



FINISH WITH STRENGTH™

QUALITY CONTROL
STANDARDS

TABLE OF CONTENTS



DU-ALL AT A GLANCE

Company History	3
General Du-All Information	3

THE DU-ALL FACILITY

Manufacturing Operations	4
Production Equipment	4
Inspection Equipment	4
Test & Environmental Equipment	4
Clean Room Facilities	4
Current Capacity Utilization	4
Quality Control Personnel	5
Percentage of Commercial & Military Work	5
ISO Status	5

COMPANY QUALITY POLICIES

Insurance	6
Regulatory Compliance	6
Testing & Control	6
Quality Control	6

QUALITY SYSTEM, ORGANIZATION & DOCUMENT CONTROL

Quality Control Process	7
Correction/Action System	8
Storage & Handling	8
Close Adherence to Military Specs	8
Customer Specifications	8
Quality Manual Maintenance	8

SUPPLIER CONTROL

Supplier Approval System	9
Measuring Du-All's Supplier Quality	9
Supplier Corrective Action System	9
Location of Major Sub-Contractors	9

HUMAN RESOURCE EXCELLENCE

Employee Training Programs	10
----------------------------------	----

CUSTOMER SERVICE/SATISFACTION

Customer Service/Technical Support System	11
Capturing & Managing Customer Complaints	11
Customer Satisfaction Measurement	11

CONTACT INFORMATION	12
----------------------------------	----

DU-ALL AT A GLANCE

COMPANY HISTORY

Since 1959, Du-All Anodizing Corporation has been dedicated to providing our customers with the highest possible quality Type II Anodizing, Alodine, Passivation, Bead Blasting, Metal Graining, Brite Dipping, and Chemical Cleaning. Our commitment to delivering the highest quality product possible and a clean compliance audit record has made us a trusted leader in our industry. We are proud to serve companies ranging from small to large, both nationally and internationally.

Total Employees
36

Combined Experience
Over 300 years

Annual Sales
\$5 million



THE DU-ALL FACILITY

Du-All is continually upgrading and refining our processes and materials to better serve our clients. We can handle any job, big or small. We have the largest anodizing and dye tanks of any Bay Area plating shop, which enables us to provide you with fast, efficient turn-around time.

Factory Area
4,800 Square feet

MANUFACTURING OPERATIONS PERFORMED ON-SITE

- Racking & Fixturing
- Type II Anodizing (all colors)
- Masking (all types of materials)
- Bead Blasting (all types of media)
- Chemical Films/Alodine (clear and gold)
- Passivation (all types)
- Brite Dipping
- Chemical Cleaning (strip and non-strip processes)
- Close Tolerance Handling
- Metal Graining (all available grips)

PRODUCTION EQUIPMENT

- De-Ionized Water Systems
- Filtered & Dry Air Compressor Systems
- Rapid Rectifiers and Controllers
- Kaiser Compressors
- Process Filtration Systems
- Chemical Agitation Systems
- Automated pH Systems
- Automated Refrigeration Systems
- Automated Heating Systems
- Water Treatment Systems
- Liquid Levelers and Pumping Systems

INSPECTION EQUIPMENT

- pH Meters
- Chemical Titration Kits
- Calibrated Thickness Gauges
- Voltage and Amperage Meters
- Temperature Gauges

TEST & ENVIRONMENTAL EQUIPMENT

- Dye Tanks
- Refrigerators
- Blowers/Heated
- Air Mixers and Agitators
- Heat Merging Systems
- Mixers
- Air Cleaners/Air Dryers

CLEAN ROOM FACILITIES

Currently, Du-All is not certified for clean room facilities, but due to the nature and scope of work performed on-site, there is no need for those facilities onsite. Should a need arise, Du-All will utilize the services of one of many strategic partners.



THE DU-ALL FACILITY

QUALITY CONTROL PERSONNEL

There are a total of six people on the Du-All staff that are in charge of quality control from the initial mil spec order to when the products are boxed and shipped. Those people are:

- Greg Marchand, President
- Tony Athans, Vice President
- Rose Potter, Administrative Assistant
- Steve Sapien, Quality Control Manager
- Mario Dorado, Quality Control Manager
- Jose Espinoza, Quality Control Manager

Each and every one of the highly trained quality control staff at Du-All is responsible for every product that comes in and out of the plating shop. There are a number of quality checkpoints along the way that ensure everything is meeting and exceeding standards and client expectations.

