



G. W. LISK COMPANY, INC.

ISO 9001 • AS 9100 • ISO 14001

G.W. Lisk Supplier Training Manual

The intent of this manual is to provide direction to our suppliers in a manner that is both proactive and consistent. We believe the contents of this presentation will help each of our suppliers better understand our requirements.

Communicating Expectations

Lisk uses the following documents to convey our expectations:

1. Purchase Order (every order)
2. Engineering Drawing (every order)
3. Quality Requirements Sheet (when attached to the Purchase Order)

These documents contain the only criteria for determining if the product received is conforming.



G. W. LISK COMPANY, INC.

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Purchase Orders (PO)

Total Quantity to Manufacture

Handling Class Descriptions

PO #

Due Date

Handling Class Requirements (assigned to specific p/n's)

Block with specific Quality Requirements

G.W. Lisk Co. Inc.
2 South St. Clifton Springs NY 14432
Phone: 315-462-7111 FAX: 315-462-7119

Purchase Order
EXAMPLE

000002
TO: SUPPLIER NAME
SUPPLIER ADDRESS
NEW YORK NY 00000-0000
Attn:
Phone:
FAX:

PO #

DATE: 5/12/2011

SHIP TO: UPS COL 125-160

QUANTITY	PART NO.	DESCRIPTION	DATE REQUIRED	PRICE
1,000 PCS	SAMPLE 1 Rev: Handling Class: A	COMPLETE PER PRINT	12/31/2011	1.00000 EA
2,500 PCS	SAMPLE 2 Rev: Handling Class: B	COMPLETE PER PRINT LESS MATERIAL	12/31/2011	.50000 EA
500 PCS	SAMPLE 3 Rev:	COMPLETE PER PRINT		.25000 EA

All elements of Section 1.0, "General Requirements" of Document 0 Quality Attachments and Procurement Specifications apply to this order in their entirety.

Purchase Order on all paperwork. Any quantity shipped of total order must be approved prior to shipment.
Lead time: 10 days early / 0 days late

Buyer: STEVE CHENEY
Date: 5/12/2011

This order is placed subject to the Terms and Conditions of the following Federal Acquisition Regulations. Substitute our company name in place of "Government" in the following regulations.

SECTION	CLASS TITLE	CLAUSE NO.	CLAUSE TITLE	CLAUSE NO.	CLAUSE TITLE
27.201-1	Performance	27.201-1	Default	27.201-1	Default
27.201-2	Changes	27.201-2	Performance Acceptance	27.201-2	Performance Acceptance
27.201-3	Inspection	27.201-3	Number of Inspections	27.201-3	Number of Inspections
27.201-4	Inspection of Quality	27.201-4	Acceptance of Quality	27.201-4	Acceptance of Quality
27.201-5	Inspection of Quality	27.201-5	Acceptance of Quality	27.201-5	Acceptance of Quality
27.201-6	Inspection of Quality	27.201-6	Acceptance of Quality	27.201-6	Acceptance of Quality
27.201-7	Inspection of Quality	27.201-7	Acceptance of Quality	27.201-7	Acceptance of Quality
27.201-8	Inspection of Quality	27.201-8	Acceptance of Quality	27.201-8	Acceptance of Quality
27.201-9	Inspection of Quality	27.201-9	Acceptance of Quality	27.201-9	Acceptance of Quality
27.201-10	Inspection of Quality	27.201-10	Acceptance of Quality	27.201-10	Acceptance of Quality

LISK **G.W. Lisk Co. Inc.**
2 South St. Clifton Springs NY 14432
Phone: 315-462-2611 FAX: 315-462-7119

Purchase Order
EXAMPLE

000002
TO: SUPPLIER NAME
SUPPLIER ADDRESS
NEW YORK NY 00000-0000
Attn:
Phone:
FAX:

PO #

DATE: 5/12/2011

SHIP TO: UPS COL 125-160

QUANTITY	PART NO.	DESCRIPTION	DATE REQUIRED	PRICE
500		Handling Class: C	12/31/2011	

CLASS A: No part to part contact and/or protect sensitive components, finishes, or geometry from contact with other parts. Restrain from moving. 40# limit per container.
CLASS B: Single part layered with separators between layers. Restrain from moving. 40# limit per container.
CLASS C: Bulk handling; no racking, stacking, or separation between parts required.

