# Laser and Rotary Materials





# The ideal material for each application!

Trotec offers solutions for almost all requirements in the field of engraving, cutting and marking. High-quality, innovative laser system solutions as well as highest standard consumables form this outstanding portfolio.

We aim to assist our customers improve profitability and productivity by supplying Trotec materials which offer superior results first time, offering additional services and providing a one stop shop solution, allowing our clients to purchase all their products via one call or email.

We are proud to be manufacturer of a full range of Trotec laminates that is completed by additional high-quality products of selected suppliers. We want to make you more profitable by benefitting from this advantages:

- · Engrave efficiently with fewer passes
- Little residue exposed while engraving
- · No sticky edges after laser cutting
- Minimal cleaning required
- Consistency in quality and colours
- Highly durable materials

### **About Trotec**

With the production of high end engraving materials, Trotec is setting new standards again. The company's broad line of quality laser engravers, cutters, markers and consumables, coupled with its unmatched service and support offerings, have made Trotec one of the industry's leading companies.

### → Contact us:

Trotec Laser GmbH
Freilinger Straße 99, 4614 Marchtrenk, Austria
Tel. +43 (0) 7242 239-7436, Fax +43 (0) 7242 239-7380
trotec@troteclaser.com



# → Catalogue Contents

Laser Materials	TroLase	<b>4</b>
	TroLase Metallic Plus and TroLase Metallic	6
	TroLase Reverse	8
	TroLase ADA Signage	10
	TroLase Thins	12
	TroLase Textures	14
	TroLase Lights	16
	LaserFlex	17
Cast Acrylic Sheets	TroGlass Color Gloss	18
	TroGlass Satins and TroGlass Duo	20
	TroGlass Frosted and TroGlass LED	<b>22</b>
	TroGlass Reverse	<b>24</b>
	TroGlass Clear	<b> 26</b>
Rotary Materials	TroPly	28
	TroPly Metallic Plus and TroPly Metallic	30
	TroPly Satins	32
	TroPly Ultra	34
	TroPly Ultra Reverse	36
	TroPly HiGloss	38
	TroPly HiGloss Reverse	40
Metals	Anodised Aluminium	42
	DuraBlack®	44
	AlumaMark®	45
Wood	Solid Wood	46
	Wood Veneer	47
	Plywood and MDF	48
Accessories	Colour Fillings	49
	Laser Marking Solutions	50
	Laser Rubber	52
	Seklema Workholding Mat	53
Services	Overview Characteristics	54
	Trotec Laser Machines	56

# → How to read this catalogue

### → Icon legend



### Laser material

Plastic sheets made of acrylic are perfectly used for laser processing (laser engraving and laser cutting).



### **Rotary material**

This material is suitable for processing with mechanical engraving devices.



### Reverse engraving

This material is engraved from the back using mirrored graphics. The engraved area can be infilled or backlit to enhance the contast against the coloured background.



### **Exterior use**

This material is UV-resistant and suitable for outdoor use. Of course, it can also be used for indoor applications.



### Indoor use

This material is suitable for interior applications.



### Adhesive possible

Adhesive backing can be applied on selected materials.

### → Cut to size legend



### **Cut to size**

Articles of this product group can be ordered cut to your individual size.



### **Hole drilling**

Articles of this product group can be drilled in various diametres.



### **Round corners**

Articles of this product group can be ordered with rounded corners. Choose a radius and if the curve should look inside or outside.

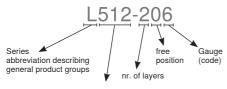


### **Bevelled edges**

Articles of this product group can be ordered with bevelled edges.

### → Product codes

TroLase and TroPly Series use order numbers with the following meaning:



Colour Code codes e.g. red/white (6=top colour group 2=core colour group)

### Series

TroLase	L
TroLase Metallic	LMT
TroLase Metallic Plus	LMT+
TroLase Reverse	LR
TroLase ADA Signage	LS
TroLase Thins	LT
TroLase Textures	LTX
TroLase Lights	LL
TroPly	Р
TroPly Metallic	PMT
TroPly Metallic Plus	PMT+
TroPly Satins	PS
TroPly Ultra	PU
TroPly Ultra Reverse	PUR
TroPly HiGloss	PH
TroPly HiGloss Reverse	PHR

### Gauge (Code)

daage (oode)				
1	0,1 mm	0.004"		
2	0,5 mm	0.020"		
3	0,8 mm	1/32"		
4	1,0 mm	0.040"		
5	1,3 mm	0.050"		
6	1,6 mm	1/16"		
7	2,4 mm	3/32"		
8	3,0 mm	0.12"		
9	3,2 mm	1/8"		
10	4,0 mm	0.167"		
11	5,0 mm	0.208"		
12	6,0 mm	0.24"		
0	custom			

### Sheet sizes & Tolerances:

Sheet sizes are indicated in each product group description. Half and quarter sheets are exactly cut to the indicated sizes. When ordering full sheets, please consider the following tolerances:

TroLase, TroLase Metallic, TroLase Metallic Plus, TroLase Reverse, TroLase ADA Signage, TroLase Thins, TroLase Textures, TroPly, TroPly Metallic, TroPly Metallic Plus, TroPly Satins, TroPly Ultra, TroPly Utra Reverse, TroPly HiGloss, TroPly HiGloss Reverse

Tolerances: width +/- 1,5 mm; length +/- 3 mm

### TroLase Lights

Tolerances: width +3 mm; -0 mm; length +6 mm; -0 mm

TroGlass Tolerances: gauge +/- 2 %

→ Browse Trotec engraving materials online

Benefit from your online advantages



Save valuable time.



Have a complete overview of all products.



Accessible 24/7.



Benefit from tips and tricks of our experts.



Be the first to be informed about new products and offers.



The optimum material for every application – Trotec Laser and Rotary Engraving material.

Find a wide selection of engraving material sheets designed for engravers and sign makers whether laser or rotary engraving.

Discover one-, two- and three-layer plastic sheets in different colours and finishings, acrylic sheets, metals and much more.

### First class materials for easiest processing:

- Engrave efficiently with fewer passes
- · Minimised cleaning effort
- · No sticky edges after laser cutting
- · Consistency in quality and colours
- · Highly durable materials



Visit us on:







# → TroLase

TroLase is a UV-resistant acrylic based laminate for both indoor and outdoor applications. Benefiting from a thin top layer it enables detailed engraving at high production speeds. Its superior composition minimises residue, therefore reducing the need for cleaning whilst maximising your output.

### **Applications**

- Interior Signs
- Exterior Signs
- Badges
- Trophy Plates
- Safety Signs
- · Industrial signage
- Legend plates







### → Material Features

Material: Micro-surfaced impact acrylic, 2 ply / 3 ply

Finish: matt, gloss

Thickness: 0,8 mm / 1,6 mm / 3,2 mm

Engraving depth: 0,08 mm

Cutting method: laser, saw, guillotine







use



use

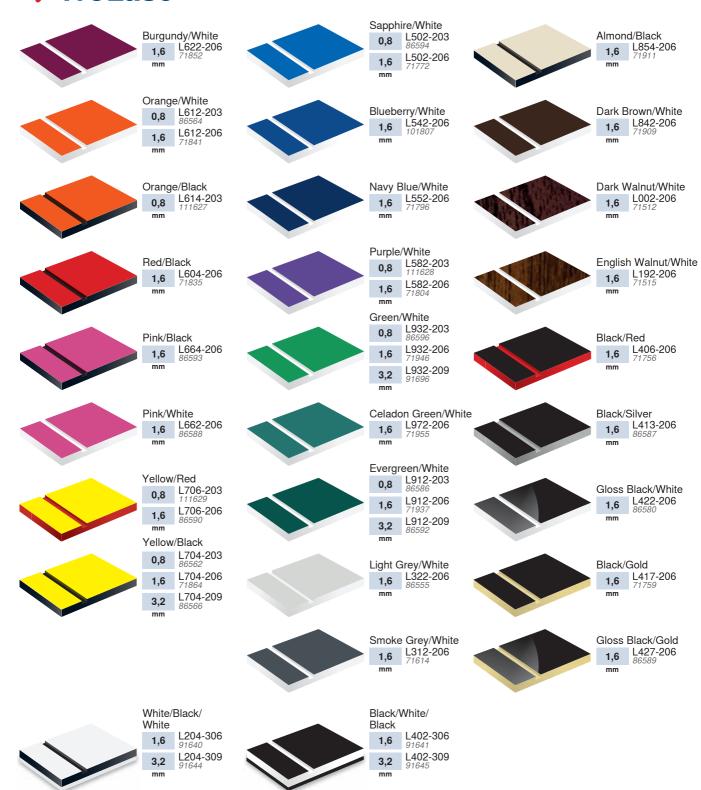


possible

Sheet size: 1245 x 616 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)

