

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Objective:

Furukawa Wiring Systems Mexico (FWSM) providers must develop and keep its quality system to provide continuous improvement, emphasizing defect prevention and the reduction of variation in their processes and waste in the customer-supplier chain.

Purpose:

Communicate the requirements of Furukawa Wiring Systems Mexico for compliance of the quality system of the companies that provide materials to our plant.

Scope:

All providers of FWSM component automotive harnesses our clients with application to USA and Mexico

Furukawa Wiring Systems Mexico Adopted the Quality System IATF 16949:2016 for its organization, and is a requirement for their suppliers of direct components to production to have a certification for its Quality Management System in ISO 9001:2015 at least.

This requirements support and are an extension of the purchase order.

Supporting Documents:

Appendix A list the supporting documents referenced en this Manual, as well as their sources. It is the responsibility of all the suppliers of FWSM current and leaflets, to obtain and maintain the updated edition of these documents.

I. Requirements for Approval of Potential Suppliers.

Initial Contact with Purchases

Potential suppliers and Purchasing Department agree the mutual opportunities of business, as well as the prospects for assessments to their facilities and quality systems.

Initial Assessment of Potential Supplier

The Purchase Area of Furukawa Wiring Systems Mexico delivers the questionnaire “Tab Opening Supplier” to the new supplier, which you must reply in its entirety and returning it to attention of Purchases.

For purposes of provider approval, the Quality Manager, Finance, Vice-president and the President signed consent.

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Process of Potential Supplier

An audit of the process is required for prospective suppliers and/or approved according to the audit program to suppliers, of the current year. If the checklist for the process type (Cross reference) is not available, the auditor should continue to plan for the control of a part number that cover most of the process from the inputs to the exit.

In the case of audits to its quality system, this requirement may be omitted for those vendors submit a copy of their certification under the requirements of the standard IATF 16949:2016. The certification of a supplier under the standard ISO-9001:2015 is accepted. In the event that the potential supplier is implementing their Quality System based in the standard ISO 9001:2015 + IATF 16949:2016, it will necessary to present a preview of their certification in which they have to determine an assessment (first part). Evaluations of second part not incurred by FWSM will be reviewed for acceptance. Once these documents were received, shall be to approve the potential provider by inserting it in the list of approved suppliers Furukawa Wiring System Mexico.

Those potential suppliers that do not have developed their System of Quality under standard IATF 16949:2016 or ISO-9001:2015 will be conditioned and/or rejected as FWSM suppliers according to the results shown in the opening tab of supplier.

II. Advanced Product Quality Planning (APQP)

Purpose:

To ensure the realization of all activities required prior to the manufacture of a product to achieve zero defects and avoid delays. Features designated shall comply with the 100% of the requirements.

As part of the APQP process, the feasibility review of the supplier is to ensure that the product could be produced according to the specifications of the drawing, process skills and capacity required. Its review must be carried out prior to the acceptance of a contract. The APQP process for suppliers must be according to the reference Manual of the APQP from A.I.A.G.

The supplier must appoint a coordinator (main contact) for each program. The coordinator and the Quality/Purchases representative of FWSM will review that each step must be confirmed and verified.

The supplier must declare the liability and enforcement of:

The APQP stages:

1. Planning and definitions of the program
2. Design and development of the product

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

3. Design and development of the process
4. Validation of the product and process
5. Continuous improvement

Compliance dates of the events of the supplier must be tagged and penalized in case of arrears to the program, tooling poor, design, fabrication of samples, etc.

III. Production Part Approval Process (PPAP)

Mandatory will be the presentation of the PPAP when occurs any of the situations set out in table I.3.1. Of the latest edition of the PPAP Manual

The presentation levels of PPAP are:

Level 3- For those suppliers certified under IATF 16949:2016

Level 3- For non-certified suppliers and new components; unless there is another agreement with the Multidisciplinary team. For those parties that are intended for our customer is an obligatory requirement to be submitted to the Level 3 (Ref. Table I.4.1. Levels of presentation of the PPAP Manual)

Likewise, for our customer Honda is necessary to comply with the IPP (Initial Production Parts) System, which basically consists in identifying the first shipment of product derived from some change referred the section II of the PPAP Manual (Appendix C) and/or agree to the requested by a multidisciplinary team.