All elements of Section 1.0, "General Requirements" of Document 0 Quality Attachments and Procurement Specifications apply to this order in their entirety.

Purchase Order on all paperwork. Any quantity shipped of total order must be approved prior to shipment.
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27.201-3	Inspection	27.201-3	Number of Inspections	27.201-3	Number of Inspections
27.201-4	Inspection of Quality	27.201-4	Acceptance of Quality	27.201-4	Acceptance of Quality
27.201-5	Inspection of Quality	27.201-5	Acceptance of Quality	27.201-5	Acceptance of Quality
27.201-6	Inspection of Quality	27.201-6	Acceptance of Quality	27.201-6	Acceptance of Quality
27.201-7	Inspection of Quality	27.201-7	Acceptance of Quality	27.201-7	Acceptance of Quality
27.201-8	Inspection of Quality	27.201-8	Acceptance of Quality	27.201-8	Acceptance of Quality
27.201-9	Inspection of Quality	27.201-9	Acceptance of Quality	27.201-9	Acceptance of Quality
27.201-10	Inspection of Quality	27.201-10	Acceptance of Quality	27.201-10	Acceptance of Quality

Quality Requirements Sheet (QRS)

When specified on the PO a QRS is attached. This document defines the quality items that are required

Your Lisk Quality Contact

G. W. Lisk Quality Requirements Sheet (QRS)

Part #:	Part Description:	Date Reviewed:
Statistical Requirements: 1) This section defines the statistical requirements. Please read these in their entirety so the proper data can be collected and provided 2) 3)		
Contact:	Source:	

Note 1:

Note 2:

Note 3:

Note 4:

Note 5:

This section defines the required documentation that needs to be submitted

More information regarding statistical requirements located on the next slide

***Item Approved* means that the requirement has been met and doesn't need to be re-submitted**

FAILURE TO COMPLY WITH PURCHASE ORDER QUALITY REQUIREMENTS
MAY RESULT IN THE REJECTION OF MATERIAL WHEN RECEIVED.

FOR ADDITIONAL QUALITY ASSISTANCE REFER TO OUR SUPPLIER RESOURCE CENTER AT
<http://www.gwlisk.com/supplier-resource-center.aspx>

QC 1030-1 04Aug11

Statistical Requirements

- .499/.501 OD, CAPABILITY STUDY, N=40.

What it means...40 consecutive pieces measured and recorded. If you don't have a form, use our capability study form located on our website. The N (numbers of samples requested) is a variable.

- .227/.231 WIDTH, SPC COLLECTED THROUGHOUT RUN. CP AND CPK REQUIRED. (1.33 MIN.). SUBGROUP SIZED ACCORDINGLY.

What it means...SPC required throughout the entire run, accumulating CP & CPK values. Subgroup size should be 4, 5 or based on # of spindles or cavities.

*See next slide to determine
minimum gage resolution*

Gage Resolution

Drawing tolerance / 10 = Minimum gage resolution.

Example: Drawing Spec is .499-.501", therefore, the tolerance is .002".
.002 / 10 = .0002".

Recorded measurement examples would be .5002, .4998, .5004...

