Industrial Anodizing and Electroplating

## Surtronics, Inc

## **A Brief History**

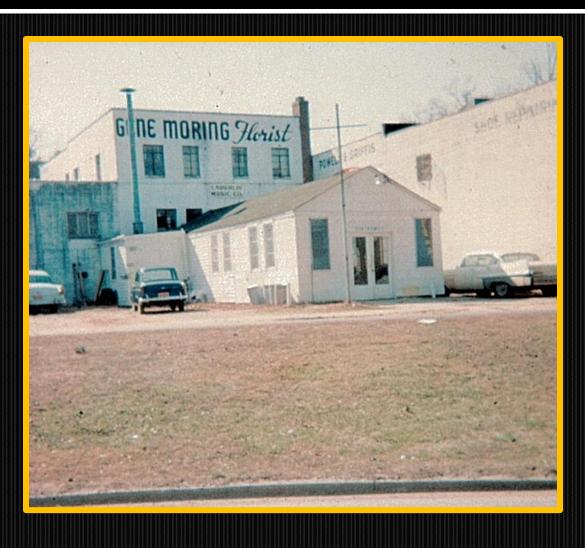


Angela Stanley CEO/President

- We are very proud to be a second generation family business that has provided quality plating for over forty years.
- Terry Smith and Bill Wade founded the company in 1965.
- In 2007, Angela Smith Stanley acquired the Wade family stock and Surtronics became a solely woman owned business.

#### 1<sup>st</sup> Location, Glenwood Avenue

(Former Laundromat) 1965-1969



## 2<sup>nd</sup> Location, Hargett Street

1969-1973



#### 4001 Beryl Rd, Raleigh, NC 27636

1973- Present



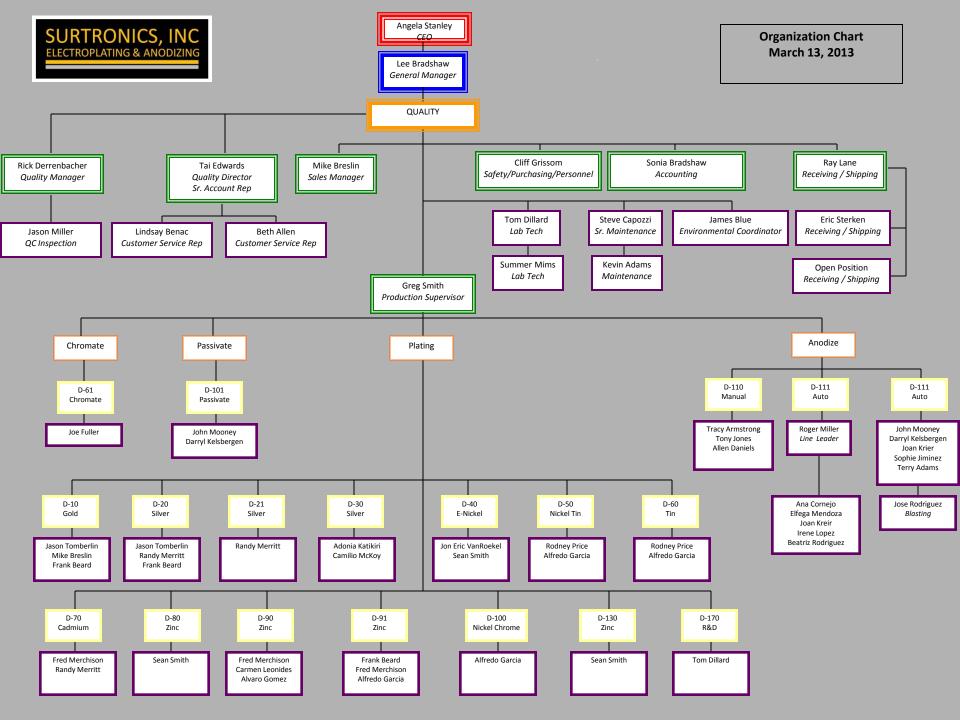




## Surtronics' Valued Employees



1 Location, 43 Employees, Average Employee Tenure = 16 years



#### **Surtronics Mission Statement:**

#### SURTRONICS, INC.

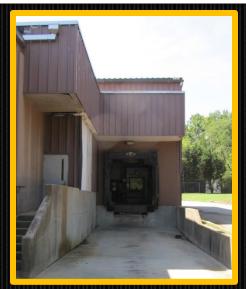
**ELECTROPLATING & ANODIZING** 



#### \* Mission Statement \*

As Valued Employees of Surtronics, We Must:

- Support our Manufacturing Customers
- Add Value to our Customers' Products in an Ecologically Responsible and Safe Way
- Stay on the Leading Edge of Technology
- Be Competitive, Efficient, and Profitable

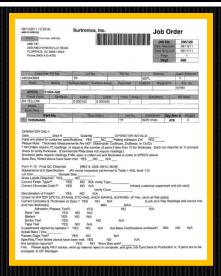


**Receiving Dock** 



Receiving Clerk counting parts

- Parts are delivered to Surtronics' Receiving Bay.
- The Parts are then opened, visually inspected, and counted.
- The paperwork is taken to the front office where the job card is generated.