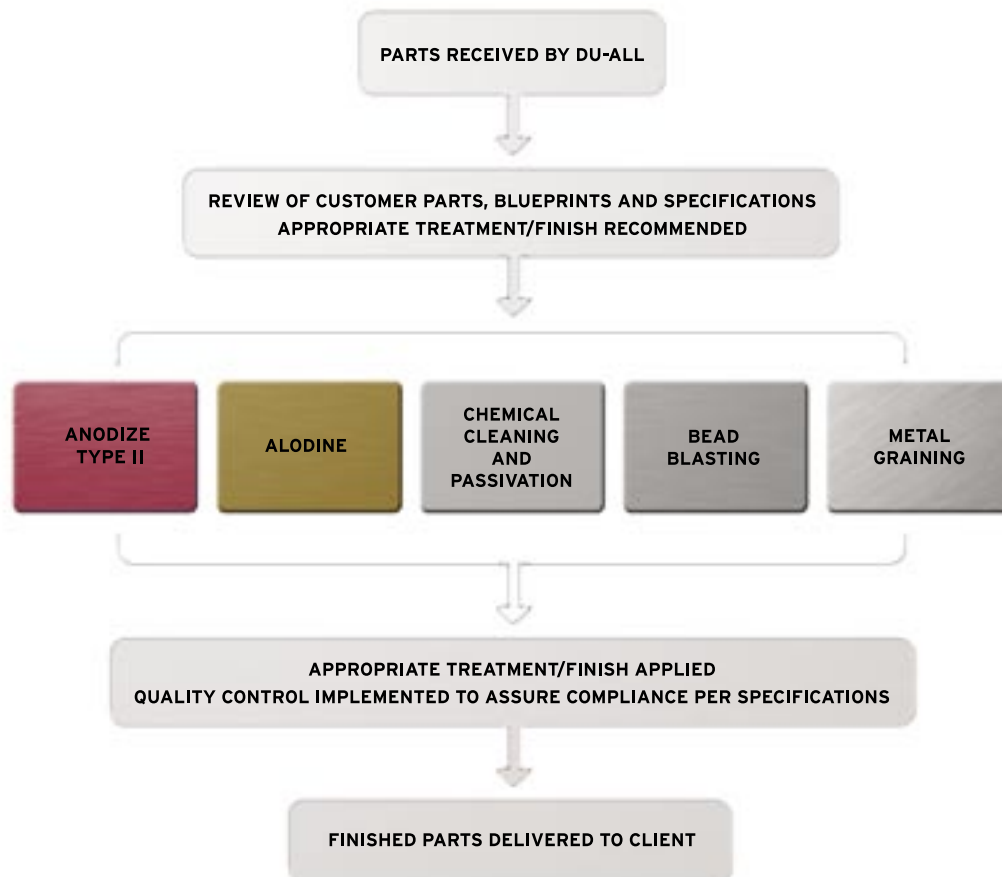
PERCENTAGE OF COMMERCIAL & MILITARY WORK

Du-All contracts with both commercial and military organizations. In-house, Du-All currently produces 15% of their total output for military with the remaining 85% for commercial work.

ISO STATUS

Du-All is currently in the process of working towards their ISO 9000 certification. Once this certification is received, the necessary information will be updated in this manual.

SYSTEM ORGANIZATION AND DOCUMENT CONTROL CHART



COMPANY QUALITY POLICIES

INSURANCE

At Du-All, we insure every product we plate to be covered from the time it's received to the time it's delivered. Copies of our insurance policies are available upon request at any time. In addition, we carry Personal Umbrella Insurance, Catastrophic Event & Workers' Compensation Insurance to comply with State requirements.