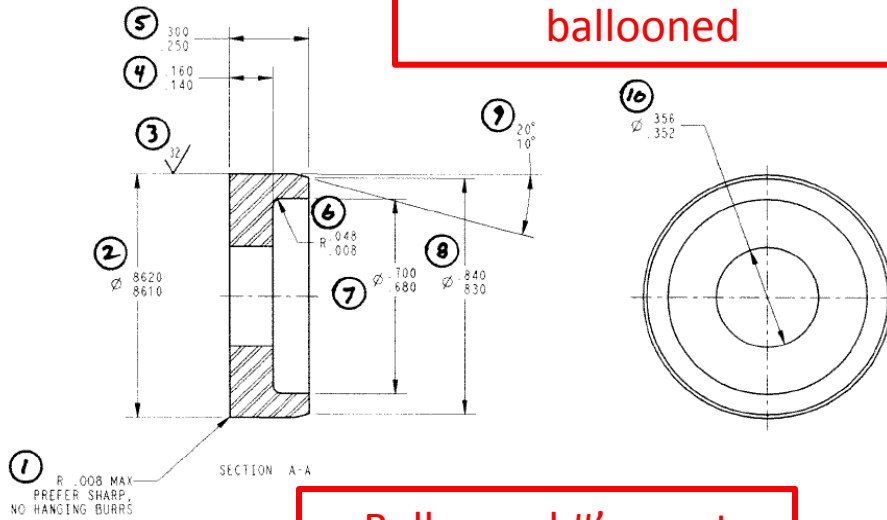
**** This formula should be used when collecting variables data (Capability Studies & SPC) and recording First Article Inspection Report responses ****

What is required when a First Article Inspection Report (FAIR) is requested?

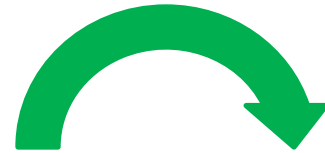
1. Ballooned Drawing for all drawings features.
2. A form containing variables data for each coinciding item #, and the type of gages used.
3. Numbered Sample(s) – unless otherwise noted it is 1 pc., or the # of spindles or cavities being used.

Example: Ballooned Drawing

ALL items MUST be ballooned



Ballooned #’s must match the FAIR #’s



Balloon each view in a clockwise fashion

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	R .008 MAX PREFER SHARP, NO HANGING BURRS WAS, LEAVE SHARP, NO HANGING BURRS	16MAR10	
	FINAL [] NEXT RELEASE [] PART NUMBER []		

NOTES:

1. MAKE FROM 303 STAINLESS STEEL - EPS-106-S PASSIVATE PER EPS-500-S

NOTICE
THIS DRAWING EMBODIES A CONFIDENTIAL PROPRIETARY DESIGN ORIGINATED BY G. W. LISK COMPANY, INC. AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE AND SALE RIGHTS REGARDING THE SAME ARE EXPRESSLY RESERVED. IF IT IS SUBMITTED UNDER A CONFIDENTIAL RELATIONSHIP FOR A SPECIFIC PURPOSE, AND THE RECIPIENT AGREES BY ACCEPTING THIS DRAWING NOT TO SUPPLY OR DISCLOSE ANY INFORMATION REGARDING IT TO ANY UNAUTHORIZED PERSON OR TO INCORPORATE IN OTHER PROJECTS ANY SPECIAL FEATURES PARTICULAR TO THE DESIGN, ALL PATENT RIGHTS HERETO ARE EXPRESSLY RESERVED BY G. W. LISK COMPANY, INC. CLIFTON SPRINGS, NEW YORK.

UNLESS OTHERWISE SPECIFIED

12 93 Ra FINISH ALL OVER

13 ROUNDOFF BETWEEN COAXIAL DIAMETERS NOT TO EXCEED .005 FULL INDICATOR MOVEMENT

14 BREAK ALL SHARP EDGES .010 MAX ALL MACHINED INSIDE CORNERS R .020 MAX

† RADIUS OR CHAMFER ACCEPTABLE

DIMENSIONS ARE IN INCHES

INTERPRET DIM AND TOL PER ANSI Y14.5M-1982

THIRD ANGLE PROJECTION

ITEM	PART NUMBER	DESCRIPTION	QTY
DRAWN		G. W. LISK CO., INC. CLIFTON SPRINGS, NEW YORK	
CHECK			
ENGINEER			FLOW ORIFICE
NEXT ASSY			
JOB NO		SIZE CAGE CODE B 81983	DWG NO. X191919
		DO NOT SCALE 3 000	WEIGHT
			REV A
			SHEET 1 OF 1

Example: FAIR

Lisk P/N (X191919)

Lisk Drawing Revision (A)

Sample size is relative to the # of spindles, cavities, etc.

