

# ***SKYWAY PRECISION INC.***



## ***SUPPLIER QUALITY MANUAL***

**EFFECTIVE: 4/1/2022**

## **INTRODUCTION**

### **VISION**

Our vision for Skyway Precision's Suppliers is to become our partners with the intent of delivering competitive, on time quality products to our customers.

### **GOAL**

The goal of Skyway Precision's Supplier Quality Manual is to standardize our Supplier expectations through communicating our requirements, nonconforming material handling and supplier rating systems.

### **SCOPE**

The scope of this manual applies to all external suppliers of production and service parts, components, services and materials to any Skyway Precision location.

## **Expectations of Suppliers**

### **Labor and Human Rights**

#### **Child Labor**

In the absence of local law, Suppliers may not employ workers under the age of 14. Workers under the age of 18 may not perform work likely to jeopardize their health, safety, or education.

#### **Forced Labor**

Suppliers must not participate in human trafficking; use forced, involuntary, or slave labor; or purchase materials or services from companies using forced, involuntary, or slave labor. They must be able to certify that materials included in their products comply with the slavery and human trafficking laws of the country or countries in which they do business.

#### **Improper Payments**

Bribes, kickbacks, and similar payments are strictly prohibited. This ban applies even when local laws may permit such activity. Employees, suppliers, and agents acting on behalf of Skyway Precision are strictly prohibited from accepting such considerations under any circumstances.

## **Health and Safety**

Suppliers must provide workers with a safe and healthy work environment. The company takes proactive measures that support accident prevention and minimize health risk exposure.

## **Environment**

Suppliers must conduct its operations in a way that minimizes the impact on natural resources and protects the environment, employees, and visitors. The company ensures their operations comply with all laws related to air emissions, water discharges, toxic substances, and hazardous waste disposal.

## **Ethics**

### **Gifts and Gratuities**

Skyway Precision employees must not give or accept gifts during the course of employment. This includes gifts of nominal value.

### **Supplier Management System**

Skyway has a management system that ensures they comply with applicable laws, regulations, and Skyway Precision policies; conform to this Supplier Code of Conduct; and identify and reduce operational risks related to this code. The system should also promote continuous improvement and compliance with changing laws and regulations. Skyway Precision's environmental management system (EMS), ISO14001, is maintained for environmental compliance.

### **Communication**

Skyway Precision supports the enforcement of this Supplier Code of Conduct by communicating its principles to their manager, supervisors, employees, and suppliers.

## QUALITY SYSTEM REQUIREMENTS

Suppliers, at a minimum, **must be ISO 9001:2015 certified by an accredited third-party agency**. Suppliers are required to send a copy of their registration certificate to Skyway Precision upon the initial issuance of a purchase order and after changes in registrar or status. Also, suppliers are encouraged to obtain and reference the AIAG (Automotive Industry Action Group) manuals.

The supplier's quality system must:

- Establish, document, and implement an effective quality system, with the ultimate objective of becoming certified to the IATF16949:2015 standard.

Suppliers, as a minimum, must be ISO 9001:2015 certified by an accredited third-party source.

- Prepare a quality manual that addresses all requirements of ISO 9001:2015. The manual must include or reference documented procedures to support the specified requirements and be made available to Skyway Precision.

Skyway would like to see the development of our suppliers to strive towards IATF 16949:2016 certification, the steps towards this goal are listed below:

- Certification to ISO 9001 through third-party audits
- Certification to ISO 9001 with compliance to Skyways customer-defined QMS requirements
- Certification to ISO9001 with compliance to IATF 16949 through second-party audits
- Certification to IATF-16949:2015 through third-party audits

### ADVANCED PRODUCT QUALITY PLANNING (APQP)

APQP is crucial to the development and planning of new products and processes. The Supplier must be knowledgeable of AIAG's Advanced Product Quality Planning and Control Plan reference manuals. Skyway Precision expects suppliers to participate in APQP and meet completion dates of its development cycles and activities, including:

- A Process Flow Chart
- A Process Failure Mode and Effects Analysis (PFMEA)
- A Control Plan
- PPAP

### CONFIDENTIALITY

Suppliers must ensure the confidentiality of customer-contracted products, products' information and projects under development and approved for production.

