FMP
SUPPLIER QUALITY MANAGEMENT PROGRAM

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1.0 Introduction

This program defines supplier quality requirements and applies to suppliers and all members of their supply chain who ascertain product, material, processes, and services. FMP requires that the supplier establish and maintain a system of process controls designed to ensure continuous compliance of product, material or services to the contractual specification and/or approved Process/Product Control Plan. The elements of process (e.g. personnel, machines, tools, materials, measuring and test equipment, etc.) must be identified, prioritiesed, controlled and continuously monitored to ensure process output meets or exceeds FMP's requirements. FMP shall have the right of entry into a supplier's facility or that of their subcontractors. Entry shall provide for access to quality system documentation and quality records as well as the ability to conduct audits and verify product and processes.

1.1 Scope

Purchased products include components, materials and services used directly in the manufacture of finished products, or products (finished and semi-finished) traded under FMP Group brands.

1.2 Purpose

The purpose of this program is to communicate FMP's quality requirements and expectations to suppliers. It is the intent of FMP to do business with suppliers who are able to provide parts/materials/processes and services consistently to specifications, at a competitive price, and in accordance with the defined delivery schedule. The program is intended to assist suppliers in their understanding of requirements regarding specific management, communication, and reporting processes.

2.0 Quality System Requirements

2.1 Specific Requirements

Specified purchase requirements will be communicated to suppliers where necessary.

2.2 General Quality System Requirements

Unless otherwise specified/agreed by FMP, suppliers shall be at least registered to ISO9001:2015 by an accredited third-party certification body.

2.3 Supplier Assessments

With prior notification, FMP will conduct quality system audit at supplier's facilities. The goal of these audits is to understand suppliers' capabilities and quality systems, and identify continuous improvement opportunities.

Potential suppliers will be audited, if necessary, as part of FMP's sourcing process. Current suppliers may be audited under annual audit scheme, or if there are ongoing quality problems, or if there are new products launching.

Tooling, material and equipment moves to a different supplier manufacturing facility may require a quality system audit of the new facility. Any changes on tooling, material and equipment may require suppliers to submit PPAP documents for approval. Suppliers are prohibited from moving or changing tooling, material and equipment without prior notification and approval from FMP.

Suppliers will receive pre-audit requirements before the agreed audit date. All required information should be returned to FMP prior to the audit being conducted. Following the audit, FMP will forward all findings and any needed corrective actions to suppliers. Suppliers are required to submit Improvement Action Plan (IAP) according to audit findings within period stated in audit report. IAP shall at least include improvement items, activities, person-in-charge and schedule/target completion date. All improvement items must be supported with evidence of actions in an appropriate format. Results of the audit and responses on IAP will be used in the sourcing decision of potential suppliers.

2.4 Pre-Award

Pre-award assessments or desktop audit will take place before commencing new business. These pre-award assessments include Quality Desktop Audit with QMS documents, and Commercial Desktop Audit.

Quality Management System (QMS) standard documents required for Quality Desktop Audit are:

No.	Document
1	ISO 9001:2015 (and/or IATF 16949:2016) certificate
2	Organization chart
3	Factory floor plan / layout
4	Product / Process change procedure
5	Rework procedure
6	Non-conforming handling procedure
7	Working instruction (one sample)
8	Customer complaint log & problem solving methodology
9	Supplier non-conforming log & problem solving methodology
10	Internal rejection report (scrap and rework; quantity and defect)
11	Internal audit summary report
12	Traceability & identification system
13	Quality objectives and its target (e.g. KPI)
14	Document control system, include drawing controlled and released process
15	Warranty policy, term & condition, responsibility
16	Contingency plan, backup mode, emergency planning
17	Monitoring and measuring equipment list

Commercial Desktop Audit will focus on supplier capacity management, delivery and scheduling flexibility, organization ability and stability, and financial stability.

2.5 Engineering Prototype Sample Submissions

Submission of prototype parts may be requested with documentation of specification conformance that meets PPAP and/or FMP's quality requirements. At a minimum, a dimensional report, material certification and testing report (performance test and/or fitting test) is required for submission.

2.6 Special Characteristics

A special characteristic is a product or process characteristic that could affect fit, function or performance. FMP identifies two types of special characteristics – control

items and significant characteristics. Control items are defined on product drawings with an inverted delta symbol (∇), and significant characteristics are shown as a bubble enclosing the dimension (▢).

Control method, inspection method, testing frequency and reaction plan of special characteristic for incoming, layout, in-process and final inspection operation shall be clearly addressed in the supplier's quality documentation, such as control plan, operator instruction, FMEA and process flow.

Suppliers may have specific special characteristics required to maintain robust process control. The presence of any "Special Characteristics" is not intended to reduce the importance of other dimensions and/or characteristics.

Process capability studies are conducted on special characteristics when required to prove capability.

2.7 Process Capability and Control

The supplier is responsible to ensure process capability and control requirements are documented in their control plan and that capability indices are achieved and improved throughout production.

2.8 Control of Externally Provided Processes, Products and Services

The supplier is responsible for externally provided processes, products and services used in product sold to FMP. It is expected that the supplier works closely with their external providers and monitor their quality level. Sub-supplier development is encouraged however FMP reserves the right to request and perform any necessary assessment at sub-supplier facilities.

2.9 Supplier Tooling and Gauging

FMP's property shall be permanently marked showing FMP as the owner. The supplier is responsible for maintaining, calibrating and keep a preventive maintenance procedure for FMP's property. These records should be available for review at any time. Suppliers are required to inform FMP in writting if FMP's property is damage or end-of-life.

