

A space-themed background featuring a starry field with a blueish tint, a crescent moon on the left, and a large, reddish-brown planet (Mars) on the right.

**NASA/MARSHALL SPACE  
FLIGHT CENTER**

**JOINT COUNSELING SESSION**

***Advanced Nitriding Solutions***  
***Megumi Owens***

**June 16, 2020**

# Background

<b>COMPANY NAME:</b>	Advanced Nitriding Solutions	<b>ADDRESS:</b>	1688 Lammers Pike Batesville, Indiana 47006
<b>OWNER:</b>	Mariann Dickman	<b>CONTACT NAME:</b>	Megumi Owens
<b>EMAIL:</b>	sales@ans-ion.net	<b>YEARS IN BUSINESS:</b>	12
<b>CAGE CODE:</b>	66G36	<b>DUNS NUMBER:</b>	604226956
<b>WEB SITE:</b>	www.ans-ion.net	<b>NAICS CODES:</b>	332811

# Business Size & Classifications

<b>TOTAL EMPLOYEES:</b>	<b>11</b>
<b>AVERAGE SALES:</b>	<b>\$2MM</b>

<b>CLASSIFICATIONS (select from list below):</b>	<b>Yes/No</b>
<b>SMALL BUSINESS</b>	Yes
<b>SMALL DISADVANTAGED BUSINESS</b>	No
<b>NATIVE AMERICAN-OWNED</b>	No
<b>ALASKAN NATIVE CORPORATION</b>	No
<b>WOMEN OWNED</b>	Yes
<b>ECONOMICALLY DISADVANTAGED WOMEN OWNED</b>	No
<b>VETERAN-OWNED</b>	No
<b>SERVICE DISABLED VETERAN OWNED</b>	No
<b>HUBZONE CERTIFIED</b>	No
<b>8(A) CERTIFIED</b>	No
<b>8(A) EXPIRATION DATE (if applicable)</b>	No

# Quality Systems

Our QMS is AS9100 D



FFL



Compliant

# Skills & Processes

Advanced Nitriding Solutions is a thermal processing company, specializing in surface engineering treatments to mitigate corrosion, enhance wear and fatigue resistance characteristics.

## Services

Process	AMS #	Corrosion	Wear	Fatigue
Ion/Plasma Nitride	2759/8	✓	✓	✓
Gas Nitride	2759/6, 10	✓	✓	✓
Black/Steam Oxide	AMS 2485	✓		
Ion Implantation			✓	
Ferritic Nitro-carburizing	2757, 2759/12	✓	✓	
Plasma Nitro-carburizing		✓	✓	

# Skills & Processes (Cont.)

## Application Example

Cylinder Seat: Plasma Nitride for wear resistance.

Without Nitriding the Internal plunger mating surface will wear prematurely.



Before



After

# Skills & Processes (Cont.)

ANS Qualified Furnaces List					
Furnace ID	Model	Max Size / Weight	Heat Zone	Process Type	Furnace Type
GN1	GN150/210	1500D X2100H mm 59"D x 94" H 148.65 ft3, 7500kg	57"D x 94"H 138.81 ft3	Gas	Type D, Class 3
GN2	GN150/210	1500D X2100H mm 59"D x 94" H 148.65 ft3, 7500kg	57"D x 94"H 138.81 ft3	Gas	Type D, Class 3
PN1	PN70/90	700D x 900H mm 27"D x 35" H, 12.25 ft3, 600kg	27"D x 35"H 12.25 ft3	Ion	Type D, Class 5
PN2	PN100/180	1000D x 1800H mm 39"D x 70" H, 49.94 ft3, 5000kg	59"D x 70"H 49.91 ft3	Ion	Type D, Class 5
PN3	PN150/210	1500D X2100H mm 59"D x 82" H 131.02 ft3, 7500kg	59"D x 82"H 131.02 ft3	Ion	Type D, Class 5
PN4	PN150/240	1500D X 2400H mm 59"D x 94"H 148.65 ft3, 11000kg	59"D x 94"H 148.65 ft3	Ion	Type D, Class 5
PN5	PN100/180	1000D x 1800H mm 39"D x 70" H, 49.94 ft3, 5000kg	59"D x 70"H 49.91 ft3	Ion	Type D, Class 3

# Customers

Our Top 6 Customers:



Top Primes (Tier 2 or 3):





# Current Space Program

## Space Program

### Boeing SLS

- Tier 2 Supplier to Boeing
- Component: Piston
- Application: Solenoid Valve
- Plasma Nitride for wear resistance



# Principle Point(s) of Contact

<b>NAME</b>	<b>TITLE</b>	<b>PHONE</b>	<b>EMAIL</b>
<b>Megumi Owens</b>	Sales/Engineering Manager	812-569-4186	sales@ans-ion.net
<b>Steve Hensley</b>	Quality Manager	812-932-1010 x104	quality@ans-ion.net
<b>Donna Weber</b>	Office Manager	812-932-1010 x102	accounting@ans-ion.net