# PRODUCTION PART APPROVAL PROCESS (PPAP)

## PPAP REQUIREMENTS

The PPAP verifies that products and processes meet Skyway Precision's engineering requirements and are production ready. The Supplier must be knowledgeable of AIAG's Production Part Approval Process (PPAP) reference manual as well as the Skyway PPAP check list. Production part approval is granted for a part number, production process, engineering change level, manufacturing location, material supplier(s) and production process environments. Changes to any of these require communication to Skyway Precision of changes, PPAP resubmission and approval from Skyway Precision. A checklist of PPAP requirements is available to aid our Suppliers.

## WHEN PPAP IS REQUIRED

Production part approval is **always required prior to the first production shipment**. PPAP submission of a product is required in the following situations:

- A new part or product (i.e., a specific part, material, or process not previously supplied to the specific customer).
- Correction of a discrepancy on a previously submitted part.
- Engineering change to design records, specifications or materials for production product/part number(s).
- Refurbishment of tooling or fixtures necessary for production.
- Change of Manufacturing Location
- Movement of Tooling Location

**PPAP parts must be sent to the attention of the Skyway SQE and PPAP parts must be labeled as such to avoid possible use without authorization.**

## PPAP SUBMISSION LEVEL

Skyway Precision will identify the level used with each PPAP submission. Skyway Precision's choice of levels for a supplier will be determined by such factors as a supplier's compliance to ISO 9001:2015 requirements, supplier quality recognition status, part criticality, supplier experience with prior part submissions and supplier production expertise. (See appendix A for PPAP checklist).

## INTERIM PPAP APPROVAL

**Skyway's SQE will provide an Interim Approval which will allow the supplier to ship parts to Skyway. An Interim approval will last until the parts are fully approved by the Skyway SQE. An interim approval will expire one year after the initial interim approval date.**

## ANNUAL LAYOUT REQUIREMENT

**Annual layouts and material certification are required yearly to recertify material. CQIs will also be required yearly and must be available upon request from Skyway Precision.**

## SPECIAL CHARACTERISTICS

Some products will have features designated as special characteristics. These may be identified by Skyway Precision or its customer. When a special characteristic is shown on the drawing or referenced in a specification, the supplier is required to comply with Skyway Precision's customer's requirements. It is the supplier's responsibility to understand all

requirements shown on drawings or specifications. For these characteristics, SPC data verifying a minimum 1.33 C<sub>pk</sub> process capability must be furnished with each shipment, unless waived in writing by Skyway Precision.

The supplier must use a multidisciplinary approach to establish, document, and implement its processes to identify special characteristics. The suppliers must have documentation of all special characteristics in the product and/or manufacturing documents, relevant risk analysis, control plans, standard work/operator instructions. Special characteristics need to be identified with special markings and must be documented in manufacturing documents which show the creation of and the controls required for these characteristics.

## MATERIAL CERTIFICATION

The supplier has the responsibility to ensure that purchased production material supplied to Skyway Precision is in compliance with all material specifications shown on the drawing and/or purchase order. Material certification containing actual measured results are required to be available for each lot of material. The test sample must be pulled from castings and not poured separately unless otherwise instructed.

## RESTRICTED MATERIAL

The supplier shall comply with all current government and safety restraints on restricted, toxic and hazardous materials; as well as environmental, electrical, and electromagnetic considerations applicable to the country of manufacture and sale. The supplier must comply with and retain the end users restricted material list when applicable.

## WHERE TO SUBMIT PPAP

Suppliers must submit PPAP documentation to [quality@skywayprecision.com](mailto:quality@skywayprecision.com) or to the Skyway SQE directly.

## PROTOTYPE PARTS

Skyway will require a control plan and a prototype program for Prototype parts. When possible, Skyway will require the same supplier, tooling and manufacturing processes to be used in the Prototype phase as that will be used in production. All performance-testing activities shall be monitored for conformity and will be completed in a timely manner. If services are outsourced for Prototype parts, the supplier will ensure that the outsourced company's scope of its quality management system and that all services rendered are certified to ISO9001 requirements. Prototype parts must be labeled as Prototype parts and be sent to the attention of Skyway's SQE.

## PPAP APPROVAL

The Supplier Quality Engineer or designee at Skyway Precision is the approval authority. Simply receiving a **material release or a purchase order does not constitute nor implies PPAP approval**. PPAP will be approved once **complete documentation is provided and reviewed. Full PPAP status will also depend on when the samples have been reviewed and machined**. PPAP documents must be stored for the life of the program and service requirements plus one year at the supplier site. Other documents such as capability studies reports, inspection and traceability records and certificates shall be stored for 5 years. All documentation must be available for Skyway Precision and its customers on request.

