



# Laser Engraved Ceramic On Stainless Steel Nameplates

## HIGH TEMP METAL TAGS

Laser Engraved Ceramic On Stainless Steel offers the option of printing information onsite using a compatible YAG or CO<sup>2</sup> laser or they can be preprinted at Metalcraft. These labels provide excellent durability against high temperatures and chemicals. Possible applications include work in process tracking for automobile parts and identification tags for airplane components and steel companies.

### Material and Design Specifications

- Material: Stainless steel substrate and ceramic label
- Compatible Lasers: YAG laser is compatible with both LSL800 and LSL1000, CO<sup>2</sup> laser is compatible with LSL1000 (SUNX LP-V10 is verified YAG laser 15 Watt).
- Serialization: All alphanumeric barcodes are printed with a human-readable equivalent. Guaranteed no skips in sequence. Code 39 is standard. CPLs range from high to low densities. Other options include Code 128, I2 of 5 and 2D symbologies.
- Sizes: Contact Metalcraft for details
- Attachment Options: Several hole sizes are available for mechanical fasteners. Optional pressure-sensitive adhesive backing is available which is resistant to temperatures of up to 480 °F (248.9 °C).
- Food Grade: LSL-316 is food grade compliant because of the stainless steel alloy.

### Key Features

- Entire line of products resist extreme caustics and acids
- On-site printable option is available
- Withstands exposure to high temperatures

### Applications

- Asset Tracking
- Manufacturing
- Aerospace/Aviation
- Work-in-Process Tracking

### Environmental Specifications

- Chemical Resistance: Excellent resistance to chemicals, extreme caustics and acids.

## 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.

Heat Test				
Properties	Time	LSL316	LSL800	LSL1000
Maximum Heat Resistance	3 hrs.	1,070 °F (577 °C)	1,470 °F (800 °C)	1,830 °F (1,000 °C)

Chemical Resistance Test				
Properties	Time	LSL316	LSL800	LSL1000
Hydrochloride (5%, 25 °C)	24 hrs.	CF	F	G
Nitric Acid (5%, 25 °C)	180 days	G	F	G
Sulfuric Acid (5%, 25 °C)	24 hrs.	NT	G	G
Sulfuric Acid (95%, 70 °C)	7 days	NT	G	F
Sodium Hydroxide (5%, 70 °C)	24 hrs.	G	G	F

Key: CF - Corrosion Formed, G - Good, NT - Not Tested, F - Fade

## Installation Instructions (Optional Adhesive)

- 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.
- Handle the tag by edges, peel release liner from back ensuring not to touch the adhesive.
- Place the tag in desired tagging location and firmly apply even pressure to the tag for 5 seconds.
- Do not disturb the newly mounted tag for at least 72 hours to ensure proper adhesive sealing.