### **Bestseller** White/Black White/Red L206-203 **0,8** L204-203 8.0 White/Blue L205-206 L206-206 L204-206 L206-209 L204-209 3,2 3,2 Red/White Blue/White Black/White L512-203 86581 L402-203 86563 L602-203 0,8 8,0 L402-206 L602-206 L512-206 L602-209 L402-209 L512-209 3,2 3,2 3,2

# → TroLase



# → TroLase Metallic Plus and TroLase Metallic

TroLase Metallic is an acrylic based laminate with an authentic metallic finish. Benefiting from a thin top layer it enables detailed engraving at high production speeds. For external applications and cost effective, time saving alternatives to metal engraving, we recommend TroLase Metallic Plus which is UV-resistant.

### **Applications**

- Interior Signs
- Exterior Signs (Metallic Plus)
- Badges
- Trophy Plates
- Safety Signs
- Funeral Plates







### → Material Features TroLase Metallic Plus

Material: Modified impact acrylic, 2 ply

Finish: brushed metal

Thickness: 0,8 mm / 1,6 mm / 3,2 mm

Engraving depth: 0,08 mm

Cutting method: laser, saw, guillotine

Sheet size: 1245 x 616 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)











erior Adhesive

### → Material Features TroLase Metallic

Material: Micro-surfaced impact acrylic, 2 ply

Finish: brushed metal, smooth Thickness: 0,8 mm / 1,6 mm / 3,2 mm

Engraving depth: 0,08 mm

Cutting method: laser, saw, guillotine

Sheet size: 1245 x 616 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)



Laser





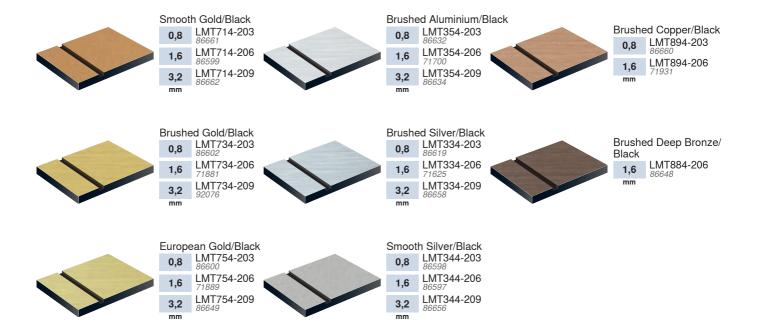
use

Adhesive possible

# → TroLase Metallic Plus



# → TroLase Metallic



# → TroLase Reverse

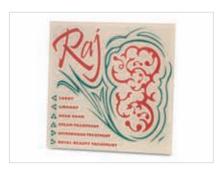
TroLase Reverse comprises of a transparent acrylic fascia with a coloured coating on the reverse side. By reverse engraving your image into the coloured layer you expose clear text/image which can either be infilled with your choice of acrylic paint or backlit for an effective contrast. As an additional feature the reverse has a third layer which significantly reduces the cleaning time and enhances the depth of colour.

### **Applications**

- Interior Signs
- Exterior Signs
- Badges
- Safety Signs
- Control Panels







### → Material Features

Material: Micro-surfaced impact acrylic with back-coating,

Finish: matt, gloss (gold and silver)

Thickness: 1,6 mm

Engraving depth: 0,08 mm Cutting method: laser, saw

Sheet size: 1245 x 616 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)



material

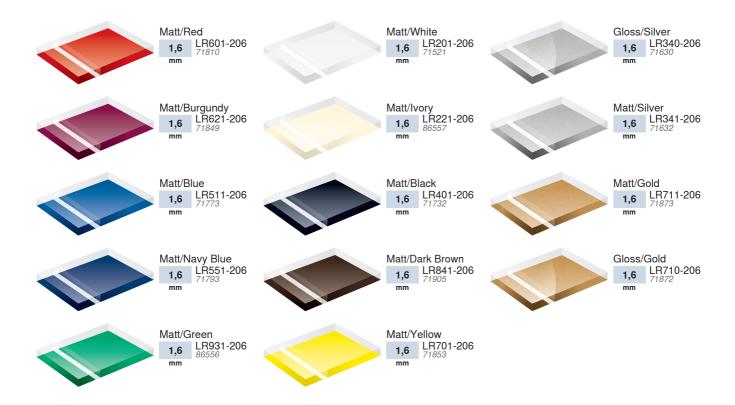








# → TroLase Reverse



Tip

TroLase Reverse offers the advantage of a third layer on the back. This additional layer reduces the need for cleaning and increases the color depth. If engraved areas are infilled with color, this additional layer prevents from the painting shining through.

# → TroLase ADA Signage

TroLase ADA Signage is a solid, dyed, acrylic based material primarily used for the production of braille and tactile signage. With the added advantage of being UV stable it is ideal for functional signage in indoor and outdoor areas, for cutting out letters and for creating 3-dimensional signs. The thinner options are increasingly becoming a popular medium in the production of architectural model making.

### **Applications**

- Exterior & Interior Signs
- ADA compliant braille & Tactile Signage
- 3 Dimensional Signs
- Model Making
- Cut Out Letters





Sheet size: 1245 x 616 mm, \*1220 x 610 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)



### → Material Features

Material: Modified acrylic, 1 ply

Finish: matt

Thickness: 0,8 mm / 1,0 mm /

1,6 mm / 3,2 mm

Cutting method: laser, saw, guillotine







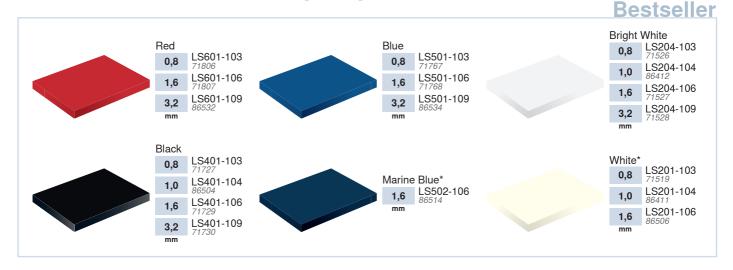


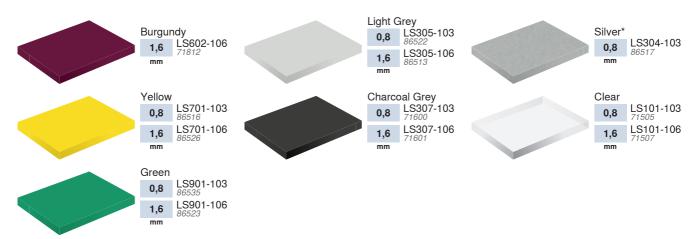


possible

10

# → TroLase ADA Signage





**Tips** 

Order TroLase ADA Signage with self-adhesive film applied to the back. This allows you to easily mount letters cut-out from the material plate on base plates or walls. During assembly use the cut material plate as a template for spacing and as a line level.

A few tips for best results:

- Materials must be even and without bends or distortions.
- A cutting table should always be used when cutting plastics, in order to lift the material.
- Remove the protective film, in order to prevent discolouration or excessive smoke.
- If excess smoke results, then too much energy is being used. In this case increase the speed.

# → TroLase Thins

TroLase Thins are extremely flexible and ideally suited to applications on curved surfaces. With an acrylic base and thin foiled surface you can achieve detailed, elegant engraving accommodating both the trophy and award industry as well as the industrial market. New additions include solid White and Black, proven medium for 3D model makers.