## PURCHASING

Acceptance of a Skyway Precision purchase order is also acceptance of the requirements of this manual.

### PURCHASING PROCESS

As a supplier to Skyway, the supplier is responsible for the quality of the products and services provided by their supply chain. The requirements of this manual extend to the supplier's supply chain.

### REGULATORY CONFORMITY

All purchased products or materials used in supplier's and their supply chain's processes, products, or services shall conform to all applicable statutory and regulatory requirements.

### FIRST SHIPMENT OF PARTS

Once the first shipment of parts has been Interim approved to ship, the parts must be labeled as PPAP parts and must be sent to the attention of Skyway's SQE. This allows Skyway to segregate the parts appropriately and make sure the parts are available to machine ASAP. **Supplier must not ship parts without a minimum of an Interim PPAP from the Skyway SQE.**

## PRODUCTION AND PROCESSES PROVISIONS

### CONTROL OF PRODUCTION AND PROCESSES

The supplier has the responsibility to ensure that production processes supplied to Skyway Precision are in compliance with all specifications shown on the drawing and/or purchase order. **The supplier will provide data stating the parts are conforming to print requirements with every shipment they make to Skyway.** Process certification must be maintained at the supplier's location and be made available upon Skyway Precision's request and contain measured results with a minimum 1.67 C<sub>pk</sub> process capability.

### FIFO PROCESSING REQUIREMENT

The supplier is responsible for utilizing the FIFO (first in, first out) when processing Skyway Precision parts.

### PACKAGING AND RUST PREVENTION REQUIREMENTS

Skyway expects that parts will be shipped in a condition that will ensure that the parts will not rust for a minimum of 90 days from when they first arrive on Skyway's dock. If VCI and rust preventative are required for the parts, these costs will need to be built into the initial quote.

**Skyway expects parts to be shipped and packaged in a manner that will allow transport from the supplier's dock to Skyway's dock without any damage. As Skyway has many different commodities that it purchases, this is ultimately up to the supplier to use what they deem as proper packaging for parts. If Skyway has an issue with the way parts are packaged, Skyway's SQE will contact the Supplier.**

### LOT TRACEABILITY

The supplier is responsible for maintaining lot traceability while the product is at the supplier's location. Lots are not to be mixed together.

## SKYWAY PRECISION PROPERTY

The supplier shall exercise care with all Skyway Precision property, including intellectual property, while it is under the Supplier's control or being used by the supplier. The supplier shall identify, verify, protect and maintain Skyway Precision property provided for use or incorporated into product. If any Skyway Precision property is lost, damaged or otherwise found to be unsuitable for use shall be recorded and reported to Skyway Precision. Processing equipment, tooling, measurement equipment and fixtures owned by Skyway Precision are covered under this section.

## VERIFICATION OF PURCHASED PRODUCT

Skyway Precision and its customers reserve the right to verify all Skyway Precision products' quality at the supplier's premises. Such verification shall not be used as evidence of effective control of quality by the supplier. Verification by the customer shall not absolve the supplier of the responsibility to provide acceptable product/service, nor shall it preclude subsequent rejection by the customer.

## 100% ON-TIME

100% on-time delivery is required of all suppliers. Appropriate planning information and purchase commitments are provided by the Skyway Precision Purchasing Department. Supplier delivery performance is monitored and is an element of the supplier rating. Appropriate corrective actions are to be taken in the event of failure to meet delivery requirements. In the event of potential / actual delivery issues, it is the responsibility of the supplier to notify the Material Manager at Skyway Precision in advance. **Any expenses incurred as a result of expedited shipments to Skyway or the end user as a result of late orders will be the responsibility of the supplier.** If Skyway Precision does not receive delivery on time, **it will negatively affect the supplier's quality rating.** Please see section Supplier Quality Rating (SQR) for more information.

## DELIVERED PRODUCT QUALITY

The supplier shall adopt an acceptance criteria policy of zero defects on raw material, products and services supplied to Skyway Precision. Delivered product quality performance is monitored and is an element of the supplier rating. Appropriate corrective actions are to be taken in the event of failure to meet delivered product quality requirements. This includes identification, handling, packaging, storage and protection while in transit.

