

# UID Ceramic-on-Stainless Steel Nameplates



Unique Item Identification - or UID as it is commonly referred - is a Department of Defense mandate that requires a globally Unique Item Identifier to track items throughout their lifecycle. Because the mandate specifies the UID mark must last the service life of the item being identified, this presents some challenging marking applications in difficult environments.

For UID applications in extremely harsh environments Metalcraft offers Ceramic-on-Stainless Steel Bar Code Nameplates. These unique products are printed using ceramic ink on a thin ceramic layer that is fired and fused to a heat resistant stainless steel substrate. We have several different variations of this product available – one with an additional glaze for image protection and one specifically designed for saltwater applications.

And because it is a Metalcraft UID product you receive all the same benefits as our other UID products – expert knowledge from our team of UID specialists, verification and validation reports, etc.\*

\*As well as UID products that are compliant according to International Traffic in Arms Regulations (ITAR).

## Key Product Features

- Expertise with the UID Spec
- Withstands temperatures up to 1000°F intermittently
- Resists extreme caustics and acids
- Ideal for applications with repeated exposure to saltwater
- SLGZ offers additional glaze for image protection
- Established company with a reputation for durable and reliable products
- ITAR Compliant

To order call  
**800.437.5283 or**  
**641.423.9460**  
and ask for a UID Specialist



3360 9th St. SW  
Mason City, IA 50401  
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E-mail: metalcraft@idplate.com



# UID Ceramic-on-Stainless Steel Nameplates Specifications

**Material:** Stainless steel substrate with ceramic layer that can withstand moderate to harsh chemical exposure and temperatures up to 1000°F for short durations.

**Serialization:** All alphanumeric bar codes are printed with a human-readable equivalent.

**Sizes:** Send email to [Metalcraft@idplate.com](mailto:Metalcraft@idplate.com) or fax request to 641-423-8898 to call 800-437-5283 for details on available sizes.

**Adhesive:** Optional holes are available for mechanical fasteners. Standard hole diameters include 3/32", 3/16", and 1/8". Contact Metalcraft for additional dimensions. A 1/4" quiet zone must be allowed at the beginning and end of the bar code inside the mechanical fastener area.

**Shipment:** Ships 30-40 work days upon receipt of order and proof approval.

## Test Results

These tests were conducted for a limited period of time in strict laboratory conditions. In order to achieve maximum satisfaction we highly recommend that any customer considering use of this product test the labels in the environment in which they will be used.

**Heat Test:** UID Ceramic-on-Stainless Steel Nameplates are able to withstand intermittent heat exposure to 1040°F (580°C).

### Chemical Resistance Test

Properties	SL600	SLGZ600
Hydrochloride (10%, 20°C)	No effect after 50 hours	No effect after 50 hours
Hydrochloride (5%, 70°C)	No effect after 3 hours	No effect after 2 hours
Nitric Acid (60%, 20°C)	No effect after 20 days	No effect after 293 days
Nitric Acid (60%, 70°C)	No effect after 1 hour	No effect after 24 hours
Sulfuric Acid (5%, 70°C)	No effect after 5 hours	No effect after 6 hours
Sulfuric Acid (98%, 70°C)	No effect after 5 hours	No effect after 40 days
Phosphoric Acid (85%, 70°C)	No effect after 1 hour	No effect after 7 days
Sodium Hydroxide (5%, 720°C)	No effect after 16 hours	No effect after 14 days
Solvent	No effect	No effect

**Weather Resistance Test:** No effect on ceramic layer after 30 cycles salt spray test under conditions indicated.

Conditions	Temperature	Humidity	Time
5% salt water spray	35° ± 1°C	Over 95%	2 hours
Dry hot air	60° ± 2°C	---	4 hours
Wetting	50° ± 2°C	Over 95%	2 hours

No effect after 4000 hours of weather meter test (equivalent to 15 years of outdoor use).

**Shock Resistance Test:** Label withstands a shock caused by a 200g steel ball dropped from a height of 50cm with no damage.



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