Suppliers should sent to the Purchase Area – the samples (which should be at least 5 parts, identified as “PPAP Samples” stuck in a visible place and marked each piece from the area which was considered the point of support on the measurement carried out and that were taken from a regular production running that totalize at least 300 pieces or that specifically agreed otherwise in writing between the supplier and FWSM as well as the documentation required by the PPAP Manual (latest edition). If the part is rejected, the supplier must correct discrepancies and submit it again.

The supplier must deliver an annual validation of PPAP with PSW level 2 to upgrade the conditions and parts:

- PSW
- Dimensional
- Raw material Certificate
- Test Report

Material should not be send until the PSW approval. Requirements in PPAP documents are Mandatory before sending to Furukawa Wiring System México must accomplish them entirety and reviewed by the document leader and consultation by multidisciplinary team.

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

* When starting to revise PPAP documentation be sure that you are in time to make modifications,

If you have questions ask them in time and manner to the a multidisciplinary Team assigned to the project, documents must reflect the results of the work done on the product and process to meet expectations of Furukawa Wiring System México “Living Document.”

1- The PPAP folder for new projects or engineering changes must be submitted in letter-size sheets with a readable font size and/or electronic, is not acceptable to make combinations of characters that adversely affect the seriousness of the example document (italics with gothic letters, flashing colors) it is also forbidden to deliver to Furukawa Wiring System México corrections to documents with deletions, proofreader or markings of any kind, if it will be made should be done on the original electronic document.

The delivery should be performed in schedule mentioned by the multidisciplinary team or Buyer in a folder properly identified, with dividers for each of the items content with a complete cover index, is not accepted folders with missing documents or outstanding information.

2- If the documentation comes from outside the country or a distant location, the mode of shipment must be made by messaging with closed document and protected from damage.

3- The document where the information is captured should not be obsolete, check it with the AIAG Manuals or with your Quality System Consultant.

PSW Sheet, this sheet must be filled in the spaces where you apply otherwise add N/A, if you have questions consult the multidisciplinary team before filling. This sheet should reflect the name and number of the component requested full, actual weight, the date of completion, the data of the supplier company complete, the level at which is requested, and buyer, the kind of results delivered, the full rate for 8 continuous hours of production (could be evaluated by visit of Furukawa Wiring System México), to fulfill the process and report on the number of IMDS until the adoption in Furukawa Wiring System México, name and signature of responsible adding contact.

Samples: The minimum of required samples included in the documentation package are 6 pieces and/or those determined by the multidisciplinary team, identified by cavities and packaged with label of the parte number and supplier (see schematic label pre-production) This should be sent at the same time with PPAP otherwise the approbation process will be invalidated.

Dimensional Report: Must show actual readings to the process with heights or item OK in its entirety as is indicated in the example design (by both sides, assembly, without assembly, closed, open, coated, etc.) must comply with all notes and be reflected in the report as well as the standards which makes reference to the testing Marks in Design and/or when requested by the Product Engineer - Multidisciplinary team in writing prior to the shipment of parts. The

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

reporting should express the measures of tolerance applied by design and measurement systems requested in the latter case explain the equivalence. Must be identified and numbered critical features required from design and/or defined by the multidisciplinary team/supplier.

Warranty Certificate (Product): The reporting should express the measures of tolerance applied by design, and measurement system requested. It is valid to make equivalencies, and always when the origin of the instruments of measurement does not allow this. A warranty certificate (product) must append and identify from the PPAP; except in extraordinary cases where an electronic system does not allow it until the first shipment, this should be clarified in writing.