### **Applications**

- Interior Signs
- Badges
- Trophy Plates
- Safety Signs
- Business Cards
- · Architectural model making







### → Material Features

Material: Micro-surfaced pre-adhesive plastic, 1 ply / 2 ply

Finish: matt, gloss, brushed metal

Thickness: 0,5 mm

Engraving depth: 0,08 mm

Cutting method: laser, saw, guillotine

Sheet size: 1245 x 614 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)







use

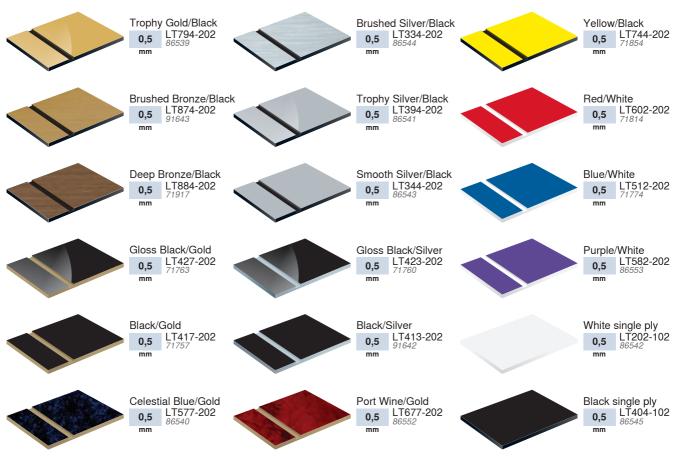


Adhesive

possible

# → TroLase Thins





# → TroLase Textures

TroLase Textures are two-layer acrylic based materials, suitable for applications in demanding environments, where extra durability and scratch resistance are required. The textured, matt surface is non-reflective, durable and easy to clean. TroLase Textures are UV- and weather-resistant, suitable for indoor and outdoor use.

### **Applications**

- Exterior & Interior Signs
- Badges
- Safety Signs
- Control Panels
- Industrial Applications







### → Material Features

Material: Co-extruded impact acrylic; 1 ply / 2 ply

Sheet size: 1220 x 610 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)

Finish: textured matt Thickness: 1,6 mm / 3,2 mm

Engraving depth: 0,18 mm

Cutting method: laser, saw, guillotine





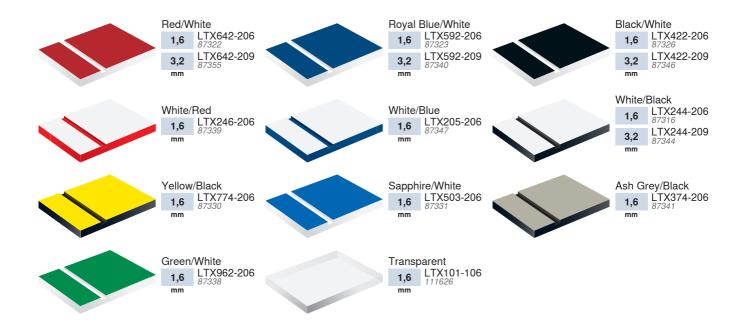






possible

# → TroLase Textures



# → TroLase Lights

TroLase Lights are a highly flexible, UV stable and robust film with an adhesive coating on the reverse. The self-adhesive film adheres perfectly to various materials such as metals, plastic, rubber, and wood and makes it a popular material in industry and commerce.

### **Applications**

- Exterior & Interior Signs
- Badges
- Trophy Plates
- · Inscription Foil
- · Labels / Stickers
- · Packaging Labels







### Material Features

Material: Micro-surfaced pre-adhesive plastic, 2 ply

Finish: gloss, brushed metal

Thickness: 0,1 mm

Engraving depth: 0,04 mm Cutting method: laser, guillotine Sheet size: 600 x 305 mm



Rotary material material

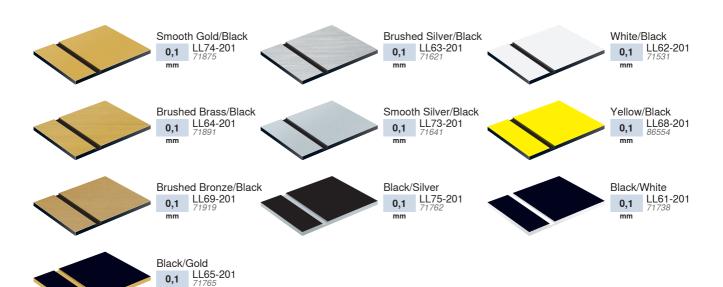


Interior



Exterior





# LaserFlex

LaserFlex is a high quality, multi-layered polyurethane film highly suited for customising textiles. The laser can realise even the finest details with intricate motifs, which would be impossible to achieve with a cutting plotter. Once the motif has been engraved and cut out on the laser unit, the design is applied to the textiles using a transfer press. LaserFlex is characterised by good opacity and high elasticity.

### **Applications**

- · Customisation of T-shirts
- · Customisation of fabric bags
- · Cotton, polyester, blended fabrics
- · Less suitable for nylon and coated textiles
- · Flex on flex is possible







### Material Features

Material: Polyurethanfoil on transfer film

Finish: matt Thickness: 0,1 mm

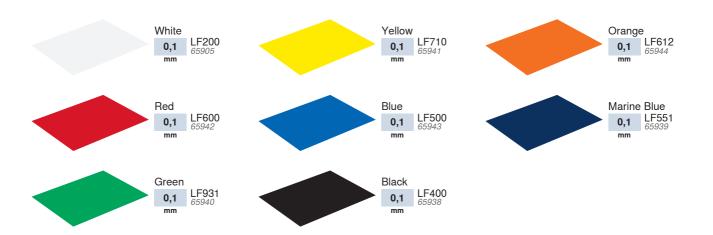
Engraving depth: 0,04 mm Cutting method: laser, guillotine Sheet size: 420 x 297 mm (A3)



material



**Tips** 



LaserFlex has been specially designed to not only be cut but also to be weeded by laser. This means that it is no longer necessary to mechanically remove excess material between graphics and letters or along edges.

Recommended transfer conditions:

Temperature: 165 °C Duration: 17 seconds

LaserFlex film can be washed at up to 60 °C. Any residues can be removed by washing.

www.trotec-materials.com

# → TroGlass Color Gloss

This cast acrylic glass is available in a wide range of colours, in variations of transparent, fluorescent, translucent and nontransparent. Both material sides have a glossy finish. The transparent, fluorescent and translucent colours offer constant light transmission superior to similar glass colours.

TroGlass Color Gloss features all advantages of cast acrylic, especially in terms of impact resistance, light diffusion and handling capabilities.

### **Applications**

- · Illumination and lighting
- · Visual communication Signage, Display, POP
- Shop fitting
- · Interior design and furnishing







### → Material Features

Material: cast acrylic

Finish: gloss

Translucency: transparent, fluorescent,

translucent, non-transparent

Thickness: 3 mm

Cutting method: laser, saw

Sheet sizes: 1216 x 606 mm, 606 x 606 mm (half), 606 x 301 mm (quarter)











Adhesive

possible

**Tips** 

- Perfect light transmission with up to 92 % in clear version better than that of glass
- Impact resistance 8 to 10 times higher than glass
- · Elegant polished finish when laser cut
- · High resistance to external agents and UV rays
- · UV stable and weatherproof
- Easy to work with (laser cut/engrave, bend, glue, thermoforming, milling)

# → TroGlass Color Gloss



# → TroGlass Satins and **TroGlass Duo**

TroGlass Satins cast acrylic glass is available in a wide range of colours, in variations of transparent, translucent and nontransparent. Both sheet sides have a satin surface that give an elegant and soft feeling and appearance.

TroGlass Duo is a cast acrylic glass with one matt and one glossy side. The Night and Day colour variation allows for a change in color when backlighted. While being black when not backlighted, the colour turns bright with the backlight turned on.

