and permanent marking industry, Gravotech's many subsidiaries and distributors/agents around the world offer a complete and worldwide engraving solution to their customers, coupled with unparalleled customer service and support.





Distributors

 \odot Production platforms

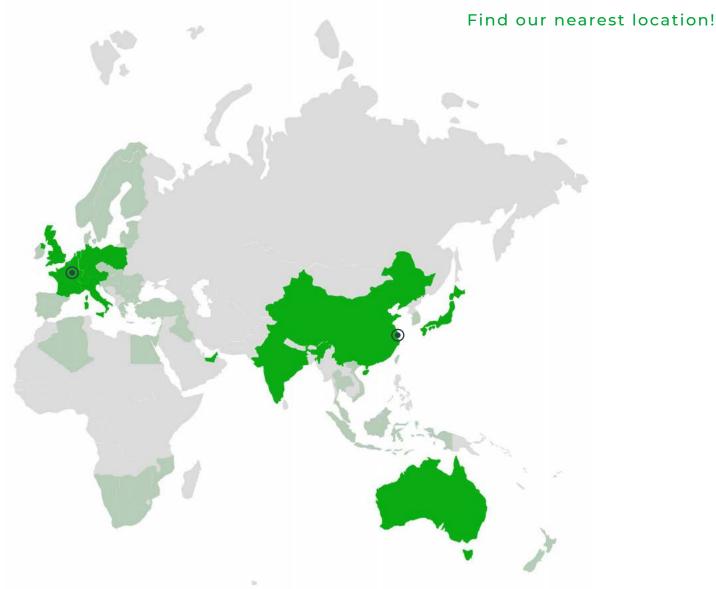
Algeria Argentina Australia Austria Benelux Bolivia Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark Ecuador Egypt Finland France Germany Greece Hungary India Indonesia Ireland Israel Italy Japan

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