



**India Pistons Limited**  
(A Member of the Amalgamations Group)

# **SUPPLIER QUALITY MANUAL**



**4TH EDITION**

# **INDIA PISTONS LIMITED**



## **SUPPLIER QUALITY MANUAL**

**4<sup>th</sup> Edition – 08<sup>th</sup> July 2025**

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## FOREWORD

IPL's Supplier Quality Manual specially explains the activities, which are to be carried out by Approved / Prospective Suppliers of IPL for meeting the goal of Quality, Consistency, continual improvement and Cost Reduction. These activities are part of **IATF-16949:2016** and IPL requirements, which all suppliers of IPL must fulfill to these requirements.

In support of the strategy, our effort is directed towards selecting the best suppliers based on capability and performance. Once selected, our goal is to work with these suppliers to develop a strong, long-term, structured relationship with them.

We expect our suppliers to be committed to a ***ZERO - DEFECT APPROACH*** and to demonstrate this commitment through:

- Delivering fully conforming parts or products,
- On time delivery,
- Rigorous adherence to approved processes and requirements,
- Pro-active risk management.

Through focused efforts, we have started to build our future highly capable supplier base.

As an IPL's supplier, it is expected that the requirements in this manual will be passed on to sub suppliers to ensure that quality is consistent through the entire supply chain. Collaborating with our suppliers as business partners is essential, for us to develop and produce attractive products and services to our customers.

This document is intended to serve as a reference for better understanding our requirements and your role in the shared responsibility to deliver the highest quality & safety. We are convinced that you will support us in making our objectives a reality.

**CORPORATE QUALITY**  
**INDIA PISTONS LIMITED**



**INDIA PISTONS LTD.**

## **VISION STATEMENT**

To be the first choice of all engine manufacturers for cylinder components of internal combustion engines through pursuit of excellence in technology & customer satisfaction

## **MISSION STATEMENT**

- To provide innovative product solutions to meet and excel the stringent customer demands
- To ensure excellence in manufacture and provide cost effective products to service all its customers
- To achieve growth and profitability on a continuous basis to satisfy all its stake holders

# QUALITY POLICY



**India Pistons Limited** is committed to deliver Quality and Cost competitive products on -time, every time to enhance Customer satisfaction,

## **This is achieved through**

- State of the art Technology and Processes
- Robust QMS to fulfill Customer requirements and expectations
- Motivating the Employees by Total Employee Involvement
- Due consideration to Human Safety and Environment

Thus, making IPL as the most preferred choice to Customers.



**Gautam Venkataramani**  
Whole Time Director

Date : 04<sup>th</sup> April 24



# ENVIRONMENTAL POLICY



WE AT INDIA PISTONS LTD, ARE COMMITTED TO PROTECT AND MAINTAIN A CLEANER ENVIRONMENT BY IMPLEMENTING RESOURCE CONSERVATION, POLLUTION CONTROL AND WASTE MANAGEMENT PROGRAMS.

TOWARDS THIS ENDEAVOR, WE SHALL STRIVE TO,

- CONSERVE NATURAL RESOURCES SUCH AS AIR, WATER AND ENERGY.
- PREVENT ENVIRONMENTAL POLLUTION BY GOOD 'REDUCE, REUSE AND RECYCLE' PRACTICES.
- COMPLY WITH ALL APPLICABLE LEGAL AND OTHER REQUIREMENTS.
- ENHANCE AWARENESS IN EMPLOYEES AND INTERESTED PARTIES.
- CONTINUALLY IMPROVE THE ENVIRONMENTAL PERFORMANCE.

Chairman & Managing Director :  
Date : 01.02.2016



INDIA PISTONS LTD



## **NON-DISCRIMINATION POLICY**



It is the policy and commitment of India Pistons Limited, that it does not discriminate on the basis of race, age, color, sex, national origin, physical or mental disability, or religion.

### **Equal Employment Opportunity**

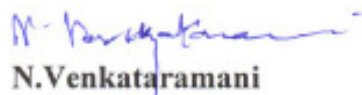
India Pistons Limited, is committed to a policy of equal employment opportunity and does not discriminate in the terms, conditions, or privileges of employment on account of race, age, color, sex, national origin, physical or mental disability, or religion or otherwise as may be prohibited by federal and state law.

Any employee, board member, volunteer or client who believes that s/he or any other affiliate of India Pistons Limited, has been discriminated against is strongly encouraged to report this concern promptly to the Management.

### **Discriminatory Harassment**

Harassment or intimidation of a client, staff person or guest because of that person's race, age, color, sex, national origin, physical or mental disability, or religion is specifically prohibited and may be grounds for termination. Harassment and intimidation includes abusive, foul or threatening language or behaviour.

India Pistons Limited is committed to maintaining a workplace that is free of any such harassment and will not tolerate discrimination against staff members, volunteers or agency clients. Issues of discriminatory treatment, harassment, or intimidation on any of these bases should immediately be reported to the management and, if substantiated, prompt action will be taken.



**N.Venkataramani**

Chairman & Managing Director

## **ANTI-SLAVERY AND HUMAN TRAFFICKING POLICY**



### **Statement of the Policy**

India Pistons Limited strictly prohibits employees/contract employees from engaging in human trafficking related activities. These activities include engaging in sex trafficking, destroying or otherwise denying access to an employee's identity, using misleading or fraudulent practices to recruit employees such as failing to disclose key terms and conditions of employment, using recruiters that do not comply with local labour laws, charging employees recruitment fees or slavery.

This policy applies to all persons working for us including employees at all levels, directors, officers, interns, agents, contractors, external consultants, and business partners.

### **Disciplinary Action**

Any violation of this Policy could result in disciplinary action, up to, and including, removal from a contract, reduction in benefits, termination of a business relationship, or termination of employment.

Ultimate responsibility for the prevention and prevention of modern slavery rests with the Company's leadership. The board of directors of the Company has overall responsibility for ensuring this policy and its implementation comply with our legal and ethical obligations. Managers at all levels are responsible for ensuring those reporting to them, understand and comply with this policy and are given adequate and regular training on it and the issue of modern slavery.

In summary, team member should approach either their manager/supervisor or equivalent senior leader or the Head of Human Resources and Development. If the matter is extremely serious then a director of the Company should be approached. The nature of the complaint will determine the Company's next course of action

The Anti-Slavery and Human Trafficking Policy will be reviewed annually by the Company's Board of Directors and may be amended from time to time.

  
N. Venkataramani

Chairman & Managing Director




## **SAFETY & HEALTH POLICY**



1. To endeavour to carry out the manufacturing activities of our Organisation, including those supporting functions, in a manner consistent with the requirement of Safety and Health of all persons at work within the organisation, as well as the need to prevent, wherever possible or to control, within permissible limits, pollution of the work environment as well as the outside environment.
2. To continuously strive to provide a safe place of work, plant and equipment and material which would be safe enough for use.
3. Continuous education and training at all levels on "Safety & Health".
4. In furtherance of the safety and health objectives, to liaise, co-operate and work with all agencies, Government as well as professional, devoted to the cause of promotion of Safety, Health and well being of persons at work.
5. To develop a sense of commitment and involvement of all employees in all activities for creating an awareness on "Safety & Health" with emphasis on PREVENTION OF ACCIDENTS.

Chennai.

Date : 01.09.2014

  
[GAUTAM VENKATARAMANI]  
WHOLE TIME DIRECTOR

### 3. HOW TO REFER THIS MANUAL

The purpose of this manual is to communicate IPL requirements to all our suppliers to ensure the quality of supplied parts. All our Supplier related transactions are done through Oracle Fusion, a single server environment across all the plants of IPL.

Suppliers have been provided access through our intranet services called **i-supplier portal**. This is compatible with Oracle Fusion and suppliers can view Purchase Order details, schedules, payments etc. along with other initiatives like monthly feedback on Supplier rating, rejection and other communications are through official mails.

#### 3.1. DOCUMENT ACCESS

The latest valid version of this Supplier Quality Manual is posted on the IPL website & i-supplier portal. (Link - <https://fa-enrm-saasfaprod1.fa.ocs.oraclecloud.com> )

To access the manual, log on to the i-supplier portal using your login ID (Vendor code) and password as provided. After logging on, go to the “Supplier Manual” folder using the following path: Home > Documents > Supplier Quality > Supplier Quality Manual.

#### 3.2. AIAG Documents

All AIAG specific documents referenced can be ordered from [www.AIAG.org](http://www.AIAG.org).

#### 3.3. SUPPLIER FEEDBACK

Feedback concerning this document is welcomed. Should you have any improvement / suggestion about this document, please send an e-mail to the following address: [sqa@indiapistons.com](mailto:sqa@indiapistons.com)

## **4. INTRODUCTION**

IPL's Supplier Quality Manual has been developed for suppliers to understand the requirements of IPL regarding Quality Management Systems and ensure quality of supplied parts.

This Supplier Quality Manual defines IPL general quality related requirements for development, production, verification of delivered parts and services and is in line with IATF 16949:2016. The Purchasing and Quality strategies in this Quality Manual are a policy where we expect a commitment from our suppliers to achieve zero defects. Suppliers demonstrate this commitment through:

- Deliveries ON-TIME IN FULL (OTIF)
- Delivery of fully conforming products and services
- Rigorous adherence to approved processes and requirements
- Pro-active risk management
- Continual improvements

IPL knows suppliers have a high influence on the total performance. Therefore, suppliers must ensure that sub-suppliers also work according to this Supplier Quality Manual and meet the requirements. It is required that suppliers have a Quality Management System (QMS) in place preferably according to the international quality standard IATF 16949:2016, but minimum ISO 9001 in the current revision is required (as stated in the IATF 16949:2016 manual).

### **4.1. PURPOSE**

The IPL's Supplier Quality Manual has been developed to assist suppliers understand the expectations of IPL regarding quality management systems and meet the terms of IPL purchase agreement, engineering drawings and specifications.

### **4.2. SCOPE**

This Supplier Quality Manual is applicable to activities related to procurement of Raw Materials / Components required for regular products under manufacturing, but does not apply to materials / items which do not impact the manufacturing process at IPL .

### 4.3. RESPONSIBILITY

Suppliers always use the latest revision of this Supplier Quality Manual and seek clarification from their IPL contact when necessary for items that are not identified or completely clear in the manual. IPL will continually improve and revise the contents of this manual.

### 4.4. RECORDS

Suppliers shall maintain records of all required documents of this Supplier Quality Manual and shall be made available to IPL team upon request. Retention period for the records as mentioned below and all the documents to be maintained as live.

Sl no	Records	Retention period
1	Inspection reports	1 Year
2	PDI reports	1 Year
3	Layout Inspection reports	2 Years

### 4.5. GENERAL REQUIREMENTS

IPL quality requirements stated in this document are general in nature. Quality requirements for specific parts are specified in product specifications and order documents.

#### 4.5.1. QUALITY REQUIREMENTS

Suppliers supplying products / components / etc., are expected to be IATF 16949:2016 Certification. Suppliers are expected to be certified to minimum ISO 9001:2015 with an aim to comply with IATF 16949:2016 QMS requirements. IPL will carry out periodic assessment / audit of supplier's Quality Systems and manufacturing processes. Supplier is expected to carry out improvements in time bound manner as identified during such audits. Supplier is expected to proactively take suitable actions to make systems robust enough to ensure that non-conforming parts are prevented from escaping supplier's premises.