### **Applications**

- · Illumination and backlighted signs
- · Visual communication Signage, Display, POP
- Shop fitting
- · Interior design and furnishing







### → Material Features TroGlass Satins

Material: cast acrylic

Finish: matt

Translucency: translucent, non-transparent

Thickness: 3 mm

Cutting method: laser, saw

Sheet sizes: 1216 x 606 mm, 606 x 606 mm (half), 606 x 301 mm (quarter)

# Laser











Adhesive

### Material Features TroGlass Duo

Material: cast acrylic

Finish: one side matt, one side glossy

Translucency: translucent

Thickness: 3 mm

Cutting method: laser, saw

Sheet sizes: 1216 x 606 mm, 606 x 606 mm (half), 606 x 301 mm (quarter)









Interior



# → TroGlass Satins



# → TroGlass Duo



**Tips** 

Special Product TroGlass Duo Night & Day: allows the creation of sophisticated signs, giving the possibility of having 2 colors in the same product:

- · black when not backlighted
- · bright when the sign is backlighted

# → TroGlass Frosted and **TroGlass LED**

TroGlass Frosted is a heavy-duty cast acrylic glass with a matt, roughly structured surface on both sides ("sandblasted finish"). The frosted surface, combined with the intrinsic hardness of cast acrylic, allows applications where higher material strength and robustness are required.

TroGlass LED is a cast acrylic glass, optimised to LED light waves. This allows high light transmission and strong light diffusion while typical "spot effects" typical of LED lights are eliminated.

### **Applications**

- Signs
- · Illumination and backlighted signs
- Visual communication Signage Display, POP
- Shop fitting
- · Interior design and furnishing







### Material Features TroGlass Frosted

Material: cast acrylic

Finish: matt, sandblasted texture Translucency: translucent

Thickness: 3 mm

Cutting method: laser, saw



Rotary material Lase



Interior



possible



Sheet sizes: 1216 x 606 mm, 606 x 606 mm (half), 606 x 301 mm (quarter)

Sheet sizes: 1216 x 606 mm, 606 x 606 mm (half), 606 x 301 mm (quarter)

### Material Features TroGlass LED

Material: cast acrylic

Finish: one side matt, one side glossy

Translucency: translucent

Thickness: 3 mm

Cutting method: laser, saw

Laser



Rotary material



Interior



Exterior



possible

# → TroGlass Frosted



# → TroGlass LED



# Tips TroGlass LED

TroGlass LED is an optimised cast acrylic sheet, developed to adjust itself to the particularity of LED lighting:

- Colors are formulated to meet the wavelength of LEDs: the sheets maintain the same colour tone with backlights being turned on and off.
- · It allows a high light transmission. The strong diffusion characteristics eliminate spot effects.

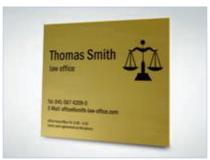
# → TroGlass Reverse

TroGlass Reverse is a transparent, cast gloss acrylic with a coloured coating on the reverse side. By reverse engraving the back and infilling the engraved areas with colour or backlighting an elegant finish can be created. A third layer of Black backing significantly reduces the cleaning time and enhances the depth of colour.

### **Applications**

- Interior Signs
- Exterior Signs
- Safety Signs
- Promotional & Display Signage







### Material Features

Material: Micro-surfaced impact acrylic with back-coating,

2 ply Einight alog

Finish: gloss

Thickness: 3,0 mm / 5,0 mm Engraving depth: 0,08 mm Cutting method: laser, saw



Laser Rota material mate



Interior

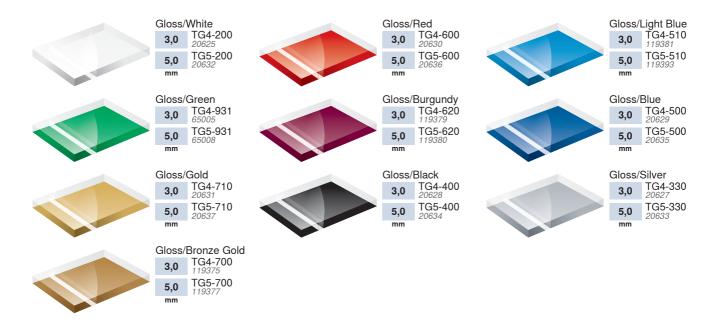


Exterior R



Sheet size: 1220 x 610 mm, 600 x 600 mm (half), 600 x 300 mm (quarter)

# → TroGlass Reverse



# → TroGlass Clear

TroGlass Clear sheets are a great alternative to glass as they offer perfect optical clarity. At the same time they provide the physical benefits of acrylic such as being formable, UV-stable and hardwearing. Laser engraving produces a white or clear engraved image, depending on the chosen settings. The laser cut produces polished cutting edges and inner contours, no additional post-processing of the material is required.

### **Applications**

- Interior Signs
- Exterior Signs
- Safety Signs
- Promotional & Display Signage







### Material Features

Material: Cast acrylic, 1 ply

Finish: gloss

Thickness: 3,0 mm / 4,0 mm / 5,0 mm / 6,0 mm /

8,0 mm / 10,0 mm / 15,0 mm / 20,0 mm

Cutting method: laser, saw

Sheet sizes: 1216 x 606 mm (3, 4, 5 mm) / 1200 x 598 (6, 8, 10, 15 mm) / 1194 x 595 mm (20 mm),

606 x 606 mm (half), 606 x 301 mm (quarter)



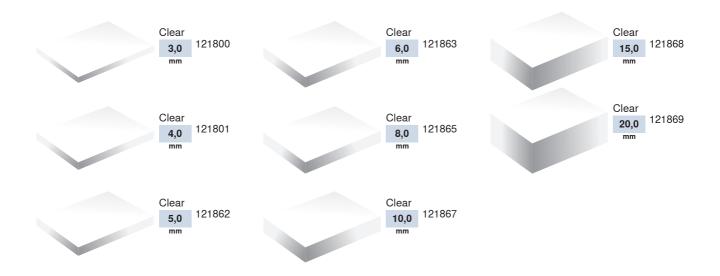






Exteri

# → TroGlass Clear



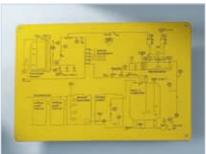
# → TroPly

TroPly features a thin surface coating, which allows for intricate details and fast engraving without shading effects. The reflection-free surface allows clear and easy-to-read designs to be created of the very smallest engraved images.

### **Applications**

- Interior Signs
- Badges
- Trophy Plates
- Safety Signs
- Information Signs







### Material Features

Material: ABS, 2/3 ply

Finish: matt

Thickness: 0,8 mm / 1,6 mm / 2,4 mm / 3,2 mm (3 ply)

Engraving depth: 0,08 mm Cutting method: saw

Sheet size: 1245 x 616 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)







Adhesive possible

### **Bestseller** Yellow/Black White/Black P744-203 86676 P204-203 86664 0,8 White/Red P206-206 71575 P204-206 P744-206 71883 1,6 P744-207 86689 P204-207 86684 2,4 2,4 Red/White Blue/White Black/White P602-203 P402-203 86665 **0,8** P512-203 0,8 0,8 P512-206 P402-206 P512-207 86833 P402-207 P602-207 2,4 2,4 2,4

# → TroPly



# → TroPly Metallic Plus and TroPly Metallic

TroPly Metallic is characterised by a precious metal look and ideal for the finest details with clear contrast as well as fast and cost-efficient processing.

TroPly Metallic Plus features a special protective layer, which is particularly resistant to scratches and wear.