REGULATORY COMPLIANCE

At Du-All, we take the absolute greatest care of your product and document the entire process from the initial Mil-Spec's inspection to the product's final rinse. Our process complies with both the rigid specifications set forth by the US Government & Military as well as those in place for commercial and consumer products. Du-All has also been in outstanding compliance with all Federal, State and local regulatory agencies, as well as upheld compliance with all Federal, State and local insurance laws. We have been awarded merits of conduct from several of these agencies over the years, and keep these records for review at any time. We also pride ourselves on being ever-conscientious of the environment and have received many awards from local and State environmental and regulatory agencies. We continue to shine in the eyes of the 152 Federal, State and local agencies that regulate our industry.

TESTING & CONTROL

At Du-All, we truly believe that just meeting standards is not enough. We have consistently exceeded quality standards in strict industry tests such as the 72-hour Salt Spray Test, Nitric Drop Test, Adhesion, Color Fastness, and Thickness Test. In addition to our in-house inspections three times a day, our outside laboratory performs a weekly test to ensure that we maintain the highest quality materials. In total, inspections in- and out-of-house occur 15 times a week, including weekends and are documented on our "Daily Self-Inspection Form" (FIGURE 1).

Our process has been refined over the years to assure consistency in our procedures, colors and handling of your product. Our customers are our number one priority, and we have received many awards from them over the years for exceeding expectations in Quality Assurance audits.

QUALITY CONTROL

At Du-All, we do nothing halfway and we take quality control very seriously. We use de-ionized water throughout all of our systems, as well as water filtration and agitation procedures to provide a uniform consistency to all the pieces that pass through our plating process. Our tanks are monitored and maintained on a regular basis and are tested both on-site at our facility daily and off-site twice a week by a certified lab. Our chemicals are kept pure, and our concentrations are pH balanced on a daily basis. All chemicals and dyes used are the finest in the industry. Every product must pass rigorous quality control check-points throughout all process phases, starting from the minute we receive the order to when we box it up. Your project is tracked through the entire plating process to ensure that all job requirements are properly met, that any issues are immediately addressed and that the finished product has complete consistency in the end – regardless of quantity.

DAILY SELF-INSPECTION

Date Inspected		Time Inspected		Inspected By		Areas Inspected										
--/--/--		AM PM				ALL										
						1	2	3	4	5	6	7	8	9	10	11

No Problem Found	Problem Found	Hu/Mat Problem	Safety Problem	Reported to Supervisor	Date Reported	Date Resolved	In-House Maintenance	Contracted Maintenance	In-House Repairs	Contracted Repairs

Notes: _____

Corrective Actions Taken: _____

Date	Signed-Off By	Date Resolved
--/--/--		--/--/--

Supervisor Notes: _____

Daily Flow Meter Readings

Initials	Time	Influent to Process	Effluent to City	Sample Point	Grab	Composite	Laboratory	Time Taken
	AM PM	Gal	Gal	pH				AM PM

DU-ALL ANODIZING CORPORATION
 730 CHESTNUT STREET
 SAN JOSE, CA 95128-1803
 408.275.6694 OFFICE
 408.275.0924 OFFICE FAX
www.duallanodizing.com

FIGURE 1

QUALITY SYSTEM, ORGANIZATION & DOCUMENT CONTROL

QUALITY CONTROL PROCESS

The following outlines the process each product goes through with no exceptions. In addition, our quality control process is outlined and demonstrates the rigorous standards we apply to everything that comes through our door.



QUALITY SYSTEM, ORGANIZATION & DOCUMENT CONTROL

CORRECTION/ACTION SYSTEM FOR PRODUCT/QUALITY PROBLEMS & ISSUES

Should an error occur, whether it be metal conforming inconsistencies, incorrect processing based on specs, etc. during any part of the phases listed above, Du-All documents the time, the steps taken to get to that point and determines where the mistake took place. We then fill out a "Corrective Action Report" (FIGURE 2) to determine whether or not the parts need to be re-processed or what next steps are to fix the problem. Then, Du-All documents what measures need to be taken to ensure the problem does not repeat itself.

STORAGE & HANDLING

Following the completion of the processing of parts, a final inspection/review occurs. A "tracking slip" (FIGURE 3) is filled out before the parts are boxed-up.

Following the boxing of the materials, Du-All either ships them or has them ready for customer pick-up. Should a customer require temporary storage, Du-All provides on-site storage for parts until they are picked up by the customer. For short-term storage, boxes are kept in a safe area on-site and suspended above the floor in case any leakage in that area occurs.