Raw Material Certificate: The raw material certificates of the sub-suppliers must refer explicitly, to the type of material required in the design, in addition the support and traceability to the applicable standard. Example: copy of the rule, in specification comparative and results of mechanical testing, chemical, etc.) The reports must express the measures of tolerance applied by design and measurement system requested equivalency is valid to do; they must also be appended by each PPAP requested independent if is carried another similar component, by the applicable features to inspection receipt declared by the supplier. "The certificates should not contain dates greater than 1 year of the raw material to the requested component"

Flow Chart: You must indicate all the operations with script applied to the process, the material resources and methods used in the realization of the product, this should be focused in the same way in the sequence and realization of the AMEF and control plan. Must be identified and numbered critical features required from design and/or defined by the multidisciplinary team /supplier.

Control Plan: Must meet the required points in the APQP no spaces unfilled. With an extracted sequence FMEA as a control point to the process or product as applicable. Should be identified and numbered from the critical features required design and / or defined by the multidisciplinary team / provider, also controls the statistical control method. The minimum required statistical controls are: graphic X-R, capacity study (CPK > 1.67)

Flawless Launch Contract: To be completed by the characteristics that have been identified in the processes before starting trade negotiations with Furukawa Wiring System México and are good = G wrong = R requires improvement = Y, delivered to Purchases with PPAP

Team Feasibility Commitment: Documents to be completed and submitted with the PPAP feasibility study for the implementation of quality-cost-delivery and capacity requirements, Special Features Providers will be notified of the key features of Control or other designation of the client, the supplier development engineer. It is responsibility of the provider to incorporate these features to control plans and documents related to products assorted to FWSM.

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Providers are required to have their processes under statistical control consistent with guidelines manuals SPC (Statistical Process Control) for the AIAG features.

In case of deviation : Failure to achieve the extent specified in design provider should make efforts before requesting a deviation, demonstrating the technical efforts previously made and documented this information must be brought to Furukawa Wiring System México.

Note: This does not exempt the provider to meet your delivery requirements. The request does not imply that the request should be accepted.

IV. Supplier Evaluation in System and Production Process QAV2

It is a Furukawa Wiring System Mexico requirement that all direct material suppliers are able to demonstrate that its quality system is based in IATF 16949:2016 or ISO 9001:2015 processes or demonstrate that they are in process to obtain these certifications.

Continuing with our environmental policy, we suggest our suppliers to implement environmental guidelines applicable to the product under the ISO 14001:2015 consider this, as a future mandatory requirement (previous notification Furukawa Wiring Systems Mexico).

IATF 16949:2016 or ISO 9001: 2015 certified suppliers must present objective evidence that the Audit Board of certification has done follow-up audits and/or revalidation. Also the supplier must provide a copy of its certificate of accreditation to Purchasing Department of FWSM it must be updated.

Audit to Quality System and/or production process QAV2.

Furukawa Wiring System Mexico reserves the right to audit their suppliers (even those who are already certified) when any of the following situations occurs:

- a) Before celebrating a significant new business,
- b) Depending on the reliability of the supplier quality,
- c) Recurring quality problems of the supplier,
- d) When customers of FWSM requires.

The Audit Process (QAV2) is conducted by Purchasing, Materials Procurement and Quality Departments of FWSM. The follow-up observations of the audits will be defined internally by the responsible auditor, equally to balance workloads, delays in providing an answering due corrective actions to 30 days leads to a reduction of 5 points on the monthly rate of the supplier.