### **Applications**

- Interior Signs
- Badges
- Trophy Plates
- Funeral Plates
- · Information Signs







### → Material Features TroPly Metallic Plus

Material: ABS, 2 ply

Finish: brushed and smooth metal Thickness: 0,8 mm / 1,6 mm / 2,4 mm

Engraving depth: 0,08 mm Cutting method: saw, guillotine

Sheet size: 1245 x 616 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)







Adhesive possible

### → Material Features TroPly Metallic

Material: ABS, 2 ply

Finish: brushed and smooth metal Thickness: 0,8 mm / 1,6 mm / 2,4 mm

Engraving depth: 0,08 mm Cutting method: saw, guillotine

Sheet size: 1245 x 616 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)



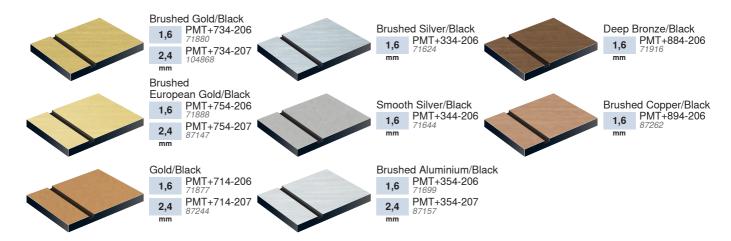




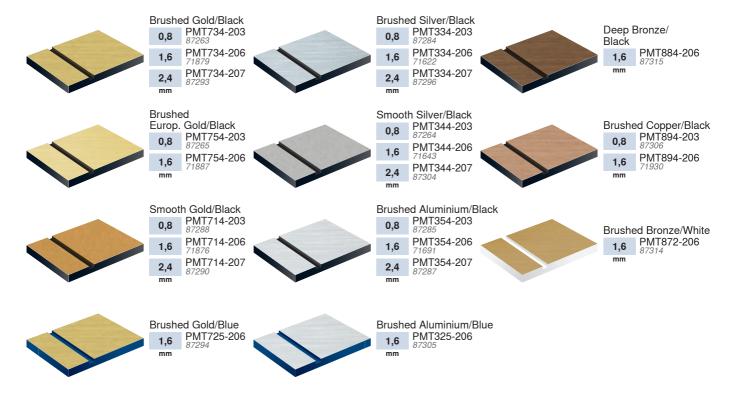
Interior use



# → TroPly Metallic Plus



# → TroPly Metallic



# → TroPly Satins

TroPly Satins is supplied as standard with a brushed finish. An interior laminate with an extensive colour range, it is ideally suited to internal signage, nameplates, key tags and personal identification. The solid cap offers a highly durable and scratch resistant surface.

### **Applications**

- Interior Signs
- Badges
- Safety Signs
- Information Signs







### → Material Features

Material: Acrylic cap / ABS core, 2 ply / 3 ply

Finish: gloss-brushed

Thickness: 0,8 mm / 1,6 mm / 2,4 mm / 3,2 mm

Engraving depth: 0,30 mm Cutting method: saw, guillotine

Sheet size: 1220 x 610 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)







possible

# → TroPly Satins



# → TroPly Ultra

TroPly Ultra is a UV stable, non-glare modified acrylic laminate for internal or external applications. The thicker cap increases protection providing an ideal solution for harsh environments or external professional signage and directories.

### **Applications**

- Exterior & Interior Signs
- Badges
- Safety Signs
- Control Panels
- Braille Signage
- Plant Labels







### → Material Features

Material: Multi surface impact acrylic, 2 ply

Finish: matt

Thickness: 1,6 mm / 3,2 mm Engraving depth: 0,30 mm Cutting method: saw

Sheet size: 1220 x 610 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)







use



Adhesive possible

# → TroPly Ultra

#### **Bestseller** Yellow/Black White/Red White/Black 1,6 PU204-206 1,6 PU206-206 **1,6** PU704-206 PU704-209 91738 PU204-209 91730 PU206-209 3,2 3,2 3,2 Red/White Blue/White Black/White PU602-206 91716 **1,6** PU512-206 **1,6** PU402-206 **3,2** PU512-209 PU402-209 91731 PU602-209 91733



## → TroPly Ultra Reverse

TroPly Ultra Reverse is a transparent acrylic glass with a coating on the back. A transparent image is created by engraving the coloured back. This engraving can then be filled with colours. The protective transparent acrylic glass in combination with the deep coloured layer on the back makes TroPly Ultra Reverse resistant to adverse external influences and easy to clean.

#### **Applications**

- Exterior & Interior Signs
- Badges
- Safety Signs
- Information Signs
- Braille Signage
- · Industrial Signs







### Material Features

Material: Laminated impact acrylic, 1 ply / 2 ply

Finish: matt

Thickness: 0,8 mm / 1 mm / 1,6 mm / 3,2 mm

Engraving depth: 0,30 mm Cutting method: saw

Sheet size: 1220 x 610 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)

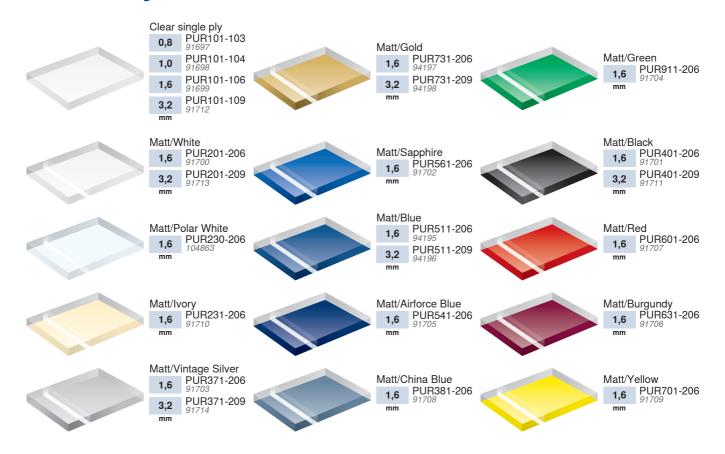








# → TroPly Ultra Reverse



# → TroPly HiGloss

TroPly HiGloss is highly polished, lustrous in colour and UV stable, suited to both internal and external applications. A thick cap offers resistance to abrasion and whilst suited to mechanical engraving, its modified acrylic composition enables the added advantage of being able to cut intricate shapes using a laser.

#### **Applications**

- Exterior & Interior Signs
- Badges
- Safety Signs
- Information Signs
- Industrial Signs
- Plant Labels







### Material Features

Material: Laminated impact acrylic, 2 ply / 3 ply

Finish: gloss

Thickness: 1,6 mm / 3,2 mm Engraving depth: 0,30 mm Cutting method: saw

Sheet size: 1220 x 610 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)









Adhesive possible

## → TroPly HiGloss



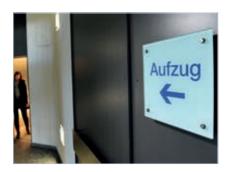


# → TroPly HiGloss Reverse

TroPly HiGloss Reverse is polished to a high gloss finish and can be marked on the back, thus creating high-quality signage products. The material is UV stable and weather-proof and therefore suitable for indoor and outdoor use. A 3D effect can be achieved by using an appropriate milling cutter. The material is ideal for backlighting.

#### **Applications**

- Interior Signs
- Exterior Signs
- Control Panels
- Safety Signs
- Industrial Signs







### → Material Features

Material: Acrylic, 1 ply / 2 ply

Finish: gloss

Thickness: 1,6 mm / 3,2 mm Engraving depth: 0,30 mm Cutting method: saw **♣** 

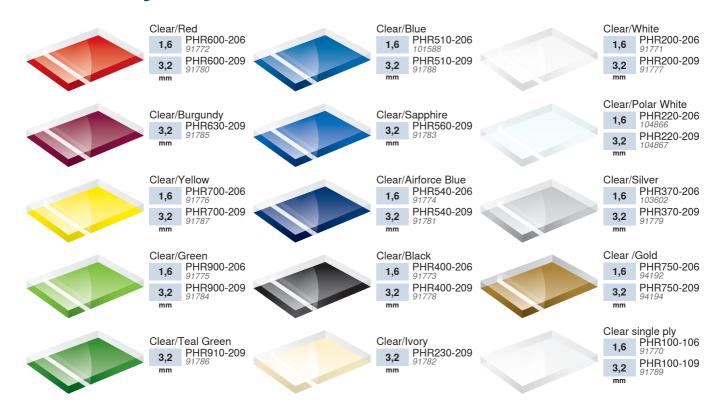






Sheet size: 1220 x 610 mm, 610 x 610 mm (half), 610 x 305 mm (quarter)

# → TroPly HiGloss Reverse



## → Anodised Aluminium

Anodised or colour anodised aluminum is suitable both for engraving with a CO<sub>2</sub> laser and with mechanical engraving devices. The protective anodised coating remains intact during laser processing. The image contrast is caused by the removal of the coloured coating and almost photographic qualities can be achieved. A detailed, white engraved image is created.