Part Number: X191919

Revision: A

Supplier or Department: Your Company Name

Inspected By: Name

Date: Today's Date

PO No. or Operation No.: 12345

APPROVED Yes No

Reason:

Item	Dimension	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Pass	Fail	Gage No.	Comments
1	R.008 Max Prefer Sharp, No Hanging Burrs	Accept	Accept	Accept				X		Visual	7x Loupe
2	.8610 - .8620 Dia.	0.86165	0.86165	0.86180				X		Mics	
3	32 Ra Finish	16.8	20.2	20.1				X		Surf Analyzer	
4	.140 - .160	.1489 - .1494	.1489 - .1493	.1488 - .1493				X		Height Gage	
5	.250 - .300	.2758 - .2761	.2758 - .2760	.2758 - .2760				X		Height Gage	
6	R.008 - .048	0.0250	0.0250	0.0250				X		Comparator	
7	.680 - .700 Dia.	0.6880	0.6885	0.6890				X		VC285	
8	.830 - .840 Dia.	0.8351	0.8346	0.8354				X		OCS281	
9	10 - 20°	15.0	15.0	15.0				X		OCS281	
10	.352 - .356 Dia.	Accept	Accept	Accept				X		CPS.2510 R10	.352 Go / .356 Nogo
11	Note 1: Make from 303 SS - EPS-106	Accept	Accept	Accept				X		Inspection Certificate	PO 11111, Heat #828282
12	93 Ra	Accept	Accept	Accept				X		Visual	
13	.005 Runout	<.0005	<.0005	<.0005				X		.353 Pin & Indicator	
14		Accept	Accept	Accept				X		Visual	

Use item #'s to match the ballooned drawing

FAIRs need actual measurements where applicable

Provide objective evidence where necessary

08Aug11

What is a Delta FAIR?

A Delta FAIR is requested when a revision has changed on a part for which a FAIR has been previously approved or as a result of receiving “conditional” approval. The Delta FAIR requires measurements of ONLY the dimensions that are affected by the new revision or issues that prevented full approval.

Shipping a FAIR

Be sure to clearly identify the location of the FAIR documentation. See examples...



What is a Non-Conforming Containment Report (NCCR)?

The NCCR is sent as soon as a defect(s) is found at Lisk. The form provides the opportunity for assessment of inventory; work in progress, stock, and in transit. When this form is generated Lisk most likely has not determined disposition of the non-conforming hardware.

**** NCCR's do not affect the Supplier Report Card unless they are not returned by the due date ****

Completing the NCCR Form

LISK
NON-CONFORMING CONTAINMENT REPORT (NCCR)

A) Details

Part #:	Rev:
Desc:	Assy/Job:
Supplier:	PO #:
Date Received:	Receiver #:
Inspected by:	MDR #:
Date issued:	Return date:

Discrepancy:
Discrepancy:
Discrepancy:

Supplier to complete sections B & C:

B) Inventory Status

Is there any product in transit?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Qty.
Does your facility have any product in inventory?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Qty.
Does your facility have any work in progress?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Qty.
Can this problem exist in other part #'s?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

C) Contact Information

Supplier Representative:	Date:	
Email:	Phone #:	Fax:

Failure to respond within 2 business days (48 hours), will negatively affect your Supplier Report Card rating. Return the completed form to the individual below:

Retain a copy of this form. If formal corrective action is required this information will be part of the response for Step 3 of the Supplier 8D Corrective Action Report.