CLOSE ADHERENCE TO MILITARY SPECS

At Du-All, we take the absolute greatest care of your product and document the entire process from the initial Mil-Spec's inspection to the product's final rinse. Our process complies with both the rigid specifications set forth by the US Government & Military as well as those in place for commercial and consumer products.

CUSTOMER SPECIFICATIONS

Once a job is complete, we keep the customer's specifications on file in-house for up to four years. Following the four years, the files are archived and taken to a filing system off-site where they are kept for seven additional years.

QUALITY MANUAL MAINTENANCE

The Du-All Quality Control Manual is updated every six months to ensure that our quality control systems and procedures are always up-to-date.

INTERNAL INCIDENT REPORT

Describe Incident: _____

Describe corrective action that occurred:

Was it reported to supervisor? Yes No
Supervisor Name _____ Date _____

Who was contacted?
 Name, company & phone number: _____
 Name, company & phone number: _____
 Name, company & phone number: _____

Was the insurance company called? Yes No
Were the parts re-run? Yes No

What measures have been taken to ensure this does not happen again?

Continue on back if needed

Employee Signature _____ Print Name _____ Date _____

We are happy to answer any questions you may have about our process. Please feel free to contact us anytime.

PRODUCTION Tony Athans Vice President 408.275.6694 Main office 408.275.0924 Main fax tathans@duallanodizing.com	TECHNICAL ISSUES Greg Marchand President 661.588.5844 Off-site office 661.588.5848 Off-site fax gmarchand@duallanodizing.com
---	--

DU-ALL ANODIZING CORPORATION
 730 CHESTNUT STREET
 SAN JOSE, CA 95103-8803
 408.275.6694 OFFICE
 408.275.0924 OFFICE FAX
 www.duallanodizing.com

FIGURE 2

TRACKING SLIP

Date Received:		Date Promised:		Time Promised:	
Customer:				Customer's P.O. #	
Part Name:				Part Number:	
Count Before Run:		Count After Run:		Count Shipped:	
U.P.S.	Federal Express	Delivered	Customer Pick-Up		
Anodize	Clear	Gold	Passivate	Bright Dip	Strip Only
Type II	Clear	Black	Gray	Red	Blue
Gold	Green	Violet	Other		
Cathodic Etch	15 Sec	30 Sec	45 Sec	60 Sec	Time
					CED
					Non-Strip
					Etch
Masking Required	Mask Threaded Holes	Special Masking Required	Close Tolerance Parts		
Bead Blast	AQ	AF	AC	Oxide	Other:
Metal Grinding	Sides	80 Grit	100 Grit	120 Grit	Other:
Scratch Brife	Extra Fine	Fine	Medium	Coarse	Extra Coarse
Package To Protect	Package Per Customer		Special Packaging Instructions		
Certification Required	Testing Required		Special Fixtures Required		

Special Instructions:

ALL FIELDS MUST BE COMPLETED Created by _____ Safety by _____ Processed by _____
 Inspected by _____ Inspected by _____ Quality after process by _____ Packaged by _____

DU-ALL ANODIZING CORPORATION
 730 CHESTNUT STREET
 SAN JOSE, CA 95103-8803
 408.275.6694 OFFICE
 408.275.0924 OFFICE FAX
 www.duallanodizing.com

FIGURE 3



SUPPLIER APPROVAL SYSTEM

In order to become an approved Du-All supplier, they must first submit credentials to Du-All to be reviewed carefully. Then, Du-All ensures that they are certified and checks references to confirm each organization is reputable.

MEASURING DU-ALL'S SUPPLIER QUALITY

Du-All puts its vendors through an extremely rigorous approval process. Each vendor is tested numerous times throughout each job to ensure that they are staying to their specifications and maintaining the highest level of quality from start to finish. Du-All documents every aspect of the relationship so that our suppliers remain focused to the rigid standards expected by Du-All.