Supplier shall inform IPL about changes in their QMS registration status, such as new certificate, suspension, revocation or switchover to another certification body.

#### **4.5.2. IATF REQUIREMENTS**

Supplier shall have documented quality systems as per IATF requirements. As IPL initiative, IPL may demand its supplier quality management system up-gradation from ISO: 9001 to IATF 16949:2016.

- All 10 clauses are to be implemented.
- Automotive approach
- Product safety
- Risk Management
- Continual improvements
- Competency

etc. are few major points to be focused during transition phase.

#### **4.5.3. LABORATORY REQUIREMENTS**

##### **Internal Laboratory**

There shall be a defined and systematic Laboratory Scope for the laboratory that includes its capability to perform the required inspection, test or calibration services and they must be traceable up to NABL (National Accreditation Board for Laboratories).

This laboratory scope shall be included in the quality system documentation. Accreditation to ISO/IEC 17025 is recommended for internal laboratories but not mandatory. The laboratory shall specify and implement, as a minimum, technical requirements for -

- Adequacy of the laboratory procedures
- Competency of laboratory personnel
- Testing procedures of products

##### **External Laboratory: -**

There shall be a defined and systematic Laboratory Scope for the laboratory that includes its capability to perform the required inspection, test or calibration services. The laboratory shall be accredited to ISO/IEC 17025 or NABL (National Accreditation Board for Laboratories).

#### **4.5.4. APPLICABLE STATUTORY AND REGULATORY REQUIREMENTS**

IPL demands the supplier to comply with all applicable statutory and regulatory requirements.



#### **4.5.5. HEALTH AND SAFETY REQUIREMENTS**

Supplier shall adhere to following health and safety requirements:

- Design of manufacturing process shall be such that, it has minimum potential risks to employees.
- Use of PPE (Personal Protective Equipment's) like helmets, goggles, safety shoes.
- Ensure availability of Emergency exits, Emergency hooters and Fire extinguishers etc.

##### **4.5.5.1 SAFETY PREPAREDNESS (FIRE RISK ASSESSMENT)**

Ensure safe and sound working environment in the factory premises. Suppliers shall ensure his plant self-assessment on Fire Risk by his own to have prevented, detect of potential risks to the safety of all employees & assets. IPL has the authority to audit suppliers on Fire Risk Safety Preparedness at any time.

#### **4.6 SPECIFIC REQUIREMENTS**

In many cases, this manual will not sufficiently describe all of the specific requirements of IPL. The IPL specific requirements shall be identified during the Advanced Product Quality Planning (APQP) activities. If there are any questions regarding these specific requirements, the supplier shall contact the respective Purchasing / Supplier Quality Department of IPL.

#### **4.7 CHANGE MANAGEMENT**

Supplier shall ensure effective system for change management. Once a part is approved, request for changes in sub supplier, location, method, process, delivery method & packaging etc. that may affect fit, form or function of parts shall be recorded and informed to IPL through 4-M Change Notification. IPL holds the right to hold or reject the material if this process found to be skipped.

Suppliers must also make sure for their own entire supply chain. The supplier will need to notify the change and ultimately IPL will determine if a PPAP is required. Changes shall not be implemented prior to the receipt of written approval from IPL. VERBAL REQUESTS WILL NOT BE ACCEPTED.

#### **4.8. PRODUCT SAFETY**

IPL manufacturing products are Piston, Rings & Gudgeon pin. It is of utmost importance that our products are reliable in their applications. Product safety must therefore be the highest priority throughout the complete supply chain.

#### **4.9 RESOURCE MANAGEMENT**

Supplier is expected to optimal utilization of resources in effective and efficient way like manpower, financial, goods, equipment's. Supplier shall establish well defined procedure for resource management. It shall include -

1. Preservation and conservation of natural resources like water, electricity etc.
2. Well trained and qualified personnel.
3. Well defined training procedure including On Job Training.

#### **4.10 MATERIAL AND PROCESS SPECIFICATIONS**

Supplier must produce IPL products of the specified material and to the process specifications. The understanding shall be based on IPL approved drawings or standards. Any deviation from the required specifications is not acceptable otherwise/unless there is no written approval from IPL.

#### **4.11. IPL CODE OF CONDUCT**

The supplier shall implement IPL Code of Conduct (COC) requirements at supplier's operations and is applicable to all his dealings relevant to his relationship with IPL. Supplier as a business partner of IPL shall not only subscribe to IPL policy but also support, promote and propagate them in all possible manners.

#### **4.12 PROPERTIES BELONGING TO IPL**

The Supplier shall exercise care with property (it includes materials, components, tools and equipment, premises, intellectual property and personal data) belonging to IPL while it is under the supplier's control or being used by the supplier.

The Supplier shall identify, verify, protect and safeguard IPL's property provided for use or incorporation into the products and services.

When the property of IPL is lost, damaged or otherwise found to be unsuitable for use, the supplier shall report this to IPL and retain documented information on what has occurred.

#### **4.13 PRESERVATION**

It includes identification, handling, contamination control, packaging, storage, transmission or transportation, and protection. Preservation shall apply to materials and components from suppliers from receipt through processing, including shipment and until delivery to/acceptance by the IPL.

In order to detect deterioration, the organization shall assess at appropriate planned intervals the condition of product in stock, the place/type of storage container, and the storage environment.

The supplier shall use an inventory management system to optimize inventory turns over time and ensure stock rotation, such as "first-in-first-out" (FIFO). Suppliers shall comply with preservation, packaging, shipping, and labeling requirements as provided by IPL

#### **4.14 CALIBRATION**

Only calibrated Gauges and Instruments are to be used. All gauges and instruments are to be identified, their frequency, method and acceptance criteria are to be established and the calibration is to be traceable to National / International standards. If traceability could not be established, check method is documented and complied with.

A master list of all Gauges and measuring instruments is to be maintained by the suppliers. Instruments are to be calibrated at the defined intervals for their full operating range before use.

All the Gauges are to be calibrated on or before the due dates either inhouse or at any other external calibration centre. The calibration records are to be maintained and to be made available to IPL when required. Any default will result in the supplies be quarantined.

Out of calibration situation – Refer the exhibit “Out of calibration Report”

Whenever the results of calibrations are found to be unsatisfactory, out of calibration report is to be raised. Gauges that are prone to rust shall be smeared with a film of oil or white petroleum jelly or anti-corrosive chemical while in storage.

#### **4.15 PDI REPORT**

Pre delivery inspection must be performed on all parts, product and materials with dimensional / metallurgical requirements to determine conformance with all relevant design record specification. All dimensional characteristics and specifications as noted on the design record and control plan are to be listed and recorded. Suppliers must produce Material test reports along with every dispatch. Blanket statements as OK or NOT OK will not be accepted. Indicate the data of design record, change level and any authorized engineering change document not yet incorporated in design record to which the part was made.

It is the supplier's responsibility to meet all applicable specifications. Any results that are outside specifications are cause for the supplier not to submit the parts and /or documentation. Every effort has to be made to correct the process so that all design record requirements are met. If the supplier is unable to meet any of the requirements, IPL is to be contacted for further instructions. The product which was measured has to be identified properly and sent to IPL for verification and approval.

## 5. SUPPLIER SELECTION PROCEDURE

The procedure explains the processes and steps involved in supplier selection, approval of supplier, performance monitoring and evaluation process in IPL using section of IATF 16949:2016 requirements. The word “Supplier” talks Sub contractors, Job workers, Material suppliers, Service provider.

### 5.1 SCOPE

This procedure is applicable to activities related to Procurement of Raw materials, Child parts (components) for regular products under manufacturing, Service provider. But does not apply to the materials / items which do not affect the quality of IPL products.

### 5.2 SUPPLIER SELECTION PROCESS

Identify the prospective supplier (Ensure that at a minimum, the supplier registered to ISO 9001) and carried out **Initial assessment** to know about the capacity & capability of the supplier / service provider, to verify whether the requirements of IPL can be met or not. Assessment should be done as per below, for

- ✓ Raw material supplier / Child parts supplier – A6-C1-R6 (**Annexure 1**)
- ✓ Small scale supplier / Sub-contractor – A6-C1-R6A (**Annexure 2**)
- ✓ Traders / Dealers – A6-C1-R6B (**Annexure 3**)

Ensures assessment & approval by Purchase & Quality team members. In case of Authorized Dealers of reputed manufacturers, ensures validity by obtaining dealership certificates issued by the manufacturer. Obtains approval from customer in case of contractual agreement. Updates the capabilities in case of changes to earlier assessment conditions and ensures continuing capability. For customer recommended sources, proceed to sample evaluation stage after supplier registration stage. The assessment results should be categorized as per below

Assessment score	Assessment result	Judgement
$\geq 75$	Selected	Can proceed to supply sample
61 - 74	Re audit to be planned / Hold	Action plan received to improve the capacity & capability – Re audit to be planned
$\leq 60$	Rejected	Reject

Based on result the supplier will be classified as Capable / Not capable. If capable further process will takes place and incase of the supplier is not capable, it should be communicated.

Once selected sample purchase order [indicating NS-SAMPLE (NEW SOURCE)] is released along with the item specification sheet to supplier to provide samples. The item specification document are clearly indicates drawing and other additional requirement if any in the supplies.

After sample approval the supplier (Direct material / Raw material) is planned for onsite Process and System audit. The audit process is based on the supplier certification status.

- ✓ System audit - ISO 9001 Suppliers – A6-C1-R8 (**Annexure 4**)
- ✓ System audit - Non-ISO 9001 Suppliers – A6-C1-R8A (**Annexure 5**)
- ✓ System audit - IATF 16949 Suppliers – A6-C1-R8B (**Annexure 6**)
- ✓ Process audit - Component supplier – A6-C1-R8C (**Annexure 7**)
- ✓ Process audit - Heat treatment supplier – A6-C1-R8D (**Annexure 8**)

Audit type	Assessment score	Assessment result	Judgement
System audit	Approved	$\geq 80\%$	Green – Can be add as approved supplier
	Restricted approval	70 – 79 %	Yellow – Action plan to be received and re-audit to be planned
	Rejected	$< 70 \%$	Reject
Process audit	Action plan with evidence of corrective action to be received for all NOT OK questions.		

#### Audit score criteria

1. If the overall score is  $> 80\%$  the supplier is in green zone.
2. If the individual score is  $\leq 1$ , corrective actions to be submitted by the supplier.
3. YELLOW and RED status of overall results require corrective actions.
4. Review of corrective action may be done on site or via E-mail, at the auditor's discretion.

### 5.3 SUPPLIER PPAP REQUIREMENTS

A Supplier / Sub-contractor shall provide PPAP documentation for approval during the following situations:

- ✓ Supply of new Part or Product
- ✓ Development of New Supplier for existing part
- ✓ Change of Manufacturing Site
- ✓ Product modified by an Engineering Change (for specifications or materials)
- ✓ Process Change (different from initially approved Control Plan)
- ✓ Any other significant change's – Differed from the earlier PPAP approval.
- ✓ Product produced after the tooling has been inactive in production for 12 months or more.