#### **Applications**

- Exterior & Interior Signs
- Type Plates
- Serial Number Plates
- Barcodes
- · Signs with advertising impact
- ID Tags







### → Material Features

Material: anodised aluminium, single ply

Finish: matt, gloss Thickness:

matt: 0,5 / 1,0 / 1,5 / 2,0 / 3,0 mm

gloss: 1,0 / 1,5 / 2,0 mm Cutting method: saw, guillotine Sheet size: 1000 x 500 mm



Laser material





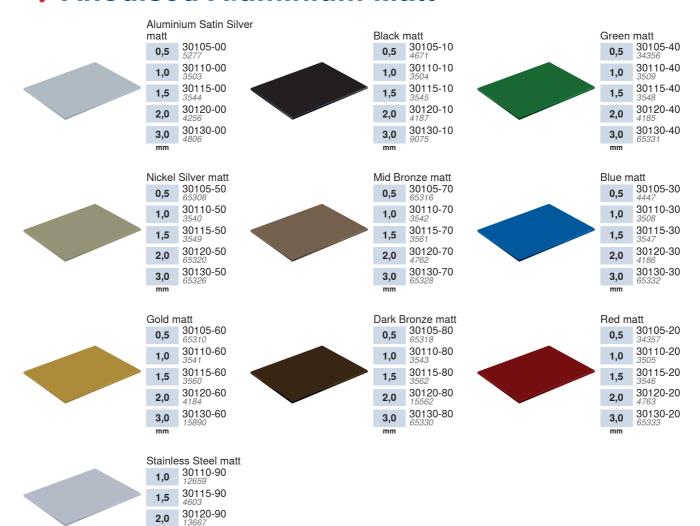
Interior

Exterior

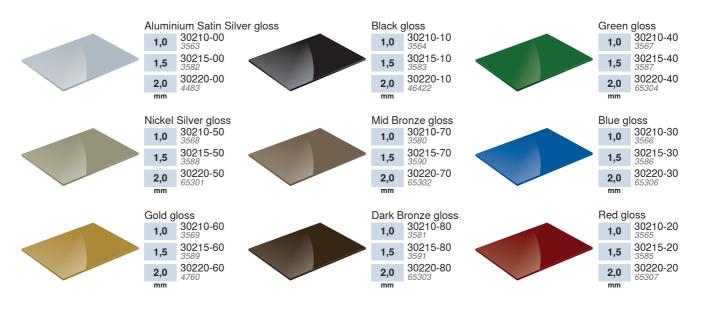


possible

## → Anodised Aluminium Matt



## → Anodised Aluminium Gloss



## → DuraBlack®

DuraBlack® is a coated aluminum with a black surface, which can be marked in white with a CO2 laser. Due to the additional layer of protection, DuraBlack® is particularly resistant to environmental influences (weathering, salt water, chemicals, etc.). DuraBlack® conforms with various industrial and military standards, including MIL-STD 130N, A-A-50271 (MIL-P-514D) and MIL-STD-15024F, Type L.

#### **Applications**

- Exterior & Interior Signs
- Type Plates
- Badges
- Materials Handling
- Military Signage







### Material Features

Material: Aluminium, anodised

Finish: matt Thickness: 0,5 mm

Cutting method: saw, guillotine Sheet size: 508 x 609 mm



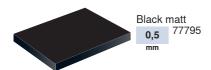
Laser Interior material use



Exterior



ior Adhesive possible



## → AlumaMark®

AlumaMark® is a coated aluminum, which can be marked in black with a CO<sub>2</sub> laser. AlumaMark® is designed in such a way that even low laser power levels can create a high-contrast engraving.

#### **Applications**

- Interior Signs
- Name Plates
- Badges
- Trophy Signs
- Labels







### Material Features

Material: Aluminium, anodised

Finish: matt Thickness: 0,5 mm

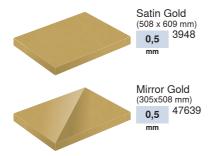
Cutting method: saw, guillotine Sheet size: 508 x 609 mm

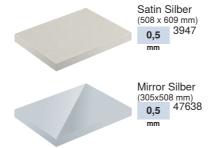






or Adhesive possible







## → Solid Wood

Available in five luxurious finishes our solid wood panels are ideally suited for the requirements of laser processing. A sanded, matt and varnished surface offers an authentic high quality appearance and durability. Incredibly versatile our panels can be used for a multitude of applications such as small interior signage, interior decorations, fashion accessories and promotional giftware.

#### **Applications**

- Interior Signs
- · Arts and crafts
- Promotional items
- · Awards and trophies







### → Material Features

Material: Solid wood

Finish: sanded and varnished, matt Thickness: 5 mm, 3 mm (Alder) Cutting method: saw, laser

Sheet size: 600 x 300 mm, 300 x 100 mm (pack of 20)



Rotary material material



Interior use





## → Wood Veneer

Our veneered wood is supplied with a formaldehyde free fiber board core with real wood laminated on either side. Sanded smooth and semi-matt varnished, they are suitable for a wide range of applications.

### **Applications**

- Interior Signs
- Gifts
- · Architectural model making
- Arts and crafts







### → Material Features

Material: Veneered wood sheets

Finish: semi-matt, sanded and varnished

Thickness: 3 mm

Cutting method: saw, laser Sheet size: 600 x 300 mm







Rotary material

Interior use

Cherry Cedar Maple **3,0** 119801 3,0 119953 **3,0** 119798



## → Plywood and MDF

The MDF fibreboard panels feature a high surface quality and homogenous fibre structure. The high fibre density allow for great results even in fine-detail laser cutting.

The Plywood panels are made from softwood, combining lightweight characteristics with improved dimensional stability. The untreated, bright surface is ideally for laser marking or to be painted on.

#### **Applications**

- · Architectural model making
- Prototyping
- · Giftware, Toys
- Signage
- · Arts & crafts
- · Furniture, Intarsia







### Material features

Material: MDF, Plywood poplar

Finish: untreated Thickness: 3 mm, 6 mm Cutting method: saw, laser

Sheet size: 1220 x 600 mm (MDF), 600 x 300 mm, 300 x 300 mm

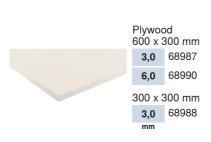






material

Interior





**Tips** 

We recommend that you allow time for the wood to acclimatise to its new environment before processing. Ideally maintain in an area with constant temperature/humidity.

# → Colour Fillings

Specially designed to use on laser engraved plastics our acrylic filler paints will not affect nor "craze" the lasered area. Fill reverse engraved signs with acrylic colours and create long-lasting, colourful, multi-colour signs.

### **Applications**

- Indoor and outdoor signs
- Homogenous colour filling of engraved spots
- Signs in various colours
- Colour effects with individually mixed colours







## → Acrylic Paint

	Colour	Size / Can	Order Number
Pro Conserva	Black	29,57 ml	74163
To September 1	Red	29,57 ml	74164
The Code of the Co	White	29,57 ml	74165
Carried St.	Blue	29,57 ml	74166
Programme of the control of the cont	Silver	29,57 ml	74169
Pro Coage Fd	Gold	29,57 ml	90961
1 Sept 12 Sept	Green	29,57 ml	90550
The second second	Yellow	29,57 ml	90875

## → Laser marking solutions

# Creating black markings on metals, glass and ceramics

By applying the spray or paste on the blank surface (metal, glass, ceramic), CO<sub>2</sub> lasers, as well as fiber or Nd:YAG lasers, produce a permanent black marking. This marking is highly resistant to mechanical and chemical stresses as well as high temperatures. High contrast and resolution can easily be achieved.