SUPPLIER CORRECTIVE ACTION SYSTEM

The corrective action system Du-All takes with our suppliers is the same one instituted in-house. Du-All documents the time, the steps taken to get to that point and determine where the error occurred. They then fill out an "Incident Report" (FIGURE 4) to determine whether or not the parts need to be re-processed or what next steps are to fix problem. Then, Du-All documents what measures need to be taken to ensure that the problem does not repeat itself.

LOCATION OF MAJOR SUB-CONTRACTORS

80% of Du-All's sub-contractors reside in the Bay Area; the other 20% are located throughout the country. This allows Du-All to visit their site at any time and cuts down on shipping costs on the client's behalf.

OUTSIDE VENDOR INCIDENT REPORT

Describe Incident: _____

Describe corrective action that occurred: _____

Was it reported to supervisor? Yes No _____
Supervisor Name Date

Who was contacted?
 Name, company & phone number: _____
 Name, company & phone number: _____
 Name, company & phone number: _____

Did this affect the order? Yes No
 If so how? _____

What measures have been taken to ensure this does not happen again?

Continue on back if needed

Vendor Signature _____ Print Name _____ Date _____

We are happy to answer any questions you may have about our process. Please feel free to contact us anytime.

PRODUCTION Tony Albano Vice President 408.275.6694 Main office 408.275.0924 Main fax talbano@duallanodizing.com	TECHNICAL ISSUES Greg Marchand President 661.588.5844 On-site office 661.588.5848 Off-site fax gsmarchand@duallanodizing.com
---	--

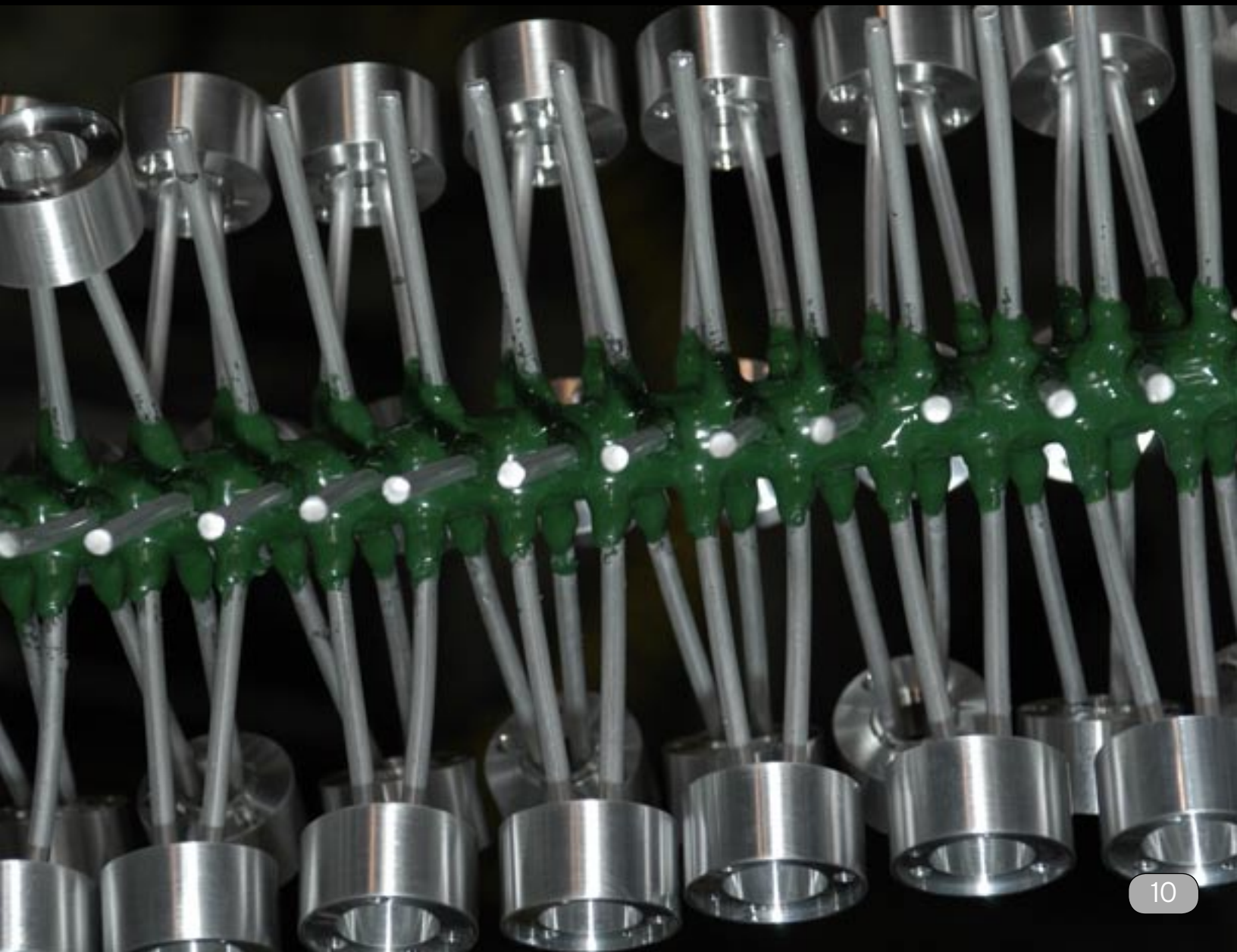
DU-ALL ANODIZING CORPORATION
 730 CHESTNUT STREET
 SAN JOSE, CA 95104-8033
 408.275.6694 OFFICE
 408.275.0924 OFFICE FAX
 www.duallanodizing.com

