



**DOCUMENT CONTROL
COVER SHEET**

REFERENCE DOCUMENT

Document Title: Supplier Handbook

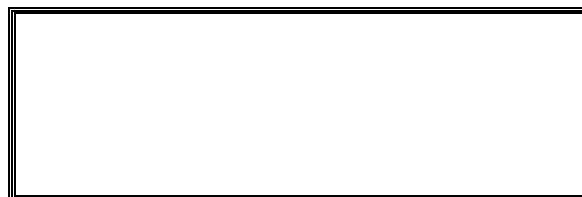
Document ID No: QRD74.1

Revision Date: 13 Mar 18

Revision Level: 4

Author: Matt Slovacek

Page: 1 Of: 12



Document Control Stamp

- Table of Contents -

1.	PURPOSE.....	4
1.1	SCOPE & APPLICATION.....	4
2.	NORMATIVE REFERENCES	4
3.	PROCUREMENT DEFINITIONS	4
4.	KEY SUPPLIER REQUIREMENTS & EXPECTATIONS.....	5
4.1	GENERAL REQUIREMENTS	5
4.2	SUPPLIER QUALITY SYSTEM.....	5
4.3	SAFETY & RELATED ISSUES	5
4.3.1	<i>Safety Data Sheets (SDS)</i>	5
4.4	PRODUCT VALIDATION & VERIFICATION	5
4.5	USE OF ACCREDITED LABORATORIES	5
4.6	MATERIAL CERTIFICATIONS	5
4.7	STATISTICAL DATA.....	5
4.8	ADVANCED QUALITY PLANNING & PRODUCT LAUNCH	6
4.9	PRODUCTION PART APPROVAL PROCESS (PPAP).....	6
4.9.1	<i>Initial Samples</i>	6
4.10	CONTINGENCY PLANS	6
5.	SUPPLIER QUALITY SYSTEM REQUIREMENTS	7
5.1	GENERAL.....	7
5.2	MANAGEMENT RESPONSIBILITY	7
5.2.1	<i>Quality Policy</i>	7
5.3	QUALITY SYSTEM.....	7
5.3.1	<i>Quality Operating System Manual</i>	7
5.3.2	<i>Advanced Quality Planning</i>	7
5.3.3	<i>Continual Improvement</i>	8
5.4	CONTRACT REVIEW	8
5.5	DOCUMENT & DATA CONTROL	8
5.6	PURCHASING.....	8
5.6.1	<i>Control of Subcontractors</i>	8
5.7	CONTROL OF CUSTOMER SUPPLIED PRODUCT	8
5.8	PRODUCT ID & TRACEABILITY.....	8
5.9	PROCESS CONTROL.....	8
5.9.1	<i>Process Changes</i>	8
5.10	INSPECTION & TESTING	9
5.10.1	<i>Inspection Records</i>	9
5.10.2	<i>Automotive Product-Related Software</i>	9
5.11	CONTROL OF INSPECTION, MEASURING & TEST EQUIPMENT.....	9
5.11.1	<i>Test Equipment Records</i>	9
5.11.2	<i>Measurement System Analysis</i>	9
5.12	INSPECTION & TEST STATUS	9
5.13	CONTROL OF NON-CONFORMING PRODUCT	9
5.13.1	<i>Supplier Requested Deviation To Interdyne Specifications</i>	9
5.14	CORRECTIVE ACTION	10
5.15	PREVENTIVE ACTION	10
5.16	HANDLING, STORAGE, PACKAGING, PRESERVATION & DELIVERY	10
5.16.1	<i>Delivery</i>	10

Document ID:	Revision Date: 13 Mar 18	Page: 2 Of: 12
	Revision Level: 4	Author:

5.17	CONTROL OF QUALITY RECORDS	10
5.18	INTERNAL QUALITY AUDITS.....	10
5.18.1	<i>Manufacturing Processes</i>	10
5.18.2	<i>Audit Records</i>	10
5.19	TRAINING	10
5.20	STATISTICAL TECHNIQUES	11
5.20.1	<i>Procedures</i>	11
6.	APPROVED SUPPLIERS	11
6.1	STATUS REQUIREMENTS	11
6.2	STATUS RANK	11
7.	SUPPLIER PERFORMANCE RATINGS	12
7.1	GENERAL.....	12
7.2	MINIMUM PERFORMANCE REQUIREMENTS	12
8.	REJECTED MATERIAL	12
8.1	DISPOSITION	12
8.2	CORRECTIVE ACTION	12
9.	DOCUMENT REVISIONS.....	12

Document ID:	Revision Date: 13 Mar 18	Page: 3 Of: 12
	Revision Level: 4	Author:

1. PURPOSE

To clearly describe and communicate the uniform Supplier Quality expectations and requirements which are the critical elements in developing and maintaining a good Supplier-Customer business relationship.