#### Job Card

JOB_NO	QNT_REC	QNT_SHIPD	DATE_RECVD	DATE_REQRD	PARTNO	SHIPCOMP	DEPT	JOBS
595022	10,000.00	0.00	09-Aug-2011	16-Aug-2011	791P-91145	Deringer - Ney Inc	010	
591660	539,200.00	60,000.00	07-Jun-2011	14-Jun-2011	9-00-0001-1 REV. A	Autosplice/ BLS Inc.	010	
950872	223,040.00	60,000.00	07-Jun-2011	14-Jun-2011	9-S24041610LL	Autosplice/ BLS Inc.	010	
594622	6,100.00	0.00	01-Aug-2011	08-Aug-2011	10-70138 REV B	Deringer - Ney Inc	010	2
594802	300,000.00	0.00	04-Aug-2011	11-Aug-2011	10-71398 A	Deringer - Ney Inc	010	
594829	2,500.00	0.00	04-Aug-2011	11-Aug-2011	9887-1272-1	Shallco, Inc.	010	
594830	25,000.00	0.00	04-Aug-2011	11-Aug-2011	9887-306-2	Shallco, Inc.	010	
594848	220,000.00	0.00	04-Aug-2011	11-Aug-2011	51-80062 REV D	Deringer - Ney Inc	010	
594844	12,000.00	0.00	04-Aug-2011	11-Aug-2011	QT05012-009 REV. C	QUALITY THERMISTOR	010	
594903	1,000.00	0.00	05-Aug-2011	12-Aug-2011	9-1617291-7/4797-2	TYCO ELECTRONICS	010	
594950	4,000.00	0.00	08-Aug-2011	15-Aug-2011	23-4859-35 REV P 3	EATON IND. MFG GMBH	010	
595041	206,000.00	0.00	09-Aug-2011	16-Aug-2011	10-71398 A	Deringer - Ney Inc	010	
595049	1,000.00	0.00	09-Aug-2011	16-Aug-2011	08020-1-E1	Electro Switch Corp	010	
595048	110.00	0.00	09-Aug-2011	16-Aug-2011	86-30-0532	Electro Switch Corp	010	
595019	520.00	0.00	09-Aug-2011	16-Aug-2011	031032-2	MOOG COMPONENTS GROUP	010	13
594413	134,000.00	0.00	27-Jul-2011	03-Aug-2011	130-38137	Deringer - Ney Inc	020	
594396	5,732.00	0.00	27-Jul-2011	03-Aug-2011	P82889-11	Electro Switch Corp	020	
583062	10,000.00	0.00	29-Jul-2011	05-Aug-2011	W-FU-22 REV. Z	Electro Switch Corp	020	
594527	12,000.00	0.00	29-Jul-2011	05-Aug-2011	02-100-07-06	Stamp-Tech Precision	020	
583072	30,000.00	0.00	29-Jul-2011	05-Aug-2011	W-RK-108	Electro Switch Corp	020	
594620	5,034.00	0.00	01-Aug-2011	08-Aug-2011	030926-001	MOOG COMPONENTS GROUP	020	
594608	998.00	0.00	01-Aug-2011	08-Aug-2011	LOT-INOFAST	Inofast	020	7
594696	16,226.00	0.00	02-Aug-2011	09-Aug-2011	C525006-11	Electro Switch Corp	020	

- The paperwork is attached to the parts and the job is delivered to the respective department's staging area.
- The job is placed in queue. Everyday our Production Manager monitors what jobs will be plated while planning for possible expedited jobs.





Parts are rack or barrel plated.



- Depending on the size of the part the job is either racked or placed in a barrel.
- Through a series of cleaning, rinsing, and acid pickeling the parts are processed to the customer's specification.



Operator checking for plating thickness.



Quality Inspector checking for visual defects.

- Next the job will be plated according to the customer's specification.
- Upon completion of plating the parts will be inspected for any possible defects.