Applicable for the following category suppliers / sub-contractors:

- ✓ Raw material supplier
- ✓ Finished component supplier
- ✓ Semi-finished component supplier
- ✓ Fine boring sub-contractors
- ✓ Heat treatment sub-contractors

Raw Material	Finished component	Semi-finished component
Pure Aluminium	Circlips	Pin blanks
Aluminium alloy	Springs & Latches	Rings blanks
Steel bars for Gudgeon pin	Rings	Semi-Finished rings from
Pig iron	Gudgeon pins	RMU
	Liners	
	Inserts	

All the PPAP documents should submit as per latest **AIAG manual formats** or otherwise IPL should specify.

## PPAP Requirements matrix

Sl. No	Description	Raw material supplier	Finished component supplier	Semi-finished component supplier	Heat treatment service provider	Fine boring sub-contractor
1	Design records	NA	NA	NA	NA	NA
2	Engineering Change Documents, if any	NA	NA	NA	NA	NA
3	Customer Engineering Approval, if required	NA	NA	NA	NA	NA
4	Design FMEA	NA	NA	NA	NA	NA
5	Process Flow Diagram	Applicable	Applicable	Applicable	Applicable	Applicable
6	Process FMEA	Applicable	Applicable	Applicable	Applicable	Applicable
7	Control plan	Applicable	Applicable	Applicable	Applicable	Applicable
8	Measurement System Analysis	NA	Applicable	Applicable	NA	NA
9	Dimensional Results	Applicable	Applicable	Applicable	NA	Applicable
10	Material, Performance, Test Results	Applicable	Applicable	Applicable	Applicable	NA
10A	Microstructure specimens / photographs / Tensile specimen	Applicable	Applicable	Applicable	Applicable	NA
11	Initial Process Study	NA	Applicable	Applicable	NA	Applicable
12	Qualified Laboratory Documentation	Applicable	Applicable	Applicable	Applicable	NA
13	Appearance Approval Report(AAR), if applicable	NA	NA	NA	NA	NA
14	Sample Product	Applicable	Applicable	Applicable	Applicable	Applicable
15	Master Sample	Applicable	Applicable	Applicable	Applicable	Applicable
16	Checking Aids	Applicable	Applicable	Applicable	Applicable	Applicable
17	Records of compliance with customer specific requirements, if any	Applicable	Applicable	Applicable	Applicable – Process validation	NA
18	Part submission Warrant (PSW)	Applicable	Applicable	Applicable	Applicable	Applicable
19	Other's if any	NA	NA	NA	NA	NA

Note :

1. Sl. no 1,2,3 & 4 – Is not applicable if the component is IPL design
2. Not applicable for proprietary manufacturing products (Eg- Pig iron, Pure Aluminum)

## **5.4 VERIFICATION AND ACCEPTANCE OF EXTERNALLY PROVIDED PRODUCTS**

The Raw material / Component / Child parts are inward to IPL, once it confirms to the quality / drawing requirements. Verifies the supplier's inspection reports and the data provided and as per the receiving inspection plan of IPL, Raw materials / Components / Child parts, are undergoes inspection activity to verify the quality and other requirements. If it is not fulfilling the requirements the items get rejected and generate ARCA to return goods back to suppliers.

## **5.5 INFORMATION TO EXTERNAL PROVIDERS**

IPL is being ensure the adequacy of requirements prior to their communication to the external provider, and it is being communicate to external providers its requirements for:

- a) the processes, products and services to be provided
- b) the approval of:
  - 1) products and services
  - 2) methods, processes and equipment
  - 3) the release of products and services
- c) competence, including any required qualification of persons
- d) the external providers' interactions with IPL
- e) control and monitoring of the external providers' performance to be applied by IPL
- f) verification or validation activities that the organization, or its customer, intends to perform at the external providers' premises.

IPL shall pass down all applicable statutory and regulatory requirements and special product and process characteristics to their suppliers and require the suppliers to cascade all applicable requirements down the supply chain to the point of manufacture.

## **6.1 SUPPLIER PERFORMANCE EVALUATION**

Suppliers of IPL is being monitored on monthly basis to assess their performance by Vendor rating. The key factors for calculating vendor ratings are

- ✓ Quantity
- ✓ Quality
- ✓ Delivery
- ✓ Service rating
- ✓ Premium freight
- ✓ Customer complaint



The vendor rating for Raw materials suppliers will be calculated as per the work instruction (**Annexure 9**) and rating method for others (i.e., Child part supplier / Component supplier / Subcontractors / Consumable suppliers) will be calculated as per the work instruction (**Annexure 10**). And the same will be communicated to all by the respective buyer.

## 6.2 SECOND PARTY AUDIT'S

Onsite Second party audits are conducted as per the Annual audit plan. Qualified internal auditors of IPL will conduct this onsite audit in the standard audit questioner format as mentioned above. (**Refer Annexure's of 04 to 08**).

Supplier category	Audit type	Frequency
Direct (Child part / Component suppliers / Subcontractors)	System audit	2 Years
Raw Material – Local supplier		2 Years
Raw Material – Imported / Proprietary item		NA
Direct (Child part / Component suppliers / Subcontractors)	Process audit	1 Year
Heat treatment supplier		1 Year

Criteria of Audit score and supplier status is same as discussed in supplier selection process. The frequency of audit is reviewed interim of any additional requirements raised periodically.

## 6.3 CONTROL OF SPECIAL CHARACTERISTICS

Suppliers shall identify special characteristics specified in IPL drawing. If not provided in drawing, it is the sole responsibility of supplier to identify these characteristics.

These characteristics must be incorporated in PFD, Control Plan and PFMEA and action plans to be decided for the same. Suppliers must have to achieve more than 1.33Cpk, in case of not achieved put Poka-Yoke or 100% Inspection for Special Characteristic.

## 6.4 CONTROL OF SPECIAL PROCESSES

Supplier shall establish a documented system to control 'Special Processes' like heat treatment, casting, phosphating and protective coatings etc.

Where outsourced processes are used, the supplier must retain full responsibility for ensuring that the work performed meets all specified quality requirements.

## 6.5 CONTROL OF SUB-SUPPLIERS

Suppliers shall have effective controls and monitoring over their sub-suppliers. Suppliers have the responsibility for managing all Process and Process Approval for their Sub-suppliers.

Also, Supplier has to conduct regular Audits at certain frequency in order to improve & develop their Sub-supplier & to meet the Quality objectives of complete Supply Chain.

**In any case, Supplier have the full responsibility for  
Quality Assurance for their Sub-suppliers.**

IPL and its customers reserve the right to directly onsite assess sub-supplier's processes.

## 6.6 INTERNAL AUDITING

Supplier shall conduct internal audits at planned intervals to determine effectiveness of Quality Management System. Records of the audits and their observations with actions shall be maintained. Internal audits shall cover Quality Management System Audit, Process Audit and Product Audits.

Internal audits shall cover all processes, activities and shifts, Products and shall be scheduled according to an Annual Plan.

## 6.7 CONTROL OF NC PARTS AND SUPPLIER CORRECTIVE ACTION (CAPA/8D)

The supplier shall have processes and systems in place to prevent shipment of non-conforming products to IPL facilities. For non-conforming products supplied to IPL, including those that reached at IPL's customer, the Supplier must cover all costs to correct the non-conformance.

If product is found to be non-conforming at IPL as Lot or Line Rejection / Customer / Warranty complaints, the supplier is expected to provide the resources necessary to contain, evaluate, sort and / or scrap the non-conforming product.

In the event of a quality issue related to a supplier's products, the supplier will be required to provide a written corrective action report (CAPA/8D) within 7 (seven) days.

The details of non-conformance shall be communicated to the supplier by e-mail, when IPL detects non-conforming product. The supplier's initial response including containment plan, shall be provided to IPL SQA team within 24 hours (one working day) from the date, the supplier receives notification of the non-conformance.

IPL and the supplier shall determine if the product can be inspected to remove defects from the "lot" that has been contained. It will be determined whether product is sorted on site or returned to the supplier. If it is

determined that inspection alone cannot detect the defect, the product will be returned to the supplier or scrapped as agreed. If the product is needed for urgent production at IPL, the supplier shall send his Inspection Team to IPL for inspection or agree to the use of a third-party inspection with the cost of inspection borne by the supplier.

A written corrective and preventive action (CAPA/8D) must be sent to the IPL SQA team within 7(seven) days.

Supplier shall implement all the action written in CAPA/8D within the specified time at their end and regularly monitor the effectiveness for the same.

**IPL or its customers reserve the Right to check and verify at Supplier end the implementation and effectiveness of the action taken against any Quality issue raised in past at any point of time with or without prior information.**

## **6.8 MATERIAL AND PROCESS/ PRODUCT DEVIATION**

A Supplier shall not knowingly ship products that deviate from the drawing, specification limits or Design intent without prior written authorization from the IPL. If such a condition exists, the Supplier may raise a concession note to IPL, in writing, to allow shipment of the product under a written nonconformance deviation.

The written request shall be submitted through IPL along with following information –

- Part Number and latest engineering change Note
- Quantity of parts affected
- Specifications involved
- Statistical analysis of the non-confirming characteristic(s), as applicable
- A statement of the requested deviation
- The containment plan to be implemented
- Corrective / Preventive action to be taken along with the timeline for implementation.

If requested by the IPL, the Supplier must send samples of such nonconforming items to IPL for evaluation. The cost of shipping, inspection, and testing to determine the potential acceptability of such product will be charged to the Supplier.

## **6.9 LAYOUT INSPECTION**

Supplier shall submit layout inspection report (as per specifications declared in IPL drawing -

- While submitting samples (for Measurement Alignment)
- While submitting PPAP lot
- When there is any change in material, machine, method or location (as per IPL demand)
- As and when required by IPL or its customers

## **6.10 HANDLING, PRESERVATION, STORAGE AND INVENTORY**

IPL requires that all material shall be clean and free from any kind of contamination including chips / debris etc. Supplier shall arrange such kind of arrangement that no material is placed on shop floor directly. Supplier shall ensure rust, dust, dirt and damage free preservation and storage of parts.

Supplier shall preserve the material at all stages of process in such a way that material does not get affected by atmospheric conditions or any other reasons for deteriorating the quality of the material or product.

Supplier shall ensure the Inventory level as per the guidance of IPL Purchase Department and FIRST IN FIRST OUT (FIFO) throughout the whole process.

## **6.11 IDENTIFICATION AND TRACEABILITY**

Product traceability is IPL and its customer's requirement. Suppliers shall have to introduce an effective system to incorporate identification and traceability in their system along with a documented procedure. Suppliers must provide unique identification of product batches / lots or individual component / parts as required. The components should be traceable up to the raw material.

## **6.12 CONTINGENCY PLAN AND RISK ASSESSMENT**

Supplier shall develop a contingency plan for potential catastrophes disrupting deliveries to IPL and inform immediately (on the same day) in the event of an actual disaster.

Contingency plan shall be made available to IPL (as per Supplier has to assess & make contingency plan on the following Risk –

- Capacity
- Capability
- Legal, Financial & Costing
- Infrastructure,
- Logistics
- Manpower shortage
- Key equipment failure's / Utility interruptions
- Cyber attacks
- Natural Disaster etc.