FIGURE 4

RESOURCE EXCELLENCE

EMPLOYEE TRAINING PROGRAMS

Du-All strongly believes that the success of a company and the proper implementation of quality control processes and standards is a direct result of the staff in place. That is why Du-All puts all new staff through 6-12 months worth of training. Until they pass a 6-month supervised training program, they are shadowed by a senior supervisor before they can handle parts on their own. This process is viewed as the "indoctrination program" where they are taught Du-All's specialties and are trained on our equipment.



CUSTOMER SERVICE/SATISFACTION

CUSTOMER SERVICE/TECHNICAL SUPPORT SYSTEM

Du-All's highly trained support staff is available Monday through Friday from 7AM - 3:30PM to handle any problems or concerns our customers may have. By calling our office at 408.275.6694, we will be happy to assist you with your needs.

CAPTURING & MANAGING CUSTOMER COMPLAINTS

As part of our technical support system, all complaints are written up and tracked through our "Process Tracking Sheet" (FIGURE 5). All complaints, no matter how large or small, are reviewed personally by either Greg Marchand, President, or Tony Athans, Vice President of Du-All, and are all dealt with individually.

CUSTOMER SATISFACTION MEASUREMENT

Our customers are interviewed via email or phone, formally and informally following the delivery of their processed parts to determine overall customer satisfaction (FIGURE 6). The results of the interviews are reviewed by the President of Du-All in order to continue to enhance the quality of Du-All's service.

PROCESS TRACKING SHEET

To: _____ Date Received: _____ Rework Yes No
 _____ Rush Yes No
 _____ Promised Date: _____ Time Due: _____
 _____ Customer PO #: _____
 _____ Our Invoice #: _____
 _____ Drawing #: _____
 _____ Revision #: _____
 _____ Certification Required #: _____

Shipping

<input type="checkbox"/> Our Packaging	<input type="checkbox"/> Delivered
<input type="checkbox"/> Customer Packaging	<input type="checkbox"/> UPS
<input type="checkbox"/> Special Packaging	<input type="checkbox"/> FedEx
<input type="checkbox"/> Picked-up	<input type="checkbox"/> Airborne
<input type="checkbox"/> Other _____	

See Reverse Side Items 1 2 3 4 5 6 Blueprints Yes No
 Close Tolerance Parts 1 2 3 4 5 6 Spec _____ "or"

Masking Required Bead Blasting Required Graining Required Special Instructions

Processed By _____

Quantity Received	Count Shipped	Part Name	Part Number & Description
1			
2			
3			
4			
5			
6			

Preparation Prior to Chemical Processing

<input type="checkbox"/> Caustic Etch	<input type="checkbox"/> Non-Dip Etch	<input type="checkbox"/> Brine Dip	<input type="checkbox"/> No Etch	<input type="checkbox"/> DeGrease Clean	<input type="checkbox"/> Bead Blasting	<input type="checkbox"/> Graining Scotch Bright	<input type="checkbox"/> Other _____
---------------------------------------	---------------------------------------	------------------------------------	----------------------------------	---	--	---	--------------------------------------