## LABELS FOR MANUFACTURED COMPONENT SUPPLIERS

The minimum information to be shown on labels for component parts is the supplier's name, purchased part number, quantity, and a supplier initiated unique traceability number that can be used to trace components to their manufacturing process and raw material used.

## DELIVERED PRODUCT QUANTITY

Casting suppliers shall ensure product shipped matches quantities requested on the "Open Purchase Order Report". Variances shall not exceed +/- 5%, unless authorized in advance by the Skyway Precision Material Manager.

For all components other than castings, the supplier shall ensure product shipped matches quantities requested on the "Open Purchase Order Report" with no variances.



## NONCONFORMING MATERIAL

The Supplier must establish and maintain documented procedure to ensure that nonconforming products are prevented from shipment, use or installation. This control will provide for identification, documentation, evaluation, isolation, disposition and notification of nonconforming product both internal and external. The supplier is responsible to notify Skyway Precision of nonconforming material in transit and its containment.

### DISCREPANT MATERIAL FOUND AT SKYWAY PRECISION

In cases where discrepant material is discovered at a Skyway Precision facility, it is the supplier's responsibility to evaluate, contain, sort, reclaim, replace or scrap the defective material. The supplier shall have a representative establish containment at the Skyway Precision facility, material in transit and at the supplier **within 24 hours**. Quicker response may be required based on the severity of the situation. It is the supplier's responsibility to initiate sorts, whether by a supplier representative or a 3<sup>rd</sup> party sorting company. If a 3<sup>rd</sup> party sorting company is used, it will be at the supplier's expense. Suppliers are also responsible for reimbursing Skyway Precision for all associated costs incurred as a direct result of discrepant product or service. The supplier will be issued a Defective Material Report (DMR) and will then need to re-invoice Skyway Precision once the material is re-shipped. **A supplier's scrap rate will have a negative effect on the supplier's quality rating.** Please see section Supplier Quality Rating (SQR) for more information.

### SORTING OR REWORK AS A SEPARATE OPERATION

Under certain circumstances, it will be necessary for Skyway Precision to sort product in-house so that scheduling requirements are not compromised. In such a circumstance, the sorting will take place at the supplier's expense. **The charge for this sort or rework will be \$60.00 per man hour.**

### SORTING INCLUDED WITH PACKAGING

Under certain circumstances, it will be necessary for Skyway Precision to sort for a defect as part of the normal packaging operations so that scheduling requirements are not compromised. In such a circumstance, the sorting will take place at the supplier's expense. **The charge for this sort will be a flat rate of \$60.00 per lot.**

### SORTING AS PROVIDED BY A THIRD PARTY

It is the Supplier's responsibility to hire the services of a third party sorting company for sorting at Skyway Precision's facility. In such circumstances, the cost of such sorting will be at the supplier's expense.

### COST OF DEFECTIVE MATERIAL

The total cost of defective material sorted and scrapped from any particular lot will be charged to the supplier at the cost in the part up to that point and inbound freight of the discrepant product.

### EXCESS FREIGHT

The supplier will be held responsible for excess freight costs incurred because of supplier's lack of performance. This includes premium freight charges from the supplier facility to Skyway Precision as well as any premium freight charges passed on by Skyway Precision's customer.

### CUSTOMER WARRANTY CLAIMS

All costs resulting from Skyway Precision's customer warranty claims will be passed on to the responsible supplier. It is the supplier's responsibility to aid Skyway Precision in evaluating and correcting the problem.

## DEFECTIVE MATERIAL REPORT (DMR)

DMRs Skyway Precision uses the Defective Material Report (DMR) system to communicate quality concerns to the supplier.

All “material” is subject to Skyway Precision, Inc.’s final inspection. Skyway Precision, Inc. may reject any non-conforming material and return it to the Seller at Seller’s risk and expense at the full invoice price plus all transportation and other related costs.

### INITIAL RESPONSE

Upon receiving a DMR, the supplier is required to respond with return or scrap authorization **within 48 hours**.

## CORRECTIVE ACTION REQUESTS (CAR)

If nonconforming product is disrupting production or a DMR’s fallout is greater than 5%, the supplier will receive a Corrective Action Request. Upon receiving a CAR, the supplier is required to respond with the following **within a 24 hour period**.