## ANNEXURE – 1

<b>India Pistons Ltd</b> <b>A6-C1-R6 / Rev02</b>		<b>Date</b>							
<b>SUPPLIER / SUB-CONTRACTOR INITIAL ASSESSMENT FORM</b>									
<b>Organisation Name:</b>  <b>Vendor Code:</b> <b>Address:</b>  <b>Name of Owner/ Director:</b> <b>Mobile</b>  <b>Name of Operating/Plant Head</b> <b>Mobile</b>  <b>Contact Person</b> <b>Mobile</b> <b>Office Landline No</b>  <b>Email:</b>  <b>License No.:</b>				<b>Assessed By:</b>  <b>Persons Contacted:</b>  <b>GST No.:</b>  <b>ECC No:</b>  <b>Excise range:</b>  <b>Excise Division:</b>  <b>Excise Commissionarate:</b>  <b>PAN NO.:</b>					
<b>A. GENERAL FACTORS</b>				<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>SCORE</b>
1	Proximity								
2	Communication Facilities								
3	Experience								
4	Customers Served								
5	Power Facilities								
6	Capacity Availability								
7	Man Power								
8	Industrial Relations								
9	Design and development capabilities								
10	Volume of Automotive business								
11	Customer service								
12	Business continuity planning								
13	EMS Certification status								
<b>B. PURCHASING</b>									
1	Quality of his Vendors								
2	Stocking Policy								
3	Transportation / Logistics								
4	Storage facilities								
5	Method of Packing								
6	Identification of Material								
7	Issue Control								
8	Raw Matl. Purchasing & Test Procedures								

<b>C. MANUFACTURING &amp; MAINTENANCE</b>							
1	Manufacturing Lead Time						
2	Batch Size						
3	Process Capability						
4	Qualified / Experienced Operators / Tech. personnel						
5	Manufacturing technology & Machines Condition						
6	Process Control						
7	Layout & House keeping						
8	Maintenance Facilities						
9	Change management process						
<b>D. QUALITY CONTROL</b>							
1	Certified Vendor						
2	Vendor Rating						
3	Availability of Quality Control Equipments						
4	Calibration						
5	Inspection Procedures						
6	Procedure to handle Rej / Rework & Scrap						
7	Environmental Compliance						
<b>E. FINANCIAL</b>							
1	Payment Terms						
2	Excise Benefits						
3	Inventory Turnover Ratio						
4	Turnover / Assets Ratio						
5	Financial Strength & Stability						
<b>Overall Score</b>							
<b>CONCLUSION :</b>							
Recommended / Not Recommended::							
Scope of Supply:							
Note :							
1.If the Overall score is $\geq 75\%$ - Selected							
2.If the Overall score is $<75\%$ to $> 60\%$ - Re-audit to be planned based on the action plan							
3.If the Overall score is $\leq 60\%$ - Rejected							
4.If the section C & D score is $\leq 50\%$ - Corrective actions to be submitted by the supplier							
Signature of Assessor(s)				Head of Materials			
Date				Date			

Data Collection on General Points		
<b><u>List of Customers</u></b>		
<b>Customers</b>	<b>Component</b>	<b>Value</b>
<b><u>Power</u></b>		
	<b>in KVA</b>	
Total M/c Load		
Permitted Demand		
General Load		
Generator capacity		
<b><u>Capacity</u></b>	<b>Volume / Dimension</b>	<b>No of Shifts</b>
Installed Capacity		
Operating Capacity		
<b><u>Manpower</u></b>	<b>Nos</b>	<b>Average Experience &amp; Qualification</b>
Management Members		
Staff		
Permanent Workers		
Total		
Temporary		

Data Collection On Purchasing		
Part Nos	Average Schedule	Vendors
<b><u>Inventory Norms Followed:</u></b>	No of Days	
"A" Category Items		
"B" Category Items		
"C" Category Items		
<b><u>Stores Area :</u></b>		
Square feet/Metres		
Material handling M/C Used		
<b><u>Others:</u></b>		



[illegible]

Data Collection On Quality Control	
Certificate Received	IATF16949:2016 / ISO9001:2015
	ISO 14001:2015 , ISO45001:2018
Certification Body Name	
Year of Certification	
Valid upto	
Awards From Customers	
Rating Detail by their Customers	
<b>Inspection Facilities:</b>	
List of Instruments / Equipments	Is it Periodically Calibrated / NABL Accrediated Calibration source
<b>Rejections / COPQ</b>	
Process Rejection ( in %)	
Final Rejection (in %)	
Customer Rejection ( in PPM)	
Warranty Rejection ( in PPM)	
Cost of Poor Quality ( in % to Sales)	
<b>Scrap Handling:</b>	
Whether Scrap returned to customers	
Scrap disposal cycle in Days	
Automation in scrap handling	
<b>Enviornmental Compliance</b>	
Check Supplier has Commitment on Waste management / energy consumption and Carbon footprint reduction activities etc	

## ANNEXURE – 2











<b>India Pistons Ltd</b>		Chennai - 600 001	
<b>A6-C1-R6A</b>		<b><u>SMALL SUPPLIER / SUB-CONTRACTOR ASSESSMENT</u></b>	
Date :			
<b><u>I. ORGANISATION INFORMATION</u></b>			
Name of the Organisation :			
Nature of Business: <input type="checkbox"/> Manufacturing <input type="checkbox"/> Job Work <input type="checkbox"/> Trading <input type="checkbox"/> Others (specify)			
Category : <input type="checkbox"/> Proprietary <input type="checkbox"/> Partnership <input type="checkbox"/> Pvt Ltd.			
Name of the Chief Executive :		Designation :	
TNGST(Equivalent) No.:		CST No.:	
Central Excise Regn. No.:		SSI Regn. No.:	
Excise Range:		Division:	
Excise Commissionarate:			
Address : Office		Persons Dealing with IPL	
Fax:		email :	
Mobile:		Mobile:	
Address : Factory		Persons Dealing with IPL	
Fax:		email :	
Mobile:		Mobile:	
email:		email:	
<b><u>II. PLANT INFORMATION</u></b>			
Area in Sq.metre:		Plant Capacity Installed :	
Covered:		Plant Capacity Can be Spared to IPL:	
Uncovered:		Utilised :	
Turnover (Rs.) Last Year (200 - 200 ):		Previous Year (200 - 200 ):	
Nature of Department Set-up & Man power:			
Manufacturing	Quality	Procurement	Administration
Others if Any	Others if Any		
<b><u>III. CUSTOMER PROFILE</u></b>			
Name of the Customer		Turnover (Rs.)	
Manufacturing / Supply Range		Manufacturing / Supply Range	
Manufacturing / Supply Range		Manufacturing / Supply Range	
Manufacturing / Supply Range		Manufacturing / Supply Range	
Manufacturing / Supply Range		Manufacturing / Supply Range	
Manufacturing / Supply Range		Manufacturing / Supply Range	

<b>India Pistons Ltd</b> <span style="float: right;">Chennai - 600 001</span>				
<b>A6-C1-R6A</b> <span style="float: right;"><u><b>SMALL SUPPLIER / SUB-CONTRACTOR ASSESSMENT</b></u></span>				
Date :				
<b>IV MATERIALS SOURCING</b>				
Type of Material	Source			
<b>V. MACHINERY &amp; INSPECTION FACILITIES (Enclose the Details)</b>				
1 List of Machinery (Description, Year of Manufacture, Specification, Qty etc.,)				
2 List of Inspection / Testing Facilities (Description, Year of Manufacture, Specification - Range, LC, Calibration Status & Qty etc., )				
<b>VI. TRANSPORT FACILITIES</b>				
<input type="checkbox"/> Own Transport Facilities ( Specify)	<input type="checkbox"/> Hired Transport			
<b>OBSERVATION &amp; COMMENTNS OF THE ASSESSORS:</b>				
Name & Signature:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> </table>			
Date :				
<b>COMMENTS OF HEAD MATERIALS:</b>				
<input type="checkbox"/> Can be considered for Development for the Scope indicated  <input type="checkbox"/> Cannot be considered for Development	Scope :    Signature : Date :			
<b>COMMENTS OF HEAD QUALITY ASSURANCE:</b>				
<input type="checkbox"/> Can be Developed  <input type="checkbox"/> Cannot be Developed	Instructions if any :    Signature: Date:			

### ANNEXURE - 3

<b>India Pistons Ltd</b> <b>A6-C1-R6B</b>		Chennai - 600 011	
<b><u>TRADER PROFILE</u></b>			
Date :			
Name of the Trading Agency :			
Name of the Chief Executive :		Designation :	
TNGST(Equivalent) No.:	CST No.:	SSI Regn. No.:	
Central Excise Regn. No.:	Excise Range:	Division:	
Excise Commissionerate:			
Address :		Persons Dealing with IPL	
Fax:		email :	
Mobile:		Mobile:	
email:		email:	
<b>Items Under Consideration: (enclose Dealership Certificates from Manufacturer)</b>			
Sl.No	Description	Manufacturer	Dealership
<b><u>Customer Profile</u></b>			
Sl.No	Item Supplied	Customer	
<b>Comments of the Assessor:</b>			
Date:			
Signature:			
<b>Comments of Head Materials :</b>			
The following items can be procured:			
Sl.No	Description	Manufacturer	
Date :			
Signature :			

**ANNEXURE – 4**

 <b>A6-C1-R8 / Rev02</b>																	
<b><u>SYSTEM EVALUATION RECORD (ISO 9001 Certified Supplier)</u></b>																	
<b>Date :</b> _____																	
<b>Supplier Name :</b> _____																	
<b>Address :</b> _____																	
<b>Vendor code :</b> _____																	
<b>Supply Scope :</b> <b>Raw Material / Finished component /</b> _____																	
<b>Certificate status :</b> <input type="checkbox"/> ISO 9001 <input type="checkbox"/> IATF 16949 <input type="checkbox"/> ISO 14001 <input type="checkbox"/> OHSAS 18001 <input type="checkbox"/> Others (specify) _____																	
<input type="checkbox"/> First time Assessment <input type="checkbox"/> Special Audit based on Issue or Complaint <input type="checkbox"/> Surveillance Audit as per Plan																	
<b><u>Earlier performance</u></b> Grade : _____    Date : _____ Evaluated by : _____																	
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;"><b><u>Evaluation / Re-evaluation status</u></b></th> <th style="width:10%;"></th> <th style="width:10%;"><b>Result</b></th> <th style="width:40%;"><b>Grade</b></th> </tr> </thead> <tbody> <tr> <td>APPROVED (80% and above)</td> <td align="center"></td> <td align="center"><input type="checkbox"/></td> <td align="center">A</td> </tr> <tr> <td>RESTRICTED APPROVAL (70-79%)</td> <td align="center"></td> <td align="center"><input type="checkbox"/></td> <td align="center">B</td> </tr> <tr> <td>REJECTED (Below 70%)</td> <td align="center"></td> <td align="center"><input type="checkbox"/></td> <td align="center">C</td> </tr> </tbody> </table>		<b><u>Evaluation / Re-evaluation status</u></b>		<b>Result</b>	<b>Grade</b>	APPROVED (80% and above)		<input type="checkbox"/>	A	RESTRICTED APPROVAL (70-79%)		<input type="checkbox"/>	B	REJECTED (Below 70%)		<input type="checkbox"/>	C
<b><u>Evaluation / Re-evaluation status</u></b>		<b>Result</b>	<b>Grade</b>														
APPROVED (80% and above)		<input type="checkbox"/>	A														
RESTRICTED APPROVAL (70-79%)		<input type="checkbox"/>	B														
REJECTED (Below 70%)		<input type="checkbox"/>	C														
<b>Next Audit Due on :</b> _____																	
Auditor Name & Signature	Auditor Name & Signature	Auditor Name & Signature															
Insert tick mark (✓) as appropriate																	

