Metal Tag Durability

Chemical Resistance

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>TEST CONDITIONS</th>
<th>EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCE</td>
<td>2400 lbs</td>
<td>No Effect</td>
</tr>
<tr>
<td>Ammonium Hydroxide</td>
<td>2 hours at 1%</td>
<td>No Effect</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>2 hours at 5%</td>
<td>No Effect</td>
</tr>
<tr>
<td>Ferric Chloride</td>
<td>10% at 16 hours</td>
<td>No Effect</td>
</tr>
<tr>
<td>Methylene</td>
<td>72 hours</td>
<td>No Effect</td>
</tr>
<tr>
<td>Hydrochloric Acid</td>
<td>2% at 60 hours</td>
<td>No Effect</td>
</tr>
<tr>
<td>Nitric Acid</td>
<td>1% at 40 hours</td>
<td>No Effect</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>1% at 40 hours</td>
<td>No Effect</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>10% at 24 hours</td>
<td>Affects overall readability</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>10% at 24 hours</td>
<td>No Effect</td>
</tr>
<tr>
<td>Toluene and jet fuel</td>
<td>(MIL-L 5161C)</td>
<td>No Effect</td>
</tr>
<tr>
<td>Tetra Sodium Phosphatate</td>
<td>1% at 40 hours</td>
<td>No Effect</td>
</tr>
<tr>
<td>Tribasic Phosphate</td>
<td>2% at 70%</td>
<td>No Effect</td>
</tr>
</tbody>
</table>

Temperature Resistance

<table>
<thead>
<tr>
<th>Temperature [image intensified]</th>
<th>Duration</th>
<th>EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>150°F</td>
<td>24 hours</td>
<td>Reduced overall readability after these thresholds</td>
</tr>
<tr>
<td>300°F</td>
<td>90 hours</td>
<td>Reduced overall readability after these thresholds</td>
</tr>
<tr>
<td>500°F</td>
<td>40 hours</td>
<td>Reduced overall readability after these thresholds</td>
</tr>
</tbody>
</table>

UV Exposure

<table>
<thead>
<tr>
<th>UV Exposure [image intensified]</th>
<th>Weathering</th>
<th>EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years equivalent</td>
<td>24 hours</td>
<td>Reduced overall readability after these thresholds</td>
</tr>
</tbody>
</table>

Abrasion Resistance

<table>
<thead>
<tr>
<th>Abrasion Resistance [image intensified]</th>
<th>Plates brushed for 7,000 cycles with 40 grit sandpaper (1/4 in. rough)</th>
<th>EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 hours at 1,000 psi on sand paper (C-17) at 1,000 psi on sand paper (1/4 in. rough)</td>
<td>Reduced overall readability after these thresholds</td>
</tr>
</tbody>
</table>

Applications for these products are limited only by the customer's imagination. Here are just a few possible applications:

- Sheet Signs
- Traffic Signs
- Computers
- Outdoor Furniture
- Lawn Equipment
- Office Furniture
- Audio/Visual Equipment
- Medical Equipment
- Playground Equipment
- Laboratory Equipment
- Gas Meters
- Transformers
- Engines
- Vending Machines
- Storage Tanks
- Fails
- Industrial Equipment
- Amusement Parks
- Athletic Equipment
- Wine Barrels
- Catalytic Converters
- Outdoor Fixtures
- Hand Tools
- Laboratory Equipment
- Surgical Equipment
- Construction Equipment
- Agriculture Equipment
- Unique Items
- Dental Equipment
- Pharmaceutical Items
- Electronic Equipment
- Prison Fixtures
- Utility Poles
- Fitness Equipment
- Casino Equipment
- Picnic Tables
- Power Poles
- Production Equipment
- File Hydrants
- Warehouse Equipment
- Mining Equipment
- Autoclaves
- Parking Meters

And many other OEM and asset tracking applications:

- Surgical Equipment
- Ambulatory Equipment
- Hand Tools
- Outdoor Fixtures
- Catalytic Converters
- Wine Barrels
- Athletic Equipment
- Amusement Parks
- Industrial Equipment
- Vending Machines
- Storage Tanks
- Fails
- Construction Equipment
- Agriculture Equipment
- Unique Items
- Dental Equipment
- Pharmaceutical Items
- Electronic Equipment
- Prison Fixtures
- Utility Poles
- Fitness Equipment
- Casino Equipment
- Picnic Tables
- Power Poles
- Production Equipment
- File Hydrants
- Warehouse Equipment
- Mining Equipment
- Autoclaves
- Parking Meters

Just how durable are Metalcraft photo anodized nameplates and labels? The test results below speak for themselves!

- Abrasion Resistance Plates brushed for Reduced overal readability
- UV Exposure Weatherometer, Reduced overal readability
- Temperature Resistance 265 hours at 500°F Reduced overal readability
- Trisodium Phosphate Affects overall readability
- Tetra Sodium Pyrophosphate Affects overall readability

Tests were conducted in laboratory environments and may or may not simulate your specific conditions.

NOTE: Always test a sample in your exact environment to ensure performance.

