

<b>Manual Code</b> MCP-74.12	<b>Revision number</b> 26	<b>Approval date:</b> 21-JAN-2022	<b>Page</b> 1 de 40
---------------------------------	------------------------------	--------------------------------------	------------------------

# Supplier Manual

Version 2022



**INDEX**

**1. Mission, vision, quality and environmental policy.....4**

1.1 Expected targets for suppliers .....5

1.2 Hi-Lex Mexicana and Suppliers Quality Creed .....7

1.3 Objective.....8

1.4 Purpose .....8

1.5 Scope .....8

1.6 Hi-Lex Mexicana Requirements.....8

1.7 Supporting documents .....9

**2 Approval requirements for potential suppliers.....9**

2.1 Initial contact with purchasing supplier developers .....9

2.2 Initial evaluation for potential suppliers.....9

2.3 Potential Suppliers Process.....10

2.4 Secondary level Supplier’s Control.....11

2.5 Legal environmental accomplishment.....11

2.6 Preventive Action Plan .....11

**3.- Advanced Product Quality Planning APQP .....11**

3.1.-Purpose .....11

3.2 The APQP Phases:.....12

3.3 Quality System Requirements .....12

**4 Production part approval process.....12**

4.1 Requirements .....12

4.2 Mandatory requirements for PPAP documents .....14

4.3 PSW (Part submission Warrant).....14

4.4 Samples.....15

4.5 Dimensional Report.....15

4.6 Warranty Certificate (Product) .....15

4.7 Raw Material Certificate .....15

4.8 Flowchart .....16

4.9 PFMEA .....16

4.10 Control Plan.....16

4.11 Team Feasibility Commitment.....16

4.12 Special Characteristics.....16

4.13 Process capability requirements of special features .....17

4.14 In case of deviation .....17

<b>Manual Code</b> MCP-74.12	<b>Revision number</b> 26	<b>Approval date:</b> 21-JAN-2022	<b>Page</b> 3 de 40
---------------------------------	------------------------------	--------------------------------------	---------------------------

4.15 Mandatory references.....	18
4.16 Annual Validation .....	18
<b>5 Supplier evaluation system and QAV2: Production Process .....</b>	<b>19</b>
5.1 Audit to Quality System and/or Production Process QAV2 .....	19
<b>6 Specific Requirements from HI-LEX Mexicana S.A. de C.V.....</b>	<b>20</b>
6.1 Quality certificates / receipt of materials at Hi-Lex Mexicana .....	20
6.2 Information for the label of Raw Materials and Components received at Hi-Lex Mexicana .....	21
6.3 Update drawings.....	22
6.4 Statistical Control Summary.....	22
6.5 Engineering Deviation Request.....	22
6.6 Packing and Shipment Identification.....	22
6.7 Delivery, traceability, packaging and product identification .....	23
6.8 Invoicing.....	23
<b>7 Continuous improvement.....</b>	<b>23</b>
7.1 Notification about changes on Business Name, Facilities and Lay-out .....	23
7.2 Engineering change request (ECR) .....	24
7.3 Supplier cost reduction proposals.....	24
<b>8 Defective material reports.....</b>	<b>24</b>
8.1 Corrective actions report DMN (8 D's).....	25
8.2 Penalties.....	26
8.3 Repetitive issues and Containment Levels (Controlled Shipping CS1 & CS2, Business on Hold) .....	26
<b>9. Internal audits .....</b>	<b>27</b>
9.1 Development of supplier quality management systems .....	27
9.2 Additional customer quality audit requirements .....	27
<b>10 Suppliers Reliability .....</b>	<b>27</b>
10.1 Performance Analysis.....	28
<b>11. Tooling evaluation owned by Hi-Lex Mexicana.....</b>	<b>29</b>
<b>X Glossary .....</b>	<b>30</b>
<b>XI Appendix .....</b>	<b>31</b>
<b>Change control.....</b>	<b>33</b>

## 1. Mission, vision, quality and environmental policy

### ➤ **Mission**

Our mission is to achieve customer satisfaction through quality and durable products with the confidence of always delivering on time.

Providing personal and professional security to our HI-LEX Mexicana Family, generate suppliers and shareholders with a mutual satisfaction of goods and services.

### ➤ **Vision**

Keep the preference of our customers, exceeding their expectations to generate more utilities, keeping our costs together with the participation of all our suppliers and our Hi Lex Mexicana family.

### ➤ **Quality policy**

- Evaluate the context of the organization and create business strategies focused on meeting the needs and expectations of our customers and other stakeholders.
- To establish objectives that guarantee the quality and timely delivery of our products and services.
- Comply with customer requirements and with other legal and regulatory requirements that are applicable to our processes.
- Continuously improve the effectiveness of the quality management system, implementing actions to reduce waste and prevent defects in the supply chain.

### ➤ **Environmental policy**

- Evaluate the context of the organization and meet the needs and expectations of the interested parties associated with the possible environmental impacts of our activities, products and services.
- Establish objectives to control and/or reduce the significant environmental aspects generated in our production processes.
- Protect the environment and prevent pollution through the efficient use of natural resources and the proper management of waste.
- Comply with applicable legal requirements and with other environmental requirements to which we are voluntarily committed.
- Continuously improve the performance of the environmental management system to the extent of the economic possibilities and technological capabilities of the organization

**Dear Supplier:**

We would like to begin by thanking to all of you, on behalf of Hi-Lex Mexicana, for all your support given to us over the period from October 2020 to September 2021. I would like to emphasize a significant improvement in your performance regarding quality and deliveries areas in comparison with the previous year.

On the other hand, it is quite important to share the main objectives for this new period FY October 2021 to September 2022. The main purpose is to line up our supplier base in parallel with the requirements of our customers.

Please see the information below:

### **1.1 Expected targets for suppliers from October 2021 to September 2022**

#### **1. DELIVERIES: 100%**

#### **2. QUALITY (SQA)**

a) **PPM's:** max. 5 PPM

b) **Product audits before shipping (Dock Audit)**

c) It refers to all audits performed just after packing, labeling and just ready for shipping. A random sample is taken and audited, our request is to meet this requirement and document all necessary evidence.

d) **PPAP (PSW)** It is mandatory to be complete and on schedule as per the program agreement. Previously, must be reviewed and send to the main point of contact in purchasing, before review, evaluation and approval from our ASQA team member at Hi-Lex Mexicana. PPAP samples must be delivered with the PPAP information in accordance with the requested level.

e) **Quality Creed of Hi-Lex Mexicana and its suppliers** Signed-off of Hi-Lex Mexicana Quality creed and its suppliers.

f) **Sub - suppliers' audits** Must have a suppliers Audit Plan or evidence in which you can ensure that the sub-supplier's deliveries are lined up to our specifications and IATF 16949 standard.

#### **3. Prices**

a) **Price reduction of 5%** Be implemented by October 2021. It applies from the second to fifth year since the start of production (SOP).

b) **Improvement Ideas for cost reduction** You must send to our category buyers, at least 3 cost reduction ideas (associated with the material, design or logistics areas) only over the second quarter of the fiscal year (From January to March 2022).

4. **TERMS** According to the Terms and Conditions mentioned in our Purchase Order.

5. **PAYMENT CONDITION**

A. Direct Material: According to the terms of payment agreed between both parts. Consider the payments dates according to the calendar of payments of HLM (it could be checked in our website: <https://www.hi-lex.com.mx/>).

B. Tooling:

- 30% Feasibility study accepted by HLM.
- 20% FOT samples with dimensional report 100% in spec, raw material certificate and IMDS.
- 20% PPAP delivered complete and HLM dimensional report 100% in spec.
- 30% PSW approved, Tooling information sheet (include riveted tag ID picture), commodatum contract.

6. **IATF 16949 & ISO 9001 CERTIFICATE** It is mandatory that suppliers send to the SQA their updated certificate each time it is renewed, including an annual risk assessment according to the standard.

7. **ISO 14001 CERTIFICATE** All suppliers should work on ISO 14001 certification and encourage to their sub-suppliers to certify them too.

If the ISO 14001 certification isn't covered, they must cover the monitoring of air quality, energy efficiency, greenhouse gas emissions and use of renewable energy by providing evidence of a certified laboratory or regulatory government entity.

All these mentioned above are going to be monitored, evaluated and considered in any:

- 1.- Business revisions
- 2.- Negotiations
- 3.- New project to assign
- 4.- Annual supplier event 2022 attendance

For any further information, doubt or comment please do not hesitate to contact our purchasing team.

