



THERMOFLAN

equipments & products **Sign**

Make the right choice !

metalphoto®

Photographic aluminium widely used for its extended durability in industrial or challenging environments and sharpness in graphic applications. Processed in yellow safelight conditions, Metalphoto plates are exposed through a film, developed, fixed then sealed. Results are safe and fast.

Applications :

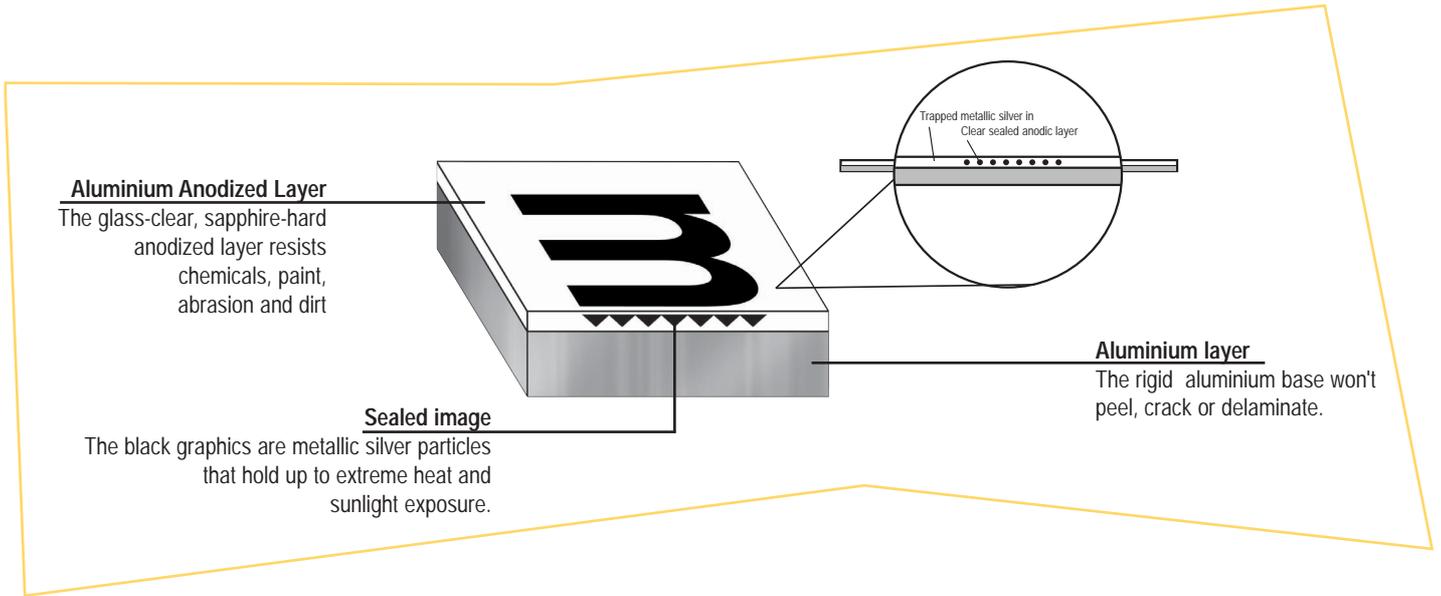
Identification plates,
Name plates,
Panel fronts,
Awards,
Labels,
Signs
...



The Metalphoto® process is the fastest and easiest way to make durable metal panels, nameplates and labels.

Metalphoto parts will look as good as new for a lifetime. That's because information is sealed into the anodized layer of the aluminium.

In addition, imbedded black graphics are metallic silver particles that resist heat and sunlight.

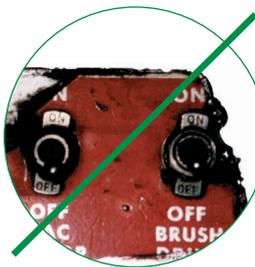


*Over time, your product may be subjected to any or all of the following conditions :
sunlight, heat, cleaning, handling, abrasion, grime, solvents, fuels, paint, impact, graffiti, salt spray, blowing sand, chemicals, moisture, cold.*

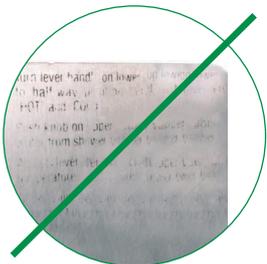
If you want your parts to last, make the right choice... Metalphoto



Chemicals can corrode other materials, rendering them unreadable. Most chemicals roll off Metalphoto parts with no effect
Make the right choice.
metalphoto®



Delaminated, peeled or battered parts can't be clearly read on other materials. Metalphoto parts can't peel or delaminate because the image is embedded within a sapphire-hard anodized layer
Make the right choice.
metalphoto®



Sunlight and heat can fade graphics on other materials to the point of illegibility. Metalphoto parts won't fade even super-fine graphics withstand heat and ultraviolet extremes.
Make the right choice.
metalphoto®



Abrasion can make labels printed on other materials unreadable and unattractive. Metalphoto parts remain readable even in abrasive environments
Make the right choice.
metalphoto®

Metalphoto panels, nameplates and labels outlast other parts in challenging environments.

