SURTRONICS, INC.

Industrial Electroplating and Anodizing

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.

1st Location, Glenwood Avenue

(Former Laundromat) 1965-1969



2nd Location, Hargett Street

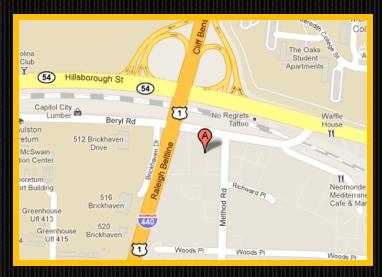
1969-1973



4001 Beryl Rd, Raleigh, NC 27636

1973- Present



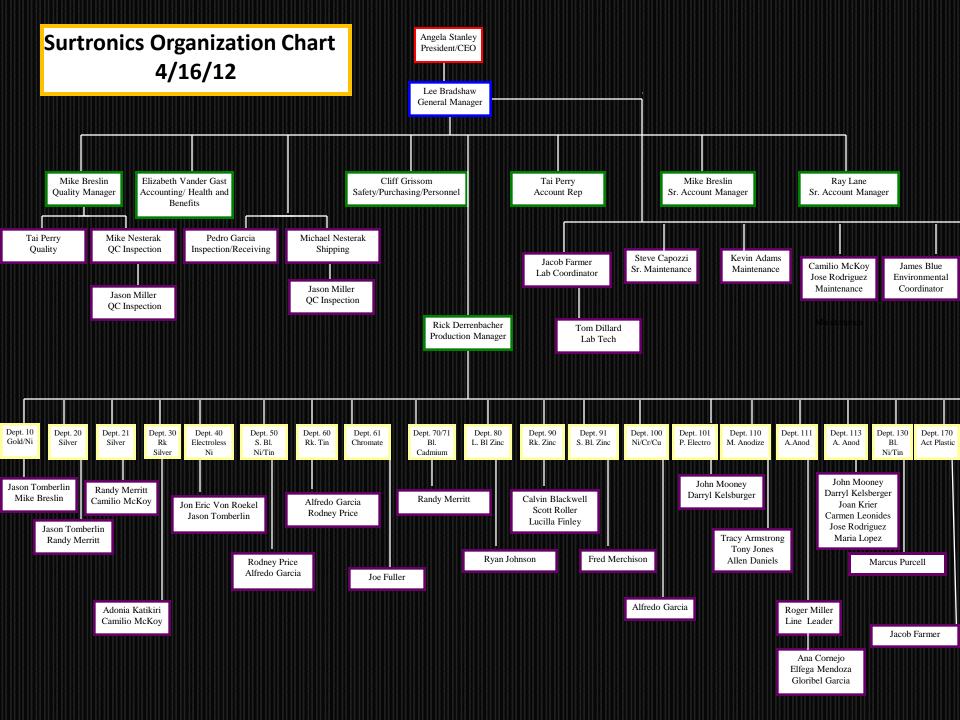




Surtronics' Valued Employees



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



Surtronics Mission Statement:

SURTRONICS, INC.

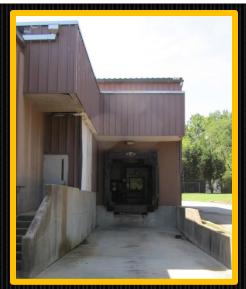
ELECTROPLATING & ANODIZING



* 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

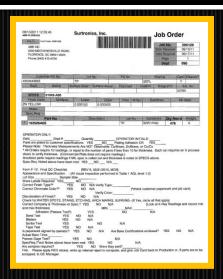


Receiving Dock



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.

Work In Progress
Spreadsheet





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: Quali Internal Rework Authorization	ty Procedure Manual
	[REV 3; 02/07/11 MDB]	
Form F-05: Int	ernal Rework Authorization Forn	<u>n</u>
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 ISO 9001:2008 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

ISO 9001 Certified Metal Finishing Company







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 certification
 2012-03-12

 Valid until
 2015-03-11

UL DQS Inc.



Ganesh Rao

Accredited Body: UL DQS Inc., 1130 West Lake Cook Road, Sulte 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



Industries Served

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

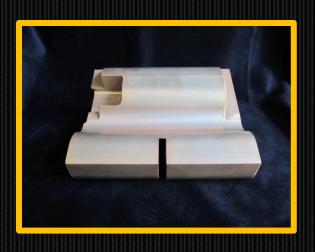
- Aerospace and Defense (Walter Kidde, AAR, Carolina Growler)
- Medical (Teleflex, TransEnterix, Triangle Biomedic)
- R&D (Duke, NC State University, Univ. of North Carolina, Sirchie Fingerprint)
- Power and Energy (Nuclear) (ABB, Siemens, GE)
- Telecommunications and Electronics (Eaton, Tyco, Corning, Electro Switch, Shallco)
- Automotive (Nissan, Toyota, Hyundai, TRW) (with a volume/capacity of 60-80,000 units/day)
- Commercial/Industrial (BSH, John Deere, Flowserve)
- NASCAR (Joe Gibbs, Dale Earnhardt)

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

Base Metals



Plating 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
 - 60/40
- 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	Other Common Synonym(s)	MIL-or-QQ	AMS	ASTM	MIL-STD 171 Finish No.	MIL- F-14072 Finish No.	Other				
Anodize,Chromic non-dyed	Clear Chromic Acid Anodize	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	Dyed Chromic Acid Anodize	MIL-A-8625 Type I or IB, Class 2		ASTM-B-580 Type G	7.1.2	E522, Type I					
Anodize, Sulfuric, non-dyed	Clear Sulfuric Acid Anodize	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	Dyed Sulfuric Anodize	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	Chemical Film; Iridite; Alodine	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	Nickel Phosphorous; Autocatalytic Nickel; Chemical Nickel	MIL-C-26074 (cancelled, but still used-See AMS & ASTM)	AMS-2404 AMS-2405	ASTM-B-733 ASTM-B-656	l.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	Black Hardcoat Black Hard Anodize	MIL-A-8625 Type III, Class 2		ASTM-B-580 Type A	7.5.2	E514					
Hardcoat/Teflon	Hardlube, Nituff, Tufram, Polylube	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	Clear 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							

Surtronics has expanded in size and complexity



Automated Anodizing Type I, II, & III





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...



facebook

9 4001 Beryl Road, Raleigh, NC.

Surtronics, Inc

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



Surtronics, Inc. is on Facebook. To correct with surtronics, Inc, sign up for Facebook today.

Sign Up Long In



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.