Yours sincerely,

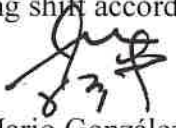
Mr. Mario González  
**Purchasing Director**

Hi-Lex Mexicana S.A de C.V.

### 1.2 Hi-Lex Mexicana and Suppliers Quality Creed

Hi-Lex Mexicana and its suppliers have a high level of responsibility over our quality products. For that reason, we emphasize our **COMMITMENT** to accomplish the following principles listed below:

1. We cannot do any change on material, process, drawing or supplier without our customer's authorization. In case to be necessary, the change must be requested through an Engineering Change Request (ECR). For changes on company name, facility location or lay out, the change must be requested through a Supplier Condition Change Request (SCCR - format HFM-C.025).
2. We guarantee that all materials used to manufacture Hi-Lex Mexicana products are under my direct responsibility. In relation with our Tier 3 suppliers, we ensure that they are in constantly supervision and we audit them periodically, otherwise we give them a total support to ensure the improvement of the supply chain. Also, we must keep and recollect as much evidence as we can for our customer use.
3. It is mandatory for us to follow the procedures described in our Quality Manual and the ones of the standard in which we are certified.
4. We ensure that our way of work and doing business is lined up with the Ethic and Conduct Hi-Lex Mexicana policy, and we follow the work conditions of the automotive industry which are:
  - ✓ Professional conduct
  - ✓ No discrimination
  - ✓ No social harassment
  - ✓ No alcohol and drugs.
  - ✓ Personal data confidentiality
  - ✓ Hi-Lex Mexicana Data and documents Confidentiality
  - ✓ Hi-Lex Mexicana Data and documents must be protected
  - ✓ Be a responsible company with the Conservation of the Environment
  - ✓ Satisfy a 100% the standards and norms
  - ✓ No forced labor
  - ✓ Work of children only with a Parent or Tutor Permission (According to the country law)
  - ✓ Salaries and benefits according to the entity or country law
  - ✓ Safe work conditions
  - ✓ Working shift according to the entity or country law

  
Mr. Mario González  
Mr. Oscar Rivera Martínez

Purchasing Director

SQA Chief

### 1.3 Objective

Hi-Lex Mexicana's suppliers must develop and maintain a quality management system to provide a continuous improvement, focus on defects prevention, reduction of processes variability and wastes in the complete costumer-supplier chain.

### 1.4 Purpose

Communicating all Hi-Lex Mexicana, SA de CV requirements to accomplish a quality management system of our suppliers that ship products to our sites.

### 1.5 Scope

All Hi-Lex Mexicana's suppliers of direct materials and components for production.

### 1.6 Hi-Lex Mexicana Requirements

Hi-Lex Mexicana adopted IATF 16949:2016 as quality management system and it is a requirement for all our suppliers which supplying direct items for production that its Quality Management System be certified on IATF 16949 standard. In case, you are certified on ISO 9001:2015, you be audited with a Second Part audit according to IATF 16949 standard and Hi-Lex Mexicana requirements. All these are the main support of the purchasing order.

In addition, Hi-Lex Mexicana adopted the ISO 14001:2015 standard. Due to that, Hi-Lex Mexicana encourage and promote to its suppliers to be certified on an environmental system and to meet with the environmental legislation according to their country of origin.

Domestic suppliers should be certified as Clean Company (Empresa Limpia) and must meet with the next documents according to Mexican legislation:

- a) Environmental License
- b) Annual Operational Card
- c) Permit for draining wastewater
- d) Register as hazardous waste source
- e) Register as special waste and municipal waste source





If the ISO 14001 certification isn't covered, they must ensure the monitoring of air quality, energy efficiency, greenhouse gas emissions and use of renewable energy.

### 1.7 Supporting documents

Appendix A lists all documents referred in this manual among all the sources.

- A. Technical Data Sheet
- B. Deviation Request (supplier form)
- C. PPAP checklist
- D. Supplier Condition Change Request
- E. PSW form
- F. PPAP guidance approval (SQA / ASQA)
- G. RFQ (Cost Breakdown)
- H. Standard Packaging
- I. Feasibility Study
- J. Nomination Letter

\* Review Appendix A, if it meets the documents at the last level.

## 2 Approval requirements for potential suppliers in 2022

- ✓ Acknowledge Hi-Lex Mexicana Quality Manual.
- ✓ Must have quality system management: ISO 9001:2015 & IATF 16949 standard.
- ✓ Must have an active role in the automotive industry.
- ✓ Fulfill Technical Profile information.
- ✓ Does not belong to a financial group.
- ✓ Acknowledge Hi-Lex Mexicana Terms and Conditions.

### 2.1 Initial contact with purchasing department.

The potential supplier and Purchasing department must have an agreement regarding their business opportunities, quality system, facilities evaluation and installed capacity.

### 2.2 Initial evaluation for potential suppliers

Hi-Lex Mexicana Purchasing Category Buyers team provides a special form named "Business Card" (Appendix B, format HFM-C.005) to new suppliers. This one must be filled completely and returned to the team within an agreed period.

All the new suppliers must meet with all the documentation on environmental subject according to the legislation of their country of origin. For Mexican suppliers, they must meet with the next documents according to their field:

- Environmental License
- Annual Operational Card
- Register as Hazardous Waste Source
- Register as Special Waste and Municipal Waste Source
- Permit for draining Wastewater

The register numbers must be filled out on the form. These registers be verified on the data base of involved public entities.

The main purpose of this questionnaire is to get a clear overview about facilities, abilities, Quality system operation and supplier study organization.

To approve a new supplier, category buyer, purchasing leader, purchasing director, Quality director, Finance manager, the Vice-president and COO, must authorize it.

### **2.3 Potential Suppliers Process**

It is required for potential suppliers a Process and system audit (QAV2). If the process verification list (by commodity) is not available, the auditor should follow the control plan regarding a part number which includes most of the processes including from ins to outs.

Regarding of quality system audit, this can be omitted only if the potential supplier delivers a copy of their certificate of IATF 16949:2016 standard. In case you have ISO 9001:2015 standard must be audited under QAV audit.

In case that potential suppliers are implementing a “Quality System” based on IATF 16949: 2016, it is necessary to deliver a previous program of their certification, this preview must be evaluated (1rst. revision), as the same way, second part evaluations not provided by Hi-Lex Mexicana, also will be received by us.

In addition, potential supplier must deliver a copy of each one of the current documents on environmental subject: Environmental License, Annual Operational Card, Register as Hazardous Waste Source, Register as Special Waste and Municipal Waste Source and Permit for draining Wastewater.

Once we approve these documents, new suppliers are going to be registered on the list of approved suppliers by Hi-Lex Mexicana.

## 2.4 Secondary level Supplier's Control

It is strictly necessary for Hi-Lex Mexicana supplier's to keep and maintain a high-level standard for their own suppliers, as well as a complete Annual Audit Plan and re-validation of its items and services.

## 2.5 Legal environmental accomplishment

It is strictly necessary for Hi-Lex Mexicana active supplier's to have a procedure for Management and control of Hazardous Waste, Special Waste, Municipal Waste and Draining Wastewater, and others.

## 2.6 Preventive Action Plan

The main purpose of a Preventive Action Plan is to avoid or reduce defective material notices.

It is a mandatory activity for Hi-Lex suppliers to create an efficient system to solve internal quality issues. Also, this system must be able to find the root cause of the issue and apply corrective and permanent actions to reduce the risk of recurrence.

## 3.- Advanced Product Quality Planning APQP

It is mandatory for each supplier works with *Advanced Product Quality Planning* methodology (APQP) in the development of a new project.

### 3.1.-Purpose

Ensure all previous activities for production area to achieve zero defects and avoid delays.

The assigned specifications must meet requirements at 100%.

As a part of the APQP process, the supplier feasibility analysis refers to ensure that the item can be elaborated under the drawing specifications, process abilities and required capacity. All these activities must be done before approving a contract.

The APQP process for suppliers must be in accordance with the APQP Manual reference of A.I.A.G.

Suppliers must appoint a person in charge and responsible of each new program or component. The coordinator of quality/purchasing representative of Hi-Lex Mexicana will review that every stage must be confirmed and verified.

The supplier will declare responsibility and application of:

### 3.2 The APQP Phases:

- 1.- Product Planning and Quality Program Definition
- 2.- Product Design and Development
- 3.- Process Design and Development
- 4.- Validation of Product and Process
- 5.- Production Launch, Assessment, and Improvement

Due dates from suppliers to deliver at HLM must be identified. Delays from tooling or design of samples will be cause of penalties.