Metalphoto parts in minutes *(Noncontractual photographs)*



Metalphoto features

DURABLE

Image is permanently embedded in the anodic layer and protected by a sapphire-hard surface making it impervious to acids, fungus, moisture (35 year resistance to corrosion), weathering, temperature extremes (resistance to 400°C) and UV light (20 year resistance to outdoor exposure)

As a result, industry groups recognize Metalphoto as the most durable aluminium parts available.

FAST

Process directly from production film to imaged plate, no intermediate plates or screens are required.

Effective for one or thousands of custom parts

SHARP

Anything that can be photographed in line of halftone can be reproduced with total fidelity.

EASY

Few steps.

Makes perfect parts every time.

SAFE

Meets the strictest environmental standards anywhere.

Safe for the user and the community.

PROVEN

Used by thousands of production shops worldwide and supported by 45 years of manufacturing experience : US Army, Motorola, Boeing, Nasa, Aérospatiale, Philips.

MINIMAL INVESTMENT

Economical, long-lasting equipment.

TYPE OF PLATE

METALPHOTO GROUP 1

One side anodized aluminium plates producing black and silver images. Background or selective coloring possible.

METALPHOTO GROUP 2

Two side anodized aluminium plates producing black and silver images. Background or selective coloring possible

METALPHOTO PLUS

One side anodized aluminium plates producing black images on a colored background (silver, copper, yellow, gold, red)

POLYCOLOR

One side photosensitized photopolymer coated plates for one or more spaced or butted colors on a silver background

SIZES

254 x 305 mm / 305 x 508 mm / 508 x 610 mm / 610 x 1016 mm

THICKNESSES

0.08 / 0.13 / 0.2 / 0.3 / 0.5 / 0.8 / 1 / 1.6 / 2.3 et 3.2 mm

FINISH

satın / matte / gloss / brushed



METALPHOTO ENVIRONMENTAL PROPERTIES											
Results Key	Test conditions	Abrasion resistance Taber Abraser with CS17 wheel, 1000 gram load for 7000 cycles	Solvent/Fuel resistance Extended immersion in alcohol, kerosene, JP-4 jet fuel, hydraulic fluid, MEK and other organic solvents at room temperature	Temperature resistance		Ultraviolet light resistance 400 hour Weatherometer test GG-P-455b recognized equivalent of 20 years outdoor exposure	Salt spray/Immersion resistance		Chemical resistance		
				Oven tested for one hour			Salt spray testing with a 5% NaCl solution at 90° F for 700 hours equivalent of 35 years outdoor	Immersed plates in sea water at ambient temperature for an extended period of time avoiding galvanic coupling	Acid		Bases
				> 400 °F <= 750 °F	> 750 °F <= 1000 °F				24 hours immersion at room temperature in 3% solutions of nitric acid, Sulfuric acid and ferric chloride	hour immersion at room temperature in 3 solution of Chlorox	24 hour immersion at room temperature in 3% solutions of sodium or ammonium hydroxide
Finished plate characteristics ● Excellent ○ Acceptable ○ Not recommended	Black & aluminium image intensified	●	●	●	●	●	●	●	●	○	○
	Black on Gold * background image intensified	●	●	●	●	○	○	●	○	○	○
	Black & aluminium not image intensified	●	●	●	○	○	○	●	○	○	○
	Black on Gold * background not image intensified	●	●	●	○	○	○	○	●	○	○
	Additional background or selective colors	●	●	○	○	○	○	○	●	○	○

Note : users must test Metalphoto products in the specific environment anticipated, Metalphoto performances are not warranted in any environment.
*includes Sunfast and Classic Gold colors.

INDUSTRY & GOVERNMENT SPECIFICATIONS :

- Underwriters laboratories / file # MH17767
- Canadian Standards Association / file # 11133-1, class # 7921
- Federal specification GGP-455b, Grade A or B

MILITARY SPECIFICATIONS

- Mil-P-15024 F Mil-P-514 D
- Mil-P-19834 B Mil-A-8625E

DIN STANDARD TESTING EQUIVALENCE

- DIN 50017 - resistance to corrosion
- DIN 50021 - resistance to salt spray
- DIN 50004 - resistance to Xenon attacks
- DIN 50018 - resistance to industrial environments
- DIN 53387 - resistance to radiation artificial ageing

259 Chemin de la Côte
30120 MOLIERES-CAVAILLAC (FRANCE)

Tél. +33 (0)4 67 81 14 41
Fax. +33 (0)4 67 81 09 80



THERMOFLAN

E-mail. info@thermoflan.com
www.thermoflan.com

S.A.S au capital de 300000 euros
SIRET 720 201 961 00011
RCS 72B196 NIMES