Operator completing a Rework Authorization Form

Surtronics, Inc.	5.1.5 Form F-05: Internal Rework Authorization [REV 3; 02/07/11 MDB]	Quality Procedure Manual
Form F-05: Into	ernal Rework Authorization	n Form
Date:		
Department:		
Job Number:		
Process Type:		
Quantity Reworked:		
All [ ]	Partial [ ]	
Reason for Rework:		
Authorization:		

- If the parts do not meet our plating standards the part will be reworked according to procedures set forth in Surtronics Quality Management System.
- A Rework Authorization Form will then be completed and attached to the paperwork



Certificate of Compliance



Parts are packaged in the manner in which received.

- Once the parts pass inspection the job will be delivered to Shipping.
- At this time a Certificate of Compliance is generated and included in the shipment.

- Jobs are shipped out of the shipping dock, via the customer's preferred carrier.
- Invoices are generated when parts are shipped.



**Shipping Dock** 

#### Industries Served

#### We are proud to serve 75 major and numerous smaller customers in the following industries:

- Aerospace Walter Kidde (Sunstrand), AAR Cargo Systems (Boeing, Airbus), BE Aerospace, Honda, Spirit, Dill Air, TW Metals
- Defense ITT Night Vision, Wakefield/Simon (Curtis Wright), Mecca, Ruhl Tech, HiTech, Sirchie
- Pharmaceutical Alyward, Accurate Machine
- Medical Teleflex, TransEnterix, Triangle Biomedic
- R&D Duke, NC State University, Univ. of North Carolina
- Power and Energy Nuclear, ABB, Siemens, GE, Reinhausen, Quality Switch, Sunbelt
- Telecommunications and Electronics Eaton, Tyco, Corning, Electro Switch, Shallco)
- Automotive Nissan, Toyota, Hyundai, Honda, NASCAR, After Market Accessories
- Commercial/Industrial John Deere, Flowserve, Ingersol Rand, Schindler, Moog, Moen
- Outdoor Recreation Truball, Major Machine, Honda Marine

We meet all customer, military, automotive, & ASTM specifications.

# ISO 9001 Certified Metal Finishing Company







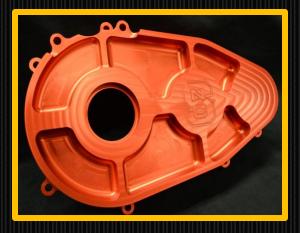
## **Base Metals**



#### Finishes Available













#### **Finishes Available**

- Anodizing
  - 12' Automated, 6' Automated
  - Type I Chromic
  - Type II Conventional
  - Type III Hard Coat
  - Bright Dip
  - 8 Organic Dyes
- Busbar/Tin
  - 12' Line
  - Bright/Dull
  - Rack/Barrel

- Cadmium
- Chromate Conversion
  - 12' Line
- Chromium
- Cyanide Copper
  - 6 lines
  - Rack/Barrel
- Cupric Oxide
- Electroless Nickel
  - 1 Line
  - Mid PHOS

#### Finishes Available (cont'd)

- Electro Polish
- Passivation
  - QQ-P-35C
  - Type II, VI, VII
- Gold
  - Cobalt Hard
  - Soft
- Nickel
  - 4 lines
  - Barrel/ Rack
  - Bright and Dull Sulfamate
- Cyanide Silver
  - 2 lines Barrel

- 1 line Rack
- Tin and Tin/Lead
  - 90/10
  - **6**0/40
- Chloride Zinc
   Small Barrel/Large Barrel
   Auto Rack/Manual Rack
  - Black, Olive Drab, Yellow, ROHS Clear, ROHS Yellow
- Other Processes
  - Bead Blasting
  - Heat Treatment
  - Embrittlement Relief