The use of special gauging on FMP's product must be accomplished with mutually agreed upon gauging. This gauging must also be proven and documented with the use of Gauge R&R studies. The supplier is also responsible to include the cost of any special gauging required for exclusive use on FMP's products in the original product

quotation. Additionally, the cost of any modifications to special gauging must be approved by FMP prior to incorporating the change. Standard gauging costs are expected to be absorbed by the supplier.

2.10 Production Part Approval Process (PPAP)

All suppliers are required to submit PPAP documents for approval prior to start mass-production or shipment for following conditions:

- New part
- Tool moves or additional production facilities
- Design change
- New or modified tool
- New or optional material
- New process or significant process changes
- New externally provided product or process
- Non-active part over one year old

Minimum PPAP documents requirements:

Product	IAM	OEM / OES
Friction material	- PSW - Process flow chart/diagram - Control Plan - PFMEA - Material testing report / Material certification - Sample, if applicable - Packaging standard - Picture of product	- PSW - Process flow chart/diagram - Control Plan - PFMEA - Material testing report / Material certification - Sample, if applicable - Packaging standard - Picture of product
Backing plate	- PSW - Process flow chart / diagram - Control Plan - PFMEA - Dimensional report (Customer touch point / Special characteristics) + markup drawing - Material certification - Material/Finishing testing report - Packaging standard - Sample - Picture of product (minimum 6 views – top, bottom, 2 sides, front & back)	- Design record - Authorized engineering change document - Customer engineering approval - Design FMEA (if needed) - Process flow chart / diagram - Process FMEA - Control Plan - MSA - Dimensional evaluation results - Record of material / performance test result (if needed) - Initial sample assessment - Qualified laboratory documentation - Appearance approval report (AAR) – picture of product (top, bottom, 2 sides, front & back, isometric) - Sample production part - Master sample - Checking aids - Record of compliance with customer-specific requirements – Packaging standard

		- PSW – level 3 or above - Traceability records to support supplier's compliance to statutory & regulatory requirements
Accessories 1) Shim, gasket, spring, pin 2) Wear indicator, clip	- PSW - Process flow chart / diagram - Control Plan - PFMEA - Dimensional report (Customer touch point / Special characteristics) + markup drawing - Material certification - Material/Finishing testing report - Packaging standard - Sample - Picture of product (minimum 6 views – top, bottom, 2 sides, front & back) - Removal of hydrogen embrittlement for all plate parts letter or methodology or as per drawing (applicable for item 2)	- Design record - Authorized engineering change document - Customer engineering approval - Design FMEA (if needed) - Process flow chart / diagram - Process FMEA - Control Plan - MSA - Dimensional evaluation results - Record of material / performance test result (if needed) - Initial sample assessment - Qualified laboratory documentation - Appearance approval report (AAR) – picture of product (top, bottom, 2 sides, front & back, isometric) - Sample production part - Master sample - Checking aids - Record of compliance with customer-specific requirements – Packaging standard - PSW – level 3 or above - Removal of hydrogen embrittlement for all plate parts letter or methodology or as per drawing (applicable for item 2) - Traceability records to support supplier's compliance to statutory & regulatory requirements
Indirect material that apply on product	- PSW - Process flow chart / diagram - Control Plan - PFMEA - Material certification - Material testing report - Packaging standard	- PSW - Process flow chart / diagram - Control Plan - PFMEA - Material certification - Material testing report - Packaging standard

Traded product – Friction	- PSW - Process flow chart / diagram - Control Plan - PFMEA - Material certification - Material/Finishing testing report - Dimensional report + markup drawing - Packaging standard - Picture of product (minimum 6 views – top, bottom, 2 sides, front & back) - ECE R90 certificate (if applicable) - Factory audit and test report for SALEEM (Saudi Arabia Product Safety Program) – (if applicable)	- PSW - Process flow chart / diagram - Control Plan - PFMEA - MSA - Material certification - Material/Finishing testing report - Dimensional report + markup drawing - Packaging standard - Appearance approval report (AAR) – picture of product (top, bottom, 2 sides, front & back, isometric) - ECE R90 certification (if applicable) - Factory audit and test report for SALEEM (Saudi Arabia Product Safety Program) – (if applicable) - Traceability records to support supplier's compliance to statutory & regulatory requirements
Traded product – Ancillary	- PSW - Process flow chart / diagram - Control Plan - PFMEA - Material certification / COA - Material/Finishing testing report (if applicable) - Dimensional report + markup drawing (if applicable) - Packaging standard - Picture of product (minimum 6 views – top, bottom, 2 sides, front & back) - Factory audit and test report for SALEEM (Saudi Arabia Product Safety Program) – (if applicable)	Not applicable

Full or interim approval PPAP is required prior to shipping parts to FMP. Any shipments received by FMP prior to obtaining this approval will be rejected. Any exceptions must be documented and approved on FMP deviation or concession prior to shipment.

Supplier must ensure that all special characteristics are identified appropriately within the PPAP documentation. Failure to provide timely and accurate PPAP documentation will be reflected in supplier performance rating. FMP reserves the right to request and audit the supplier annual layout data.
Supplier is to submit PPAP to project schedule for new parts, and agreed time plan for existing production component, unless otherwise specified by requestor. PPAP packages arriving after due date will be considered late.

All costs related to PPAP submission are responsibility of the supplier. FMP will not authorize additional payment to a supplier for submission of a PPAP.

