metalphoto®

The Most Durable Labels in the World!

Metalphoto labels and data plates have been delivering field performance for Department of Defense applications and to the American War Fighter for decades. More than fifty years in the fight, Metalphoto labels are still the best and most durable you will find; and the Metalphoto manufacturing system remains the most cost-effective durable label production method on the market.

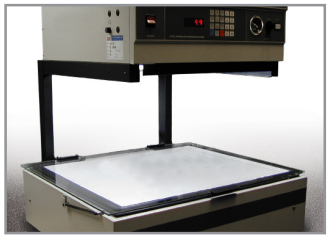
Metalphoto was created to satisfy the incredibly demanding, “life-of-the-part” UID requirements of MIL-STD-130N. We just didn’t know it until now!

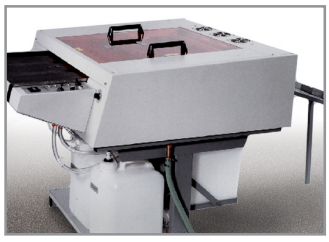
Metalphoto UID Manufacturing System 3
Extreme High Volume

Metalphoto System 3 for Extreme High Volume will allow you to efficiently produce the most durable labels in the world. **Designed for extremely high levels of production**, the system package includes everything you will need with the exception of a safe light production area, which we will help you design, and alternative fabrication equipment that is determined to be necessary.

System elements include:

- Data Plate and Design Software and Graphics Module
- Metalphoto Film Output Device
- Metalphoto Exposure Device
- Metalphoto Dry-to-Dry Zip Processing Equipment
- Metalphoto Sealing & Rinsing Equipment
- Metalphoto Starter Material Package
- On-Site System/Production Training
- Annual Maintenance Visit & Technical Review





Horizons ISG - 18531 South Miles Road, Cleveland, Ohio 44128
(800) 482-7758 x0026

metalphoto® Specifications and Guides

UID

DoD
Mil-Std-130N
GG-P-455B
Mil-A-8625F
Mil-DTL-15024
SPEC 2000
Lockheed Martin LMA-PN010

Industry Specifications & Studies

BF Goodrich Aerospace
Data Systems Division
Specification SMT0022

Boeing Commercial Aircraft Company
Boeing Process Specification BAC5875
Fabrication of Aluminum Markers, Instrument Panels, Drawer Front Panels and Fabrication of Metal and Plastic Appliques

Honeywell, Inc.
Satellite Systems Operations
Metalphoto approved for use on Space Station
Memorandum A3-J024-M-9501786
Laboratory Case 161311

SAE Technical Paper Series 2000-01-2437
Special requirements for Crew Interface Labels on the International Space Station
Stephen Gray & Fernando Ramos - Boeing

U.S. Government Specifications

Department of Defense
Commercial Item Description
A-A-50271 Class 2- Composition C

Department of Defense
MIL-A-8625F
Anodic Coatings for Aluminum & Aluminum Alloys Type II Class 1 (unprocessed or clear) Class 2 (processed)

Departments of Defense
MIL-STD-13231
Standard Practice
Marking of Electronic Items

Department of Defense
MIL-DTL-15024F
Identification of Equipment
Type G - Foil - Type H - Plate

Department of Defense
MIL-STD-130N
Identification Marking of U.S. Military Property

Department of Defense
MIL-P-19834B
General Specification for Plates Identification or Instruction, Metal Foil, Adhesive Backed

Department of Navy
Laboratory evaluation of label plate materials and attachment methods considered for use on LPD-17
CARDIVNSWC-TR-62-00-05 June 2000

NASA, Johnson Space Center Texas
Space Station Inventory Label Specification - SSP 50007

United State Federal Government
Federal Specification GGP-455B(3)
Type I (Grade A&B) Class 1 or 2

metalphoto® Performance Characteristics

Characteristic	*Result*
Abrasion Resistance	No pronounced image loss, degradation, or reduced readability after 7000 cycles of 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 1000°F.
Salt Spray Corrosion	No deleterious effect after a 720-hour 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-hour carbon arc weatherometer exposure.
Accelerated Oxygen Aging	No discoloration or fading after 96hour/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 (MIL-C-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-hour 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.