#### Finish Specification Cross Reference Chart

Specification Cross Reference Chart										
Common Name	Common Name MIL-or-QQ		ASTM	MIL-STD 171 Finish No.	MIL- F-14072 Finish No.	Other				
Anodize,Chromic non-dyed	MIL-A-8625 Type I Class I Type IB	AMS-2470, AMS-2468/2469 AMS- 2471, AMS-2472	ASTM-B-580 Type G	7.1.1; 7.1.3	E511, Type I					
Anodize,Chromic dyed	MIL-A-8625 Type I or IB, Class 2		ASTM-B-580 Type G	7.1.2	E522, Type I					
Anodize, Sulfuric, non-dyed	MIL-A-8625 Type II, Class I	AMS - 2471	ASTM-B-580 Type B Thru F	7.2.1	E511, Type II					
Anodize Sulfuric, dyed	MIL-A-8625 Type II, Class 2	AMS-2472	ASTM-B-580 Type B Thru F	7.2.2	E511, Type II					
Black Oxide	MIL-C-13924	AMS-2485								
Cadmium	QQ-P-416	AMS-2400								
Chromium	QQ-C-320	AMS-2406 Hard	ASTM-B-456							
Chromate	MIL-C-5541 Class IA	AMS-2473, AMS-2474	ASTM-B-449	7.3.1	E513					
Copper	MIL-C-14550	AMS-2418	ASTM-B-734, ASTM-B-281							
Electroless Nickel	MIL-C-26074 (cancelled, but still used-See AMS & ASTM)	AMS-2404, AMS-2405	ASTM-B-733, ASTM-B-656	I.4.3 Thru 1.4.3.4	M265, Grade A; M357, Grade B	NACE-T-6A-54; ISO 4527 MIS 23483				
Electropolish			ASTM-B-254							
Gold	MIL-G-45204	AMS-2422, AMS-2425	ASTM-B-488	MIL-STD-865		Brush Plating Rockwell 580-0143				
Hardcoat, non-Dyed	MIL-A-8625 Type III, Class I	AMS-2468, AMS-2469	ASTM-B-580 Type A	7.5.1	E514					
Hardcoat, Dyed	MIL-A-8625 Type III, Class 2		ASTM-B-580 Type A	7.5.2	E514					
Hardcoat/Teflon	MIL-A-8625, Type III, Class I or Class 2 with Teflon MIL-A-63576, Type I	AMS-2482				SM-B-657374				
Nickel, Bright	QQ-N-290	AMS-2403	ASTM-B-689							
Nickel, Sulfamate	MIL-P-27418 QQ-N-290	AMS-2403, AMS-2424	ASTM-B-689							
Passivate	MIL-STD-753 QQ-P-35, Types II:VI:VII:VIII		ASTM A380 Codes F Thru M; ASTM-A-967, ASTM-B-449	5.4.1	E300	MIS-13219 MIS-20134C				
Silver	QQ-S-365	AMS-2410, AMS-2411, AMS- 2412	ASTM-B-700							
Tin, Bright	MIL-T-10727	AMS-2408	ASTM-B-545			Rockwell 580-0605				
Tin, Dull	MIL-T-10727	AMS-2408	ASTM-B-545			Rockwell 580-0151 Rockwell 580-0225				
Tin, Lead Alloy (90/100)	MIL-P-81728									
Zinc		AMS-2402	ASTM-B-633							
Zincate			ASTM-B-253							
Other Specially Engineered Finishes & Services										
Salt Spray			ASTM-B-117							
Quality System						ISO 9001:2008 AS9100C				
X-Ray			ASTM-B-568							

# ISO 9001-2008 Certified Metal Finishing Company

#### **ISO** Certification



#### CERTIFICATE





#### Surtronics Inc.

This is to certify that

4001 Beryl Road Raleigh, NC 27606 United States of America

has implemented and maintains a Quality Management System

#### Scope:

Performance of metal finishing on customer parts from electronic switch, plumbing hardware, recreational, communications, power control, machine tool, and other industries.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

#### ISO 9001: 2008

Certificate registration no. 10000693 QM08
Date of original certification 2003-06-05
Date of revision 2012-03-12

 Date of revision
 2012-03-12

 Date of certification
 2012-03-12

 Valid until
 2015-03-11

UL DQS Inc.



Ganesh Rao

Accredited Body: UL DQS Inc., 1130 West Lake Cook Road, Sufte 340, Buffalo Grove, IL 60089 USA

We are in the process of Qualifying for AS9100C

#### **Core Competencies**

- Quality
- Custom Certifications
- Quick Turnaround
- Precious Metals Au/Ag
- Tin/Tin Alloys
- Anodizing
- Custom Masking
- Added Value



#### In house, State Certified Testing Lab



AutoTech 36x42 Salt Spray Cabinet, Testing per ASTM B117 Spec



Perkin Elmer AA400 Waste Water Sample



Surtronics Inc's Water Quality Certificate



(2) Fischer Xray XDL-B-XYZPT8 System S

# Flexible processing equipment to match your job.



## We have an extensive Waste Treatment Department that exceeds governing regulations.



#### Visit Us on...





- The Web at www.surtronics.com
- Like us on



Add us to your network



# You Start It and We'll Finish It! Right and On Time When you partner with Surtronics You will have the Advantage of:

- Service to your Specifications
- The economy of a single source for all your finishing needs.
- Quality from beginning to end, the first time.
- World class customer support.