2.11 Changes to Approved Products and Processes

FMP must be notified in writing by all suppliers of any process, tooling/machine, material, product design, and any deviation from control plan changes that affects form, fit and/or function of the product being supplied to FMP. Written approval from FMP is needed prior to any changes being implemented. FMP may reject product or material shipped without written authorization. Such a rejection will affect the supplier's quality performance rating and all expenses, damages and liabilities incurred by FMP as a result of unauthorized changes will be the responsibility of the supplier. In addition, the supplier may be placed on new business hold until the systemic issue is addressed. No deviation/concessions shall be permitted without appropriate validation and FMP approvals. PPAP must be submitted to FMP per PPAP requirements.

2.12 Annual Re-qualification

Unless waived in writing by FMP, the supplier shall inspect and test annually a sample of each active product supplied to assure conformance to all the FMP's specified requirements (e.g. dimensional, material and performance). These inspection requirements shall be included in the supplier's production control plan. Material testing shall be carried out by a qualified laboratory. Annual validation documentation shall be on file at supplier and available to FMP upon request. If a nonconformance is found during the annual validation, supplier must notify FMP's quality department immediately so that appropriate action can be determined and implemented.

2.13 Certificate of Conformance (C of C) / Inspection report

A signed inspection report, which in FMP report format (FMP Supplier Inspection Report, or Part Inspection Report) or in supplier report format that agreed by FMP, or certificate of conformance (C of C) will be maintained on file at the supplier and may be required to accompany each shipment of specified parts. The report must contain the actual results of measurements, material/finishing testing, appearance visual inspection, branding, kitting, accessories and packaging checking. The supplier should have a system capable of retrieving and submitting the requested certificate of conformance within 24 hours upon request.

2.14 Certificate of Analysis (C of A)

Suppliers are required to submit a signed certificate of analysis (C of A) together with every delivery of raw materials to FMP unless otherwise agreed. FMP will not receive/accept any shipment of raw materials that without certificate of analysis. The

certificate of analysis must contain the actual results obtained from testing performed on a production lot that is delivered to FMP.

2.15 IMDS Requirements

To comply with the EU-directive on End-of-Life Vehicles (200/53/EC), the reporting of substances of concern and recycled content information is required. FMP suppliers are required to register IMDS for purchased products, and to reference it on the PPAP submission warrant, unless otherwise stated by FMP. Suppliers are to register and input substances of concern and recycling content onto the IMDS database for all FMP purchased products, prior to submission of PPAP. Please note that there is a legal requirement that all components are registered on the Material Data System database system. IMDS submissions are to be submitted via the Material Data System database at www.mdsystem.com. FMP Australia Pty Ltd ID No. is 145052. Suppliers are to refer to http://www.gadsl.org/ for a list of prohibited and declarable substances. A declaration must be supplied for any material exceeding these requirements.

2.16 GHS Requirements

FMP suppliers are required to comply with Globally Harmonized System of Classification and Labelling of Chemicals. Safety Data Sheet (SDS) shall be submitted to FMP prior to shipment. SDS validity period should be within 3 years unless it can be demonstrated that an SDS that is over 3 years old is still the current formulation and the correct classification. Products shipped to FMP are required to have labels with chemical identity, standardized hazard statements, signal words, symbols and precautionary statements. All friction products shall be non-asbestos and all products with surface treatment shall be Cr^{6+} free.

2.17 ECE R90 Requirements

When supplying product to FMP that requires ECE R90 certification, the supplier must provide a valid ECE R90 certificate with the relevant PPAP documentation. At a minimum, the section of the ECE R90 certificate that indicates the approved manufacturer, part number(s) and material code, and approval date must be provided. The ECE R90 approval mark and approval number that are marked/branded on products shall match with the information shown on the ECE R90 certificate. Any changes in ECE R90 certification, or request for deviation from any of these ECE R90 requirements, must be notified in writing to FMP in advance of shipment. For further information on ECE R90 regulations, please refer to the UNECE website www.unece.org

2.18 Verification Reviews of Purchased Product

FMP, FMP's customers and an approved 3rd party representative have the right to verify, at the suppliers premises that the product and subcontract product conform to specific requirements. Prior to conducting such verification reviews, FMP will specify both the arrangements and method of performing reviews.

2.19 Product Identification and Packaging

Each container, rack, bag, box or any pallet of material shipped to FMP shall be identified as instructed by FMP or as per approved packing standard. Packing standard include inner and outer packaging, label content and format are to be reported at PPAP. Unique requirements will be identified and documented by formal communication.

Minimum requirements on part packaging labels are the supplier identification, part number, engineering level, quantity and batch/lot number, must be clearly legible in human readable and/or bar-coded form. All barcodes must be scanned by the supplier to verify readability.

Identification shall permit traceability back to the specific supplier raw materials lot numbers, as well as the manufacturing, inspection and test records. The supplier should also be able to trace where products made under similar conditions (same raw material lot, same manufacturing line/batch, etc.) were shipped.

Suppliers are required to utilize and ship material on a first in first out basis. Sequence of batches must be identified on the packaging label by either a date code or batch/lot number. Safety related identification criteria shall conform to all government regulatory and FMP requirements. No exceptions to this requirement shall be permitted unless acknowledged in writing by FMP.

Suppliers shall ensure their products are transported in a manner that prevents damage, deterioration or contamination of the product. Suppliers shall maintain documents detailing proper packaging, cleanliness level, storage and shipping instructions of its products.