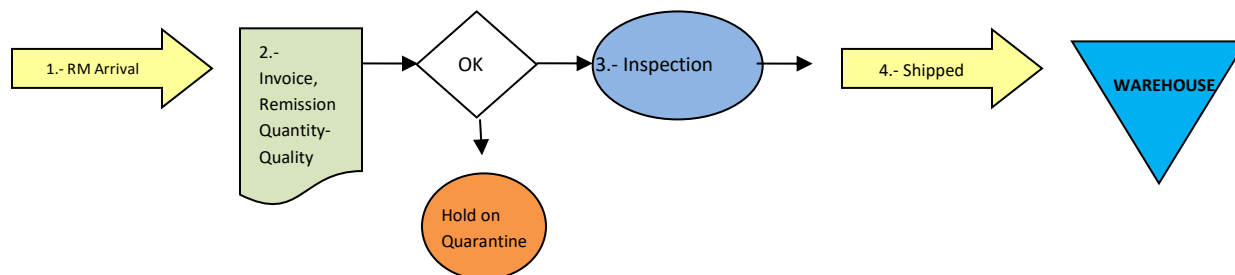
Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

In order to determine the performance and implementation of the quality system of each supplier, at the beginning of each year the supplier must provide to his buyer or the multidisciplinary team FWSM a copy of the Annual Internal Audit Program; as well as evidence of the result of these audits. In case that the supplier has scheduled an Audit by FWSM this information will be considered within it.

V. Specific Requirements of Furukawa Wiring System Mexico, S.A. De C.V.

Quality Certificate/ Receiving of materials. All materials received are sent directly to our warehouse. For our own convenience, FWSM inspect their products at Inspection Receipt area; but the quality is a direct and fully responsibility of the Supplier, so Furukawa Wiring System Mexico requires that each batch of material is accompanied by a certificate of quality compliance. This certificate must contain the results of inspection and / or release of that batch such as: dimensional results, physical and/or chemical tests and / or special physical tests indicated in the plan of each part number.

This document must include the applicable engineering level with which the batch is validated. The dimensional characteristics to be verified will be previously negotiated between the Quality Department of multidisciplinary team FWSM and the supplier, but at least it must include the instruction and inspection note of the at least those listed in the Instruction and Inspection Sheet provided by the Inspection Receipt area of Furukawa Wiring System Mexico .



Engineering drawings updates: The update of the engineering drawings is defined according to FWSM customer's requirement. The Purchasing Department is responsible for delivering to our suppliers the drawings containing the last engineering level of components. Any additional specification of the number part drawings must be obtained from the responsible developer.

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Billing: All materials delivered to the FWSM warehouse must be properly billed and supported by a Purchase Order; in case that they are only supported by an order referral they will not be received; the materials must arrive to the warehouse in the hours previously established by Furukawa Wiring System Mexico.

Summary of Statistical Control: The supplier must maintain records of statistical process control of critical characteristics, which should be available at any time requested by FWSM, if the supplier does not have these records, all inventory must be checked at FWSM to assure quality. Those features that do not comply with $CPK \geq 1.33$ should be included in a corrective action program of to achieve real skill in a short time. Program, must be sent to the multidisciplinary team assigned. Suppliers must have their processes under statistical control applying the SPC of AIAG guide and related manuals.

Engineering Deviation Request: The supplier is responsible to know the quality level of the material before shipment. If the supplier finds nonconforming material, it can order a deviation of the product before being sent to FWSM. This information must be submitted to the Multidisciplinary team by the Internal Deviation Request (own format internal SD) formats and must be accompanied by a Report of Corrective and Preventive Actions (5p's / 8 D's) for analysis.

NOTE: This does not exempt the supplier to meet own delivery requirements. The request does not imply it acceptance.

Identification of Packing and Shipping: The products must be packed in a way that they provide adequate protection against subsequent degradation of the product. All materials assorted to FWSM must have a standard packing approved by the multidisciplinary team, it also may contain and manufacture traceability code, packaging must be proper to the geometry and weight of the number piece otherwise it will be considered a NG product.

Returnable containers should be used only for number parts previously approved by FWSM and the damage suffered by mismanagement will be discount to the supplier prior to shipment.

Each container must be clearly identified with at least the following information:

- * Furukawa Wiring System Mexico part including the engineering level.
- * Quantity
- * Batch number.
- * Barcode.
- * Number of quality/engineering deviation of FURUKAWA WIRING SYSTEM MEXICO (if applicable).
- * Name of the supplier
- * Identification of containment (if applicable, include the defect.)