1.1 Scope & Application

The procurement of Quality goods and services is essential for Interdyne to maintain the station of leadership it has earned in the Rubber, Automotive and Commercial industries. The requirements of this manual shall apply directly to Suppliers of material to Interdyne and are in addition to, and do not replace any purchasing document, drawing or specification requirement.

2. NORMATIVE REFERENCES

- *Advanced Product Quality Planning & Control Plan Reference Manual (APQP)*
 - *Annual Book of ASTM Standards*
 - *ISO-9001: Quality Management Systems*
 - *ISO-14001: Environmental Management Systems – Specification with Guidance for Use.*
 - *IATF 16949: Quality Management Systems*
 - *ISO/IEC-17025: General Requirements for the Competence of Testing and Calibration Laboratories*
 - *Measurement System Analysis Reference Manual (MSA)*
 - *Potential Failure Mode and Effects Reference Manual (PFMEA)*
 - *Production Part Approval Process Reference Manual (PPAP)*
 - *SAE J200: Classification System for Rubber Materials*
 - *Statistical Process Control Reference Manual (SPC)*
-

3. PROCUREMENT DEFINITIONS

<i>Continual Improvement</i>	An operational philosophy that seeks to produce products of increasing Quality for Customers in an increasingly efficient manner and improves the return in investment on an ongoing basis.
<i>Deviation</i>	The process through which a <i>Supplier</i> is authorized to ship suspect or nonconforming materials to the Customer with the Customer's authorization.
<i>Subcontractor</i>	Provider of materials, parts or services to the <i>Supplier</i> .
<i>Supplier</i>	Provider of materials, parts or services directly to Interdyne.
<i>Supplier Development</i>	Activities designed to aid and improve the fundamental Quality System performance of the <i>Supplier</i> .

Document ID:	Revision Date: 13 Mar 18	Page: 4 Of: 12
	Revision Level: 4	Author:

4. KEY SUPPLIER REQUIREMENTS & EXPECTATIONS

4.1 General Requirements

The Supplier shall provide parts, materials, or services in accordance with the specified terms of purchase orders, releases, engineering standards, specifications and the Quality requirements of this handbook.

If a Supplier takes exception to the requirements of the handbook, or to those specifically referenced on purchasing documents, it shall be the Supplier's responsibility to contact Interdyne's **Quality Manager** in writing to seek timely resolution.

4.2 Supplier Quality System

The Supplier shall establish and maintain a fully documented Quality System in compliance with the minimum requirements specified under Section 5 *Supplier Quality System Requirements*.

4.3 Safety & Related Issues

Materials supplied to Interdyne shall satisfy current **statutory and regulatory requirements and all other applicable** governmental and safety constraints on restricted, toxic and hazardous materials. This shall include environmental considerations applicable to the state and/or country of manufacture, sale and use.

4.3.1 **Safety Data Sheets (SDS)**

The Supplier shall submit SDS sheets for materials supplied to Interdyne. When changes to these documents occur, the Supplier shall mail revised copies to the appropriate authority at Interdyne for incorporation in the Written Hazard Communication Program.

4.4 Product Validation & Verification

Interdyne and its Customers reserve the right to perform onsite product verification at the Supplier's facility. In the event such verification is required, appropriate arrangements will be made in advance specifying the type and amount of verification and requirements for the product release.

4.5 Use of Accredited Laboratories

Suppliers shall use accredited Laboratories when requested by Interdyne. The Supplier's test facility, when accredited by an independent third part, shall be sufficient for this purpose. In the event of a dispute, an independent accredited laboratory shall be used. Accredited laboratories shall be certified to ISO/IEC-17025.

4.6 Material Certifications

Raw materials received from Suppliers shall be accompanied with certificates of analysis listing applicable chemical and/or physical test results. Shipments received without supporting documentation may be held until such time as documentation can be sent. In such cases, a reduction in the Supplier performance rating will occur.

4.7 Statistical Data

Statistical data is a key indicator of Supplier process performance. This information is used in conjunction with certificates of analysis to monitor Supplier conformance to specifications.

The Supplier shall supply statistical quality reports on a quarterly basis. These reports will be limited to those product and or process characteristics that lend themselves to statistical analysis. In the event quarterly data is unavailable due to the lack of sufficient data, reports shall be submitted biannually or annually.