### 3.3 Quality System Requirements

Hi-Lex Mexicana suppliers should operate under IATF 16949:2016 or ISO 9001:2015 as a minimum requirement, it is imperative to have a plan lined up to IATF 16949.

#### 3.3.1 Nonconforming Material Control

It is under suppliers' responsibility to contain all nonconforming material and avoid sending it to Hi-Lex Mexicana facilities.

In case to have material in the conditions described above, it is responsibility of the supplier request a deviation where applicable to Hi-Lex Mexicana before sending them.

## 4 Production part approval process

### 4.1 Requirements

It is mandatory to submit PPAP, when any kind of situations set on chart I.3.1 occurs. (Last edition of PPAP Manual).

PPAP Levels:

- Level 3.- For All suppliers certified on IATF 16949 or ISO9000.
- Other PPAP level according to PPAP Guidance (HFM-Q.189).

It is responsibility of the supplier to preserve thirty initial samples of the approved component during the project life. (These must be tagged or labeled).

For the part numbers which belong to FORD customer, it is a mandatory requirement to submit PPAP level 3 (Ref. chart I.4.1 Levels of submission of PPAP manual); and which comply with control characteristics Pass through (see appendix).

In the same way, for parts numbers which belong to HONDA customer, it is mandatory to accomplish with IPP system (Initial Production Parts). It basically consists in identifying the first shipment of the product because of any change mentioned on the section II of PPAP manual (Appendix C) and/or according to another agreement with our ASQA.

For our other customers, it is mandatory that the supplier identifies with a special label the first shipment and/or any engineering change over the components. Ahead of time, a photo of the label must be sent to the project buyer, ASQA and SQA from Hi-Lex Mexicana.

PART STATUS	WHITE/BLACK	OTHERS
T0	RED	WHITE
T1	YELLOW	GOLD
T2	BLUE	SILVER
T3	GREEN	BLACK
MASS PRODUCTION	N/A	N/A

Suppliers must send to the Purchasing Projects area, the samples (which must be at least 30 pieces) together with the dimensional report, raw material certificate and in order to achieve clarity in the dimensions, the supplier is required to supply 5 parts with cuts of the piece by the most appropriate place according to the type of cuts applied, Longitudinal, transversal or oblique, half cut, cut by parallel planes, cut by successive planes, cut by concurrent planes, these must be identified according to “Diagram for delivering parts from new projects and/or engineering changes to Hi-Lex Mexicana”. The label must be adhered on the box in a visible point. Each piece must be marked over the zone which it was considered as reference to do the dimensional report and these ones must belong to a normal production. Also, the supplier must send the requested documentation based on PPAP Manual (latest edition) and the diagram for delivering parts from new projects and engineering changes.

Number from drawing

### PRE-PRODUCTION LABEL SKETCH

**(Filling instructions)**

Supplier: Must fill out all the requested fields

Supplier name \_\_\_\_\_  
 Part number \_\_\_\_\_ Component Description \_\_\_\_\_ Engineering Level \_\_\_\_\_  
 Quantity of pieces \_\_\_\_\_ Program/Project \_\_\_\_\_

(Please mark with X according reference)

**PROTOTYPE SAMPLES** → Deliver to Program Manager  
 **PPAP SAMPLE** → Deliver to Incoming Inspection.

(Fill out by HI-LEX)

Stage: \_\_\_\_\_ Internal Dimension / test   
 External test   
 Hi-Lex Analysis results

Supplier: If you have any doubt, contact your suppliers' developer or ASQA.

It is viable that these samples mentioned above, could be reviewed on their own facility (previous agreement).

Part number approved will be registered and in our MRP, BAAN system. In the case, the item was rejected, suppliers must do the necessary changes and resend samples to us.

#### 4.2 Mandatory requirements for PPAP documents

\*Before sending to HLM, supplier must ensure:

- A. All the information must be right according to Hi-Lex Mexicana requirements (meet all dimensions and notes from drawing).
- B. Hi-Lex Mexicana customers specific requirements.
- C. Meeting the 18 points of PPAP.
- D. It is mandatory upload all the PPAP information on time in our website: <https://www.hi-lex.com.mx/index.php/en/suppliers>.
- E. It is mandatory to have the PPAP approval before to the Start of Production (SOP).
- F. If the information doesn't meet Hi-Lex Mexicana requirements, suppliers would be penalized with a charge of 800.00 USD. In case of recurrence, the charge would be 1,600.00 USD.
- G. All the information must be delivered according to the latest version of the AIAG manuals.
- H. Having an annual revalidation plan of PPAP for every component. For revalidations, also applies points D, F and G.
- I. The information to be approved by ASQA or SQA according to PPAP class. See appendix H.

#### 4.3 PSW (Part submission Warrant)

This paperwork must include full name and number assigned to the component, weight, completion date, full details of company, level assigned according to the request, buyer assigned (category or project), results delivered, run at rate as per AIAG standards (share study that back-ups this information where include the capacity of our job assigned) and IMDS number until the approval in Hi-Lex Mexicana, name and signature of responsible. If you have any doubts, please address it with your main point of contact.

#### 4.4 Samples

Among samples for every event outlined in Hi-Lex nomination letter, the minimum quantity required to ship separately are 30 pieces however ASQA, SQA and category buyer may request an additional set. Samples must be identified by cavities (if applies 6 per cavity) and packed with a label indicating the part number and/or “Bar Code”.

These must be sent with PPAP otherwise the approval process part will be invalidated.

**Note:** *Supplier must preserve 30 samples of the same run test, during the whole life of the project.*

#### 4.5 Dimensional Report

Must show actual readings for all dimensions in specifications, full compliance as per design indicated for example (both sides, assembled, without assembly, closed, open, covered, etc.) must comply with all notes and be explained in the report, as well as standards norms which refers to testing MARKED IN DESIGN and / or when they requested by Engineer Product and / or ASQA.

The reports must express tolerance dimensions applied by design and the requested unit system. In the worst-case scenario, must be explained any equivalence. It should identify and list the critical characteristics required from design and/or defined by the Hi-Lex Mexicana cross-functional.

#### 4.6 Warranty Certificate (Product)

These documents must show tolerance measures applied by design, and the requested measurement system. It is valid to do equivalences, if the origin of the measuring instruments does not allow it. The warranty certificate (item) must be attached and identified on the PPAP; in the case that an electronic system does not allow it until the first shipment, it must be notified by a document.

#### 4.7 Raw Material Certificate

Certificates of raw material belonging from sub-suppliers must refer clearly to the material used on the design. Moreover, the certificate must offer support and traceability according to applicable standard. Example: Copy of the norm, comparative of specifications and results of mechanical or chemical tests etc.) These reports must show the tolerance measures applied by design and the requested measurement system is valid to do equivalences; for each PPAP requested it should be attached, no matter if it is about another similar component, for the characteristics applicable to the inspection receipt stated by the supplier. "Certificates must be no longer than 1 year of validity"

#### 4.8 Flowchart

Process Flow Diagram, also known as process flow chart, must describe all activities and all steps required in the manufacturing process of the mentioned item. The process flow diagram must be focused on and match with the control plan and the Process Failure Mode and Effects Analysis (PFMEA). Suppliers must identify and list all the critical characteristics required from design and/or defined by Hi-Lex Mexicana cross-functional team.

#### 4.9 PFMEA

It should be performed under the analysis of the part design and additional features provided by Hi-Lex Mexicana cross-functional team, as indicated by the AIAG in its Process FMEA section.

#### 4.10 Control Plan

Must fulfill all required points in the APQP, please not let spaces unfilled. This also must be a sequence extracted from the FMEA as a control to the process or product as it applies. The critical characteristics required from design and/or defined by the ASQA/supplier must be identified and numbered, as well as statistical controls. The minimum statistical controls required are: X-R graph, capacity test ( $CPK > 1.67$ ), normality test ( $P > 0.005$ ), the last one applies to Ford.

#### 4.11 Team Feasibility Commitment

This document must be requested from the purchasing department. Once completed, the supplier will return it to the buyer for review and approval. This Document must be signed and delivered together with the PPAP to comply with the quality-cost-delivery and capacity requirements, it must not exceed one year of validity.