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
		Review Date	
<i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

VI. Continuous improvement "Kaizen".

Engineering Change: If the supplier has a recommendation that can be resolved with the support of the Furukawa Wiring System Mexico Engineering Department, the supplier should complete a written description and submit it to the buyer by Deviation Request format. FWSM expects that suppliers make recommendations to improve product quality or safety, reduce costs for mutual benefit. The results of the engineering review will be communicated to the supplier by the purchaser.

Supplier Proposals for Cost Reduction: Through efforts to improve productivity and consolidate purchases, we expect that FWSM suppliers make recommendations to the buyers in order to reduce annual cost.

VII. Discrepant Material Report

When nonconforming material is detected in the facilities of our customers or FWSM, the supplier is notified via telephone and/or by the Defective Material Notice (QN) format. The disposal of the non-conforming material must be confirmed by the supplier by this format within a period not exceeding 12 hrs. Program (12x12) if this time is exceed, FWSM would determine the disposal of the material, which must be respected by the supplier which could be rework or return. If the problem occurs on the facilities of our clients and is attributable to the supplier, FWSM gives immediate assistance to our customer, requiring if it is necessary the supplier support. All the costs incurred for transportation and per travel expenses incurred by FWSM will be charged to the supplier via a credit note or discount, as well as costs incurred for the stop of the production line of the client generated by problem effect plus an application fee.

Once is informed an existence of nonconforming material by the media previous commented, the supplier must provide a timely service and disposition of discrepant material (containment problem) according to the area where the industrial is located: It is important to note that Furukawa Wiring System Mexico is forbidden to do rework by suppliers and third-parties; if urgent pieces are required, FWSM would begin this activity with his internal staff generating the costs mentioned below:

TABLE 2. Recovery and selection charges (USD standard man-hour) per zone			
CONCEPT	NATIONAL	INTERNATIONAL	ASIA
SELECTION	20	40	20
INSPECTION FG	20	40	20
REWORK	30	50	30

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
		Review Date	
<i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

SCRAP	PIECE PRICE PLUS 50 USD PER EFFECT
--------------	---

TABLE 2 NOTE: The recovery by FWSM will be done only when resources are available.

TABLE 3. Production line Stoppage charges (USD/Minute)					
LINE	To 15 min.	From min. 16 to 30	From min. 31 to 30	From min. 61 to 120	Change of model material lack
SET-UP CHANGES, CUT SRIMP AREA, CUT	59	62	65	72	59
MEDIUM PROCESS AREA	46	49	52	59	65
FINISHED PRODUCT ASSEMBLY AREA	65	72	78	85	65

Note: Change cost for cost of lost piece.

If Furukawa Wiring System Mexico does not receive any notification regarding the disposal of the material, Furukawa Wiring System Mexico has the right to take any decision in favor of their interests.

All administrative charges generated from rework authorized by the supplier shall be a responsible for Direct Purchasing Department. The accounting department should be informed to apply of such charges.

Corrective Action Report (5P's / 8 D's).

Any quality problem that disrupts the production cycle or jeopardize the delivery to our clients must be answered with a report of corrective and preventive actions, continuing the follow up until it completion. This in order to prevent re-occurrence, 10 business days is the average for the delivery and closing of the report, this depending on the complexity of the problem. The supplier must give a written response of (5P's / 8D's). For disposal of the material, corrective actions must be attached. The final decision must be done within 12 days.

If a supplier requires additional time to respond, a written request must be addressed to the multidisciplinary team and an action plan must be included and a supporting timeline for it implementation.

The supplier may also be required to complete a Corrective Action Report for chronic problems or nonconformities this according to Corrective and Preventive Actions format.

