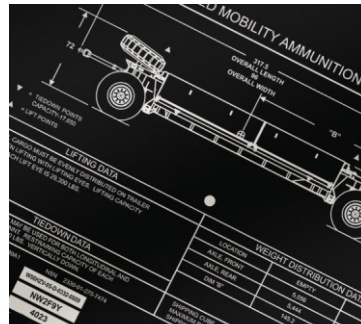
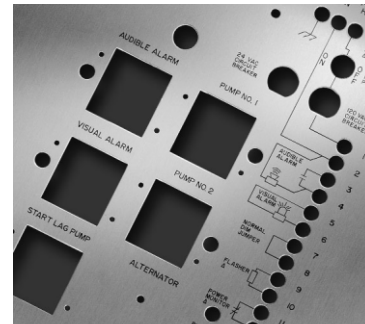




UID Labels /
Nameplates



Service Diagrams /
Schematics

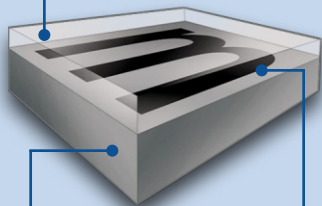


Machine
Control Panels

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. PHOTOGRAPHIC RESOLUTION.

For over 50 years, the United States Department of Defense has specified Metalphoto photosensitive anodized aluminum for durable labels, nameplates, schematics and control panels installed in harsh operating environments.

The United States Navy first adopted Metalphoto in 1958 for shipboard labels, placards and damage control signs. Since then, Metalphoto has been incorporated into several major Army weapons systems including the Abrams Tank, the Bradley Fighting Vehicle and the HMMWV. Both Marine Corps and Army Depots operate Metalphoto production facilities. All Departments utilize Metalphoto for Item Unique Identification (IUID) barcode labels as specified under MIL-STD-130.

When durability matters, specify Metalphoto.

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 application.
- + 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.

PHOTOGRAPHIC RESOLUTION:

- + 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.

CHARACTERISTIC	RESULT
Abrasion Resistance	No pronounced image loss, degradation or reduced readability after 7,000 cycles on an abrading wheel.
Acid Corrosion	No deterioration or image degradation after 24 hours in 3% nitric acid.
Heat Resistance	No legibility loss or degradation when subjected to 1,000°F.
Salt Spray Corrosion	No deleterious effect after a 720-hr salt spray (fog) test. 2,6 "Very Good" corrosion resistance after 113 days seawater exposure.
Accelerated Light and Weather Resistance	No pronounced deterioration of legibility after 400-hr carbon arc weatherometer exposure. (~ 20+ year outdoor life)
Accelerated Oxygen Aging	No discoloration or fading after 96-hr/300 psi/ 70°C oxygen bomb aging
Stain Resistance	No black fading when plates are exposed to tincture of iodine.
Cleaning Resistance	No deleterious effects when tested with alkaline cleaners (MILC- 87937 or equivalent) for aircraft surfaces.
Low Temperature Resistance	No deleterious effect or image fade after 1 hour at -50°F. No impairment of legibility upon exposure at -67°F.
Organic Solvent Resistance	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.
Fungus Resistance	Visual reading of "0" per ASTM-G21.
Thermal Shock	No deterioration after 3 cycles between -65°C and 125°C
Moisture Resistance	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", .090", .125"
FINISHES:



MATTE
non-reflective with dull finish



SATIN
semi-gloss medium reflective material



#4
brushed to resemble a stainless steel finish



GLOSS
highly reflective, mirror-like

TO ORDER

Call **1-800-438-0480** or visit our website at winmarkstampandsign.com

*Winmark Inc. does not warrant the performance of its materials in any environment.
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2284 So. West Temple
 Salt Lake City, UT 84115 USA

T: 1-800-438-0480
 F: 1-800-291-6265

E: sales@winmarkinc.com
www.winmarkstampandsign.com