Document ID:	Revision Date: 13 Mar 18	Page: 5 Of: 12
	Revision Level: 4	Author:

4.8 Advanced Quality Planning & Product Launch

At the request of Interdyne, the Supplier shall participate in Advanced Quality Planning meeting to ensure that the Supplier has full understanding of the material requirements and applications. The meetings shall provide, where applicable, a review of:

- Characteristic tolerances
- Material type, grade and class
- Material source
- Inspection requirements: suitable equipment: sample size and frequency of test
- Packaging requirements
- Feasibility to manufacturing the product as specified

4.9 Production Part Approval Process (PPAP)

Where applicable, the Supplier shall develop and provide the following control documentation as requested:

- Part Submission Warrant – to the desired submission level
- Process Flow Chart
- Control Plan
- Material Test Results

4.9.1 Initial Samples

Initial samples representing the Supplier's process shall be submitted to Interdyne's Test Facility for validation. Interdyne may, at its option, provide these samples to an independent accredited Test Laboratory for evaluation.

4.10 Contingency Plans

The Supplier shall prepare contingency plans that reasonably and suitably protects the fluid and continual supply of material to Interdyne and its Customer in the event of an emergency such as material shortages, labor strikes/contracts, power outages, fires and other catastrophes, etc.

Document ID:	Revision Date: 13 Mar 18	Page: 6 Of: 12
	Revision Level: 4	Author:

5. SUPPLIER QUALITY SYSTEM REQUIREMENTS

5.1 General

Interdyne recognizes the importance for Suppliers to develop a fundamental Quality System that provides for Continual Improvement; a system that emphasizes a system of defect prevention and the reduction of variation and waste rather than detection and reaction. The Supplier Quality System shall be certified to ISO 9001 Quality Management Systems. In addition, suppliers of automotive products or services shall progress towards compliance with and ultimately being certified to IATF 16949 Quality Management Systems

Where Suppliers have no target date for certification to the above system requirements or are considered “low volume,” Interdyne’s Quality Manager will make extensive efforts to work with those Suppliers to aid in achieving this goal.

In the interim, the requirements specified in the balance of this handbook shall apply.

5.2 Management Responsibility

5.2.1 Quality Policy

The Supplier shall, with executive authority, take a leading and visible roll in establishing, implementing and administering a Quality Policy defining also the objectives to Quality appropriate to the goals of the Supplier and the requirements of the Customer alike. The quality objectives shall be measurable and consistent with the Quality Policy.

The Supplier shall take steps to ensure that the Quality Policy and the objectives are understood at all levels of the organization.

5.3 Quality System

The Supplier shall establish a fully functional and documented Quality System describing both the approach (Policy) and the means (Procedure) through which product quality is achieved in accordance with contractual requirements. This system shall provide for the prevention of non-conforming product being shipped to Interdyne.

5.3.1 Quality Operating System Manual

A controlled copy of the Supplier’s Policy Manual (Level I Documentation) shall be sent to the Quality Manager at Interdyne. The document shall be the first means to review Supplier capabilities.

5.3.2 Advanced Quality Planning

The Supplier shall establish and document a system to provide for the advanced quality planning of materials supplied to Interdyne. The *Advanced Product Quality Planning and Control Plan* reference manual should be used as a guide for this process.

Document ID:	Revision Date: 13 Mar 18	Page: 7 Of: 12
	Revision Level: 4	Author:

5.3.3 Continual Improvement

Interdyne will purchase exclusively from Suppliers who not only produce a high quality product, but also from those who are willing to make a total commitment to and participate with Interdyne on Continual Improvement efforts.

Therefore, the Supplier shall establish a system to continually improve the effectiveness of their Quality System through the use of the Quality Policy, Quality Objectives, audit results, analysis of company level data, corrective and preventive actions and management review.

5.4 Contract Review

The Supplier shall establish and maintain a documented procedure for the review of Interdyne RFQs and requirements prior to acceptance to ensure that:

- Needs are understood and feasible
- Requirements are clearly and adequately defined
- Amendments to the contract is communicated to areas within the Supplier's organization as necessary

5.5 Document & Data Control

The Supplier shall establish and maintain a system to ensure that documents and data pertinent to the operation of the Quality System are:

- Controlled through a suitable system; identifying hard or soft copies of documents
- Accessible when and where needed
- Reviewed and revised periodically
- Purged when obsolete

5.6 Purchasing

5.6.1 Control of Subcontractors

The Supplier shall establish and maintain a system to ensure that product and materials received from Subcontractors meet Supplier and Interdyne requirements as needed.