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Penalties QN: The supplier that incurs in nonconforming material will be entitled in an administrative charge and also the disposal, if does not answer or closure the (5P's / 8D's). According to the following penalties schedule:

QN Emission	No material disposal	QN no answered	QN no closed
US\$200	US\$100	US\$100	US\$100

Re-occurrence and Containment Levels (Control Shipping, CS1, CS2, Business Hall)

Any problems in quality or variety of failure modes in one or more part numbers supplied, chronic or re-occurrence; prior document with corrective action implemented by the supplier must be properly contained. The multidisciplinary team is responsible for defining and notify to the offender supplier by corresponding letters that apply to the contingency level. The supplier must follow the written guidelines, documentation, exit criteria, as well as costs incurred for each level of contingency.

Furukawa Wiring System Mexico reserves the right to enforce contingency levels using the internal and external resources or media.

In a last instance is contemplated to involve the business resources called business and / or Business Hall.

Development of Quality Systems for the Management of Suppliers

Furukawa Wiring System Mexico promotes the development of quality management systems for suppliers by sending an annual audit with the respective evidence.

VIII. Supplier Reliability.

Furukawa Wiring System Mexico maintains monthly records of the reliability of its suppliers in order to evaluate, and to further decide the continuation, expansion or termination of business relation.

In order to evaluate the performance of our suppliers FWSM has the new grading system based on 4 Issues to measure the effort made in the guaranteed sales to achieve the reliability of the supplier before FWSM called "Green Preferred Supplier Criteria", which is described below in the NEW format named "Issues of monthly Rate".

The mathematical calculation that is used as a measure supplier performance is the estimated amount of nonconforming material (in the Furukawa Wiring System Mexico process or rejected by the Client) by the total amount of material received multiplied by a million, where the amount of estimated nonconforming material equals to the

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

quantity of nonconforming material between the verified amount by the total number of suspect material. The following table is used to determine the factor rate of the supplier.

$$\text{PPM} = \frac{\text{Estimated Nonconforming Material}}{\text{Total received material}} \times 1,000,000$$

Total received material

$$\text{Estimated Nonconforming Material} = \frac{\text{Nonconforming Material Quantity} \times \text{Suspect Material Quantity}}{\text{Verified Material Quantity}}$$

Note: These parameters will be reviewed annually as part of the continuous improvement.

Example:

Supplier "A" gets the GREEN status with the compliance of 4 receives.

Supplier "B" gets the YELLOW status for failure 1 or 2 receives.

Supplier "C" gets the RED status for failure 3 or more receives.

Response to problems: Non-compliance to the "timing" and/or Gant graphics in the development of new products, PPAP Approval (prototype samples, Mass Production) any level regarding poor product quality, lack of staff, in monitoring , failure to deliver documents on time -lack Test fails.

* It is mandatory to use methodology GP12 / Quality Net in initial samples for the first batch with a prior minimum of 40 days for defect prevention and maturation of the processes and ensuring total quality tests as an initial part of the project. Supplier must place the respective label release GP12 /Quality Net. (See Annexes of the GP12 / Quality Net steps.)

Trade issues (example: guarantees, health and safety), customer service and/or any other source reported by the developer. The following table applies:

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
		Review Date	
<i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Rate analysis: The total score of the supplier is obtained by adding monthly ratings in the sales deployment effort as described below:

Department	Item	Criteria	Score
Purchasing	Competitiveness (max 5 pts)	Cost reduction and/or improvement payment terms	5
		Price and payment terms remains the same.	4
		Price increases or negative affected payment terms due market conditions.	3
			2
			1
		Not justified price increases and/or negative affected payment terms.	0
	Service (max 5 pts)	Precise, complete and competitive quotes are received on time plus options/ suggestions are included. Supplier's representatives are available for support.	5
		Competitive quotes and information are received on time, they are accurate and complete, Additional information is received per request.	4
		Information submitted is accurate and complete.	3
			2
			1
		Information is submitted late, it is incomplete, inaccurate and unclear.	0
	Flexibility (max 5 pts)	Willing to negotiate.	5
		Willing to negotiate under pressure.	4
		Willing to negotiate under extreme pressure.	3
			2
			1
		Negotiation is impossible.	0
	Invoicing (max 5 pts)	No billing errors and/or discrepancies in the period.	5
		From one to three unjustified billing errors in the period.	4
From four to five unjustified billing errors in the period.		3	
		2	
		1	
More than five unjustified billing errors in the period.		0	