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
1.0 QUALITY PLANNING							
1.1	Availability of Current pertinent drawings / item specifications / POs - Verify and record the evidence						
1.2	Availability of PFMEA; Control plans; PFD; WI's/SOP; Quality Plan - Is it current & valid? Verify and record the evidences						
1.3	Check whether the control plan cover all stages of operation. (Raw material to dispatch at customer end)						
1.4	Verify it includes of the following & effective implementation; a) Verification of job setup; b) First off/Last off part validation; c) Measurement & monitoring control for special characteristics; d) In-process monitoring controls e) reaction plan for non conforming product.						
1.5	Whether the control plans are revised based on shipment of non-conforming product / changes in the manufacturing process / customer complaint CAPA / risk analysis and revision history maintained						
1.6	Verify whether supplier involves IPL in change of process and design engineering changes in production and communicates to IPL, if any.						
1.7	Whether the operator work instruction's available with indication of special characteristics as appropriate and it is displayed at all the processes;						
1.8	Whether the work instructions are presented in local language for better understanding by the personnel responsible for the process						
1.9	Whether appropriate visual acceptance standard's / boundary samples are available as appropriate						
1.1	Is there evidence of appropriate and adequate operator training and Skill matrix available including the setting personnel						
1.11	Verify whether Contingency plans are available and implemented.						
1.12	Verify the process for continual improvement. Record the evidence for continual improvement / Kaizen						
Sub total							

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
2.0 SUPPLIER CONTROL							
2.1	Verify whether the incoming items quality are ensured; Verify the incoming inspection records and its effectiveness						
2.2	Does the supplier have adequate purchased product controls in place for sub-tier suppliers, e.g., assessment, metrics, terms & conditions.						
Sub total							
3.0 PROCESS CONTROL							
3.1	Verify the job setup approval records and its effectiveness (initial run; material changeover; job change; new set-up).						
3.2	Check whether first off / last off approval inspection is carried out. Verify the record. (whether the approval parts are retained if applicable)						
3.3	Verify the in-process monitoring is carried out as per control plan, records are maintained and actions are implemented as per reaction plan and effective						
3.4	Verify whether tool-life/die-life are monitored as per specifications - also verify the tooling management process for effectiveness						
3.5	Is process capability and performance maintained at levels originally approved by IPL (Cp/Cpk > 1.33)						
3.6	Verify the process (Machine list) equipment list are available; check whether all are covered						
3.7	Whether critical spares are identified and stocks maintained for process equipment's.						
3.8	Verify whether the machine maintenance checklist is available for all the machines & is it displayed and updated.						
3.9	Verify the Preventive / predictive maintenance carried out as per plans and records maintained. Evidence its effectiveness						



Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
3.1	Verify whether the products are clearly identified throughout the stages of production.(RM stage/in-process/FG stage)						
3.11	Verify the storage condition of Raw materials, child parts; Finished Goods - Verify for retrieval; preservation; FIFO; Periodical validation effectiveness						
3.12	Verify the fulfilment of traceability requirements (also customer specific if any).						
3.13	Check the list of poke yoke (Error proofing methodologies) as applicable.						
3.14	Verify whether all the error proofing methods are documented in the respective risk analysis (FMEA) and test frequencies in the control plan.						
3.15	Verify whether there is a reaction plan for failure of error proofing devices and implementation.						
3.16	Process capability studies - Check for the plan and coverage all the special characters as required by IPL and updated.						
3.17	Check whether the capability studies take place after significant changes (Such as tool change, machine breakdown) - record the evidences						
3.18	Verify whether the reaction plans as per Control Plan are implemented when the acceptance criteria's are not met, and records maintained.						
3.19	Measurement system analysis - Plan & records						
3.2	Verify the plan covers all the measurement types						
3.21	Verify whether the Gauges/Instruments/Masters/ Equipment's used for measurement and monitoring are calibrated to fulfil the customer requirements. Verify whether the external calibration sources used are accredited to NABL requirements.						
3.22	Ensure that the calibration plan covers all the gauges, measuring & test equipment's used.						
3.23	Whether the temporary changes of process controls are documented if any. Verify the evidence.						
3.24	<b>Envirnmental compliance</b> Check Supplier has Commitment on Waste management / energy consumption and Carbon footprint reduction activities etc						
Sub total							

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
4.0 PART APPROVAL							
4.1	Verify Approval for manufacturing products - PPAP - whether it meets the customer requirements (IPL)						
4.2	Verify whether a documented process exists describing review (within 10 days), distribution and implementation of customer engineering changes and effectively implemented.						
Sub total							
5.0 CONTROL OF NON CONFORMING PRODUCT							
5.1	Verify the Control of non conforming product - as per customer specified process						
5.2	Verify whether the unidentified / suspect products are Controlled as non-conforming products.						
5.3	Verify whether the manufacturing personnel's are trained to identify the containment of suspect and non conforming product						
5.4	Verify whether there are instructions addressed in the Control Plan to handle the reworked product including re-inspection and implemented effectively.						
5.5	Verify whether there is traceability to identify the reworked products and customer notified if required by customer.						
5.6	Verify the evidence of Disposing the reworked product - Which includes disposition qty, disposition date and traceability						
5.7	Customer notification - Verify the Evidence of communication if non confirming products are shipped to customer						
5.8	Verify the Customer authorization for concession - Prior to further processing whenever the products / process are deviated from the currently approved .						
Sub total							
6.0 INTERNAL AUDITING							
6.1	Whether the internal audit programme covers the entire Quality management systems including System audit, Mfg. process audit and product audits.						
6.2	Evidence of reviewing internal audit plan frequency when changes in processes, internal & external non conformities & customer complaints.						

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
6.3	Whether the internal audit results are reviewed in the management review.						
6.4	Check whether all the manufacturing processes are covered in the audit plan						
6.5	Whether it cover all shift's and appropriate shift handing over						
6.6	Product audits are being carried out;						
Sub total							
<b>7.0 NON CONFORMITY AND CORRECTIVE ACTION</b>							
7.1	Verify whether a documented process for problem solving (e.g. 8D) available to analyse customer complaints and internal non-conformities. Check whether systematic actions are in place.						
7.2	Check whether the implemented corrective actions are updated in the necessary documents (i.e. PFMEA & Control plan)						
7.3	Verify whether the analysis of non conforming products and corrective actions include field failures & returned products from customer						
Sub total							
<b>8.0 MANAGEMENT RESPONSIBILITY</b>							
8.1	Whether the customer representative is identified - with responsibility and authority to ensure that customer requirements are met.						
8.2	Whether the personnel responsible for product quality requirements are identified and documented - Verify whether the personnel available across the shifts with authority to stop production / shipment to correct the quality problems.						
8.3	Quality objectives at all functions available & consistent with the quality policy - verify and record the evidences						
8.4	Verify whether the Process effectiveness & efficiency are monitored and reviewed in management review.						
8.5	Verify whether the management review takes place at defined intervals and record the evidences.						
Sub total							

SI No	Assessment Criteria	Actual score	Maximum score	% of score
1	QUALITY PLANNING		36	0%
2	SUPPLIER CONTROL		6	0%
3	PROCESS CONTROL		72	0%
4	PART APPROVAL		6	0%
5	CONTROL OF NON CONFORMING PRODUCT		24	0%
6	INTERNAL AUDITING		18	0%
7	NON CONFORMITY AND CORRECTIVE ACTION		9	0%
8	MANAGEMENT RESPONSIBILITY		15	0%
<b>Total score :</b>		<b>0</b>	<b>186</b>	
1	Number of Not Applicable questions		0	
<b>Agreegate score % :</b>		<b>0.00%</b>		

Individual Score	Assessment
3	System in place; implemented and found effective
2	System defined and documented, implemented but minor/few deviations observed.
1	System defined and documented, implemented but major/many deviations observed-(Probable shipment of NC product)
0	Systems not defined and (or) no evidence of implementation


**Note:**

1. If the individual score is  $\leq 1$ , corrective actions to be submitted by the supplier.
2. If the overall score is  $> 80\%$  the supplier are in green zone.
3. YELLOW and RED status of overall results require corrective actions. Review of corrective action may be done on site or via E-mail; at the auditor's discretion.

AUDITOR'S (IPL Team)			AUDITEE'S (Supplier Team)		
Signature	Name	Dept	Signature	Name	Dept
Signature	Name	Dept	Signature	Name	Dept
Signature	Name	Dept	Signature	Name	Dept
Date:					

ANNEXURE – 5

 <b>A6-C1-R8A / Rev 02</b>																	
<b><u>SYSTEM EVALUATION RECORD (Non ISO 9001 Supplier)</u></b>																	
<b>Date :</b> <span style="border: 1px solid black; display: inline-block; width: 150px; height: 20px;"></span>																	
<b>Supplier Name :</b> <span style="border: 1px solid black; display: inline-block; width: 90%; height: 20px;"></span>																	
<b>Part name :</b> <span style="border: 1px solid black; display: inline-block; width: 45%; height: 20px;"></span>	<b>Part no :</b> <span style="border: 1px solid black; display: inline-block; width: 45%; height: 20px;"></span>																
<b>Address :</b> <span style="border: 1px solid black; display: inline-block; width: 90%; height: 20px;"></span>																	
<b>Auditee :</b> <span style="border: 1px solid black; display: inline-block; width: 90%; height: 20px;"></span>																	
<b>Vendor code :</b> <span style="border: 1px solid black; display: inline-block; width: 90%; height: 20px;"></span>																	
<b>Supply Scope :</b>																	
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> First time Assessment  <input type="checkbox"/> Surveillance Audit as per Plan         </div> <div> <input type="checkbox"/> Special Audit based on Issue or Complaint         </div> </div>																	
<b><u>Earlier performance</u></b>																	
<b>Grade :</b> <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	<b>Date :</b> <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>																
<b>Evaluated by :</b> <span style="border: 1px solid black; display: inline-block; width: 90%; height: 20px;"></span>																	
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"><b><u>Evaluation / Re-evaluation status</u></b></th> <th style="width: 10%;"></th> <th style="width: 20%;"><b>Result</b></th> <th style="width: 30%;"><b>Grade</b></th> </tr> </thead> <tbody> <tr> <td>APPROVED (75% and above)</td> <td align="center"><div style="width: 20px; height: 15px; background-color: green; border: 1px solid black;"></div></td> <td align="center"><span style="border: 1px solid black; display: inline-block; width: 40px; height: 20px;"></span></td> <td align="center">A</td> </tr> <tr> <td>RESTRICTED APPROVAL (60-74%)</td> <td align="center"><div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black;"></div></td> <td align="center"><span style="border: 1px solid black; display: inline-block; width: 40px; height: 20px;"></span></td> <td align="center">B</td> </tr> <tr> <td>REJECTED (Below 60%)</td> <td align="center"><div style="width: 20px; height: 15px; background-color: red; border: 1px solid black;"></div></td> <td align="center"><span style="border: 1px solid black; display: inline-block; width: 40px; height: 20px;"></span></td> <td align="center">C</td> </tr> </tbody> </table>		<b><u>Evaluation / Re-evaluation status</u></b>		<b>Result</b>	<b>Grade</b>	APPROVED (75% and above)	<div style="width: 20px; height: 15px; background-color: green; border: 1px solid black;"></div>	<span style="border: 1px solid black; display: inline-block; width: 40px; height: 20px;"></span>	A	RESTRICTED APPROVAL (60-74%)	<div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black;"></div>	<span style="border: 1px solid black; display: inline-block; width: 40px; height: 20px;"></span>	B	REJECTED (Below 60%)	<div style="width: 20px; height: 15px; background-color: red; border: 1px solid black;"></div>	<span style="border: 1px solid black; display: inline-block; width: 40px; height: 20px;"></span>	C
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<b>Next Audit Due on :</b> <span style="border: 1px solid black; display: inline-block; width: 150px; height: 20px;"></span>																	
<b>Auditor Name &amp; Signature</b> <span style="border: 1px solid black; display: inline-block; width: 150px; height: 20px;"></span>	<b>Auditor Name &amp; Signature</b> <span style="border: 1px solid black; display: inline-block; width: 150px; height: 20px;"></span>																
<b>Auditee Name &amp; Signature</b> <span style="border: 1px solid black; display: inline-block; width: 150px; height: 20px;"></span>																	
Insert tick mark (✓) as appropriate																	