QC2279-1
Rev: 21-June-2011

48 hrs. to
return form to
the SQE
identified
here!

Complete Sections B & C

What is a Material Discrepancy Report (MDR)?

The MDR is the method that Lisk records any non-conformance(s) found. As a supplier this is the formal manner in which you are alerted that a defect(s) has been identified. If you receive a MDR you should identify the root cause and make the proper changes to prevent the problem from recurring.

**** MDR's have a negative impact on the Supplier Report Card ****

What is a Corrective Action Plan (CAP/8D)?

A CAP/8D is requested when there is a need to determine and formally document the root cause and prevent future recurrence of an identified defect(s).

**** CAP's/8D's do not affect the Supplier Report Card unless they are not completed by the due date ****

If more time is required to complete the CAP/8D you can request an extension by contacting your Lisk Supplier Quality Engineer.

What is a Sourced Material Waiver (SMW)?

A SMW can be requested when:

- 1) A dimensional non-conformance at set-up cannot be adjusted to full conformance.
- 2) Reworking to something other than drawing requirements.

Note: A SMW must be completed prior to shipping parts that do not conform to the drawing. SMW's must be signed by Lisk personnel.

**** SMW's do not affect the Supplier Report Card ****


Completing the SMW Form



Complete the highlighted areas

Send to the appropriate G.W. Lisk SQE for disposition.

The Waiver must be signed by Lisk personnel and a copy with each shipment of product exhibiting this condition.

G.W. Lisk, Inc. 2 South Street Clifton Springs, N.Y. 14432-1195 Phone (315) 462-2611 FAX (315) 462-7661			
SOURCED MATERIAL WAIVER			
Supplier		P.O. No.	Date
Assembly No.	Part No.	Drawing Name	Rev.
Certified Product Affected: Yes <input type="checkbox"/> No <input type="checkbox"/>			
Drawing Requirements:			
Non-conforming Quantity		Lot Quantity	
Description of Non-Conformance:			
Reason for Waiver Request:			
Root Cause:			
Corrective Action Proposal:			
Effective Date	Signature & Title		
GWL / CI USE ONLY			
Approved	Expiration Period or Quantity		
Disapproved:	Disposition:	Rework @ Source _____ Scrap @ Source _____ Rework @ Lisk/CI _____ Scrap @ Lisk/CI _____	GWL / CI Expense _____ Supplier Expense _____
Cost Impact:			
Comments:			
Authorizations:	Product Line Engineering _____	Date _____	
	Quality Assurance _____	Date _____	
	Certified Product Authority _____	Date _____	
Distribution: Supplier, Purchasing, Engineering, Inspection			

What are Special Characteristics?

A ● identifies Critical characteristics which are product requirements (dimensions, Specifications Tests) or process parameters which can affect compliance with government regulations or safe Vehicle/Product function. 100% inspection is required for critical characteristics and shall be included in the Control Plan (if requested).

Special characteristics are marked with a ◊ or ◆ and Major characteristics are marked with a ◐. Both identify product, process, and test requirements that are important to customer satisfaction and for which quality planning actions shall be included in the Control Plan (if requested). Many times statistical processing (SPC) with a Cpk of 1.33 minimum is required.

Refer to the engineering drawing and QRS for specific requirements. These special characteristics may also require a Gage R&R. See the QRS and/or contact your Lisk Supplier Quality Engineer for additional guidance.



What is a Part Submission Warrant (PSW)?

This is the form that summarizes a PPAP package. This form shows the reason for submission (design change, added capacity, etc) and the level of documents submitted to the customer. There is a section that asks for "results meeting all drawing and specification requirements: yes/no" refers to the whole package. If there are any exceptions the supplier should make note on the warrant or inform that the PPAP cannot be submitted.