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
<i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Department	Item	Criteria	Score
Materials Procurement	Delivery (Max 19 pts)	95-100%	19
		90-94%	16
		85-89%	14
		80-84%	12
		75-79%	10
		0-74%	0
		Premium Freight not requested by customer (Max 1 pt)	No
		Yes	0
Quality	Qty QN's / Month (max 5 pts)	<14	5
		14-50	4
		51-100	3
		101-150	2
		>150	1
		No Reply	0
	PPM's (max 5 pts)	0	5
		0-10	4
		11-25	3
		26-50	2
		51-100	1
		>100	0
	Warranty / Impact with customer (max 5 pts)	0	5
>=1		0	

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico		Start Date	Review
		28/03/2014	C
		Review Date	
<i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

Classification Reliability: The results of the supplier evaluation are classified into 4 main issues as a "guaranteed sale" to HLM according to the described below for supplier reliability rate.

EXCELLENT (60 POINTS)

The supplier that complies with the IATF 16949:2016 or ISO 9001:2015 and specific of Furukawa Wiring System Mexico and/or has an average reliability. In the case that the supplier maintains a minimum of 12 will receive from FWSM recognition as a distinguished supplier, this for demonstrating a consistency of quality, delivery and costs. This point may be considered in further new short-term contracts.

RELIABLE (51-59 POINTS)

The supplier has demonstrated that its quality system is working in compliance with the requirements of Furukawa Wiring System. The supplier can maintain the current contracts and will be considered for new medium-term contracts.

POOR RELIABILITY (38-50 POINTS)

For the Supplier who has struggled to maintain the level of quality in their products, if case that maintains this level of performance for 3 consecutive months, corrective action plan in the medium-term is required. This supplier must be conditioned in the actual contracts with Furukawa Wiring System Mexico and these depend on the result obtained in the evaluation of the next period, in case of failing in obtain a better grade, FWSM reserves the right to terminate the current contract, the supplier shall not be considered for future contracts.

NO RELIABLE (0-17 POINTS)

Supplier has demonstrated minimal ability to fulfill the requirements of Furukawa Wiring System Mexico. A corrective action plan must be submitted within thirty days after being notified, the current contracts with FWSM, will be condition, the supplier must not be considered for future contracts.

The Purchasing Department shall prepare an emergency plan to develop a new alternative supplier. In a three months period the supplier must exceed the level of performance otherwise Furukawa Wiring System Mexico reserves the right to terminate the current contract relation.

Monthly an evaluation table will be issued according to reliability classification.

If the supplier is Honda, the audit will be made when the customer requires.

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

If the provider is not Honda or is local, the audit will be made to the supplier, which is the worst in the last three consecutive months.

IX. FURUKAWA WIRING SYSTEM Tooling Evaluation

The Purchasing Department must require an annual Study Program for the tooling as: Dies, injection molds or devices loaned or owned by Furukawa Wiring System Mexico.

Once the program is determined the supplier must be informed proving a copy of this annual study program in order to prepare the tooling for evaluation.

The Supplier Development Area, according to the program, will be at the supplier's facility to evaluate the tooling, photographs must be obtained and a draft report named "Tooling condition Report" needs to be issued.

Once the verification is concluded the study program must be updated.

Likewise, a copy of the Tooling Condition Report must be delivered to the supplier and other to the Purchasing Department for its control.

The supplier has the technical responsibility for re-evaluation of PPAP (Multidisciplinary Team) or transfer to make a valuation report before starting a new project and make a knowledge through a detailed report to the and/or Multidisciplinary Team (depending on the case), and to the buyer if the tooling cannot meet an specified design. If this information is omitted the cost incurred will be applied to the supplier.