#### 4.12 Special Characteristics

Suppliers will be notified about the Control Keys features or other customer designations by Hi-Lex Mexicana cross-functional team according to the form HFM – C – 017 Project beginning.

It is responsibility of the supplier to incorporate these characteristics in the control plans and related documents of the products provided to Hi-Lex Mexicana (FMEA). We are going to follow up with ASQA and Product engineer.



These characteristics must be on statistical control, according to the AIAG SPC (Statistical Process Control) characteristics manual. When the molds (cast) exceed 8 cavities the ASQA and/or the Supplier Development Manager will determine the number of samples to be delivered.

#### 4.13 Process capability requirements of special features

It is mandatory for suppliers to provide CPKs of any special features requested by Hi-Lex Mexicana to fulfill the requirements of our customers and maintain the current list of requested part numbers.

#### 4.14 In case of deviation

If any parts do not accomplish the specification for a valid reason, it could continue into mass production when the supplier perform a technical report where it demonstrates proper reasons to justify it. This should be focused on describing why these anomalies have taken place. This report will be elaborated in two phases, 1<sup>st</sup> one by the supplier and 2<sup>nd</sup> one by supplier and Hi-Lex Mexicana.

- |          |   |  |
|----------|---|--|
| I PHASE  | { | <ul style="list-style-type: none"><li>a) Tooling settings (parameters like pressures, loads, times, etc.)</li><li>b) Changes in material lots, new features of the sub-supplier.</li><li>c) Changes on work instructions (Visual aid, operation sheet, testing format, etc.)</li><li>d) Environment Analysis (heat, noise, moisture, transportation, packaging, etc.)</li><li>e) Use of alternative equipment (gauges, jigs, etc.)</li><li>f) Minor tooling settings (pin gages, bolts, punches, sensor, etc.)</li></ul> |
| II PHASE | { | <ul style="list-style-type: none"><li>g) Dimensional changes in tolerances measures must cover and demonstrate compliance with phase I before request a test run at Customer plant. This must be in two sections: the proposal and analysis (see example).</li><li>h) In case of major changes in tooling, the supplier must send two quotes as minimum to Hi -Lex Mexicana for evaluation.</li><li>i) Send new samples with the new condition for final validation</li></ul>  |

Failures to comply pre-production programs caused by errors on supplier prevention in physical parts deliveries required by the material analyst, as well as erroneous or missing PPAP information reviewed by the ASQA, the non-practice and the lack of a strong process of manufacturing which compromising

the quality and safe integrity of the people, or the lack of customer service, will be enough reason to apply penalties by Hi-Lex Mexicana.

#### 4.15 Mandatory references.

Suppliers must obtain and maintain current copies of the latest version of Automotive Industry Action Group (AIAG) publications such as:

- Advanced Product Quality Planning (APQP)
- Statistical Process Control (SPC)
- Measurement System Analysis (MSA)
- Failure Mode and Effects Analysis (FMEA),
- Product Part Approval Process (PPAP),
- IATF 16949 and/or ISO 9001 and ISO 14001 (latest version)
- Customer-specific Requirements (available at the IATF website)
- Sanctioned Interpretations (available at the IATF website)
- FNG Facility-specific standards/specifications
- CQI-Special Process Assessments, i.e., Plating, Coating, Welding, Heat-Treat, etc.

*Note: Suppliers and sub-suppliers that provide coated, heat treated, welded products to the customer's facility, need to ensure that their processes are evaluated and certified under the appropriate CQI standard. It is also the responsibility of the supplier and sub-supplier to submit their laboratory assessments and accreditations annually.*

Also, VDA norms:

- VDA 2 Quality Assurance for Suppliers
- VDA 4 Quality Assurance in the Process Landscape
- VDA 5 Capability of Measurement Processes
- VDA 6.3 Process Audit
- VDA 6.5 Product Audit

#### 4.16 Annual Validation

The supplier must submit an annual validation of PPAP with PSW level 2 or 4 to update process conditions and parts, or according to SQA requirement:

- PSW

- IMDS (Add in the PSW)
- The current production rate (Add in the PSW)
- Dimensional Report (sample parts)
- Raw material certificate (No longer than one year)
- Testing report (according to drawing)
- Schedule of preventive maintenance for tooling (If it applies)
- Form HFM-C- 017 Project beginning
- AUDI & VW projects: Quality agreement
- The supplier is responsible for uploading the information to the supplier portal at least one month before the due date. In case of not complying, you will be affected in its monthly score-card performance and economic penalties may be applied.

<https://www.hi-lex.com.mx/en/suppliers/>

## **5 Supplier evaluation system and QAV2: Production Process**

It is a requirement of Hi-Lex Mexicana that all suppliers be capable to demonstrate that their Quality Management System is in accordance with requirements detailed in IATF 16949:2016 and/or ISO 9001:2015 standard. In the worst-case scenario, suppliers must show any document that works as support of the certification process.

Considering our Environmental Policy, we recommend to our suppliers implement Environmental Guidelines applicable to products under ISO 14001:2015 standard. In the future, this standard will be mandatory, with previous notification from Hi- Lex Mexicana.

Suppliers certified on IATF 16949:2016 and ISO 9001: 2015 must demonstrate strong evidence that their certification bodies have performed follow-up and/or doing evaluation audits. They must also provide a copy of their accreditation certificate and keep this copy in the HI-LEX MEXICANA Purchasing Area. All suppliers, in this year, must carry out activities for the preservation of the environment, as well as look for the ISO 14001 certification and/or any other environmental certification which applies in your origin country.

### **5.1 Audit to Quality System and/or Production Process QAV2**

Hi - Lex Mexicana reserves the right to audit to its suppliers (even if they are certified) when any of the following situations occurs:

- a) Before assigning a new project

- b) According to results in Quality Reliability
- c) Continuous Quality problems (DMN's)
- d) When it is a Hi-Lex Mexicana and/or our Customer's requirement

The audit process (QAV2) is led by Purchasing and Quality areas of Hi-Lex Mexicana. The follow up to findings in the audit will be defined internally by responsible auditor in an equitable way to balance workloads. Delay in responses over corrective actions longer than 30 days have as a result a reduction of 5 points on the monthly score of the supplier.

At the beginning of a fiscal year, the Supplier must deliver to Purchasing or SQA its Annual Internal Audit Program and at the end of the fiscal year the Supplier must show the result of this Program. This information is auditable by Hi Lex Mexicana.

## 6 Specific Requirements from HI-LEX Mexicana S.A. de C.V.

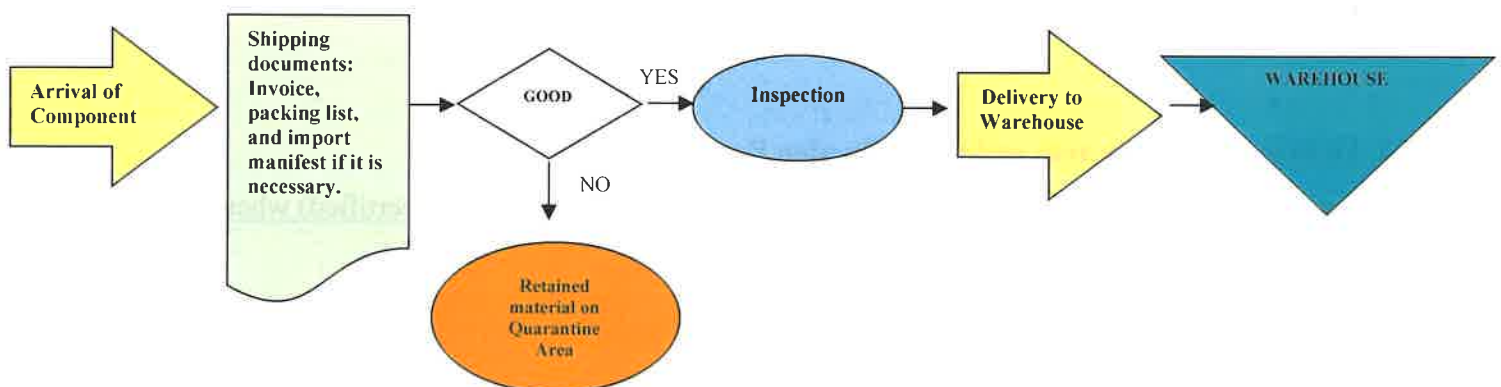
### 6.1 Quality certificates / receipt of materials at Hi-Lex Mexicana

All materials received are sent directly to our warehouses, for the convenience of Hi-Lex Mexicana, the inspection of their products is being carried out in incoming inspection area, but the quality of the materials is responsibility of the supplier. Hi-Lex Mexicana requires that each Lot of material be accompanied with a quality certificate.