Sulfuric Anodize Type II (M-486257) Class I - Iron-Nickel Class 2 - Copper Seal Do Not Seal

Sealing Process: Nickel Acetate Seal Dichromate Seal Teflon Seal Hot Water Rinse Aid 80 59

<input type="checkbox"/> Clear	<input type="checkbox"/> Black BK	<input type="checkbox"/> Bronze	<input type="checkbox"/> Blue-44	<input type="checkbox"/> Grey BK	<input type="checkbox"/> Turquoise PLW	<input type="checkbox"/> Original 4V	<input type="checkbox"/> Green 4V	<input type="checkbox"/> Other _____
--------------------------------	-----------------------------------	---------------------------------	----------------------------------	----------------------------------	--	--------------------------------------	-----------------------------------	--------------------------------------

Chemical Conversion Coatings: Anodize (M-C-55852) Class 14 Class 3 Other CoatPrime _____


Brine Dip Only Acid Dip Only Clean Only Etch Only Strip and Brine Dip Only Other _____

Passivate (M-90-4950) Type F Type VI Type VII Type VIII Other _____

Developed Process: Customer Process Specification Du-All Process Specification Other _____

We are happy to answer any questions you may have about our process. Please feel free to contact us anytime.

PRODUCTION Tony Athans Vice President 408.275.6694 Main office 408.275.0924 Main fax tathans@duallanodizing.com	TECHNICAL ISSUES Greg Marchand President 408.275.6694 Main office 661.588.5844 Off-site office 408.275.0924 Off-site fax gmarchand@duallanodizing.com
---	--



DU-ALL ANODIZING CORPORATION
 730 CHESTNUT STREET
 SAN JOSE, CA 95104-803
 408.275.6694 OFFICE
 408.275.0924 OFFICE FAX
 www.duallanodizing.com

FIGURE 5

CUSTOMER SATISFACTION SURVEY

What Services did Du-All Anodizing provide for you? _____

Please describe the experience: _____

What were some of the benefits? _____

What were some of the challenges? _____

How can we better improve our service? _____

Did you know that Du-All provided the following services? Please check all that you are aware of

<input type="checkbox"/> Type II Anodizing	<input type="checkbox"/> Brine Dipping	<input type="checkbox"/> Chemical Cleaning
<input type="checkbox"/> Passivation	<input type="checkbox"/> Bead Blasting	<input type="checkbox"/> Masking
<input type="checkbox"/> Alodine / Chemical Conversion Coatings	<input type="checkbox"/> Metal Graining	<input type="checkbox"/> Racking & Fixturing
		<input type="checkbox"/> Close Tolerance Handling

Do you know anyone who might benefit from any of these services? _____


Please rate your experience with Du-All on a scale of 1-10 (1=lowest, 10=highest)

Have you been to your website? www.duallanodizing.com (Y / N) _____

Any additional comments? _____

We are happy to answer any questions you may have about our process. Please feel free to contact us anytime.

PRODUCTION Tony Athans Vice President 408.275.6694 Main office 408.275.0924 Main fax tathans@duallanodizing.com	TECHNICAL ISSUES Greg Marchand President 408.275.6694 Main office 661.588.5844 Off-site office 408.275.0924 Off-site fax gmarchand@duallanodizing.com
---	--



DU-ALL ANODIZING CORPORATION
 730 CHESTNUT STREET
 SAN JOSE, CA 95104-803
 408.275.6694 OFFICE
 408.275.0924 OFFICE FAX
 www.duallanodizing.com

FIGURE 6

CONTACT INFO

Greg Marchand/President

Tony Athans/Vice President

Martel Marchand/Secretary Treasurer

730 Chestnut Street

San Jose, CA 95110-1803

408.275.6694 Main office

408.275.0924 Main fax

www.duallanodizing.com

661.588.5844 Off-site office

661.588.5848 Off-site fax

Hours of Operation - Monday through Friday,

7:00AM - 4:30PM