Sl no	Assesment measure	Assessor's Remarks	Results				
			0	1	2	3	Remarks
1	Check whether the relevant IPL drawing available.						
2	Check process flow as per PFC.						
3	Check incoming inspection as per sampling plan.						
4	Check every process stage drawing as per quality sheet / control plan for compliance of product & process characteristics.						
5	Check setup verification, first off approval as per control plan						
6	Check machine check sheet is being filled by operator on daily basis.						
7	Physically verify machine check sheet parameters.						
8	Check operators working as per SOP ( Are checks carried out as per WI).						
9	Are non conformance parts identified and separated from regular production flow.						
10	Are rejected parts are separated (kept at red bin)						
11	Are the rework parts are separated (kept at yellow bin)						
12	Check the reworking is being done as per the rework instruction.						
13	Are the counter measures taken to reduce rejection and rework.						
14	Check the measuring equipments are calibrated and status updated						
15	Check the operators are deployed are trained enough to perform the task and skill matrix maintained						
16	Are counter measures taken for customer complaint.						
17	Is PPAP status is alive - check for minimum documents to be submitted to IPL						
19	Is perishable tool change frequency defined and followed.						
20	Are special process parameters are established and followed.						
21	Is revalidation done for special process.						
22	Is process capability study done as per plan and action plan made and followed to improve Cp and Cpk.						
23	Is WIP material and items ready for despatch are identified and stored properly (with out damage / deterioration).						
24	Does the operator know the effect of non conformance.						
25	Are process objectives tracked and improved.						
26	ISO 9001 certification Plan & Actions						
27	<b>Enviornmental compliance</b> Check Supplier has Commitment on Waste management / energy consumption and Carbon footprint reduction activities etc						
		<b>Assesment score %</b>					











  

Ind. Score	Assessment
3	System in place; implemented and found effective
2	System defined and documented, implemented but minor/few deviations observed.
1	System defined and documented, implemented but major/many deviations observed-(Probable shipment of NC product)
0	Systems not defined and (or) no evidence of implementation

**Note:**

1. If the individual score is ≤ 1, corrective actions to be submitted by the supplier.
2. If the overall score is > 75% the supplier are in green zone.
3. YELLOW and RED status of overall results require corrective actions. Review of corrective action may be done on site or via E-mail; at the auditor's discretion.

ANNEXURE – 6

		<b>SYSTEM EVALUATION RECORD (IATF Certified Supplier)</b>		<b>A6-C1-R8B / Rev02</b>																
		<b>Date :</b>																		
<b>Supplier Name :</b>																				
<b>Address :</b>																				
<b>Vendor code :</b>																				
<b>Supply Scope :</b> <b>Raw Material / Finished component /</b>																				
<b>Certificate status :</b> <input type="checkbox"/> ISO 9001 <input type="checkbox"/> IATF 16949 <input type="checkbox"/> ISO 14001 <input type="checkbox"/> OHSAS 18001 <input type="checkbox"/> Others (specify)																				
<input type="checkbox"/> First time Assessment <input type="checkbox"/> Special Audit based on Issue or Complaint <input type="checkbox"/> Surveillance Audit as per Plan																				
<b>Earlier performance</b> Grade :                      Not applicable                      Date :                      ; - Evaluated by :																				
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th align="left" colspan="2"><b>Evaluation / Re-evaluation status</b></th> <th align="center"><b>Result</b></th> <th align="center"><b>Grade</b></th> </tr> </thead> <tbody> <tr> <td>APPROVED (80% and above)</td> <td align="center"></td> <td align="center"><input type="text"/></td> <td align="center">A</td> </tr> <tr> <td>RESTRICTED APPROVAL (70-79%)</td> <td align="center"></td> <td align="center"><input type="text"/></td> <td align="center">B</td> </tr> <tr> <td>REJECTED (Below 70%)</td> <td align="center"></td> <td align="center"><input type="text"/></td> <td align="center">C</td> </tr> </tbody> </table>					<b>Evaluation / Re-evaluation status</b>		<b>Result</b>	<b>Grade</b>	APPROVED (80% and above)		<input type="text"/>	A	RESTRICTED APPROVAL (70-79%)		<input type="text"/>	B	REJECTED (Below 70%)		<input type="text"/>	C
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REJECTED (Below 70%)		<input type="text"/>	C																	
		<b>Next Audit Due on :</b>																		
Auditor Name & Signature	Auditor Name & Signature	Auditor Name & Signature																		
Insert tick mark (✓) as appropriate																				

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
1. QMS & CONTEXT OF THE ORGANIZATION							
1.1	Has the organization determined external and internal issues that are relevant to its purpose and its strategic direction and that affect its ability to achieve the intended result(s) of its quality management system and periodically review and monitor this information						
1.2	Has the organization identified the interested parties and their requirements that are relevant to the quality management system, and periodically review and monitor this information						
1.3	Has the organization evaluated the Customer-specific requirements and included in the scope of the organization's quality management system.						
Sub total							
2. LEADERSHIP							
2.1	Has the top management demonstrated its leadership and commitment by ensuring: quality policy and objectives are established; integration of QMS into its business processes; resources needed for QMS; communicating the importance of QMS; achievement of intended results and promotion of improvement						
2.2	Has the top management identified the processes owners, assigned roles, responsibilities and authorities to ensure customer requirements are met with product requirements and corrective actions						
2.3	Whether the customer representative is identified with responsibility and authority to ensure that customer requirements are met.						
2.4	Whether the personnel responsible for product quality requirements are identified and documented - Verify whether the personnel available across the shifts with authority to stop production / shipment to correct the quality problems.						
2.5	Verify whether the management review takes place at defined intervals, verify the output and record the evidences.						
2.6	Verify the Management review inputs should cover following the requirements: a) measures of process effectiveness; b) measures of process efficiency c) product conformance; d) customer satisfaction; e) review of performance against maintenance objectives; f) review of customer scorecards (where applicable); g) identification of potential failures identified through risk analysis (such as FMEA);						
2.7	Verify whether production operations across all shifts are staffed with personnel in charge of, or delegated responsibility for, ensuring conformity to product requirements.						
Sub total							



Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
3. PLANNING							
3.1	Has the organization identified the risks and opportunities and planned the actions to address them; verify whether those actions are integrated and implemented into its QMS processes and evaluated its effectiveness.						
3.2	Verify whether the organization has included in its risk analysis, the lessons learned from product recalls, product audits, field returns and repairs, complaints, scrap, and rework.						
3.3	Verify whether the organization has determine and implement action(s) to eliminate the causes of potential nonconformities in order to prevent their occurrence and effectively implemented.						
3.4	Verify whether the quality objectives to meet customer requirements are defined, established, and maintained for relevant functions, processes, and levels throughout the organization. Verify the trends and evaluate and record the effectiveness						
3.5	Has the organization defined contingency plans according to risk and impact to the customer that include key equipment failures ; interruption from externally provided products, processes, and services; recurring natural disasters; fire; utility interruptions; labour shortages; or infrastructure disruptions; Verify the effectiveness of the same.						
3.6	Verify the monthly production plans for effective planning of products under consideration.						
Sub total							
4. PROCESS CONTROL							
4.1	Verify whether all the plant, facility and equipment (manufacturing and inspection) are in line with the concerned Process Flow Diagram & Control plan.						
4.2	Verify whether their manufacturing capacity is adequate to meet current IPL's demands.						
4.3	Verify whether the premises in a state of order, cleanliness, and repair that is consistent with the product and manufacturing process needs. (5S, & work environment - adequate lighting, ventilation, plant layout etc.,)						
4.4	Verify the appropriate MSA studies carried out as per Control plan special characteristics and maintained within acceptable limits.						
4.5	Verify whether the calibration status of all the gauges, masters and measuring instruments are live with measurements traceable to International / NABL requirements.						

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
4.6	Verify whether the personnel carrying out work affecting quality of products, are competent enough - Interview them & verify their skill / competency matrix; Verify the on-the-job training for production & inspection personnel						
4.7	Verify the document control status, availability and validity of the following appropriately at the work spot: product specification/drawing; Control plan; Work Instructions; SOP; Visual Masters / boundary samples / Daily maintenance check sheets / Poka-yoke / Quality alerts / display of customer complaints						
4.8	Verify the evidences of engineering change review response within 10 working days from the date of notification by IPL, if any.						
4.9	Verify the PPAP & PSW approval for the products under consideration						
4.1	Verify the identification of and controls on product special characteristics in the relevant process specifications (PFMEA; Control Plan; SOP; WI; Insp.Reports; and awareness with the concerned)						
4.11	Verify the Work instructions includes the rules for operator safety						
4.12	Verify whether the raw materials are procured from designated sources by IPL, if any.						
4.13	Does the supplier have adequate purchased product controls in place for sub-tier suppliers, e.g., assessment, metrics, terms & conditions.						
4.14	Verify the inspection reports / Mill TCs / Heat nos. / Material TCs / Batch No. of the incoming materials and ascertain that incoming inspection is effective.						
4.15	Verify the storage condition of Raw materials, child parts; Finished Goods - Verify for retrieval; preservation; FIFO; Periodical validation effectiveness						
4.16	Verify whether the production process is in line with approved (initial PPAP) conditions in terms of currency of product drawing/ specification, PFD, PFMEA, CP, SOP, WI, manufacturing / inspection facility & methods.						
4.17	Verify whether the set-up approval & shift-wise first-off records are maintained and appropriate actions are taken.						
4.18	Verify the job setup approval records are available (initial run; material changeover; job change; new set-up).						
4.19	Check whether first off / last off approval inspection is carried out. Verify the record. ( whether the approval parts are retained if applicable)						