This certificate must contain the results from its inspection and/or release for such Lot, for example: dimensional results, physical, chemical tests and/or special physical tests indicated in the drawing of part. This document must include the corresponding number and engineering level of the part with which the lot is being validated.

The dimensional characteristics to be verified shall be negotiated in advance between the ASQA Hi-Lex Mexicana quality area and the supplier and shall contain at least those indicated in the Instruction Sheet and Inspection Receipt sheet of Hi-Lex Mexicana (HFM-Q-041).

The internal process of receipt of materials at Hi-Lex Mexicana is as follow:



## 6.2 Information for the label of Raw Materials and Components received at Hi-Lex Mexicana

All the products (components and raw materials) received at Hi-Lex Mexicana must be identified with a “Bar Code” label with following information:

1. Supplier information
2. Part number (internal code used at Hi-Lex Mexicana) \*\*
3. Item Description
4. Quantity \*\*
5. Supplier production Date
6. Production Lot (Prefix 1T) \*\*

The supplier must meet the following special instructions:

1. Printing out code is 39
2. The lot information must include Prefix (1T)
3. The Label size must be adapted to product or package
4. Suppliers which have its label with that information, continues using its form
5. GP12 identification

Example:



<b>No. Parte (P)</b> <b>AV19115FA1</b>  <b>SPRING</b>	<b>Proveedor</b> <b>VMR005</b> <b>Proveedor S.A.</b> <b>Av. del Monte # 122 Parque Ind. Lomas</b> <b>76125 Queretaro, Qro. Mexico</b>
<b>Cantidad (Q)</b> <b>250</b> 	<b>Fecha de Producción</b> <b>18/07/14</b> <b>Lote (1T)</b> <b>127388</b> 

**Note:** The supplier must keep the information for 10 years and/or as directed by the OEM. If the commercial relationship is over, the supplier must deliver the information to HI-LEX MEXICANA.

### 6.3 Update drawings

Hi-Lex Mexicana category buyer is responsible for updating and delivering the components drawings at the last level to our suppliers as well as the specifications mentioned on the drawings.

### 6.4 Statistical Control Summary

The supplier must keep records of the statistical process control related with the critical characteristics, which should be available at any time to be reviewed by Hi-Lex Mexicana. In case that the supplier does not have this information, he should verify all inventories at Hi-Lex Mexicana to be sure that the quality of the materials is meeting the specification.

All these characteristics that does not meet a  $CPk \geq 1.33$  should be included in a Corrective action Program to meet the CPk requested in a short period of time. This information must be sent to the SQA. All suppliers should have all their processes under a consistent statistical control based on AIAG's SPC and all related manuals.

### 6.5 Engineering Deviation Request

The supplier is responsible to ensure the quality of all the material before the shipment to Hi-Lex Mexicana. If the supplier finds nonconforming material, the supplier can request a deviation to Hi-Lex Mexicana before the shipment. Hi-Lex Mexicana reserves the right to accept or not the deviation.

The deviations must be sent to the SQA or ASQA following the internal deviation request format together with a Corrective and Preventive plan (8 D's) to be analyzed.

**Note:** *This does not exempt the supplier from complying with its delivery requirements. The application does not imply that it should be accepted.*

### 6.6 Packing and Shipment Identification

Products must be packaged and shipped to Hi-Lex Mexicana providing the necessary protection for their transportation, handling and storage.

All material delivered to Hi-Lex Mexicana must have its packaging standard previously approved by Hi-Lex Mexicana ASQA what ensure product integrity. Material must also have the production lot number for its traceability. The packaging should match/correspond with the material shape, dimension and weight otherwise should be considered as a nonconforming product.

Each returnable container must be used only for the parts which are approved by Hi-Lex Mexicana. Any container damaged due to mismanagement will be deducted from the supplier invoices.

Each container must be identified with the following information:

- ✓ Hi-Lex Mexicana part number, including the engineering level
- ✓ Quantity (The supplier must ensure that it is physically the amount declared on the label)
- ✓ Lot number
- ✓ Bar code
- ✓ Number of deviations from quality/engineering Hi-Lex Mexicana (if it is applicable)
- ✓ Supplier name
- ✓ Identification of contention (If it is applicable, please mentioned the issue)

**Note: In case of not complying with the previous points, the provider will be sanctioned through an administrative penalty, depending on the impact of non-compliance**

### **6.7 Delivery, traceability, packaging and product identification**

Suppliers are responsible for the traceability of their products because facing a claim, Hi-Lex Mexicana only preserve the external label of the box and not individual label of components.

### **6.8 Invoicing**

All materials should be delivered to Hi-Lex Mexicana together with invoice/s and Purchase Order. If the supplier does not have this information together with the material, the material is not going to be received. Furthermore, suppliers must deliver the material respecting the Warehouse Schedules.

## **7 Continuous improvement**

### **7.1 Notification about changes on Business Name, Facilities and Lay-out**

It is mandatory that supplier notifies to Hi-Lex Mexicana purchasing department about any relevant change with its company:

- Change of business name
- Change of facilities
- Lay out modification

It is through form HFM-C.025 (Supplier Condition Change Request), to do the modification and approval about the notified change.

## 7.2 Engineering change request (ECR)

If the supplier suggests an Engineering or Process Change that improves the quality and safety of the product, reduces costs due to the use of new materials, shall be through an Engineering Change Request (ECR). This request will be analyzed and approved by a cross-functional team at Hi-Lex Mexicana.

Hi-Lex Mexicana expects its suppliers to come up with suggestions that improve product quality or safety, reduce costs and be for mutual benefit. The result shall be communicated to the suppliers through the category buyers.

## 7.3 Supplier cost reduction proposals

Taking an advantage of all the efforts made to improve the productivity and consolidate the purchasing amounts, Hi-Lex Mexicana expects that suppliers present to our purchasing department annual cost reduction ideas.

## 8 Defective material reports

When defective material is detected in our customers facilities or in Hi-Lex Mexicana, the supplier is informed via phone call and through the notification of Defective Material Notice (DMN HFM-Q.047). The disposition of the material must be confirmed by the supplier using this document in a period not longer than 12 hours. (12 X 12 program). **If you exceed this time, Hi-Lex Mexicana is going to resolve the disposition of the material, which must be respected by the supplier. This material might be reworked or returned to the supplier. If the problem occurs in our Customers facilities and the issue is supplier responsibility, Hi-Lex Mexicana will give immediate assistance to our Customer, requesting in some cases the suppliers' services only if it is necessary. All costs incurred due the issue like traveling expenses related to Hi-Lex Mexicana personnel and sorting material will be charged to the supplier through a debit note, as well as the costs incurred for Customer or Hi-Lex Mexicana production lines shutdowns.**

Once the supplier is informed of the existence of nonconforming material, the supplier must give full and timely service to Hi-Lex Mexicana (containment of the problem and material disposition). It is important to point out that it is not allowed to do sorting and reworks activities in Hi-Lex Mexicana facilities. In the cases that Hi-Lex Mexicana urgently needs these kinds of activities, we will do it with our staff charging the costs mentioned on below chart to the suppliers. Please consider that these activities could



be made by a third company. Therefore, Hi-Lex Mexicana will charge to the supplier the third company cost plus some administrative charges.

TABLE 2. SORTING CHARGES / MATERIAL DISPOSITION (USD / MAN/HR)			
CONCEPT	DOMESTIC	INTERNATIONAL	ASIA- Hi-Lex Mexicana
SORTING	\$20	\$40	\$20
FG INSPECTION	\$20	\$40	\$20
RE-WORK	\$30	\$50	\$30
SCRAP	APPLY THE UNIT PRICE + 50 USD per defect.		

**TABLE NOTE 2:** The recovery made by Hi-Lex Mexicana staff, can only be performed when resources are available.

TABLE 3. SHUTDOWNS CHARGES ON ASSY LINES (USD / MINUTE)					
LINE	Up to the min. 15	Up to the. 16 al 30	Up to the 31 al 60	Up to the 61 al 120	Change model for lack of materials
CHANGE ON SET-UP	\$59	\$62	\$65	\$72	\$59
INNER-OUTER					
CABLE ASSY LINE	\$46	\$49	\$52	\$59	\$65
W/R ASSY LINE	\$65	\$72	\$78	\$85	\$65

**If Hi-Lex Mexicana does not receive any material disposition from suppliers within the following 30 calendar days after the notification, we will have the right to take any decision about the material.**

All administrative charges arising from re-works authorized by the supplier (DMN) will be confirmed through Purchasing area to Finance area to apply the charges.