From laptops to railroad locomotive air brake systems, the tracking opportunities for our photo anodized nameplates and labels are endless. And because they’re manufactured by a company known for their product quality you know they will last. Read what some of our customers are saying and then give us a call and discern for yourself the Metalcraft Difference.

Being an owner/operator in the TV production business it is easy to lose gear mixed with another TV crew. Metalcraft labels stick so well you need a chisel to remove them. I haven’t lost a piece of equipment since I labeled everything.

Ralph Renick, Owner
Ralph Renick Productions

We have barcoded nameplates that are still performing after being attached to brakes for 10 years. With the long-term exposure to extreme conditions, I can’t imagine a more robust application for Metalcraft barcode nameplates.

Bob Ward, Senior Buyer
New York Air Brake

They hold up well in use and they stay on the item they are attached to. My staff are very satisfied.

Bill Holst
Texas Youth Commision

The price resistance is a great feature. Once we apply the label on the part, we paint them. If we had to mask off the label each time it would add too much time to the process.

Marko M., Quality Manufacturing

I use this label because of its durability. I have used them myself and add them to equipment in any situation needing assets that sustain extreme wear and tear and weathering. They are easy to affix to equipment, and the production turns in pretty quick.

Adam Veawcomb
Lockwood Technology

For more information on the products listed here or any of our other products please contact Metalcraft's Customer Service Department at 1-800-437-5283 or visit www.idplate.com.
Metalcraft – Superior Metal Labels

Just what makes photo anodized products superior to other products? Photo anodized nameplates and labels are produced using a photo imaging process that seals the image within the sapphire-hard anodic layer of the aluminum which resists chemicals, paint, abrasion and dirt. Unlike surface printed products, photo anodized nameplates and labels offer durability even in the most extreme environments, plus with a special intensification process they can last outside for 20 plus years. This optional secondary coating also increases the heat resistance of the nameplate or label.

With literally hundreds of different size options and various material thicknesses as well as a wide array of adhesives and/or affixing methods available it’s no wonder our photo anodized product line is the top choice among our customers due to its durability, reliability (aka “scannability”) and versatility.

Photo Anodized Product Line
- Metal Bar Code/Non-Bar Code Nameplates
- Foil Bar Code/Non-Bar Code Labels
- Teflon® Coated Bar Code/Non-Bar Code Nameplates
- Permanent Paint-Resist Metal Bar Code/Non-Bar Code Nameplates
- High Temperature Metal Bar Code/Non-Bar Code Nameplates
- UV Defend Metal Bar Code/Non-Bar Code Nameplates
- UV Defend Foil Bar Code/Non-Bar Code Labels
- Foil 2D Dot™ Bar Code Labels

But it doesn’t stop there – in addition to our Metal Bar Code Nameplates and Foil Bar Code Labels, Metalcraft offers a full line of photo anodized products. All offer the standard benefits – resistance to chemicals, abrasion and UV rays – and all are available with or without a bar code. Each one of the following products also has some type of unique feature that distinguishes it from the row. From high temperatures to paint resistance, Metalcraft Photo Anodized Nameplates and Labels have got you covered.

UV Defend Metal Bar Code Nameplates & UV Defend Foil Bar Code Labels

Developed specifically for outdoor applications exposed to direct sunlight and other extreme environmental conditions, these labels feature our image intensification process extending their lifetime to 20 plus years.

Paint-Resist Metal Bar Code Nameplates

These unique nameplates feature a special fluoropolymer laminate that resists multiple paint applications, grease, graffiti and can withstand temperatures up to 350˚F. An economical alternative, Paint-Resist Metal Bar Code Nameplates offer the option of adding a color logo or design to the product.

Teflon® Coated Metal Bar Code Nameplates

Dirt, grease, grime, even dried paint easily clean off this revolutionary nameplate due to its durable Teflon® coating. This product also resists incidental or intermittent contact with strong acids and caustics as well as temperatures up to 500˚F.

UV Defend Metal Bar Code Nameplates

Developed specifically for outdoor applications with temperature requirements from 900˚F to 1200˚F and are produced with holes for attachment with mechanical fasteners. These unique nameplates are an economical alternative to other more expensive high temperature materials such as ceramic and stainless steel.

Scan and Learn

How does it work? Download any QR code reader from your mobile smart phone’s app feature, activate it and “scan” this bar code to see how Metalcraft’s new tabbed nameplate works.

This available on all sizes

Foil 2D Dot™ Bar Code Labels

The 2D DataMatrix ECC200 bar code symbology allows you to identify and track property as well as record calibration and maintenance information in one-tenth the space of traditional bar codes. Plus, because of the high redundancy within the DataMatrix symbology, the bar code is still readable if as much as 60% of the image is destroyed.

Teflon® is a registered trademark of DuPont

High Temperature Metal Bar Code Nameplates

These nameplates are ideal for applications with temperature requirements from 900˚F to 1200˚F and are produced with holes for attachment with mechanical fasteners. These unique nameplates are an economical alternative to other more expensive high temperature materials such as ceramic and stainless steel.