#### **Applications**

- Bar coding
- Product serialisation
- Logos
- Decorative marking
- Individual pieces







## → Laser marking metals

Product	Size	Order Number	
markSolid Spray Metal 114	300 ml	57792	
CerMark LMM 6000	340 g	4767	
Thermark LMM 14	170 g	15891	
markSolid Paste Metal 015	50 g	110200	
markSolid Paste Metal 015	100 g	110201	
markSolid Paste Metal 015	200 g	84577	
markSolid Paste Metal 015	500 g	84578	
CerMark LMM 6000	250 g	48391	
CerMark LMM 6000	50 g	49852	
LMM 6018 Tape	25 mm x 15 metres	58243	
LMM 6018 Tape	50 mm x 15 metres	64752	
	markSolid Spray Metal 114 CerMark LMM 6000 Thermark LMM 14 markSolid Paste Metal 015 markSolid Paste Metal 015 markSolid Paste Metal 015 markSolid Paste Metal 015 CerMark LMM 6000 CerMark LMM 6000 LMM 6018 Tape	markSolid Spray Metal 114       300 ml         CerMark LMM 6000       340 g         Thermark LMM 14       170 g         markSolid Paste Metal 015       50 g         markSolid Paste Metal 015       100 g         markSolid Paste Metal 015       200 g         markSolid Paste Metal 015       500 g         CerMark LMM 6000       250 g         CerMark LMM 6000       50 g         LMM 6018 Tape       25 mm x 15 metres	

<sup>\*</sup> Spray not recommended for airfreight

## → Laser marking glass and ceramics

	Product	Size	Order Number
liquid	markSolid Liquid Glass/Ceramic 590 to be applied by airbrush	100g	110202

## → How to use laser marking solutions



### 1. Preparation

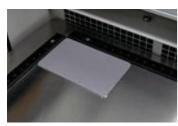
- Surface Cleaning: Product needs to be applied directly on the blank surface (metal, glass, ceramic). The surface has to be dry and clean, free of dust, grease, silicone, etc.
- · Spray: Shake the spray well to make sure solid sediments are dissolved.
- Pastes: Dilute the paste with ethanol (alcohol) or water according to the description on the product label. For curved surfaces reduce the grade of dilution.



### 2. Applying

The more evenly and the more accurately you apply the product onto the surface, the better results you achieve. The principle "less is more" applies often in regard to the layer thickness.

- Spray: Spray from 20 30 cm distance
- Paste: Apply with brush, foam or airbrush



### 3. Drying

The coating must be completely dry before starting the laser marking. It usually takes 1-2 minutes when dried by air, but a hot air blower (e.g. a simple hair dryer) can reduce the drying time. **Tip:** You may reduce the drying time by putting the work piece in the laser with exhaust turned on.



### 3. Laser Marking

The products can be used for marking with  ${\rm CO_2}$  lasers, Nd:YAG lasers and fiber laser, to name a few. Differences in laser power, wave length and other factors influence the final settings required. After laser marking, excessive coating can be removed by wiping with a damp cloth or by washing with water.

Tips

- → Light-grey to brown results indicate that too much laser power or too little marking speed were used.
- → If the marking can be rubbed off, too little power or too high laser speed can be the cause.
- → The same result may occur if the coating is thicker than it should be, or if the material surface is not free of oil or dirt.

## → Our recommendations

Product	Application					
markSolid Paste Metal 015 50 g, 100 g, 200 g, 500 g	Black marking on blank metal (stainless steel, brass, etc.) Paste is suitable for application by brush, especially for smaller areas, or by airbrush.					
markSolid Spray Metal 114* 300 ml	Black marking on blank metal (stainless steel, brass, etc.) Using a spray might be the easiest way for an even coating, especially for larger areas.					
markSolid Liquid Glass/Ceramic 590	Black marking on glass and ceramic Liquid can be applied using an airbrush.					

<sup>\*</sup> Spray not recommended for airfreight



## → Laser Rubber Sheets

Our innovative Trodat stamp rubber has been specially developed to deliver the best engraving results and highest productivity. Regardless of whether you want to save production time, or you want to reduce odours in your production area, Trodat is the right laser rubber for your exact needs. Trodat's laser rubbers are completely harmless with regard to occupational health and safety.



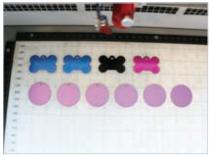
	Product	Size	Colour	Order Number
	TEMPO Speed laser rubber Up to 21% faster than standard laser rubber Excellent engraving and imprint quality S5° Shore-A	A4 / 2,3mm	orange (850206)	34242
	AERO Odourless laser rubber Low odour while engraving As fast as standard laser rubber Very easy to clean 60° Shore-A	A4 / 2,3mm A3 / 2,3mm	light grey (850208) light grey (850208)	34192 (A4) 36877 (A3)
40	ECO Ecological laser rubber from natural rubber • Made from 100% natural rubber • 55° Shore-A • Water-based ink	A4 / 2,3mm	green (850202)	34244
1	CLASSICO Reliable standard laser rubber • Solvent-resistant • 60° Shore-A	A4 / 2,3mm or A4 / 1,5mm (for Goldring)	grey (850205)	34248 (2,3 mm) 34270 (1,5 mm)
	OLIO Oil-resistant laser rubber • No expansion with oil-based inks • 55° Shore-A	A4 / 2,3mm	black (850203)	34246
	SOFT Soft laser rubber • Suitable for bold letters and holohedral designs • Low odour and easy to clean • 50° Shore-A	A4 / 2,3mm A3 / 2,3 mm	blue (850209)	62229 (A4) 62230 (A3)

## → Seklema Workholding Mat

The Seklema Mat is a thin plastic with a special coating on both sides. Using the Seklema mat allows laser and rotary users without a vacuum table to hold down a workpiece and prevent it from moving while operating. No tape, clamps or additional adhesives are required. Also recommended for applications where the vacuum table cannot be fully utilized – for example when marking or engraving a high number of small pieces.

#### **Applications**

- · Holds material flat on the table
- · For laser and rotary users without vacuum table
- Fixation of small items







Easy to fix small items

Material can be released easily again

Workholding mat is available in various

Product	Size					
Seklema 67064	1200 x 600 x 3 mm					
Seklema 67063	600 x 600 x 3 mm					
Seklema 67062	600 x 400 x 3 mm					
Seklema 67061	600 x 300 x 3 mm					
Seklema 67060	300 x 300 x 3 mm					

**Tips** 

Seklema is a reusable mat, that helps streamlining the production process:

- · Holds material flat and in position if there is no a vacuum table
- · Better fixation of small items which are hard to pin down by vacuum table
- Speeds up production
- · Long lifetime due to "self-healing" surface and two usable sides
- · Can be easily cleaned with only a soft sponge and water
- · Various sheet sizes available to fit different laser bed sizes

		Engraving		Use		Ply		Handling			
	Material	Laser	Mechanical engraving	Exterior	Interior	-	2	ဇ	Front	Reverse engraving (optional colour fill)	Scoring
	TroLase 4	Х	Х	х	х		х	х	х		х
	TroLase Metallic Plus 6	х	х	х	х		х		х		х
	TroLase Metallic 6	х	х		х		х		х		х
	TroLase Reverse 8	х	х	х	х		х			х	х
ials	TroLase ADA Signage 10	х	х	х	х	х			х		х
Laserable Materials	TroLase Thins 12	х	х		х	х	х		х		х
<u>е</u>	TroLase Textures 14	Х	х	Х	Х	(x)	Х		Х		Х
erab	TroLase Lights 16	х	х	х	х		х		х		х
Lase	LaserFlex 17	х		х	х	х				х	
S											
TroGlass	TroGlass Series 18	х	х	х	х	х			х	х	
Tro	TroGlass Clear 26	Х	х	х	Х	х			Х	Х	
	TroPly 28		Х		Х		Х	Х	Х		х
	TroPly Metallic Plus 30		Х		Х		х		х		х
	TroPly Metallic 30		х		х		х		х		х
(A)	TroPly Satins 32		Х		Х		х	Х	х		х
rial	TroPly Ultra 34		Х	Х	Х		Х		Х		х
Mate	TroPly Ultra Reverse 36		Х	Х	Х	Х	Х			Х	Х
ary	TroPly HiGloss 38		Х	Х	Х		Х	Х	Х		Х
Rotary Materials	TroPly HiGloss Reverse 40		х	х	х	х	х			х	х
	Anodised Aluminium 42	х	х	х	х	х			х		
als	DuraBlack 44	х		х	х	х			х		
Metals	AlumaMark 45	х			х	х			х		



# → Speedy Laser Engraver

## **Profitability by Design**



The Speedy laser engraving and cutting systems are the perfect choice both for entry level users as well as professional engravers. "Speedy" – the fastest and most productive laser machines in the market: By processing at maximum speed of 3.55 m/sec and acceleration of 5g the Speedy is designed to increase your production efficiency. Thanks to the closed construction, essential components are protected from dirt and dust. This is why you can operate without virtually any maintenance and cleaning requirements. This results in higher up-time and lowest cost of ownership. All platform sizes from  $610 \times 305$  mm up to  $1000 \times 610$  mm are available with a  $CO_2$ , a fiber or even both laser sources in one laser system. The patented flexx function enables endless application possibilities. Use both laser sources in one job without having to change the laser source, the lenses or the focus manually.