**8.1 Corrective actions report DMN (8 D's)**

All Quality issue that interrupts Hi-Lex Mexicana production program or jeopardize our deliveries to our customers must be answered by suppliers with a report of corrective and preventive actions following all

the necessary actions to solve the issue and avoid happening again in the future. The suppliers have 5 business days for shipping and closing them, depending how complex is the problem. For our customers complaints, the time is from 1 to 3 business days.

The supplier must respond in writing to the DMN and together with the evidence of corrective actions. Also, he has 30 days to give disposition of NG material. The final resolution must be made within 5 days. If a supplier requires additional time to respond, it must be requested in writing, addressed to the ASQA and/or SQA (according to each case), and include the action plan, requiring additional time with a timeline for implementation.

**When it is necessary, the supplier is required to complete a Corrective Action report for chronic or critical nonconformities following the Corrective and Preventive Actions form.**

**Note:** *The answer to the DMN must be answered in Spanish or English according to:*

A) If you are a national supplier:

- Spanish: When the complaint is internal to Hi-Lex Mexicana
- English: When the claim comes from one of our customers

B) International Supplier:

- English.

**8.2 Penalties**

The supplier that presents defective material, will receive and administrative charge from Hi-Lex Mexicana. In the same way, Hi-Lex Mexicana is going to apply charges on the following cases:

Release DMN	No material disposition answers	No answers to DMN	No close DMN on time
US\$400	US\$200	US\$200	US\$200

**8.3 Repetitive issues and Containment Levels (Controlled Shipping CS1 & CS2, Business on Hold)**

Every quality issue or failure modes variety in one or more-part numbers supplied, which could be chronic or presents repetitive incidences; with previous corrective action document implemented by the supplier, must be properly contained. The SQA is responsible of defining and notifying to the supplier

through containment levels letter. The supplier must follow the guidelines required by the SQA on the documentation, criteria, as well as the involved costs for each contingency level.

Hi-Lex Mexicana reserves the right to enforce contingency levels using internal/external resources. If suppliers are having these kinds of issues, Hi-Lex Mexicana could place the supplier in a Business on Hold status.

## **9. Internal audits**

### **9.1 Development of supplier quality management systems**

Hi-Lex Mexicana promotes the development of the quality management system of the suppliers, through the annual self-assessment sent to each of the suppliers that is available on the supplier portal.

It is the supplier's responsibility to upload it to the portal within a maximum time of 10 business days after your request with its respective evidence.

### **9.2 Additional customer quality audit requirements**

Suppliers must comply with Hi-Lex Mexicana's requirements of our customer visit and/or evaluation to supplier's facilities by verifying processes, components, materials and finished goods when Hi-Lex Mexicana requested, and it is responsibility of the supplier meet with the requested date.

Suppliers may be required to complete the annual assessment to the special requirements of the AIAG and other specific assessments of our customers.

Types of assessments may include:

- AIAG CQI-9 Special Process Heat Treat System Assessment
- AIAG CQI-11 Special Process Plating System Assessment
- AIAG CQI-12 Special Process Coating System Assessment
- AIAG CQI-15 Special Process Welding System Assessment
- AIAG CQI-17 Special Process Soldering System Assessment
- AIAG CQI-23 Special Process Molding System Assessment

## **10 Suppliers Reliability**

Hi-Lex Mexicana keeps reliability monthly reports of its suppliers. With base on them, the decision of continue, expand or end the business is taken. With the objective to evaluate the supplier performance,

<b>Manual Code</b> MCP-74.12	<b>Revision number</b> 26	<b>Approval date:</b> 21-JAN-2022	<b>Page</b> 28 de 40
---------------------------------	------------------------------	--------------------------------------	----------------------------

Hi-Lex Mexicana has the evaluation based on 8 items that allows us to measure the effort deployed in *Cost, Quality and Delivery*. The form is Supplier Performance Score Card:

- A) Delivery
- B) Quality (PPM'S)
- C) DMN'S per month
- D) Customer complains
- E) PPAP revalidation
- F) Self-assessment
- G) New projects
- H) Cost

**10.1 Performance Analysis**

The supplier's total score is the result of the average of monthly scores, as it is described below:

**Supplier Reliability Classification**

The results of the supplier's performance are classified in 5 categories (SUPPLIER PERFORMANCE STATUS):

**EXCELLENT (99.8 – 100 %) A**

Supplier meets IATF 16949:2016 requirements, all Hi-Lex Mexicana's specific requirements and reliability average score. If the suppliers keep this result for 12 consecutive months it will be considered as a distinguished supplier demonstrating a consistency on quality, deliveries and cost. Also, this supplier could be considered for new business in the short term.

**GOOD (97 – 99.79 %) B**

Supplier has shown that their quality system is working in compliance with the requirements of Hi-Lex Mexicana. The suppliers can keep current business with Hi-Lex Mexicana, and it could be considered for new business in the medium term.

**RELIABLE (87 – 95.99 %) C**

Suppliers who have problems on keeping the quality level required by Hi-Lex Mexicana. If the suppliers are having this kind of performance for 3 consecutive months, a plan of corrective actions in the medium term is going to be required by Hi-Lex Mexicana. This supplier is going to have conditioned its current contracts with Hi-Lex Mexicana. If the supplier status does not change, Hi-Lex Mexicana reserves the right to end the business relationship at the end of the contract and this supplier should not be considered for new business in future.

**NOT RELIABLE (0 – 86.99 %) D**

Supplier has shown minimum ability to meet all Hi-Lex Mexicana requirements. A corrective action plan should be submitted within a period of thirty days after being notified. Its current contracts are going to be conditioned. It will not have the opportunity to be considered for future business. Purchasing Area shall prepare an emergency plan to develop a new alternative source for the materials provided by this kind of supplier. If the supplier keeps the same kind of performance the next three months, Hi-Lex Mexicana reserves the right to end the business relationship.

Every month, your score card is uploaded in our website:

<http://proveedor.hi-lex.com.mx/WebProveedores/#no-back-button>

**11. Tooling evaluation owned by Hi-Lex Mexicana.**

The category buyers Area is going to request to all suppliers a Tooling Annual Program in which all the suppliers that have tooling and devices owned by Hi-Lex Mexicana, should confirm the status of each one. This information must be delivered on time, according to the scheduled due date.

As soon as the Tooling Annual Program is received, the Development Area could request to the suppliers some visit to the supplier's facilities to evaluate and verify the tooling and devices status. The Developer should take some pictures and make the tooling status report together with the supplier.

When the evaluation and verification is finished, the tooling annual program shall be adjusted, and the supplier should give to the suppliers' Developer a copy of the tooling status report. (See attachment F).

Once the verification is done, the tooling study program will be updated. Also, the original report about physical condition of the tooling be sent to purchasing area for its control and a copy will be delivered to the supplier.

The supplier should meet the PPAP revalidation according with the SQA request. On the other hand, in case that we have a tooling transfer, the documentation approval should be approved by the ASQA.

The supplier is responsible to do a report before starting the project or ship samples to Hi-Lex Mexicana notifying to the suppliers' Developer, the SQA and the ASQA (depends on the case), in case that the tooling does not meet the specifications required on the drawing. If the suppliers do not inform to Hi-Lex Mexicana about this issue, all the expenses generated are going to be charge to him.

Every time that we have an engineering change, the supplier should have records about it. For the tooling transfer the supplier should place an identification tag/mark to keep a traceability between previous supplier and the current one.

Each level in the piece the provider change must be considered in the records of the mold, turn in transfer of molds must be a mark of identification, in relation to the previous provider to be able to determine responsibilities and better tracking to the final product.

The supplier is responsible for the proper use and the maintenance of the tooling and device owned by Hi-Lex Mexicana. In addition, the supplier must keep records about the quantity of pieces produced and all the maintenance activities applied to the tooling. The supplier should report to the suppliers' category buyer the remaining tooling life annually, to apply the proper actions before the tooling life is over.

The tooling and devices owned by Hi-Lex must be identified properly as follows: "Property of Hi-Lex Mexicana".

## **X Glossary**

QMS. - Quality Management System

QAV. - Quality Audit Visit

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

ASQA. - Advanced Supplier Quality Assurance

SQA. - Supplier Quality Assurance

IMDS. - International Material Data System

CPK. - Process Capability.