2.20 Shipping Documentation

2.20.1 FMP Australia

Origin country	Shipping method	Documents required					
		Commercial invoice / Delivery docket	Packing list	Free Trade Agreement Certificate of Origin	Packing declaration	Bill of landing	Certificate of Analysis (C of A) *Note 1
Australia	Land / Air	√	√				√
China, Japan, Republic of Korea, New Zealand, US, Chile, The Association of South East Asian Nations (ASEAN)	Sea /Air	√	√	√	√	√	√
Others	Sea / Air	√	√		√	√	√

Note 1: For raw material only

2.20.2 FMP Thailand

Origin country	Shipping method	Documents required						
		Surrender bill of landing	Shipping invoice	Packing list	Form E *Note 1	Form CO *Note 2	Form AI *Note 3	Certificate of Analysis (C of A) *Note 4
China	Sea	√	√	√	√	√		√
Australia	Sea	√	√	√			√	√
Malaysia, Singapore, USA, Netherlands, Italy	Sea	√	√	√				√
Canada	Courier / Air	√	√	√				√
Spain, Sweden	Courier / Air / Sea	√	√	√				√
Thailand	Land		√	√				√

Note 1: ASEAN – China Free Trade Certificate of Origin (Form E)
Note 2: Certificate of Origin (Form CO)
Note 3: Thailand – Australia Free Trade Certificate of Origin (Form AI)
Note 4: For raw material only

2.20.3 FMP Malaysia

Origin country	Shipping method	Import document required					
		Surrender bill of landing	Shipping invoice	Packing list	Form E *Note 1	Form D *Note 2	Form AI *Note 3
China	Sea	√	√	√	√		
India	Sea	√	√	√			√
Thailand	Land / Sea	√	√	√		√	
Australia	Courier / Air / Sea	√	√	√			
Italy	Sea	√	√	√			

Note 1: ASEAN-China Free Trade Certificate of Origin (Form E)
Note 2: ASEAN Trade in Goods Agreement/ASEAN Industrial Cooperation Scheme Certificate of Origin (Form D)
Note 3: ASEAN – India Free Trade Area Preferential Tariff Certificate of Origin (Form AI)

2.21 Delivery Performance and Requirements

All suppliers are expected to maintain 100% delivery performance. Any cost incurred as a result of delivery problems, including premium freight, customer disruption, and special status customer notifications related to delivery issues, will be the responsibility of the supplier. Upon request, supplier shall submit corrective action plan for delivery non-conformances.

2.22 Contingency Plans – Continuity of Supply

Risk management is a forward thinking activity that is necessary to prevent unexpected expense incurred in maintaining continuity of product to supply line. Every element of the critical path must have a contingency plan documented and in place so that known and proven options are available for maintaining production and services. The contingency plan shall be reviewed at least annually.

FMP requires suppliers to establish contingency plans to prevent failure of the supplier to deliver goods within terms of purchase order, in the event of an emergency such as utility interruptions, labour shortages, key equipment failure and extreme weather condition. FMP reserves the right to review the supplier's contingency plan and the supplier must review their contingency plan annually at a minimum. If FMP and/or FMP's customer production is interrupted by the failure of the supplier to deliver scheduled goods, all costs and/or penalties that are incurred by the organization and/or its customers will be the sole responsibility of the

supplier. This standard ensures suppliers are prepared for natural disaster and man-caused events that can disrupt business practices.

FMP requires suppliers to establish an escalation standard to ensure effective communication between supplier and FMP is in place, especially in the event of an emergency.

2.23 Continuous Improvement

The supplier shall continually improve quality, delivery, cost and other services provided. To aid in fulfillment of this requirement, the supplier shall establish, monitor, prioritize and act upon key performance objectives and targets. The objectives and targets should be established based upon (at minimum) business plan, management system, product quality, process capability and customer satisfaction goals. Actions taken to regain previously sustained levels of performance are corrective actions, not continuous improvement.
FMP reserves the right to visit any supplier site to assess its continuous improvement programs and lean manufacturing practices, and make recommendations for improvement. In addition, FMP may deploy personnel to focus on a specific improvement issue. In most cases, savings generated from these exercises will be shared between FMP and the supplier.

2.24 Error Proofing / Poka Yoke

All attributes should be studied for implementation of poka-yoke processes. Key attributes should be reviewed to determine whether poka-yoke is mandatory based on the detection and severity of the failure mode. Hi-tech error proofing systems are not necessarily required. Simple attribute features and proximity indicators can verify processes in most instances.

2.25 Supplier Problem Solving and Avoidance

Suppliers shall have trained (preferably certified) personnel with the ability to quickly and permanently resolve product and process issues using data driven problem resolution tools and techniques. Problem resolution must be conducted using a defined, structured process like the 8-Discipline process, Six Sigma DMAIC (Define, Measure, Analyze, Improve and Control) or any process that includes verification of the root cause and validation of corrective action effectiveness.

Data driven techniques should also be used during the product and process development process in order to prevent problems with new or changing products and processes. These data driven tools and techniques include but are not limited

to: Failure Mode and Effect Analysis (FMEA), Measurement System Analysis (MSA) and Statistical Process Control (SPC).

Product design responsible suppliers must use reliability methods during the product development process in order to assure the robustness and durability of their product design for the intended application or as specified by the organization.

2.26 Response Timing

Response timing will initiate upon notification of the concern to the supplier from FMP. Suppliers are required to provide containment action within 24 hours. All suppliers are required to acknowledge on the receipt of notification of concern within one business day. All suppliers shall submit a completed corrective action report having supporting documentation verifying corrective action has been implemented within 14 calendar days. Supplier must notify FMP when additional time is required for completion of investigation for root cause and implementation of corrective actions.

2.27 Supplier Performance Ratings

Supplier performance ratings are utilized by FMP to maintain and improve the supply performance and quality of parts. These ratings provide a reliable, fair and consistent source of information by which suppliers are rated equally. These ratings are an aid for FMP management to determine the future potential of the suppliers as an ongoing source and are communicated to supplier on a monthly basis through Supplier Assessment Performance Rating (SAPR).

