

Nameplates /  
Barcode Labels

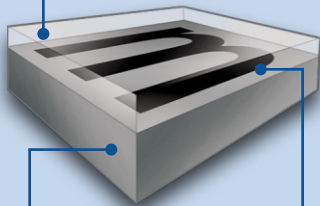
Service Diagrams /  
Schematics

Machine  
Control Panels

**THE TECHNOLOGY :**

**ANODIZED LAYER**

The glass-clear, sapphire-hard anodized layer resists chemicals, paint, abrasion and dirt.



**SEALED IMAGE**

The image is absorbed into the pores.

**ALUMINUM LAYER**  
The rigid aluminum base won't peel, crack or delaminate.

## EXCEPTIONALLY DURABLE. WIDELY SPECIFIED. HIGH RESOLUTION GRAPHICS.

Used for over 15 years on Caterpillar (Bucyrus) mining equipment, Metalphoto is engineered to withstand the demanding conditions of surface and sub-surface mining. Metalphoto photosensitive anodized aluminum is approved for mining identification applications including approval plates (MSHA Title 30, Part 18.11), on-equipment schematics/diagrams (MSHA Title 30, Part 70.310), machine control panels and several other applications. Durable Metalphoto identification products support MSHA compliance, enable fast and proper equipment repairs and improve operator efficiency.

For over 50 years industrial and military engineers have specified Metalphoto photosensitive anodized aluminum because of its ability to withstand harsh operating environments. Metalphoto's proprietary technology permanently seals a UV-stable image inside of anodized aluminum; offering **the confidence of unparalleled durability, image resolution and readability.**

Contact Photo-Graphics Co., Inc. to get Metalphoto specified into your designs.

### PRODUCT BENEFITS

**EXCEPTIONALLY DURABLE:**

- + UV-stable image is permanently sealed within the anodized aluminum.
- + Virtually impervious to chemicals, heat, abrasion, salt spray and sunlight.
- + Certified for 20 year plus outdoor applications.
- + Earned more top scores than any other IUID barcode label material tested by the U.S. Navy (NSWC, Corona Division, IUID Center; August 2011).

**WIDELY SPECIFIED:**

- + Meets a wide array of commercial, government and military specifications.
- + Notable certifications include: MIL-STD-130N, STANAG 2290, GGP-455B(3) Type I, MIL-DTL-15024F, MIL-P-19834B and A-A-50271.

**HIGH RESOLUTION GRAPHICS**

- + Photographic image affords extreme detail and contrast at any size.
- + Anti-counterfeit security printing is available.

**UV STABLE**

**ABRASION RESISTANT**

**TEMPERATURE RESISTANT**

**FLUID RESISTANT**

**RECYCLABLE**

**PERFORMANCE CHARACTERISTICS**

Because of its ability to perform across a range of challenging environments, Metalphoto meets an array of government, industrial and military specifications. Visit [www.nameplates-labels.com](http://www.nameplates-labels.com) for a list of specifications for which Metalphoto is qualified.

| CHARACTERISTIC                                  | RESULT   |
|---|--|
| <b>Abrasion Resistance</b>                      | No pronounced image loss, degradation or reduced readability after 7,000 cycles on an abrading wheel.  |
| <b>Acid Corrosion</b>                           | No deterioration or image degradation after 24 hours in 3% nitric acid.  |
| <b>Heat Resistance</b>                          | No legibility loss or degradation when subjected to 1,000°F.   |
| <b>Salt Spray Corrosion</b>                     | No deleterious effect after a 720-hr salt spray (fog) test. 2,6 "Very Good" corrosion resistance after 113 days seawater exposure.   |
| <b>Accelerated Light and Weather Resistance</b> | No pronounced deterioration of legibility after 400-hr carbon arc weatherometer exposure. (≈ 20+ year outdoor life)  |
| <b>Accelerated Oxygen Aging</b>                 | No discoloration or fading after 96-hr/300 psi/ 70°C oxygen bomb aging   |
| <b>Stain Resistance</b>                         | No black fading when plates are exposed to tincture of iodine.   |
| <b>Cleaning Resistance</b>                      | No deleterious effects when tested with alkaline cleaners (MILC- 87937 or equivalent) for aircraft surfaces.   |
| <b>Low Temperature Resistance</b>               | No deleterious effect or image fade after 1 hour at -50°F. No impairment of legibility upon exposure at -67°F.   |
| <b>Organic Solvent Resistance</b>               | No softening, staining or noticeable fade after 24-hr exposure to: JP-4 fuel, Gasoline, Mineral Spirits, Methyl Ethyl Ketone, Turpentine, Turbine & Jet Fuel, Kerosene, Xylol, Acetone, Toluol, Heptane, Trichlorethylene, MIL-H-5606 Hydraulic Fluid and MIL-L-7808 Jet Engine Oil. |
| <b>Fungus Resistance</b>                        | Visual reading of "0" per ASTM-G21.  |
| <b>Thermal Shock</b>                            | No deterioration after 3 cycles between -65°C and 125°C  |
| <b>Moisture Resistance</b>                      | No deterioration after 10 humidity cycles per MIL-STD-202, method 106.   |

**TECHNICAL SPECIFICATIONS**

MATERIAL: Anodized Aluminum Sheets

SIZES: 10"x 12", 12"x 20"

THICKNESSES: .003", .005", .008", .012", .020", .032", .039", .063"

FINISHES:



**MATTE**  
non-reflective  
with dull finish



**SATIN**  
semi-gloss medium  
reflective material

**TO ORDER**

Call **816-761-3333** or visit our website at [www.nameplates-labels.com](http://www.nameplates-labels.com)

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