The supplier is responsible for the care and proper use of tooling owned by Furukawa Wiring System. The supplier needs to maintain a report with the number of produced parts, as well as, the track of it maintenance. The Purchasing Department must be informed of remaining life of the tooling for timely replacement.

The tooling owned by Furukawa Wiring System shall be identified with a label "Property of Furukawa Wiring System".

GLOSSARY

SAC - Quality Management System

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

QAV - Quality Audit Visit

A.I.A.G - Automotive Industry Action Group

MULTIDISCIPLINARY TEAM - responsible for continuous quality production, responsible for new projects and quality start-up. Team Created to perform the Supplier Evaluation: Purchasing, Materials Procurement and Quality Assurance (other department can participate as necessary)

IMDS - International Material Data System

CPK - Real Skill of a Process

QN - Quality Notice

Purchase Order.- Is the legal document of short-term negotiation issued by the Purchasing or Procurement Department of Furukawa Wiring System, this order must reflect all the product requirements and the terms and conditions of its delivery.

Potentials Supplier: New suppliers who are starting negotiations with FWSM Mexicana (For HLM Baan System (Inventory Control, are the suppliers that have not yet assigned any Mass-production project but can be developing new components).

PPAP - Production Part Approval Process

PPM - Parts per million

TIMING (Program) - According to the present manual, the time schedule for implementation of the project, from input to output reviewed by 2 or more people to achieve an objective previously analyzed.

Direct to production - Are components that are assembled directly on our products.

Purchase Quality Assurance: Is the sum of technical, commercial and human efforts of the supplier in a coordinated and systemic manner, which aims to demonstrate compliance with the requirements expected by the customer, of a good or service for which it was designed and developed in a time, manner or form previously agreed between customer and supplier.

CS1 English acronym that refers to a level of contingency Level 1

CS2 English acronym that refers to a level of contingency Level 2

Chamber of Business (business hall) last level derived from CS1 and CS2.

PURF11 – Checklist Supplier Audit (Form to use during New Supplier Evaluation or Current Supplier Audit)

These documents are requirements of IATF 16949:2016 and contain information referenced in this manual:

- * **Advanced Product Quality Planning and Control Plan.**
- * **Part Production Approval Process. (Production Part Approval Process)**
- * **Process Failure Mode and Effects Analysis)**
- * **Statistical Process Control**
- * **Measurement Systems Analysis**

Supplier Manual		No. Manual	
		SM-002	
Furukawa Wiring System Mexico <i>Print Copy- Uncontrolled ONLY FOR INFORMATION PURPOSES</i>		Start Date	Review
		28/03/2014	C
		Review Date	
		08/29/2018	
Title:	Supplier Quality Manual		
Owner/Title:	Manuela Pérez/ QA Assistant		

These documents are available at (AIAG) Automotive Industry Action Group and can be purchased from:

Automotive Industry Action Group

26200 Lasher Road, Suite 200

Southfield, Michigan 48034

Tel: (810) 358-3570

Fax: (810) 358-3253

Internet: [http // www.aiag.org](http://www.aiag.org)

Currents edition of these documents and any other referenced document should be available at all manufacturing facilities.

This manual is the property of Furukawa Wiring System Mexico, its total or partial reproduction is prohibited; internal FWSM approval process is followed.

The documents of FWSM are used by Furukawa Wiring System Mexico and affiliated plants. Suppliers who rely on them to provide products in/or benefit of FWSM must ensure that they have the latest version. The distribution of documents outside suppliers of Furukawa Wiring System Mexico , within or without consent is only for information purposes is not responsible for the results attributable to the application or compliance of the documents. Besides those who receive and decide to use the documents, agree to take responsibility for compliance with patents and it possible violation.

Review	Date	Description
A	01/28/15	New Document
B	01/07/16	Update Purchasing, Materials and General Score
C	08/29/18	Annual Revision