The initial response must include at a minimum:

- Understanding of the problem and the problem’s description.
- A plan for Interim containment action at the Skyway Precision facility, material in transit and/or at the supplier.
- Name, telephone and email for the individual responsible for the issue.

If Skyway Precision does not receive this minimum response within 24 hours, **it will negatively affect the supplier’s quality rating**.

### CERTIFIED PRODUCT

When rework or a sort is required to contain a nonconforming product, the supplier shall:

1. 100% sort and/or rework the nonconforming product.
2. Once sorted, each container must be labeled as “Certified Product: Sorted for (specify condition)”.
3. Certify the next three (3) consecutive lots to be defect free.

### CORRECTIVE ACTION FORMAT

The preferred format for responding to Corrective Action Requests is the 8D Approach described below:

1. Form Team
2. Problem Description
3. Interim Containment Action

4. Root Cause
5. Corrective Action and Effective Date
6. Correction Verification and Control
7. Preventative Measures by Modifying Systems, Practices and Procedures.
8. Congratulate Team

**ROOT CAUSE RESPONSE**

Skyway Precision expects a root cause (#4) to be achieved **within 7 days of the Corrective Action Request** or a mutually agreed upon date, in writing, and to be sent an updated 8D up to this point.

**PREVENTATIVE MEASURES RESPONSE**

Skyway Precision expects a **finished 8D to be submitted 15 days from a Corrective Action Request** or a mutually agreed upon date, in writing, between the Supplier and Skyway Precision.

If Skyway Precision does not receive a finished 8D within the above timeframe, **it will negatively affect the supplier's quality rating**. Please see section Supplier Quality Rating (SQR) for more information. Corrective Actions may be rejected if it does not appear to effectively address root cause, permanent corrective action, valid verification methods or positive preventive action. A Skyway 8D template is available upon request. (See appendix B)

**SUPPLIER QUALITY RATING SYSTEM (SQR)**

The supplier rating system is based on a scale of 1 to 5, 5 being the best. Each Supplier is ranked in one of the four tiers:

- 4 ≤ Skyway Precision Preferred Supplier ≤ 5
- 3 ≤ Performance Supplier < 4
- 2 ≤ Low Performance Supplier < 3
- 1 ≤ Troubled Supplier < 2

Criteria taken into consideration for the over-all SQR are: Scrap Rate, On-Time Delivery, Customer Service and Quoting Comparisons.

**SCRAP RATING (SR)**

Scrap Rating is quantity rejected divided by total lot machined. 5 being if the scrap rate is below 1%, 4 being between 1% and 2%, 3 being between 2% and 3%, 2 being between 3% and 4% and 1 being anything above than 4%. See Table 2.

Scrap Rating Explanation	Score
SR > 4.0%	1
3.0% < SR ≤ 4.0%	2
2.0% < SR ≤ 3.0%	3
1.0% < SR ≤ 2.0%	4
SR ≤ 1.0%	5

Table 2

**DELIVERY RATING (DR)**

Delivery Rating is # of Days Late from promised/scheduled Date. 5 is up 5days late, 4 being between 5 and 10 days late, 3 being between 10 and 15 days late, 2 being between 15 and 20 Days late and 1 being anything greater than 20 Days

late. If a supplier does not ship product between the 1<sup>st</sup> and last day of a month, the supplier will be given a score of 5. See Table 3.

<b>Delivery Rating Explanation</b>	<b>Score</b>
DR > 11 Days Late	1
9 Days Late < DR ≤ 10 Days Late	2
7 Days Late < DR ≤ 8 Days Late	3
5 Days Late < DR ≤ 6 Days Late	4
DR ≤ 4 days Late	5

Table 3

### CUSTOMER SERVICE RATING (CSR)

Customer Service is # of times responded in 24 hours to a CAR + # of times 8D Due Dates are achieved divided by total # of CAR and 8D notifications. 5 is 100%, 4 is between 100% and 75%, 3 is between 75% and 50%, 2 is between 50% and 25% and 1 is anything less than 25%. If between the 1<sup>st</sup> and last day of a month, a supplier has never needed to be contacted for a CAR, the supplier will receive a 5 for that month. CSR rating also takes into account communication with Skyway material planning and DMR responses. See Table 4.