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
4.2	Verify the in-process monitoring is carried out as per control plan, records are maintained and actions are implemented as per reaction plan and effective						
4.21	Verify whether tool-life/die-life are monitored as per specifications - also verify the tooling management process for effectiveness						
4.22	Process capability studies - Check for the plan and coverage all the special characters as required by IPL and updated.						
4.23	Check whether the capability studies take place after significant changes (Such as tool change, machine breakdown) - record the evidences						
4.24	Verify whether the error-proofing/poka-yoke in place are effective monitored periodically.						
4.25	Verify whether final inspection / testing is carried out as per control plan and records maintained. Evidence the effectiveness of final inspection.						
4.26	Verify whether packaging and labelling is carried out as per control plan / requirements of IPL and appropriate traceability are maintained, if any.						
4.27	Whether the temporary changes of process controls are documented if any. Verify the evidence.						
4.28	Verify the process (Machine list) equipment list are available; check whether all are covered						
4.29	Whether critical spares are identified and stocks maintained for process equipment's.						
4.3	Verify whether the machine maintenance checklist is available for all the machines & is it displayed and updated.						
4.31	Verify the Preventive / predictive maintenance carried out as per plans and records maintained.						
4.32	Verify the necessary actions to ensure product compliance requirements after planned or unplanned shutdown						
4.33	If the maintenance objectives (OEE, MTBF, MTTR & PM adherence) and its trend available; action plan and corrective actions available where not achieved						
4.34	<b>Enviornmental compliance</b> Check Supplier has Commitment on Waste management / energy consumption and Carbon footprint reduction activities etc						
Sub total							

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
5. INTERNAL AUDIT							
5.1	Whether the internal audit programme covers the entire Quality management systems including System audit, Mfg. process audit and product audits.						
5.2	Evidence of reviewing internal audit plan frequency when changes in processes, internal & external non conformities & customer complaints.						
5.3	Check all the processes are captured in the internal audit plan						
5.4	Check whether all the manufacturing processes are covered in the audit plan; Whether it cover all shift's and appropriate shift handing over.						
5.4	Verify and record the evidences of Product audits						
Sub total							
6. CONTROL OF NC PRODUCT & CAPA							
6.1	Verify the Control of non conforming product - as per customer specified process						
6.2	Verify whether the unidentified / suspect products are Controlled as non-conforming products.						
6.3	Verify whether the manufacturing personnel's are trained to identify the containment of suspect and non conforming product						
6.4	Verify whether there are instructions addressed in the Control Plan to handle the reworked product including re-inspection and implemented effectively.						
6.5	Verify whether there is traceability to identify the reworked products and customer notified if required by customer.						
6.6	Verify the evidence of Disposing the reworked product - Which includes disposition qty, disposition date and traceability						
6.7	Customer notification - Verify the Evidence of communication if non confirming products are shipped to customer						

Sl.No	Assessment Measure	Score Awarded					Assessor's Remarks
		0	1	2	3	NA	
6.8	Verify the Customer authorization for concession - Prior to further processing whenever the products / process are deviated from the currently approved .						
6.9	Verify whether a documented process for problem solving (e.g. 8D) available. Check whether systematic actions are in place.						
6.1	Check whether the implemented corrective actions are updated in the necessary documents (i.e. PFMEA & Control plan) and revision history maintained.						
6.11	Verify whether the analysis of non conforming products and corrective actions include field failures & returned products from customer						
6.12	Verify for the effectiveness of CAPA given for the recent complaints / non-conformities, if any						
Sub total							
7. IMPROVEMENT							
7.1	Verify the continual improvement initiatives and record the evidences with respect to IPL products / processes						
Sub total							

SI No	Assessment Criteria	Actual score	Maximum score	% of score
1	QUALITY MANAGEMENT SYSTEM & CONTEXT OF THE ORGANIZATION		9	0%
2	LEADERSHIP		21	0%
3	PLANNING		18	0%
4	PROCESS CONTROL		102	0%
5	INTERNAL AUDIT		15	0%
6	CONTROL OF NC PRODUCT & CAPA		36	0%
7	IMPROVEMENT		3	0%
<b>Total score :</b>		<b>0</b>	<b>204</b>	
1	Number of Not Applicable questions		0	
<b>Agreegate score % :</b>		<b>0.00%</b>		


Individual Score	Assessment
3	System in place; implemented and found effective
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**Note:**

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3. YELLOW and RED status of overall results require corrective actions. Review of corrective action may be done on site or via E-mail; at the auditor's discretion.

AUDITOR'S (IPL Team)			AUDITEE'S (Supplier Team)		
Signature	Name	Dept	Signature	Name	Dept
<hr/>			<hr/>		
Signature	Name	Dept	Signature	Name	Dept
<hr/>			<hr/>		
Signature	Name	Dept	Signature	Name	Dept
<hr/>			<hr/>		
Date:					

**ANNEXURE – 7**

		<b>SUPPLIER MANUFACTURING PROCESS AUDIT</b>		<b>A6-C1-R8C / Rev02</b>	
					<b>Date :</b>
<b>Supplier Name :</b>					
<b>Part name :</b>			<b>Part no :</b>		
<b>Address :</b>					
<b>Auditee :</b>					
<b>Vendor code :</b>					
<b>Supply Scope :</b>					
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> First time Assessment  <input checked="" type="checkbox"/> Surveillance Audit as per Plan         </div> <div> <input type="checkbox"/> Special Audit based on Issue or Complaint         </div> </div>					
				<b>Next Audit Due on :</b>	
Auditor Name & Signature		Auditor Name & Signature		Auditee Name & Signature	
Insert tick mark (✓) as appropriate					

**Mandatory requirements for this audit :**

- Before start the audit - Verify the previous audit results
- Verify if there is any customer complaints related to this product supplier
- This audit scope should cover raw material to dispatch
- Audit and record Setup, In process, Final inspection records, Critical parameter record (SPC), MSA record.
- Verify and record process, product parameter compliance and tools & toolings usage as per control plan
- Ensure all the special characteristics (critical / major) are audited

Sl.no	Specification / Requirement (Process/Product specification)	Observations (mention the objective evidences of the verification viz., process / document / record / measured values)	Evaluation			Remarks
			OK	OFI	Not Ok	
1	Are gang ways clean with direct approach in the shop floor					
2	Are the unwanted items found with in the line					
3	Are the machines free from burr / chips / muck					
4	No coolant / oil spillages around the machine					
5	Indication of the product under processing on the machine (via stage control plan)					
6	If all the operators are wearing appropriate PPE's (as said in the Control plan / SOP / WI)					
7	Fire extinguisher available near the line. Whether it is easily accessible					
8	First aid box, Stretcher is available in the work spot					
9	Emergency contact no are displayed in the work spot					
10	Whether the fire fighters are identified and they are covered in this shift.					
11	If the lighting level is adequate					
12	Are the material handling methods adequate and appropriate					
13	Whether the pertinent drawings/specifications available					
14	Verify whether the latest control plan is available in the line					
15	Standard operating procedure is displayed in the line					
16	Whether the work instructions are displayed in the line					



Sl.no	Specification / Requirement (Process/Product specification)		Observations (mention the objective evidences of the verification viz., process / document / record / measured values)	Evaluation			Remarks
				OK	OFI	Not Ok	
17	Whether the latest process sheet / Quality sheet is available in the line						
18	Verify the operator skill matrix for the line is available, and verify whether it is displayed in the line						
19	Identification of products - Incoming / in-process / finished goods.						
20	Verify the adherence of preventive maintenance plan for the machine / line.						
21							
22							
23	Operation no :						
24	Operation no :						
25	Operation no :						
26	Operation no:						


Sl.no	Specification / Requirement (Process/Product specification)		Observations (mention the objective evidences of the verification viz., process / document / record / measured values)	Evaluation			Remarks
				OK	OFI	Not Ok	
27	Operation no:						
28	Operation no:						
29	Operation no:						
30	Operation no:						
31	Operation no :						
32	Operation no :						

Sl.no	Specification / Requirement (Process/Product specification)		Observations (mention the objective evidences of the verification viz., process / document / record / measured values)	Evaluation			Remarks
				OK	OFI	Not Ok	
33	Operation no :						
34	Operation no :						
35	Operation no :						
36	Operation no :						
37	Operation no :						
38	Operation no :						
39	Operation no :						
40	Operation no :						
41	Whether the process sequence are inline with the process flow diagram						
42	Whether the right tools and toolings are used as per process sheet / control plan						
43	Verify, whether all the potential process risks are identified in the FMEA						

Sl.no	Specification / Requirement (Process/Product specification)	Observations (mention the objective evidences of the verification viz., process / document / record / measured values)	Evaluation			Remarks
			OK	OFI	Not Ok	
44	Verify the SPC report for critical parameter					
45	Ensure the right packaging methods are used					
46	Verify the labelling details - verify the adherence with control plan					
47	Additional requirements - If any					
48	<b>Envirnmental compliance</b> Check Supplier has Commitment on Waste management / energy consumption and Carbon footprint reduction activities etc					
<b>Auditor remarks :</b>						
<b>Audit score legend :</b>						
Ok - Full Complainece						
OFI - Partial Complainece						
Not Ok - No Complainece						
<b>Note :</b>						
1. The assesing points which results in "Not ok" need to closed with the evidence of corrective actions.						

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ANNEXURE – 8


	<b><u>HEAT TREATMENT PROCESS AUDIT REPORT</u></b>			
				<b>Date :</b>
<b>Supplier Name :</b>				
<b>Address :</b>				
<b>Vendor code :</b>				
<b>Category :</b>				
<b>Certificate status :</b>	ISO 9001	<input style="width: 40px; height: 20px;" type="checkbox"/>	OHSAS 18001	<input style="width: 40px; height: 20px;" type="checkbox"/>
	IATF 16949	<input style="width: 40px; height: 20px;" type="checkbox"/>	Others	<input style="width: 40px; height: 20px;" type="checkbox"/>
	ISO 14001	<input style="width: 40px; height: 20px;" type="checkbox"/>	_____	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <b>Auditor :</b>  (Name &amp; Signature) </div> <div style="width: 45%;"> <b>Auditee :</b>  (Name &amp; Signature) </div> </div>				
Insert tick mark (✓) as appropriate				

ANNEXURE : HEAT TREATMENT AUDIT CHECK LIST				
Sl.No	Criteria to be Evaluated	Specification	Actual	Remarks
<b>1. Receiving Inspection &amp; Storage</b>				
1.1	Material Condition	Free from rust, oil and any physical damage		
1.2	Storage	Stored in separate location for different part nos and in protective conditions		
<b>2. Equipment</b>				
2.1	Equipment Number			
2.2	Calibration Status of Hardening Furnace	Done On:		
		Due On:		
	Calibration Status of Tempering Furnace	Done On:		
		Due On:		
2.3	Calibration of Thermocouples & Controllers			
	Hardening Furnace Main	Done On:		
		Due On:		
	Hardening Furnace Safety	Done On:		
		Due On:		
	Quench Oil	Done On:		
		Due On:		
	Tempering Furnace Main	Done On:		
		Due On:		
	Tempering Furnace Safety	Done On:		
		Due On:		
	Oxy Probe Calibration	Done On:		
		Due On:		
	<b>3. Process</b>			
3.1	Jigging Method			
3.1	Process Qualification	Done On:		
		Due On:		
3.2	Process Flow	Sequence Comply with PPAP		
3.3	Process Verification			
a	Batch Quantity			
b	Type of Hardening	Case Hardening/Through Hardening		
c	Cleaning/Washing			
d	Preheating Temp			
	Time			
e	Boosting Temp			
	Time			
	C Potential			
f	Diffusion Temp			
	Time			
	C Potential			
g	Hardening Temp			
	Time			
	C Potential			