DMN. - Defective Material Notice.

**Purchase order.** - It is the document in which Hi-Lex Mexicana states its commercial terms and conditions that are non-negotiable. This document is submitted to our suppliers by the Buyers reflecting our release requirements.

**Potential suppliers.** - All suppliers that are starting business relations with Hi-Lex Mexicana and the ones that are being reviewed and developed by our Purchasing Department. These suppliers do not have a firm commercial relation with Hi-Lex Mexicana.

**PPAP.** - Production Part Approval Process.

**PPM.** - Parts Per Million.

**TIMING (Program).** - Official document for following up any kind of issue.

**Mass Production.** - Components used directly in our ASSY lines.

**Purchasing Quality Assurance:** This is the supplier result of all the combined efforts (technical, commercial and human) to meet all the specifics requirements for Hi-Lex Mexicana.

**CS1.-** Controlled shipping level 1.

**CS2.-** Controlled shipping level 2.

**Business on Hold.** - Final level therefore from the CS1 and CS2 and other issues caused by the suppliers.

**BAAN ERP system**

**SOP.-** Start of production

## **XI Appendix**

### **Appendix A**

These documents are IATF 16949:2016 requirements and contain information mentioned on this Manual:

**\*\* APQP - (ADVANCED PRODUCT QUALITY PLANNING AND CONTROL PLAN)**

**\*\* PPAP - (PRODUCTION PART APPROVAL PROCESS)**

**\*\* PFMEA - (POTENTIAL FAILURE MODE AND EFFECTS ANALYSIS)**

**\*\* SPC - (STATISTICAL PROCESS CONTROL)**

**\*\* MSA - (MEASUREMENT SYSTEMS ANALYSIS)**

These documents are available on the AIAG, Automotive Industry Action Group and can be purchased on:

**AUTOMOTIVE INDUSTRY ACTION GROUP**

26200 Lahser Road, Suite 200

Southfield, Michigan 48034

Phone: (810) 358-3570

Fax: (810) 358-3253

Internet: <http://www.aiag.org>

**Appendix B.-** Opening file (HFM-C.005)

**Appendix C.-** Internal Deviation Request (HFM.Q.007)

**Appendix D** Check list PPAP

**Appendix E-** Supplier Condition Change Request (HFM-C.025)

**Appendix F.-** HLM pass through characteristics list

**Appendix G:** PSW Format

**Appendix H:** HFM-Q.189 Supplier PPAP Approval Guide

This Supplier Quality Manual and all the related documents should be available in all the Suppliers Productions Areas.

This Manual is Hi-Lex Mexicana property, the partial or total reproduction is prohibited. Only the Purchasing Director and the SQA of HLM could authorize any kind of changes on it.

Hi-Lex Mexicana documents are for Hi-Lex Mexicana and Sister Companies use. The suppliers are responsible to use the latest revision of this Manual.

The suppliers that received and used Hi-Lex Mexicana documents, are agreeing to assume any kind of responsibility to accomplish with the patents as well any kind of infringement of those patents too.

Web site: [www.hi-lex.com.mx](http://www.hi-lex.com.mx)

This Manual was reviewed by:

**Purchasing area**

Mr. Mario González, Mr. Oscar Rivera, Ms. Ana Luisa Granados, Ms. Dayana Páez,

Mr. Francisco Arana

**Quality area**

Mr. Rafael Reynoso



**Change control****Change**

	Annual review
--	---------------

**Approval**

Owner of the document: Responsible for development or updating.	
SUPPLIER QUALITY ASSURANCE (SQA CHIEF)	 MR. OSCAR RIVERA Name and signature
Responsible for approval: Head of Document Owner.	
PURCHASING DIRECTOR	 MR. MARIO GONZÁLEZ Name and signature
Approval: By quality direction.	
QUALITY DIRECTOR	 MR. RAFAEL REYNOSO Name and signature

Appendix B.- Opening file (HFM-C.005)

**HI-LEX** MEXICANA **COMMERCIAL TECHNICAL CARD**

Supplier's Number HI-LEX: \_\_\_\_\_ Evaluation date: \_\_\_\_\_  
 Section reserved by HI-LEX

---

**1. General information of supplier**

Company: \_\_\_\_\_  
 Complete Address: \_\_\_\_\_

Year of establishment: \_\_\_\_\_ Business activity: \_\_\_\_\_  
 Group of property: \_\_\_\_\_ Annual sales: \_\_\_\_\_  
 Total capital: \_\_\_\_\_ Year: \_\_\_\_\_ Currency: \_\_\_\_\_

---

**Branches and participants**

Company	Capital %	Sales	Number of employees	Activity	Currency	Year

*\*IF NECESSARY, ATTACH A SEPARATE DIRECTORY*

---

**Management staff directory**

Name	Position	Location	Telephone/cellphone	e-mail
Página 1				

---

Plans for expanding or constructing a new plant:  
 Yes       No      Belongs to a financial group  
 Yes       No

---

**TRADE UNION REPRESENTATIVE AND LEADER**

Name: \_\_\_\_\_ Office number: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Trade union: \_\_\_\_\_

Do you have any politic where it includes the DRC conflict-free sourcing:  
 Yes       No

*\*ATTACH THE REPORT OF CONFLICT MATERIALS*

---

**2. Financial Statement**       Financial statement       Financial audit report

*\*ATTACH EVIDENCE DEPENDING ON THE SELECTED BOX*

HILEX Compliance: \_\_\_\_\_

---

**Activity**  
 Note: The annual sales must be equal or greater to \$2,000,000.00 Million Dollars

Total sales	Forecast	2017	2018	2019	2020	2021	2022
Equal or greater	→	2000000	2000000	2000000	2000000	2000000	2000000

USD

## Appendix D Check list PPAP

ID	REQUIREMENT	DESCR	PPAP submission schedule												COMMENTS	DATE			
			27	28	29	30	31	1	2	3	4	5	6						
0	Check List Reviewed	Check list																	
1	Design Records	All the records must be approved with the approved list marks, design records must include special characteristics according to process VDA4 and Control Plan.																	
2	Manufacturing Change Controls	Approved																	
3	Customer Engineering Approvals	Approved																	
4	Design FMEA	Approved																	
5	Process Flow Diagrams	All operations must be included (Order receiving inspection in the internal production program, heat treat and Control Plan).																	
6	Process FMEA	Must include and be reviewed according with production process, special characteristics in the process, failure modes and effects analysis (FMEA) - (When applicable).																	
7	Control Plan	Control and presentation according with latest rules, including special characteristics in the production operation, failure and control according with drawing, control instructions related to design, FMEA and the status of process.																	
8	Manufacturing Control Instructions (MCI)	MCI - in - 1 (The set of applicable rules)																	
9	Dimensional Test Set up	According with drawing, all measure and limits must comply with specifications (Stamp in color).																	
10	Material / Performance Test Reports	Material Certificates must be signed by specific personnel, Notations present, Critical drawing dimensions and main characteristics. Use Material Certificates obtained by supplier free contents.																	
11	MSA Project Book	MSA completed for P1P in IRT																	
12	Qualified Laboratory Documentation	Approved																	
13	Reference Approval Matrix	Supplier must deliver a template for MSA form and if not supplying form.																	
14	Control Plan	Presented them in the purchasing area.																	
15	Material Samples	Material samples must be taken at the supplier in the quantity / Lot / lot pieces, your inspection MSA, Certificate of approval.																	
16	Drawing MSA	Approved																	
17	FIM	Approved																	
18	Inspection Standards	Approved																	
19	Specific Customer Requirements	It is the Manufacturer's obligation to identify such as the customer in the drawing.																	
20	Finality Analysis	Check the completion of all requirements requested by your and drawing.																	
21	Final Review	Approved																	
22	Final Approval	Approved																	
23	Final Completion Plan	Approved																	

Supplier Name & Signature


MSA

<b>Manual Code</b> MCP-74.12	<b>Revision number</b> 26	<b>Approval date:</b> 21-JAN-2022	<b>Page</b> 36 de 40
---------------------------------	------------------------------	--------------------------------------	----------------------------