<b>Customer Service Explanation</b>	<b>Score</b>
CSR < 25%	1
50% > CSR ≥ 25%	2
75% > CSR ≥ 50%	3
100% > CSR ≥ 75%	4
CSR = 100%	5

Table 4

### INTRODUCTION TO WEIGHTED SCORES

The practice of weighting scores emphasizes aspects, inputs or criteria of a set of data to affect a final result, giving some criteria of the data more weight in the outcome. Without weighting a score, each criteria in the data contributes equally to the final result (normal averaging process). It is as if extra weights are added to a pair of scales to favor one side over the other side.

### WEIGHTED SQR

Skyway Precision values a low scrap rate the most out of the SQR criteria. A low scrap rate ensures quality product is delivered to our customer. On-Time Delivery and Customer Service are also highly valued as on-time delivery is key to planning and logistics of our product and customer service ensures communication and improvement of nonconformances and corrective actions. The supplier quality rating is calculated as 50% of Scrap Rating (SR) + 30% of Delivery Rating (DR) + 20% of Customer Service Rating (CSR). Se

$$\text{SQR} = .50 \times \text{SR} + .30 \times \text{DR} + .20 \times \text{CSR}$$

## MISSING SUPPLIER CRITERIA

If the supplier's product is not run and no scrap percentage is generated, the supplier did not deliver any product or any combination therein, all other ratings will be divided equally.

If a supplier has no criteria to input for all ratings (SR, DR, CSR) between the 1<sup>st</sup> and last day of a month, no SQR will be given.

## SUPPLIER TIER EXPLANATIONS AND EXPECTATIONS

### SKYWAY PRECISION PREFERRED SUPPLIER

A Supplier whose average 12 month score falls into the category of "Skyway Precision Preferred Supplier" is a supplier in alignment of Skyway Precision's expectations for pricing, quality, delivery dates and customer service and **will be preferred for quoting in new business.**

### PERFORMANCE SUPPLIER

A Supplier whose average 12 month score falls into the category of "Performance Supplier" is a supplier who falls short of Skyway Precision's expectations for pricing, quality, delivery dates and customer service. Quotes for new business will be given only if "Skyway Precision Preferred Supplier's" prices are not competitive in the current market.

A Performance Supplier **is encouraged to raise its rating** by improving each of the Supplier Criteria Inputs. Inputs and weighted scores are available upon request on a monthly basis.

### LOW PERFORMANCE / TROUBLED SUPPLIERS

A Supplier whose average 12 month score falls into the category of "Low Performance Supplier" is a supplier unaligned with Skyway Precision's expectations for pricing, delivery dates and customer service.

A supplier in this category will be requested to submit an **Improvement Action Plan** to Skyway SQE. This plan must list detailed goals of how the supplier will raise each Supplier Criteria Rating and the overall Supplier Quality Rating into a higher tier over a 6 month period, Lead names for each goal with contact information and milestone dates for each goal.

On a monthly basis, a supplier in this tier will be expected to attend a conference call to go over the Improvement Action Plan achievements, CARs, 8Ds, delivery schedules, Scrap Rating, Customer Service, weighted score and any other pressing issue.

Low Performance Suppliers may also be product and process audited by a Skyway Precision Quality Representative at randomly selected times of Skyway Precision's choosing.

Once a Low Performance supplier raises their monthly score into Performance Supplier for a period of **6 straight months, the supplier will no longer be considered a Low Performance supplier.**

A supplier whose score continues to be in the Low Performance supplier tier **over a period of 6 straight months may not be awarded new business and/or have their current business pulled.** See Table 11 below.

Supplier Tier	Quotes Preferred	Raise Rating	Monthly Conference Call	Random Audits	No New Business*	Business Pulled*
Preferred	X					
Performance		X				
Low Performance		X	X	X	X	X
Troubled		X	X	X	X	X

Table 11

\*Skyway Precision reserves the right to continue business, award new business or pull business from these and all suppliers.