Evaluation elements:

- Quality – PPM rating
- Quality – Supplier Corrective Action Report (SCAR)
- Quality – Quality Notification (QN)
- Delivery and Scheduling – On Time to Requirement (OTTR) and Line Fill performance
- Development – On time reports submission
- Customer disruptions
- Other issues – warranty, dealer returns, field actions, recall and special status customer notification related to quality or delivery issues.

Each of the elements shall be scored according to the tables shown below with a weighting score multiplier (in order of significance) to reflect a supplier percentage rating.

No.	Items	Weighting (%)
1	Quality – PPM rating	15
2	Quality – SCAR	15
3	Quality – QN	15
4	Delivery and Scheduling – OTTR	20
5	Delivery and Scheduling – Line Fill	20
6	Development – On time reports submission	5
7	Customer disruption	5
8	Others – warranty, dealer returns, field actions, recall and special status customer notification related to quality or delivery issues.	5

Example of calculation:
Score = (Point x 10) x Weighting (%)

Quality – PPM rating

Supplier PPM Performance	Points
0	10
1 ~ 100	9
101 ~ 200	8
201 ~ 300	7
301 ~ 400	6
401 ~ 500	5
501 ~ 600	4
601 ~ 700	3
701 ~ 800	2
801 ~ 1000	1
>1000	0

Quality – SCAR

SCAR – Responsiveness and Content	Points
No SCAR raised	10
Containment action and corrective action response timely	9
Containment action response time exceed 24 hours	8
SCAR corrective action response time exceed 14 calendar days	6
Failure to use FMP SCAR form for submission	6
Re-submission required due to shallow root cause, no robust countermeasure in place, no supporting evidence supplied.	4
Plant interruption/shutdown/stoppage due to SCAR	0
Multiple SCAR raised during one month period for different quality issues	0

SCAR delinquent past 90 days	0
Supplier placed on Level 1 or 2 containment	0

Quality – QN

QN – Responsiveness and Content	Points
No QN raised	10
Supplier provide formal action report	9
Supplier provide response timely	8
Supplier response on QN exceeds 14 calendar days	6
Supplier did not provide any response	0
Supplier response to QN past 90 days	0

Delivery and Scheduling – OTTR

On Time to Requirements	Points
100%	10
95% ~ 99%	9
80% ~ 94%	8
70% ~ 79%	6
60% ~ 69%	4
50% ~ 59%	2
<50%	0
No delivery required	10

Delivery and Scheduling – Line Fill

Line fill performance	Points
100%	10
95% ~ 99%	9
80% ~ 94%	8
70% ~ 79%	6
60% ~ 69%	4
50% ~ 59%	2
<50%	0
No delivery required	10

Development – On time reports submission

Reports submission – e.g. PPAP documents, C of A, C of C, inspection reports, test reports & etc.	Points
Submission timely, no re-submissions or deficiencies	10
No report submission required	10
Late submission	6

Re-submission due to minor deficiency (i.e. non special characteristic)	4
Re-submission due to major deficiency (i.e. special characteristic)	2
Failure to submit	0
Failure to respond to any second request on the submission of supporting data or meeting attendance	0

Customer disruption

Customer disruption at receiving plant, including yard holds and stop ships	Points
Without customer disruption	10
Delay in delivery to FMP's customer due to delay delivery from supplier	0
Delay in delivery to FMP's customer due to quality issue (SCAR)	0

Other issues

Warranty, dealer returns, field actions, recall and special status customer notification related to quality or delivery issues.	Points
Without issues	10
Warranty cases 1% ~ 25%	7
Warranty cases 26% ~ 50%	5
Warranty cases 51% ~ 75%	2
Warranty cases >75%	0
With dealer returns, field actions, recall and special status customer notification related to quality or delivery issues.	0

In addition to the individual month's score, suppliers shall be given a rating that is average over the previous 6 months performance (rolling 6-month average). Overall supplier classification will be determined from the rolling 6-month average SAPR score as follows:

Rating Classification

90 – 100	Preferred Supplier	No additional development required at this time.
70 – 89	Approved Supplier	Documented strategic development plans, with medium to long term timeline improvements to be in place.
50 – 69	Probationary Supplier	Documented corrective action plans, with short to medium term timeline improvements to be in place.

<50	Delinquent Supplier	Documented corrective action plans, with immediate short-term timeline improvements to be in place.

Supplier's on Probationary or Delinquent status shall develop and submit action plans within 2 weeks of notification to FMP, along with a timing chart on an agreed frequency. Supplier shall update and inform FMP the status of action plans at least once a week, until all actions are completed.

If the performance of any supplier impacts FMP, or FMP's customer, in a manner that is deemed severe, but is not reflected on the above numerical scale, FMP reserves the right to immediately place the supplier on New Business Hold. If the supplier does not demonstrate adequate improvement actions, FMP may initiate supplier delisting and alternative sourcing plans for any Delinquent suppliers.
It is the supplier's responsibility to communicate the importance of these metrics within their organization. It is also the supplier's responsibility to develop an improvement plan and implement the required improvements.

2.28 Incoming Quality Process

FMP will conduct incoming inspection and testing according to documented procedure and standard. Suppliers may need to submit inspection and testing records for further verification when necessary.

2.29 Traceability

Lot control and traceability are essential requirements to be adhered to by suppliers. The size of the lot reflects the amount of risk should a problem with product occur and, therefore, must be managed accordingly. Traceability ensures quick and effective retrieval of information for containing suspect material and for problem solving.