ANNEXURE : HEAT TREATMENT AUDIT CHECK LIST				
Sl.No	Criteria to be Evaluated	Specification	Actual	Remarks
h	Furnace Fan Circulation			
i	Quenching			
	Quench Oil Type			
	Supplier			
	Quench Oil Control method			
	Receiving Inspection			
	Top Up/Changed on			
	Quenching on Genset			
	Quench oil Agitation			
	Quench oil level			
	Poka-Yoke			
	Quench oil Temperature Before			
	Quench oil Temperature After			
	Quench Delay Time			
	j	Washing/Cleaning		
k	Tempering 1 Temp			
	Time			
l	Sub-zero Temp			
	Time			
m	Tempering 2 Temp			
	Time			
<b>4. Product</b>				
4.1	Product Identification	Route Cards Availability		
4.2	Product Verification			
a	Sampling Plan			
b	Quench Hardness			
	Test Method/Machine			
c	Surface Hardness			
	Test Method/Machine			
d	Core Hardness			
	Test Method/Machine			
e	Effective Case Depth			
	Test Method/Machine			
f	Total Case Depth			
	Test Method/Machine			
g	Micro Structure			
	Test Method/Machine			
	Case			
	Core			
<b>5. Packing</b>				
5.1	Packing Condition	Proper Identification with free from damages.		
<div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div> Signature of the Auditor (IPL)  Date: </div> <div> Signature of the Auditee (Supplier)  Date: </div> </div>				



## ANNEXURE – 9

 <b>India Pistons Limited Chennai.</b>	<b>WORK INSTRUCTIONS</b>	Doc no : A6-C1-D4
<b>TITLE: Supplier Rating Methodology</b>	<b>Author : R Narayanan</b>	<b>ISSUE : 10</b>
<b>Scope : Circlips, Springs &amp; Latches, Packing materials &amp; Consumables</b>	<b>Date: 01/03/2019</b>	<b>SHEET : 1 of 1</b>

<u>Sl.no</u>	<u>Factor</u>	<u>Objective</u>
1	Quantity Adherence	Verifying whether the vendor has supplied the no. of quantities of materials scheduled for that month.
2	Quality Adherence	Verifying whether the quality supplied is first time right.
3	Delivery Adherence / Quantity	Verifying whether the material is supplied on time, for rating refer delivery adherence calculation table in annexure
4	Service Rating	Rating the suppliers' efficiency level in communication, response to complaints and Buyers Comfort level to the specific supplier
5	Premium Freight	To indicate quantities sourced by incurring PREMIUM FREIGHT
6	Customer Complaint	To indicate supply quantity which can be traced to customer complaint

### Weightage factor

<u>Sl.no</u>	<u>Factor</u>	<u>Weightage</u>
1	Quantity Adherence	30%
2	Quality Adherence	30%
3	Delivery Adherence	30%
4	Service Rating	10%
5	Premium Freight	Negative Factor
6	Customer Complaints	Negative Factor
Total (Aggregate Mean of the above)		100%

### De-rating Factor :

In case of Customer complaint attributable on a supplier/ Sub-Contracted product, the Supplier rating for the Supplier/Sub-Contractor of that particular product for that respective month will be assigned as zero


### Calculation method [Per Supplier - Per Commodity]

<u>Sl.No</u>	<u>Factor</u>	<u>Formula</u>	<u>Weightage</u>	<u>Mode</u>
1	<b>Quantity adherence</b>	Quantity supplied/ Quantity scheduled	30%	Computer
2	<b>Quality adherence</b>	Quantity accepted/ Quantity Supplied <b>Qty Accepted = Qty Accepted first time + 0.5[Qty Accepted on Concession]</b>	30%	Computer
3	<b>Delivery adherence</b>	Refer table below for delivery	30%	Computer
4	<b>Service Rating</b>	Confirmation of order within 10 days from the date of order Feedback/lifting of rejected mtl's within 60 days from the date of GI CAPA within 7 days from the date of communication of rejection Discretion of the buyer	10% 2 Points 2 Points 2 Points 4 Points	Computer
5	<b>Premium Freight</b>	Qty under premium mode / Qty supplied X 0.5 The rating % on account of premium freight shall be deducted from the overall rating	Negative factor	
6	<b>Customer complaint</b>	No of instances captured Even one instance will result in Supplier Rating as "ZERO" for the month	Negative factor	

### Note:

- Supplier rating report is communicated to each Supplier once a month through concerned purchase executive
- Corrective action should be initiated in case of composite rating for a Supplier is less than 90%  
Specific note on areas for improvement to be highlighted if the rating is between 90 to 95%  
95-100% rating shall be the desired level of performance
- Supplier rating to highlight customer disruptions including field returns
- Supplier rating to specify special status customer notification related to quality or deliver issues (only if there is any)
- CAPA requirements as per Systems/Process audit to be highlighted in the communication along with the Supplier rating.

## ANNEXURE – 10

 India Pistons Limited Chennai.		WORK INSTRUCTIONS	Doc no : A6-C1-D4A	
TITLE: Supplier Rating Methodology		Author : R.Naryanan	ISSUE : 01	
Scope : Raw materials		Date : 01-03-2019	SHEET : 1 of 1	
Sl.no	Factor	Objective		
1	Type Adherence	Verifying whether the Supplier has supplied the no. of types of materials scheduled for that month.		
2	Quality Adherence	Verifying whether the quality supplied is first time right.		
3	Delivery Adherence	Verifying whether the material is supplied on time, for rating refer table below		
4	Quantity Adherence	Verifying whether the correct quantity as specified for the respective types of materials is supplied on time.		
5	Service Rating	Rating the suppliers' efficiency level in communication, response to complaints and Buyers comfort level to the specific supplier.		
6	Premium Freight	To indicate quantities sourced by incurring PREMIUM FREIGHT		
7	Customer Complaint	To indicate supply quantity which can be traced to customer complaint		
Weightage factor				
Sl.no	Factor	Weightage		
1	Type Adherence	100%		
2	Quality Adherence	100%		
3	Delivery Adherence	100%		
4	Quantity Adherence	100%		
5	Service Rating	100%		
6	Premium Freight	Negative factor		
7	Customer Complaint	Negative factor		
Total(Aggregate mean of the above)		100%		
De-rating Factor :				
In case of Customer complaint attributable on a supplier / sub-contracted product, the Supplier rating for the supplier/sub-contractor of that particular product of that respective month will be assigned as zero.				
Calculation method [Per Supplier - Per Commodity]				
Sl.No	Factor	Formula	Weightage	Mode
1	Type adherence	No of Types Supplied/ No of types Scheduled	100%	Computer
2	Quality adherence	Quantity accepted/ Quantity Supplied	100%	Computer
3	Delivery adherence	Qty Accepted = Qty Accepted first time + 0.5[Qty Accepted on Concession]	100%	Computer
4	Quantity adherence	Refer table below for delivery	100%	Computer
5	Service Rating	Confirmation of order within 10 days from the date of order Feedback/lifting of rejected mtl's within 60 days from the date of CAPA within 7 days from the date of communication of rejection Discretion of the buyer	100% 2 Points 2 Points 2 Points 4 Points	Computer
6	Premium Freight	Qty under premium mode / Qty supplied X 0.5 The rating % on account of premium freight shall be deducted from the overall rating	Negative factor	
7	Customer complaint	No of instances captured Even one instance will result in Supplier Rating as "ZERO" for the month	Negative factor	
Note:				
1 Supplier rating report is communicated to each Supplier once a month through concerned purchase executive				
2 Corrective action should be initiated in case of composite rating for a Supplier is less than 90% Specific note on areas for improvement to be highlighted if the rating is between 90 to 95% 95-100% rating shall be the desired level of performance				
3 Supplier rating to highlight customer disruptions including field returns				
4 Supplier rating to specify special status customer notification related to quality or deliver issues (only if there is any)				
5 CAPA requirements as per Systems/Process audit to be highlighted in the communication along with the Supplier rating.				
For Steels		For Alloys		
On time supply		3 Points	On time supply	3 Points
10 - 20 days delay		2 Points	2 - 5 days delay	1 Point
20 - 30 days delay		1 Point	>5 days delay	0 Point
>30 days delay		0 Point	Non Supply	-3 Points
Non Supply		- 3 Points		

## GLOSSARY OF TERMS

IPL	–	India Pistons Ltd
PO	–	Purchase Order
JO	–	Job order
WO	–	Work Order
QARC	–	Quality Assurance Route Card
DOC	–	Documents
HOD	–	Head of Department
PED	–	Production Engineering Department
IS	–	Information System
CIP	–	Continual Improvement Process
QA	–	Quality Assurance
QMS	–	Quality Management Systems
QS	–	Quality Systems
RMD	–	Raw Material Department
R&D	–	Research & Development
Prod	–	Production
T/R	–	Tool Room
DR/ECN	–	Drawing Request/ Engineering Change Request
SQA	–	Supplier Quality Assurance
CC	–	Critical Characteristics
SC	–	Special Characteristics
APQP	–	Advanced Product Quality Planning
PPAP	–	Production part approval process
SPC	–	Statistical process control
MSA	–	Measurement System Analysis
PFMEA	–	Process Failure Mode Effective analysis
PPM	–	Parts per million
SRM	–	Supplier Relationship Management
AIAG	–	Automotive Industry Action Group
IATF	–	International Automotive Task Force
ISO	–	International Organization for Standardization
COC	–	Code of Conduct
CSR	–	Customer Specific Requirements
NA	–	Not Applicable

**REVISION HISTORY**

<b>Sl . no</b>	<b>Date</b>	<b>Revision no</b>
<b>1</b>	<b>03.03.2009</b>	<b>01</b>
<b>2</b>	<b>25.02.2010</b>	<b>02</b>
<b>3</b>	<b>04.12.2020</b>	<b>03</b>
<b>4</b>	<b>08.07.2025</b>	<b>04</b>

## ACKNOWLEDGEMENT

To be returned by Supplier via email or by post to IPL SUPPLIER QUALITY :

We hereby confirm that we have received and understood the IPL “Supplier Quality Manual- 4<sup>th</sup> Edition”. We understand that this manual defines the overall requirements which IPL expect from its Suppliers.

We agree to strive to meet these requirements, in all our facilities working and our product. We understand that it is our responsibility to ensure that only the latest revision of this Manual is used by periodically checking the IPL website for revisions and updates.

We understand that it is our responsibility to deploy this Manual in the current and future facilities working and IPL products.

The latest revision can be obtained from the IPL website : [www.indiapistons.com](http://www.indiapistons.com)

Supplier Name :

Date & Signature :

(Signature & Name of Supplier with Stamp)



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Issue no 04 / Dt: 08.07.2025

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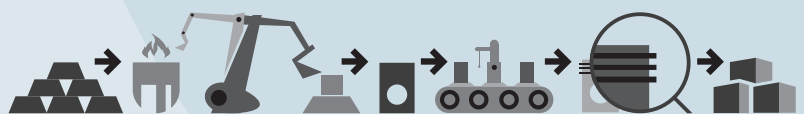


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