



Metalcraft's High Temperature Metal Barcode Nameplates are ideal for temperatures up to 1200 °F (648.9 °C).

Our High Temperature Metal Barcode Nameplates are made of anodized aluminum, so they have many of the same benefits that our standard Metal Barcode Tags do - including an image sealed within the anodic layer of the aluminum. This protects it from abrasion, solvents and chemicals.

These unique nameplates are an economical alternative to other, more expensive materials such as ceramic and stainless steel. Potential applications include work-in-process tracking or product identification. Due to the high temperatures this product is exposed to, adhesives are not recommended. Rather, the nameplates should be produced with holes for use with metal fasteners.

Material and Design Specifications

- .008" (0.21 mm) matte anodized aluminum is standard
- Optional thicknesses include .012" (0.31 mm), .020" (0.51 mm), .032" (0.82 mm)
- Overall dimensions: Various sizes available
- Holes for mechanical fasteners

Technical Specifications

- All alphanumeric barcodes are photo imaged with human-readable equivalent to guarantee no skips in sequence
- Code 39 with 2.7 to 9.4 characters per inch (CPI) is standard
- Other barcode symbologies include Code 128, I 2 of 5, 2D DataMatrix and QR Code. OCR characters and CPIs also available

High Temp Metal Barcode Nameplates

PHOTO ANODIZED PRODUCT LINE

Key Features

- Unique coating process that increases temperature range to 1200 °F (648.9 °C)
- Photographically reproduced black copy, logos and barcodes ensure accurate and reliable reads
- Anodizing process protects black copy, logos and barcodes from chemicals, abrasion and high temperatures

Applications

- Asset Tracking
- Tool Tracking
- Work-in-Process
- Product Identification

Environmental Specifications

- Temperature Range: Up to 1200 °F (648.9 °C)
- UV Resistance: Up to 20 years
- Chemical Resistance: Excellent resistance to solvents and oils, combustible and flammable chemicals and a wide variety of cleaners

Test Results

These tests were conducted for a limited period in strict laboratory conditions. To achieve maximum satisfaction, we highly recommend any customer considering use of this product test the tags in the environment in which they will be used.

Chemical Resistance: High Temp. Metal Barcode Tags immersed in ambient room temperature conditions with inspection at time intervals noted below.		
Characteristics	Test Conditions	Effect
Water/Humidity		NE
Salt Spray	5% at 95 °F (35 °C), 700 hours	NE
Ammonium Hydroxide	2 hours at 1% and 5%	Slight dulling of image, affects overall readability
Ethyl alcohol	72 hour immersion	NE
Ethyl acetate	24 hour immersion	NE
Ferric chloride	10%, 16 hours	NE
Heptane	72 hours	NE
Hydrocarbon fluid	1 hour immersion	NE
JP-4 Fuel	72 hour immersion	NE
Kerosene	12 hour immersion	NE
Methyl Ethyl Ketone	24 hour immersion	NE
Nitric acid	3%, 72 hours	NE
Phosphoric acid	1% 12 hours	NE
Skydrol	24 hour immersion (room temp. and boiling)	NE
Sodium hydroxide	1%, 1 hour	Affects overall readability
Sulfuric acid	10%, 24 hours	NE
Turbine and jet fuel (MIL-L 5161C)	(MIL-L 5161C)	NE
Trisodium Phosphate	1% 40 hours	NE

Key: NE - No Effect

Destructive Test Data		
Image Intensified	Weatherometer, 20 years equivalent	Reduced overall readability after these thresholds

Temperature Test Data		
Image Intensified	168 hours at 1000 °F (537.8 °C); max temp 1200 °F (648.9 °C)	Reduced overall readability after these thresholds

Abrasion Test Data		
Image Intensified	Plates brushed for 7,000 cycles with stiff nylon wheel (CS-17) at 1,000 gram (35.3 oz.) load	Reduced overall readability after these thresholds

Installation Instructions

1. Clean the surface using Isopropyl alcohol, alcohol pad or equivalent solvent to ensure surface is free from dirt, dust, oil and misc. debris that may affect adhesion.
2. Handle the tag by edges, peel release liner from back ensuring not to touch the adhesive.
3. Place the tag in desired tagging location and firmly apply even pressure to the tag for 5 seconds.
4. Do not disturb the newly mounted tag for at least 72 hours to ensure proper adhesive sealing.