Suppliers must have an effective system in place for ensuring incoming materials and components from their sub-suppliers are also controlled properly and traceability of lot information is quickly retrievable.

2.30 Containment Requirements

Level 1 containment	
Supplier shall implement Level 1 containment when one of the items occurred	• Plant interruption/shutdown/stoppage or delivery interruption/stoppage due to non-conforming product • 2 consecutives similar nonconformance within 3 months • SCAR delinquent past 3 months
Supplier shall perform all actions when place in level 1 containment	• Containment of all parts within the supply chain, within 24 hours • Communicate result to FMP within 24 hours • On-site support to FMP or FMP's customer, if necessary • 3rd party inspection service, if necessary • Implement corrective and preventive actions within 10 business days
Supplier may exit from level 1 containment	• Until permanent corrective action has been implemented and its effectiveness validated within 3 months (or agreed period base on standard lead time) • Full problem-solving report, with supporting evidence, has submitted to FMP and closure has been agreed.
Level 2 containment	
Supplier may be placed on Level 2 containment when one of the items occurred	• Further supply of non-conforming product following implementation of Level 1 containment actions. • Failure to effectively complete and implement corrective actions resulting in repeated product issue detected either at FMP or our customer after break pointing action is complete. • Any safety related product issue detected either at FMP, at our customer or as advised by our supplier. • Supplier responsiveness to Level 1 Containment is poor, in terms of content, robustness and/or timeliness. • No significant improvement has been made over a period of 3 months at Level 1 (or agreed period based on standard lead time) • Additional issues occur which are detected either at FMP or our customer.

Supplier shall perform all actions when place in level 2 containment	• Containment of all parts within the supply chain, within 24 hours • Communicate result to FMP within 24 hours • On-site support to FMP or FMP's customer within 24 hours • Inspection by FMP approved 3rd party within 5 business days
Supplier may exit from level 2 containment	• Until permanent corrective action has been implemented and its effectiveness validated within 3 months (or agreed period base on standard lead time). • Full problem-solving report, with supporting evidence, has submitted to FMP and closure has been agreed. • No repeating issue within 3 months after permanent corrective action has been implemented.

Suppliers are required to accept all costs and charges incurred by FMP associated with the containment activity such as shipping, handling, processing, reworking, inspecting and replacing defective material including the costs of value-added operations prior to the discovery of the nonconformance, as well as 3rd party inspection cost.

2.31 Product and Process Deviations and Concessions

It is FMP's policy to reject material that does not meet requirements of the drawings and/or specifications. In the event a deviation or concession is required, it must be submitted to the organization before the parts have been shipped from the supplier.

The deviation or concession must be in writing, indicating the specific non-conformances and defining the deviations of design requirements (quantity, date, reason and signature) whilst a corrective action plan for the discrepancy also must be included. The request change must be approved by both Product Engineering and QA otherwise the discrepant material will be counted against the supplier's quality performance. Deviation shall be approved only for a specific time period or quantity of parts. No permanent deviations are permitted.

2.32 Charges for Supplier Responsible Non-Conformances, Warranty and Cost Recovery – Cost of Poor Quality (COPQ)

Suppliers are selected based on their ability to provide cost effective, superior defect free products, expert knowledge of their product and manufacturing processes; and provide responsive and proactive support. With these expectations, suppliers held

accountable and responsible for all costs associated with FMP or FMP's customer receiving defective product.

- Recovery costs due to a automotive vehicle "recall"
- PPAP submission rejection, delays or shipments of unapproved product
- C of C and/or C of A submission delay or rejection
- 3rd party sorting or reworking costs
- Labour for sorting or reworking finished goods
- Labour for sorting or reworking of finished goods installed in the end-customer product
- Scraping or reworking of "finished goods" due to defective supplier product
- Shipping fees related to return of defect product
- Fees and taxes related to scrapping of material outside FMP's locations
- Warehousing/storage fees accumulated through to disposition of suspect product
- Rework or repair materials, tooling, gauges, testing equipment or 3rd party testing
- Excess and additional freight charges and air shipments
- Delivery Performance Failures (in addition to any specific costs incurred by the organization associated with the failure)
- Administrative, corporate and management support fees
- Nonconformance Report (e.g. SCAR – Supplier Concern Action Report) or Nonconforming Service
- Nonconforming Production Deviation Requests
- Follow up actions and assessments, as appropriate
- Any other fees associated with defective condition

All costs are calculated based on FMP's locations currency, (Australian currency, Thailand currency and Malaysian currency), using standard man-hour labour rates established by FMP. Appropriate debits are issued to the supplier through the Finance Department in cooperation with Purchasing. If a supplier believes that they have been unfairly charged for administrative fees, they shall contact their Purchasing representative to initiate a dispute resolution process.
COPQ charges includes but not limited to,

- Labour cost for involved processes, such as Production, QA, Product Engineering, Supply Chain, Store and Warehouse.
- Material cost
- Freight cost
- Admin cost

NOTE 1: Dispute resolution regarding actual non-conformances should be handled through the plant Quality representative.

NOTE 2: The supplier must promptly notify FMP, if it has provided information to a government, concerning recall of products that are Identical or Substantially Similar, regardless of whether such recall was voluntary, or government mandated.

2.33 PIC Requirements

2.33.1 Advance Notification of Potential Safety Nonconformities

The supplier must notify FMP as soon as reasonably practicable, after discovering any nonconformity relating to the performance of the product, in a way that contributes to unreasonable risk of death, injury or property damage, because of the product's design, construction or performance. This communication must be in the form of a written notice. FMP and the supplier will co-operate fully using FMP Corrective and Preventive Action process (OP 1401) to identify the cause of the nonconformity and develop a plan for the prompt resolution of the nonconformity (Product Integrity work instruction – SOP N00 09).