**PPAP Submission Checklist**

	Requirement	Submission Level				
		1	2	3	4	5
1	Design Record ( <i>Ballooned Print, 3D Scan as required</i> )	R	S	S	S	S
2	Engineering Change Documents, if any	R	R	R	R or NA	R
3	Customer Engineering Approval, if required	R	R	S	R or NA	S
4	Process Flow Diagram	R	R	S	S	S
5	Process FMEA	R	R	S	S	S
6	Control Plan	R	R	S	S	S
7	Measurement System Analysis Studies ( <i>MSA</i> ) for Key Characteristics ( <i>Gage R&amp;R</i> )	R	R	R	R or NA	S
8	Dimensional Results ( <i>100% layout or 3D Scan 1 piece/cavity unless otherwise specified by PO</i> )	R	S	S	S	S
9	Material, Functional and/or Performance Certification ( <i>Material Certification of Chemical, Physical, MET Lab Analysis of Microstructure and IMDS as applicable.</i> )	R	S	S	S	S
10	Soundness: Sectioned Castings / Xray ( <i>On customer format where applicable</i> )	R	S	S	S	S
11	Initial Process Studies ( <i>Capability Studies</i> )	R	R	R	R or NA	S
12	Qualified Laboratory Documentation ( <i>Validation of Laboratory used for #9 &amp; 10. Internal: ISO/QS/IATF. External: A2LA or equivalent</i> )	R	R	S	S	S
13	Appearance Approval Report ( <i>as applicable</i> )	R	R	S	S or NA	S
14	Sample Product	R	S	S	S	S
15	Master Sample*	R	R	R	R	R
16	Tooling Identification ( <i>Photos of tooling / Customer ID</i> )	R	R	S	S	S
17	Records of Compliance with Customer Specific Requirements ( <i>Purchase Order</i> ) <b>Required: IMDS Number or SDS sheet</b> <b>Required: Applicable CQI(s)</b>	R	R	R	S	S
18	Part Submission Warrant ( <i>PSW</i> )	S	S	S	S	S
S = The Supplier submits to Skyway Precision and retains a copy of records at Supplier locations.						
R = The Supplier retains at locations and make available to Skyway Precision upon request.						
* If requested by Skyway Precision, provide documentation.						
NA = Not Applicable						

Skyway requires all of these documents submitted and interim approved prior to castings being shipped. Failure to meet these requirements will result in Skyway not being able to grant approval to the supplier. Without Skyway's approval, the supplier will not be able to invoice for tooling.

**Supplier Quality Manual**

Appendix B – Skyway 8D Template

D0 - Organization Information	
Customer: Skyway Precision	Supplier Name:
Skyway DMR #:	Date of Issue:
Part Number:	Rev:
Part Name:	Supplier Location:
Contact Name:	Supplier Number:
Phone Number:	Contact Name:
Email:	Phone Number:
	Email:

D1 - Identify Team		
Team Member	Team Role	Job Function
	Team Champion	
	Team Leader	
	Team Member	
Initiated Date:	Completion Date:	Responsible Person: ⊕

D2 – Problem Statement / Description		
Problem Statement:		
Problem Description:		
Initiated Date:	Completion Date:	Responsible Person: ⊕

D3 – Containment Action & Short Term Corrective Action		
Containment Action:		
Criteria (Accept / Reject):		
QC Alert: [Yes / No]	Shipping Placard: [Yes / No]	Certification Mark: [Describe]
Sort Data		
Raw:		
WIP:		
Finished:		
In Transit:		
Build Hold:		
Initiated Date:	Completion Date:	Responsible Person:
Short Term Corrective Action:		
Initiated Date:	Completion Date:	Responsible Person: ⊕

D4 – Define Root Cause
<i>(Note: Root Cause Analysis tool is require to complete this section, 3P5W, Fishbone, etc.)</i>
Creation:
Detection:



D5 – Chosen Permanent Corrective Action			
Creation:			
Detection:			
Prevention:			
Start Date:	Target Date:	Completion Date:	Responsible Person: ●

D6 – Implemented Permanent Corrective Action & Verify			
Creation:			
Detection:			
Prevention:			
Start Date:	Target Date:	Completion Date:	Responsible Person: ●

D7 – Prevent Actions & Systemic Prevent Recommendations			
Prevent Actions:			
Document Checklist	Change Required	Completed	Not Completed
PFEMA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Control Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
First Piece Sheet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tooling / Pattern Changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IPCS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dock Audit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work Instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LPA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training Sheet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Error Proofing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Systemic Prevent Recommendations:			
Start Date:	Target Date:	Completion Date:	Responsible Person: ●

D8 – Team Recognition & Management Feedback			
<i>(Management feedback can be reported at the PPR meeting during the Corrective Action slide)</i>			
Comments:			
Start Date:	Target Date:	Completion Date:	Responsible Person: ●