Completing the PSW



The QRS indicates what level submission is required

DaimlerChrysler  		Part Submission Warrant	
Part Name	THIS IS THE PART NAME ON THE DRAWING	Cast Part Number	THIS IS THE G.W. LISK PART NUMBER
Shows on Drawing No.	THIS IS THE REVISED LEVEL ON THE DRAWING	Orig. Part Number	THIS IS FOUND ON THE DRAWING
Engineering Change Level	THIS IS THE REVISED LEVEL ON THE DRAWING	Date	THIS IS FOUND ON THE DRAWING
Additional Engineering Changes	_____ Dated _____	Package Order No.	_____ Weight (g) _____
Safety and/or Government Registration	<input type="checkbox"/> Yes <input type="checkbox"/> No	Checking Aid Engineering Change Level	_____ Dated _____
Checking Aid No.	_____	Customer Name/Supplier	_____
ORGANIZATION MANUFACTURING INFORMATION		CUSTOMER SUBMITTAL INFORMATION	
Supplier Name & Supplier Code	_____	G.W. Lisk Co., Inc.	_____
Street Address	_____	Customer Name/Supplier	_____
City State Zip	_____	Buyer Buyer Code	NAME OF THE G.W. LISK BUYER
MATERIALS REPORTING	_____	Application	REFER TO THE G.W. LISK JOB # IF APPLICABLE
Has customer Required Substance or Composition Information been reported?	Submitted by IMDS or other customer format	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> n/a	
Are polymeric parts identified with appropriate ISO marking codes?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> n/a		
REASON FOR SUBMISSION			
<input type="checkbox"/> Initial Submission	<input type="checkbox"/> Change to Optional Construction or Material		
<input type="checkbox"/> Engineering Change(s)	<input type="checkbox"/> Sub-Supplier or Material Source Change		
<input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment or additional	<input type="checkbox"/> Change in Part Processing		
<input type="checkbox"/> Correction of Discrepancy	<input type="checkbox"/> Part Produced at Additional Location		
<input type="checkbox"/> Tooling Inactive > 1 year	<input type="checkbox"/> Other - Please specify below _____		
REQUESTED SUBMISSION LEVEL (Check one)			
<input type="checkbox"/> Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.			
<input type="checkbox"/> Level 2 - Warrant with product samples and limited supporting data submitted to customer.			
<input type="checkbox"/> Level 3 - Warrant with product samples and complete supporting data submitted to customer.			
<input type="checkbox"/> Level 4 - Warrant and other requirements as defined by customer.			
<input type="checkbox"/> Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.			
SUBMISSION RESULTS			
The results for	<input type="checkbox"/> dimensional measurements	<input type="checkbox"/> material and functional tests	<input type="checkbox"/> appearance criteria
	<input type="checkbox"/> statistical process package		
These results meet drawing and specification requirements:	<input type="checkbox"/> YES <input type="checkbox"/> NO	(If "NO" - Explanation Required)	
Mold / Cavity / Production Process			
DECLARATION			
I hereby affirm that the samples represented by this warrant are representative of our parts, have been made to the applicable Production Part Approval Process Manual (PPAP) Edition Requirements. I further affirm that these samples were produced at the production rate of _____ / _____ hours. I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.			
EXPLANATION/COMMENTS: _____			
Is each Customer Tool Properly Tagged and Identified?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> n/a		
Organization Authorized Signature	_____	Date	_____
Title	_____	Phone No.	_____
	_____	Fax No.	_____
	_____	E-mail	_____
FOR CUSTOMER USE ONLY (IF APPLICABLE)			
Part/Warrant Disposition:	<input type="checkbox"/> Approved <input type="checkbox"/> Rejected <input type="checkbox"/> Other: _____		
Customer Signature	_____	Date	_____
Print Name	_____	Customer Tracking Number (optional)	_____



G. W. LISK COMPANY, INC.

ISO 9001 • AS 9100 • ISO 14001

Send comments/suggestions to
qualitysupport@gwlisk.com