2.33.2 Regulatory Compliance

The supplier must be knowledgeable in all applicable government statutes, regulations and standards relating to motor vehicle safety within the territories of use. Example:

- The Australian Motor Vehicle Standards Act 1989,
- The Australian Motor Vehicle Standards Regulations 1989,
- MS1164:2015 Road vehicles – Replacement brake lining assemblies and drum brake linings for power-driven vehicles and their trailers (second revision)

2.33.3 Regulatory Notice

The supplier must provide FMP copies of any data, materials or information provided to a government entity relating to the products supplied to FMP, including any test, manufacturing, field performance or warranty data. The supplier must provide the information within 10 business days from the date of submission to the government entity.

2.34 Record Retention

Records may be in the form of any type of media, such as hard copy or electronic media. PPAP, tooling records, product and process design records, traceability records, quality performance records, performance evaluations records, purchase orders or contracts, shall be retained for the length of time that the product is active for production and service requirements, plus one calendar year.

2.35 Breakpoint Shipment Notice

The FMP Breakpoint Notice (QC34) shall be used to notify/request authorization from FMP for breakpoint 24 hours (minimum) prior to release of shipments (this includes Engineering Product and PPAP samples).

Prior to shipment, supplier shall request authorization via email from FMP Quality contact and Supply Chain contact to release shipment using the QC34 – FMP Breakpoint Notice for 1st shipment after PPAP approval of change product, containment shipments, corrective actions and concession.

Shipments under breakpoint notice shall be clearly identified. Labels detial must include supplier name, FMP part number, part description, drawing issue number, batch/lot/date code number, reason for breakpoint (full description in simple clear English), where applicable, reference the deviation/concession or SCAR number.

3.0 Organizational Supporting Documentation

3.1 Supporting Industry Documents

The following publications are available from the Automotive Industry Action Group (AIAG). These documents may contain information that is mandatory for suppliers to FMP:

- Production Part Approval Process (PPAP)
- Potential Failure Modes and Effects Analysis (FMEA)
- Measurement Systems Analysis (MSA)
- Fundamental Statistical Process Control (SPC)
- CQI-19 Sub-Tier Supplier Management Process Guidelines
- CQIA-19 Sub-Tier Supplier Management Process, Readiness Checklist
- CQI-9 Special Process: Heat Treat System Assessment
- CQI-11 Special Process: Plating System Assessment
- CQI-12 Special Process: Coating System Assessment

3.2 References

IATF 16949:2016 and ISO9001:2015
IMDS: http://www.mdsystem.com
QC29 – FMP PPAP Check List Raw Material
QC31 – FMP PPAP Submission Checklist
QC34 – FMP Breakpoint Notice
QC35 – FMP Breakpoint Label
QC38 – FMP Warrant
QC146 – FMP Supplier Inspection Report – Disc Pads
QC148 – FMP Supplier Inspection Report – Brake Shoe
QC149 – FMP Supplier Inspection Report – Brake Discs
QC180 – SCAR Worksheet
Part Inspection Report
PS010 – FMP Shim Packaging Standard
PS011 – FMP Backing Plate Packaging Standard
OP 1401 – Corrective and Preventive Action Procedure
SOP N00 09 – Product Integrity Work Instruction
SOP G02 07 – Supplier Approval & Assessment
Problem Investigation Report (PIR)
The Australian Motor Vehicle Standards Act 1989
Australian Motor Vehicle Standards Regulations 1989
B8K4-20 Drawing Standard for Traded Product

4.0 Organization Acronyms

AOP	Annual Operating Plan
BAU	Business as Usual
BP	Backing Plate
BUM	Business Unit Manager
CIS	Continuous Improvement Summary
CV	Commercial Vehicles
ERT	Emergency Response Team
FMEA	Failure Mode & Effects Analysis
FMP	Friction Material Pacific
FMPA	Friction Material Pacific Australia
FMPM	Friction Material Pacific Malaysia
FMPT	Friction Material Pacific Thailand
HSE	Health Safety & Environment
IAM	Independent Aftermarket
KPI	Key Performance Indicator
NAO	Non-Asbestos Organic
NCR	Non-Conformance Report
NPI	New Product Introduction
OE	Original Equipment
OP	Operating Procedure (Quality System Level)
PAC	Product Action Committee (Sales)
PAD	Product Action Document
PAW	Project Approval Worksheet
PIC	Product Integrity Committee
PIR	Problem Investigation Report
PPAP	Production Parts Approval Process
PPM	Parts Per Million
PVL (WETS)	Passenger Vehicle Linings
QA	Quality Assurance
QAP	Quality Assurance Procedure
SAPR	Supplier Assessment Performance Rating
SCAR	Supplier Corrective Action Report
SOP	Standard Operation Procedure
TPM	Total Productive Maintenance
TQM	Total Quality Management