Efficient and environmentally friendly production of



Laser cut award out of TroGlass acrylic sheets



Laser engraved leather wallet

## → Expand your business

Speedy Laser Machines are the perfect tool for a variety of materials. Virtually any design can be realized with the laser. For example stamps can be produced within minutes and series production is

also significantly streamlined. Customize honory prizes such as awards or trophies, personalize promotional items or discover new possibilities to expand your business.



## → Speedy flexx Series

### Flexibility by Design



As part of the Speedy family the Speedy flexx Series offers the family's known advantages. The machines of the Speedy flexx Series are equipped with both a CO<sub>2</sub> and a fiber laser source. This allows customers to perform endless applications. The CO<sub>2</sub> laser source is ideally suited for engraving and cutting plastics, wood, rubber, leather, paper, and many other materials. The fiber laser is the right tool for marking metals and plastics. Depending on the material, the two laser sources are activated alternatively. Use both laser sources in a single job without the need to manually change the laser source, lens or focus. The patented flexx function ensures maximum flexibility in the applications. Every Speedy is "ready for flexx". This means that every machine can be equipped with an additional laser source at a later stage and you are well prepared for the future. Upgrade whenever you are ready.



Wood engraved and metal marked in one process step



CO<sub>2</sub> laser for engraving wood, fiber laser for marking



Process an endless variety of materials with Speedy

## → Endless Application Possibilities

With machines from the Speedy flexx series you can process an endless variety of materials and fulfill practically every order. No matter which client

request: whether it is engraving glass or textiles, marking metals or plastics or cutting wood or acrylics – with a Speedy flexx you are prepared for the future.



## → SP Series

### **Leading Large Format Laser Cutting**



The SP Series is the right choice for large format CO<sub>2</sub> laser cutting systems. The highly efficient flatbed laser plotters are ideal for demanding large format cutting applications in plastics, wood, textiles and many more. The high speed cutting with perfectly matched components ensure an extremely long lifetime and a precise cut. For the SP Series Trotec developed a unique, multifunctional table concept. Depending on the application, the ideal table can be selected and changed easily and quickly.

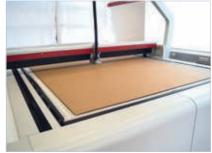
The working areas of SP laser cutters provide enough space for all standard sheet sizes in use today – from  $1.245 \times 710$  mm of the SP500 up to  $2.210 \times 3.210$  mm of the SP3000. Acrylic, textile, paper, cardboard or wooden sheets can be processed efficiently and in a cost-saving way. The SP Series is 100 % developed and manufactured in Austria.



Flame-polished result. Cut up to 40 mm acrylic.



Within seconds from design to reality



Cut very detailed geometric shapes on large format

## → Make your production more efficient

Laser cut displays or POS materials out of acrylics with glass-clear cut edges without additional material finishing. And besides save up to 88% of acrylics processing costs. Use the laser contour cutting

of high quality printed materials like acrylics, cardboard or wood. Whether intricate paper forms, logos or images, the results inspire with incredible detail, precision and quality. Offer new products and services and achieve more profit!



# → SpeedMarker Galvo Marking Lasers

### **High-Speed Laser Marking for Industrial Applications**



The SpeedMarker Series is developed for efficient laser marking of metals and plastics along the industrial production chain. They offer the perfect combination of intelligent software with highest quality hardware. The systems are available in different sizes with various configurations to meet individual requirements. Additionally, a broad range of options for special tasks is available. The SpeedMark marking software provides program modules for typical marking processes. From simple direct input to fully automated workflows, everything is possible – with no need for any special programming knowledge. Thanks to their thoughtful and robust design the laser machines guarantee absolute reliability and precision even in demanding environments. The laser head is practically maintenance free. The SpeedMarker Series is 100% designed and manufactured in Austria and Germany.



Industrial tags for machines and parts



Code marking on difficult placements



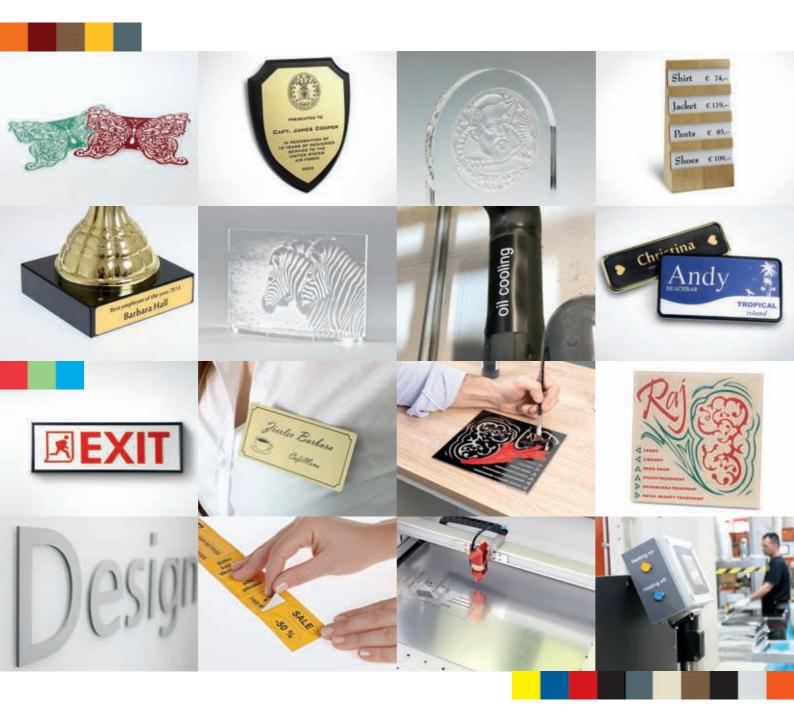
Durable marks a part's lifetime long

### → Durable, Economical, Flexible

Laser markings are heat, abrasion and even acid resistant – for perfectly legible information and longest lifetime. Due to minimum costs for operation and short set-up times the costs per marking are

constantly low. Laser marking offers maximum flexibility concerning material choice, changing geometries and processing of of dynamic contents (e.g. text, serial numbers, logos, images or codes).





## For each application the ideal material

## → Trotec materials for laser and rotary engraving

## First class materials for easiest processing

- Engrave efficiently with fewer passes
- · Consistency in quality and colours
- · Highly durable materials

- · Little residue exposed while engraving
- No sticky edges after laser cutting
- · Minimised cleaning effort



Visit us on:







## → Price list

Contact us - we are happy to send you more information and our price list!

Trotec Laser GmbH
Freilinger Str. 99
4614 Marchtrenk, Austria
Tel. +43 (0)7242 / 239-7777
Fax +43 (0)7242 / 239-7380
trotec@troteclaser.com

Any colour deviations between the images shown in the catalogue and actual items are due to electronic depiction or typographical reasons and are not considered mistakes.



Contact us:

Trotec Laser GmbH
Freilinger Straße 99, 4614 Marchtrenk, Austria
Tel. +43 (0) 7242 239-7436, Fax +43 (0) 7242 239-7380
trotec@troteclaser.com



www.trotec-materials.com