5.7 Control of Customer Supplied Product

The Supplier shall establish and maintain a system for the verification, storage and maintenance of Customer supplied product that will be incorporated into the final product. This system shall adequately protect said product from damage, deterioration or loss while in the Supplier's control.

5.8 Product ID & Traceability

The Supplier shall have a system in place to provide for proper identification and traceability of materials from receipt through to finished product to ensure that material is used as intended and to avoid errors that could cause scrap or rework.

5.9 Process Control

The Supplier shall establish and maintain a documented system to ensure that production, installation, and servicing processes are carried out under controlled conditions to minimize the variability in the manufacture of product.

5.9.1 Process Changes

Changes to Interdyne specified proprietary processes or product elements shall require written authorization and must be obtained from Interdyne prior to implementation. This requirement does not apply to Supplier or Subcontractor proprietary issues.

Document ID:	Revision Date: 13 Mar 18	Page: 8 Of: 12
	Revision Level: 4	Author:

5.10 Inspection & Testing

Suppliers are not to rely on Interdyne's Receiving Inspection to satisfy product requirements. Systems shall be established for the inspection and testing of materials.

5.10.1 Inspection Records

The Supplier shall maintain inspection records to provide evidence that the material has been inspected. These records shall be made available to Interdyne for review as requested.

5.10.2 Automotive Product-Related Software

When the Supplier provides automotive products with embedded software they shall implement and maintain a process for software quality assurance for their products.

5.11 Control of Inspection, Measuring & Test Equipment

The Supplier shall have a system to control and maintain inspection equipment to ensure continued accuracy of measurements. This shall include, but may not be limited to, procedures that provide for routine calibration and maintenance of equipment and any standards used for calibration.

5.11.1 Test Equipment Records

Suitable records relating to the maintenance, calibration and performance of test equipment shall be maintained in accordance with the Supplier's quality record retention procedure.

5.11.2 Measurement System Analysis

The Supplier shall establish and maintain a program to determine, to the extent necessary and practical, the capability of significant measuring systems. Studies shall be conducted in accordance with the *Measurement System Analysis* reference manual.

5.12 Inspection & Test Status

A system shall be in place for the reasonable and suitable identification of inspection and test status of materials under the Supplier's control from receiving inspection through to final audit. Location of material in the Supplier's manufacturing process shall not be suitable means for identification of test status.

5.13 Control of Non-Conforming Product

The Supplier shall establish and maintain an effective system to identify, contain and divert nonconforming material to prevent further contamination internally to the manufacturing processes, or externally to Interdyne products.

In the event that nonconforming product has been shipped to Interdyne, the Supplier shall contact the Quality Director and describe the nature and extent of the problem; providing necessary traceability information that will allow for the immediate recall (if necessary) of material in use at Interdyne.

5.13.1 Supplier Requested Deviation To Interdyne Specifications

Should a Supplier elect to ship materials that are outside Interdyne specifications but still within Supplier limits, the Supplier shall notify Interdyne and provide information as to the degree of the discrepancy and request permission to ship the material against a temporary deviation.

When permission to ship deviant materials is authorized, it shall be limited to a specific period or time or amount of material. The Supplier shall identify the material in a suitable manner to provide adequate traceability of the material through Interdyne's processes.

Document ID:	Revision Date: 13 Mar 18	Page: 9 Of: 12
	Revision Level: 4	Author:

5.14 Corrective Action

The Supplier shall have a formal documented system in place to assure the timely response and resolution of the various system, process and product nonconformities. This system shall also address the resolution of Customer complaints. Corrective actions are reactive in nature.

5.15 Preventive Action

The Supplier shall also have a formal documented system that reviews and determine actions to be taken to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions shall be appropriate to the effects of the potential problems. Preventive actions are proactive in nature.

5.16 Handling, Storage, Packaging, Preservation & Delivery

The Supplier shall establish a system that provides for suitable handling, packaging, and storage of materials in a fashion designed to preserve product quality integrity from receipt of said material through to delivery to Interdyne. The Supplier shall review the condition of material at defined intervals.

5.16.1 Delivery

In order to maintain a consistent, uninterrupted, just-in-time supply of Quality goods to Interdyne's Customers, Suppliers shall have systems in place that will provide for 100% on-time delivery of materials in accordance with purchase order release requirements.

5.17 Control of Quality Records

The Supplier shall establish and maintain a documented control system for quality records to demonstrate the effective operation of the Supplier's Quality System that will ensure the achievement of the required product Quality. This system shall provide and ensure that:

- Suitable retention periods are established
- Records are legible and easily retrievable
- Adequate storage of records is maintained to prevent deterioration
- Records are made available to the Customer as required

Records may be in the form of hard copy, electronic or other media.