5.0 Revision History

Revision Level	Effective Date	Revision Detail	Revised By
0	03/12/2009	Originated TS Supplier Manual Released	Shayne Burns – Quality Engineer
1	21/04/2010	Front page image change	Ian Bott – Managing Services Manager Shayne Burns – Quality Engineer
2	29/07/2010	Revised Scope section 1.1 regarding affecting performance characteristics of manufactured product	Andrea Currie – Quality Manager Ian Lynch – Supply Base Manager Shayne Burns – Quality Engineer
3	12/10/2010	• Included reference to QC070 in section 2.31 • Replaced QAP1301 reference with OP1401 in section 2.33.1 and 3.2 • Replaced TS16949 and ISO9001:2000 with updated certifications TS16949:2009 and ISO9001:2008 in sections 2.2 and 3.2 • Included acronyms SCAR and OP in section 4.0 • Removed reference to FMP's Quality Records Matrix and OP501 in section 2.35 and 3.2 • Include Akebono customer retention requirements for documentation and updated Bosch's retention time frame in section 2.35	Doug Williams – Quality System & Project Facilitator Shayne Burns – Quality Engineer
4	21/02/2011	• Section 2.13 PPAP reference PPAP and Warrant checklists • Revise in section 2.27 Supplier Performance Ratings to include Supplier Assessment Performance Rating (SAPR) criteria • Added organizational acronyms FMPA, FMPM, FMPT, PDN, RIP and SAPR • Removed organizational acronym BxT • Section 2.36 in place for Breakpoint procedure	Shayne Burns – Quality Engineer
5	05/12/2011	Product Integrity document WKI N04 has been updated to SOP N00 09 – Product Integrity Work Instruction	Shayne Burns – Quality Engineer

6	02/12/2013	Updated IMDS requirements (2.18)	Doug Williams – Quality System & Project Facilitator
7	17/11/2015	QC70 (Deviation / Concession Form) removed from section 2.31	Doug Williams – Quality System & Project Facilitator
8	13/09/2016	Revised section 2.27 Supplier Performance Rating • Separate evaluation criteria and frequency • Revised score weighting and criteria	Yong Suet Lie – Supplier Quality Engineer
9	01/02/2018	• Front page image changed • Rewritten section 1.1 Scope by adding traded product • Removed APQP section • Rewritten section 2.4 Pre-award with new practice • Revised section 2.6 Special Characteristic with remain Significant Item Characteristic only as special characteristic • Simplified section 2.7 Process Capability and Control • Renamed section 2.8 Sub-contractor Control to Control of Externally Provided Processes, Products and Services • Combined Returnable Packaging section into section 2.19 Product Identification and Packaging • Removed Early Production and Pilot Part Requirements section • Removed Manufacturing Process Review section • Rewritten section 2.10 PPAP with new requirements • Removed Run @ Rate section • Combined Annual Re-qualification section on PPAP into new section 2.10 PPAP • Revised section 2.27 Supplier Performance Ratings with new evaluation elements, criteria and points. Removed yearly evaluation. • Rewritten section 2.28 Incoming Quality Process with new practice • Revised section 2.30 Containment Requirements with new practice. Removed Containment for New Production Parts section. • Revised section 2.35 Record Retention with new requirements	Andrea Currie – Quality Manager Yong Suet Lie – Supplier Quality Engineer Quality Team, Supplier Chain Team, Product Engineering Team and HSE Team.

		• Added new section 2.14 Certificates of Analysis (C of A), section 2.16 GHS Requirements, section 2.17 ECE R90 Requirements, section 2.20 Shipping Documentation • Remove QC030	
10	03/10/2018	• Added commercial desktop audit in section 2.4 Pre-award • Minor revised on requirements in section 2.10 PPAP • Added requirements in section 2.13 C of C • Rename and added requirements in section 2.21 Delivery Performance and Requirements • Added requirements in section 2.22 Contigency Plan • Added evaluation elements in section 2.27 Supplier Performance Rating • Combined Warranty and Cost Recovery section with Charges for Supplier Responsible Non-Conformances section. • Added requirements and charges information in section 2.32 COPQ • Added MS1164:2015 in section 2.33.2 Regulatory Compliance • Added documents in section 3.1 Supporting Industry Documents • Added reference documents in section 3.2 References • Revised sction 4.0 Organization Acronyms	Yong Suet Lie – Supplier Quality Engineer Doug Williams – Quality System & Project Facilitator Belinda Barrett – Quality Engineer Thawatchai Singsermwong – FMPT QMR & Quality Manager John Nizorski – Buyer Traded Product
11	21/10/2019	Revised section 2.27 Supplier Performance Rating • Deleted score criteria and revised score point • Standardized the definition for acronyms Updated origin country for section 2.20.2 and 2.20.3	Yong Suet Lie – Supplier Quality Engineer Doug Williams – Quality System & Project Facilitator Belinda Barrett – Quality Engineer

12	02/11/2020	• Section 2.4 Pre-Award: revised 3 required QMS standard document • Section 2.5 Engineering Prototype Sample Submission: include fitting test report • Section 2.10 PPAP: separated accessories from backing plate group • Section 2.11 Changes to Approved Products and Processes: revised requirements. • Section 2.16 GHS requirements: include specific requirements. • Section 2.22 Contingency Plan: include review frequency • Section 2.27 Supplier Performance Ratings: removed 1 evaluation element, revised weighting % for delivering & scheduling • Section 2.30 Containment Requirements: rewritten with new requirements • Section 2.33.2 Regulatory Compliance: removed two examples • Section 3.2 References: revised QC31 document name, added five new documents	Andrea Currie – Quality Manager Yong Suet Lie – Supplier Quality Engineer Doug Williams – Quality System & Project Facilitator Belinda Barrett – Quality Engineer Thawatchai Singsermwong – FMPT QMR & Quality Manager
13	15/11/2021	• Section 2.13 Certificate of Conformance (C of C) / Inspection report: include FMP report format • Section 2.20.2 Shipping documentation: combine the columns by origin country • Section 2.27 Supplier Performance Rating: revise QN point allocation • Section 3.2 References: add 7 documents	Yong Suet Lie – Supplier Quality Engineer Doug Williams – Quality System & Project Facilitator