# Instructions

- 1: Place the suppliers name.
- 2: Place the HLM part number. (if needed place the suppliers part number on parenthesis).
- 3: Project's name and model.
- 4: From the first time information sent date.
- 5: This is only for the PPAP L3 information (L1 and 2 wont be evaluated here). Scan all the documents. No photos from the documents allowed and remember place only the HLM part number in the documents.
- 6: ASQA place the review date.
- 7: Check all the documents included.
- 8: ASQA comments about the documents failures or missing information.
- 9: Due date for the reception of the corrections.
- 10: Include all the child parts and parents dimensions. OK is not a valid parameter.
- 11: No photos allowed and only Spanish or English translated.
- 12: PSW full filled with last signed date (Check attach for any doubts).
- 13: **IMPORTANT:** Until the 2<sup>nd</sup> review charges will be applied.
- 14: In every review must be sing with name and date from supplier and ASQA

## Appendix E- Supplier Condition Change Request (HFM-C.025)



**HI-LEX MEXICANA**

Date: \_\_\_\_\_

Folio HLM: \_\_\_\_\_

### SUPPLIER CONDITION CHANGE REQUEST

SUPPLIER	REASON OF CHANGE REQUEST				5. CHANGE FISCAL ADDRESS	Distribution After Approval
	1. FACILITIES	2. NEW TOOLING	3. COMPANY NAME CHANGE	4. LAY OUT		
Description / Change Reason:						
1.3.5	Required Documentation		Applied	Date:	Lead Time (Weeks)	
			YES NO			
1.3.5	Commercial Technical Card					Supplier development
1.3.5	ISO Certified (ISO 9000 or TS16949)					SOA
1.3.5	Banking Information					HR/PAE
1.3.5	Financial Statements					Quality
1.3.5	RFC (W9)					Finance
2	Tooling design copy					Supplier
1.4	Layout Copy					AUSA
1.2.3.4.5	PPAP	Nivel	<input type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/>			
1.2.4	Samples					
Total Lead Time (Weeks)						
Requested (supplier)						
Requirer Name and Signature		General Manager Name and Signature		Sales Name and Signature		
Supplier Development		Approval (HLM)		Purchasing Manager		
SOA						

YES

NO

## Appendix F.- HLM pass through characteristics list



### HLM pass through characteristics list

Pass Through Characteristics Definition:

Printed document is not controlled copy

Pass through characteristics are those as manufactured component by suppliers which ones are not used in Hi-Lex Mexicana assembly process, however they are used with the customer.

Item	Component name	Sketch	Pass Through characteristics
1	Casing cap		1. Gap 2. Minor Diameter 3. Major Diameter
2	Casing cap		1. Gap 2. Minor Diameter 3. Major Diameter
3	Eye end		1. Slot length 2. Slot width 3. Eye end width
4	Bushing		1. Total length 2. Major Diameter
5	Bracket		1. Tab length 2. Diameter 3. Tab width
6	Connector		1. Closing tabs 2. Length 3. Internal Diameter
7	Cap		1. Gap width 2. Distance 3. Width tab
8	Cap body - top		1. Diameter 2. Radius 3. Gap

Rev: 0	Desarrollado por: ELMORALBERTO	Fecha: 11/02/2016	Revisado por: Mariana Prada	Revisado por: Mariana Prada	Revisado por: Mariana Prada
			<i>Mariana Prada</i> 16/01/16	<i>Mariana Prada</i> 16/01/16	<i>Mariana Prada</i> 16/01/16

## Appendix G: PSW Format

Part Submission Warrant

Part Name: 13 1 Part Number: 6636849 2

Revision: 1 Drawing Number: 6636849 3

Engineering Change Level: 5 Date: 2021/01/17 4

Additional Drawing Changes: 5 Date: 2021

Latest Approved Level: 5 Weight: 0.0000

Customer Part Name: 5 Date: 2021

---

**ORGANIZATION MANUFACTURING INFORMATION**

Organization Name: 6

Department: 7

Street Address: 8

City: 9 Region: 10 Postal Code: 11 Country: 12

---

**CUSTOMER SUPPLIER INFORMATION**

Customer Name: 9

Customer Part Name: 10

Supplier Code: 11

Application: 12

---

**SYSTEMS & PRODUCTION**

Is this part a replacement part of a product?  Yes  No  No 12

Is this part a replacement part of a product?  Yes  No  No

Change to Update Construction Material

Supplier Material Change

Change to Tool Production

Production of Different Material

Other: 12

---

**SUBMISSION RESULTS**

This part is:  replacement part  repair part  new part  other 15

These results are used to determine:  Yes  No 15

---

**DECLARATION**

I hereby declare the accuracy of the information provided in this form. It is my responsibility to provide the correct information. I agree to provide the correct information. I agree to provide the correct information. I agree to provide the correct information. 14

Is each Customer Tool clearly tagged and numbered?  Yes  No  N/A

Customer Name and Address: 15 16

Part Name: 15

Title: 15

Signature: 15

Date: 16

Country: 16

Part Name: 15

Customer Name and Address: 16

NOTE: 17

- Place the complete description on the item
- It must be the HLM part number
- Place the last approved level on drawing
- Must be the last date on the drawing review
- Place the Engineering change level
- Place the COMPLETE organization and supplier information
- Place the complete organization and supplier information
- Place the complete organization and supplier information
- Place HLM ("Hilax America" isn't valid info)
- Place the complete buyers name
- Place the project's name. ("Automotive" isn't valid info)
- Place the complete IMDS number (ex: 6636849 / 1)
- Place the complete description (mold, cavity, production)
- Place the production rate
- Place the complete information and signature
- Should be date from the current year
- All the information must be from the last approved version from the HLM format and should be placed on ENGLISH

**Appendix H: HFM-Q.189 Supplier PPAP Approval Guide**

No.		PPAP Class	Responsible		Scope/Description	PPAP Level				
			Qual.	Purch.		1	2	3	4	5
1		Initial Submission	ASQA		New components/products.			X		
2		Engineering Change(s)	ASQA		Raw material change, specifications, testing and dimensions affecting the tooling.			X		
				SQA		Drawing with minor revision not affecting to the part and/or tooling (notes, tolerance optimization, part number, minor engineering level).	X			
3		Tooling: Transfer, Replacement, Refurbishment, or additional		SQA	Transfer/relocation of tools and/or process equipment to different buildings, facilities or sites.			X		
				SQA	Transfer/relocation of tools to other machines.		X			
				ASQA	Transfer/relocation of tools or processes to external service provider.			X		
				ASQA	Replacement of current tooling with new tooling (tooling life expired).			X		
				ASQA	New tooling with different supplier (PPV).			X		
				ASQA	Refurbishment of tools/spare tools.			X		
				ASQA	Additional tooling.			X		
			ASQA		Emergency relocations due to technical or logistic reasons (natural disasters, bankruptcy-chapter 11).			X		
4		Correction of Discrepancy	ASQA		Modification of tooling, process and sub-processes.			X		
5		Tooling Inactive > than 1 year	ASQA		Tooling not used to produce components.			X		
6		Change to Optional Construction or Material	ASQA		Different raw material not listed on drawing or different to initial approval.			X		
7		Sub-Supplier or Material Source Change	ASQA		Different sub-supplier and or relocation of sub-processes (painting, plating, heat treatment, re-process).			X		
8		Change in Part Processing	ASQA		Process to produce the component changed (example: from cold forming to machining).			X		
9		Parts Produced at Additional Location	ASQA		Current supplier location plus another production location.			X		
<b>Special cases</b>										
10		Annual validation		SQA	Components/parts under mass production.		X			
11		Bulk materials	ASQA		Resin, pigments, grease, oil, lubricants glue, tapes, special labels.		X			
12		Catalog parts	ASQA		Components produced as regular production for different customers and applications (listed on catalogs or brochures).	X				
13		Motors or confidential parts	ASQA		Electrical motors and/or confidential components (product samples and complete supporting data except confidential information as DFMEA, PFMEA, Control Plan).			X		
14		Service parts		SQA	Components, raw material for service parts.	X				
15		Change supplier name		SQA	Same supplier, machine, tooling, location, building, site, raw material, process, sub-processes, etc. and only change the name of the company.	X				
16		In-House tooling validation	ASQA		Approval of tooling before start mass production at HLM (before transfer tooling to HLM facilities) - PSW cover sheet - Samples from trials (same as dimensional report) - Dimensional report - Raw material certificate - Process parameters			X		
17		Product and parts delivered/provided by customer	ASQA		Product and parts delivered/provided by customer. Enter to HLM Receiving Inspection procedure and only notification to customer with no PPMs, performance affectation (create Informtive DMN only). Example: electrica motors.	X				