5.18 Internal Quality Audits

To ensure that the Supplier's Quality activities continually comply to specified requirements and to demonstrate the effectiveness of the Quality System, Suppliers shall establish and maintain a documented system to provide for the planning and implementation of internal quality audits.

5.18.1 Manufacturing Processes

The Supplier shall audit each manufacturing process to determine its effectiveness

5.18.2 Audit Records

The results of internal audits shall be recorded and retained in accordance with Supplier Quality record control procedures; and shall made easily accessible as well as provide adequate storage against damage and deterioration.

5.19 Training

To prevent mistakes that could jeopardize product Quality integrity, the Supplier shall establish and maintain documented procedures to ensure that employees are adequately trained to perform their job functions effectively. This shall be a system that is based upon the Supplier's Quality System job requirements and shall include:

- Identification of training needs/resources

Document ID:	Revision Date: 13 Mar 18	Page: 10 Of: 12
	Revision Level: 4	Author:

- Training of personnel to meet needs
- Evaluation of trained personnel
- Maintenance of personnel training records

5.20 Statistical Techniques

The Supplier shall identify those areas where the use of effective statistical techniques is necessary as a means to identify potential/actual process variation; and to implement appropriate solutions to control and/or reduce variation and ensure product Quality.

5.20.1 Procedures

Where the need for statistical techniques has been identified, the Supplier shall establish, maintain and document procedures for the implementation and control of these techniques to ensure that they are correctly applied.

6. APPROVED SUPPLIERS

6.1 Status Requirements

To become an approved Supplier to Interdyne, a candidate must be in compliance with, or hold a Quality System certification to one or more of the following:

- ISO 9001: Quality Management Systems
- IATF 16949: Quality Management Systems

6.2 Status Rank

Each approved Supplier is ranked according to quarterly performance. The definition and criteria of status rank are as follows and are listed from highest to lowest:

- Certified Supplier: Suppliers who have achieved ship to stock status through increasingly improving product Quality, delivery and value. Materials from certified Suppliers do not require 100% inspection.
- Preferred Supplier: Suppliers who are no longer in the probationary stage, but still have not reached the certified level.
- New Supplier: A Supplier who has reached “approved” status, but has not provided sufficient material to warrant a change in status level. Such a Supplier is considered probationary and under development.
- No Audit Needed: Reserved for those Suppliers who are low volume or indirect material Suppliers.

Document ID:	Revision Date: 13 Mar 18	Page: 11 Of: 12
	Revision Level: 4	Author:

7. SUPPLIER PERFORMANCE RATINGS

7.1 General

Interdyne maintains a Supplier performance rating on a quarterly basis. Quarterly performance is calculated based on three criteria:

- Quality: Parts meet Interdyne criteria, are packaged properly and received in good condition.
- Delivery: Product is received on time in the correct amount.
- Documentation: Product is received with proper documentation. Statistical reports received on schedule.

7.2 Minimum Performance Requirements

The minimum overall ranking per quarter shall be 85%. Suppliers who fail to meet the minimum performance requirements specified in this section will be subject to a reduction in their status rank and shall be required to respond with formal corrective action.

The minimum overall annual ranking shall be 85%. Suppliers who fail to meet this minimum performance requirement will be subject to an audit according to the scope established by Interdyne.

8. REJECTED MATERIAL

8.1 Disposition

Material that is found to be nonconforming (should it be determined the fault of the Supplier) during processing at Interdyne may be subject to return to the Supplier for credit, or scrapped at Interdyne at the discretion of the Supplier. In either instance, the Supplier shall provide replacement material in a time frame suitable to prevent inconvenience to Interdyne or its Customers.

8.2 Corrective Action

The Supplier shall be required to initiate corrective action for nonconforming material. A copy of the completed corrective action will be submitted to the Quality Director at Interdyne for review.

9. DOCUMENT REVISIONS

Date Revised	Section or Paragraph Revised
16 Sep 98	Added paragraph 4, Key Supplier Requirements and Expectations
06 Dec 04	Complete revision; new document identification number.
13 Mar 18	Revised sections 2, 5.1 and 6.1 to remove QS-9000 references and update ISO 9001 and IATF 16949 references. Added section 5.10.2 to include requirement for embedded software products. Updated 4.3 to reflect statutory and regulatory regs. Replaced Management Rep with Quality Manager throughout. Updated 7.2 to include annual requirement.

Document ID:	Revision Date: 13 Mar 18	Page: 12 Of: 12
	Revision Level: 4	Author: