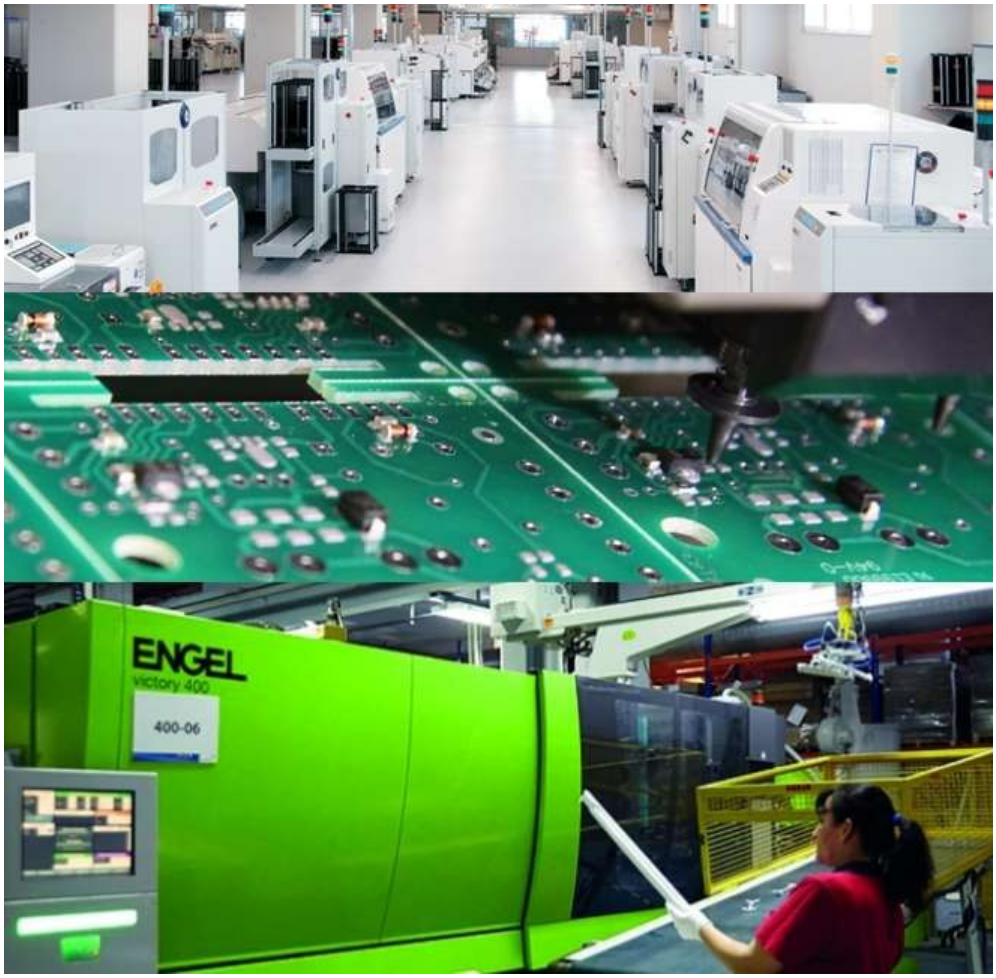
SUPPLIER MANUAL

ALPPLAS ENDÜSTRİYEL YATIRIMLAR A.Ş.

SUPPLIER MANUAL



Factory:
Alpplas Endüstriyel Yatırımlar A.Ş.
Beylikdüzü Plant
Mermerciler Sanayi Sitesi 4. Cad. No: 16
Beylikdüzü, 34524, İstanbul, Turkey

T. +90 212 876 2790
W. www.alpplas.com

Head Office:
Alpplas Endüstriyel Yatırımlar A.Ş.
Meydan Sokak No:1 Beybi Giz Plaza Kat:6
No:19 Maslak, 34398, İstanbul, Turkey

T. +90 212 2902200
W. www.alpplas.com

SUPPLIER MANUAL

0.0 REVISION PAGE

REV. NO.	DATE	PAGE NO.	REVISION DESCRIPTION	APPROVAL
00	01.02.2017	-	First Issue	
01	28.02.2017	23	Review	
02	28.02.2017	23	Review	
03	12.01.2021	24	Review	
04	02.02.2022	20	Review	

SUPPLIER MANUAL

TABLE OF CONTENTS

SUPPLIER MANUAL

SUPPLIER MANUAL

1.0 PREAMBLE

1.1 PURPOSE

This Supplier Manual is intended to inform all the suppliers that provide Alpplas with products and services of the requirements as set forth under the quality management system of Alpplas Endüstriyel Yatırımlar A.Ş. The Supplier Manual of Alpplas is based on the IATF 16949 Quality System Requirements developed by the International Automotive Task Force (IATF). For all the suppliers that provide Alpplas with products and services, Alpplas has adopted a quality system designed within the framework of the IATF 16949 as its own quality system requirements. The purpose of the IATF 16949 is to develop quality processes in order to highlight the importance of continuous improvement and error prevention avoiding unnecessary actions in a supply chain. This applies to all the internal and external suppliers that provide critical products and services. These requirements support the respective provisions of the IATF 1649 and ISO 9001 as stated on purchase orders placed by Alpplas. Alpplas requires its suppliers to:

- Manage their plants, processes, quality systems and personnel in a compliant manner; make productions and offer services efficiently and cost-effectively to meet the needs of Alpplas and its customers;
- Develop, implement, document and maintain an APQP process to meet the requests for products and services;
- Provide evidence proving that the requests for first samples are met and that acceptance process qualifications are applied for all the special characteristics. Warrant continuous improvement by means of reducing variations from one piece to another and preventing unnecessary procedures.

1.2 SUPPORTING DOCUMENTATION

The following publications are made available at the International Automotive Task Force (IATF). These documents contain additional information for Alpplas' Suppliers:

- Quality System Requirements IATF 16949 or ISO 9001
- Production Part Approval Process (PPAP)
- Advanced Product Quality Planning and Control Plan Manual (APQP)
- Failure Mode and Effects Analysis (FMEA)
- Measurement System Analysis (MSA)
- Statistical Process Control (SPC)
- Customer Special Requests (CSR)

1.3 CERTIFICATION

These requirements are supplementary to the purchase orders placed by Alpplas.

The suppliers are encouraged to have IATF 16949 certification; however the suppliers are required to have ISO 9001 certification at minimum as issued by an independent third party certification authority.

2.0 PURCHASE REQUESTS

2.1 CRITERIA FOR SELECTION OF NEW SUPPLIERS

In case of one of the following situations, the respective supplier is included into the Alpplas List of Approved Suppliers. The required inspections and audits are then to be carried out and conducted. Otherwise, the requirements as set forth under the Table 1 are expected to be fulfilled.

- A supplier that is included into a customer's List of Approved Supplier and that is required by that customer,
- A supplier that is indicated on the technical documents of a customer for a specific material,
- A supplier that is the sole and/or approved authorized seller, service or representative for a specific Product/Machine/Equipment/Service.

SUPPLIER MANUAL

Table 1 Alpplas' List of Approved Suppliers Requirements

MATERIALS			Supplier Risk Analysis	Supplier Details	Quality System Certificate Requirement		Proposal Assessment	First Product Approval Process Requirement			
								Sampling			
					ISO 9001	IATF 1694		Necessary	Unnecessary	Test Report	PPAP Requirement
SUPPLIERS GROUP-1 : Those Supplying Products That Are Directly Used in Production											
1	Plastic Raw Materials / Granulated MasterBatch	1.1.A	✓	✓	✓		✓	✓		✓	✓
		1.1.B	✓	✓	✓		✓		✓	✓	
		1.1.C	✓	✓	✓		✓	✓		✓	
2	Terminal / Coolers / Screws/ Cables	1.2.A	✓	✓	✓		✓	✓		✓	✓
		1.2.B	✓	✓	✓		✓		✓	✓	
		1.2.C	✓	✓	✓		✓	✓		✓	
3	Electronic Material	1.3.A	✓	✓	✓		✓	✓		✓	✓
		1.3.B	✓	✓	✓		✓		✓	✓	
		1.3.C	✓	✓	✓		✓	✓		✓	
4	Plastic Part/ Decorative Part/ PCB	1.4.A	✓	✓	✓		✓	✓		✓	✓
		1.4.C	✓	✓	✓		✓	✓		✓	
5	Paint / Ink/ Thinner/ Adhesive / Tape/ Silicon Par / Protective	1.5.A	✓	✓	✓		✓	✓		✓	✓
		1.5.B	✓	✓	✓		✓		✓	✓	
		1.5.C	✓	✓	✓		✓	✓		✓	
6	Software/ Automotive products with embedded software	1.5.A	✓	✓	✓	✓	✓	✓		✓	✓
SUPPLIERS GROUP-2 : Those Supplying Auxiliary Materials Needed in Production											
1	Packaging Materials	2.1.A	✓	✓	✓		✓	✓		✓	
		2.1.B	✓	✓	✓		✓				
		2.1.C	✓	✓	✓		✓	✓			✓
2	Stencil	2.2	✓	✓	✓		✓				
3	Production Consumables (Soldering iron/ Solder/ Nitrogen Gas)	2.3	✓	✓	✓		✓			✓	
SUPPLIERS GROUP-3 : Those Engaging in Contract Manufacturing											
1	Electronic Assembly	3.1.A	✓	✓	✓		✓	✓		✓	
		3.1.C	✓	✓	✓	✓	✓	✓		✓	✓
2	Coating/ Painting	3.2.A	✓	✓	✓		✓	✓		✓	✓
		3.2.C	✓	✓	✓		✓	✓		✓	
SUPPLIERS GROUP -4 : Service											
1	Transport/ Logistics	4.1	✓	✓			✓				
2	Calibration / Test Laboratory	4.2		✓	ISO 17025		✓				
3	Training/ Consulting	4.3		✓			✓				
4	Personnel Service / Security / Cafeteria / Cleaning	4.4		✓			✓				
5	Reprocessing/ Sorting/ Rework Option etc.	4.5	✓	✓			✓				
6	Equipment Service	4.6		✓			✓				
		A: Custom Prod. / Automotive		***B: Standard Catalogue Prod.***			***/***	***C: Custom Prod. Non-Automotive***			

2.2 SUPPLIER SELECTION PROCESS

2.2.1 Supplier Candidate Information Form

Alpplas requires the supplier candidates to sign the Supplier Candidate Information Form (FR.09.03-010) and Confidentiality Agreement (GNL.FR.01-011). In addition to these forms, it also shares the status information on the quality system certificates it possesses (IATF 16949, ISO 9001, ISO 14001). It shares the current

certificates if possible. All type of information submitted by the supplier candidates are to be kept by Alpplas within the framework of the respective **confidentiality rules**.

In case of any change to the information specified on this form (moving, growing, name change etc.), the respective supplier is asked to update the information accordingly.

2.2.2 Supplier Risk Analysis Form

During the process of commissioning a supplier, the Procurement Management also completes a Supplier Risk Analysis Form (FR.05.01-009) in the light of information obtained from the supplier. A supplier is asked to take necessary actions concerning the items responded as Yes in terms of risk if it is decided to work with that supplier. The supplier informs the Procurement Management of the actions it identifies. The Procurement Management ensures these actions are monitored.

2.2.3 Supplier System Audit

During the supplier selection process, in case a candidate possesses IATF 16949 and/or ISO 9001 certification, then a quality system audit is carried out. A Quality System Audit is an audit that is conducted within the production site of the respective supplier candidate. A form of Supplier Audit Questionnaires (FR.07.05-012) is used to that end. It takes in general 1 day to complete this audit. A supplier is required to have a success of 70% at minimum as a result of this audit in order to get qualified to be in Alpplas' List of Approved Suppliers.

The purpose of a supplier audit is to inform the suppliers of what the quality requirements of Alpplas are. Another purpose of the audit is to verify that a supplier candidate has a compliant process and confirm that its quality process functions properly.

Alpplas must be provided with a formal response concerning all the major items decided to be "improved" after the audit and a follow-up action plan that needs to be based on a certain period of time.

During the process of a new supplier selection and assessment, Alpplas may conduct different audits in order assess the qualification of the supplier. A supplier that fails to get an acceptable score during the first audit is allowed to create an action and time plan in order to remedy such non-conformances and then it will be free to ask for a new audit to verify that these actions are properly taken.

2.2.4 Quality System Certificates

In order to get included into Alpplas' List of Approved Suppliers, a supplier candidate is required to have IATF 16949 and/or ISO 9001 quality system certification and recommended to have ISO 14001, ISO 27001, ISO 45001 and ISO 50001 certification depending on the respective supplier groups (Table 1). A supplier candidate from which materials that are used for our automotive customers are to be supplied needs to have a plan indicating that the respective requirements of IATF 16949 are fulfilled.

Alpplas recommends its suppliers that they always use the most recent versions issued by AIAG for the forms that are to be used for the respective processes of APQP, Control Plan, FMEA, MSA, PPAP and SPC.

Alpplas Procurement Department follows up the current versions of the respective documents and certifications by means of using QDMS.

2.2.5 Offer Assessment

A supplier is expected to be globally competitive and offer a price that is comparable to those already offered to Alpplas.

A higher freight charge that may be needed to meet an urgent requirement of Alpplas should be approved by Alpplas in advance and, indicated on the supplier's respective invoice as a detailed separate item. A higher freight charge that is attributable to the supplier and that is applied to meet a shipment date already notified to Alpplas is to be covered by the supplier.

Alpplas expects a supplier to participate in the Continuous Improvement programs and make use of the opportunities to reduce the costs and of the programs intended to create added-values.

All the offers concerning new works and agreed-upon changes need to be submitted to the Procurement Department of Alpplas and these offers should contain part costs, mold costs and shipment times (as minimum requests).

These offers from the suppliers are assessed by the Procurement Department. The Procurement Manager may at his or her discretion also contact the Project Manager and/or the Business Development Manager in respect of quantities and price assessments.

2.2.6 On-Time Shipment

Each shipment needs to be 100% on time and in such amounts and quantities that are asked. A supplier is expected to keep a sufficient level of inventory to ensure that the shipments are sent in a complete and timely manner. An offer for deadline submitted by a supplier is as important as the unit prices. The supplier is responsible for not only the quantity of a shipment but also ensuring that the shipment is sent on time. All the expenses that are to be made to fulfill a request of Alpplas in this respect are of the responsibility of the supplier.

2.2.7 Incoming Quality Control Methods

Dimensional Measurement Reports, Material Test Reports and Raw Material Test Reports as identified for all the products purchased as well as the respective shipment details for each shipment need to be sent to the respective Quality Engineer with a cover letter via e-mail and/or shipped in accompany with the respective batch.

Alpplas identifies the number of samples by means of using the following forms prepared pursuant to the ISO 2859-1 Sampling Standard for Inspections and Testing: General Sampling Plan (P.K.05-002), Sampling Plan for Automotive Products (P.K.05-001) and Plastic Injection Sampling Plan (P.K.05-002). The Quality Department applies Strict and Loose inspection requirements over the ERP program. For general products, a decision as Accept/Refuse is taken according to AQL level 1.0.

A practice explained in detailed on the Sampling Instructions (TL.08.02-003) may be shared with the supplier if requested by it after Alpplas starts to work with it.

The incoming control for raw materials and semi-finished goods is carried out by Alpplas Quality Assurance Department according to the Incoming Quality Control Instructions. All products are accepted after the respective controls are carried out according to the number of samples and requirements as defined on our ERP system. In case of a non-conformance during the ongoing production, an 8D corrective action is initiated depending on the complaint status or the stage of sample submission restarts upon the request for 8D. In case of any non-conformance, the respective problem is resolved by means of an appropriate method selected according to the request of Alpplas (8D or sample submission).

2.2.7.1 Controlled Shipping (CS)

This process of Controlled Shipping is a process that is useful for both Alpplas and the suppliers.

CS represents 100% control of the components and ensures that they are verified by labels/crayon. This 100% control as requested contains visual, electrical or dimensional inspections. Alpplas identifies output criteria for CSL (number of shipments, inspection methods etc.) and informs the supplier of the respective CSL level. A CSL may be closed if there is "0" error during the identified shipment period. In case Alpplas decides that the actions taken by a supplier during the CSL process are insufficient, then Alpplas may request the supplier to initiate additional corrective-preventive actions.

There are 2 types of Controlled Shipments applied within the organization of Alpplas Endüstriyel Yatırımlar A.Ş.

<u>>CSL1:</u>

Before shipping the respective products to Alpplas, the supplier conducts a 100% control on its own site. It is required to attach a "CSL1 Label" (FR.01.01-127) indicating that the products at the level of CSL1 are shipped with packages in a controlled manner.

Alpplas expects that the products at the level of CSL1 are shipped in 5 shipments in a 100% controlled manner. In case there is no problem with the subsequent 5 batches, then the controlled shipping returns to a normal shipment process.

<u>>CSL2:</u>

In case of any problem with one of the subsequent 5 shipments for a product at the level of CSL1, then it is reduced to the level of CSL2 Controlled Shipping. This CSL2 level is a level indicating that the inspections by the supplier are insufficient. Therefore, it is expected that the subsequent inspections are to be conducted by an external company (agreed upon by Alpplas and the Supplier). The cost for this service is covered by the supplier. A CSL2 verification process may be carried out in the respective warehouses of Alpplas if needed. In case the

respective errors become chronic and fail to be remedied, then Alpplas may have the CSL1 practice applied concurrently with the CSL1 practice on the same shipment.

2.2.8 Packaging

Alpplas and the supplier should agree upon the form of packaging. Unless otherwise indicated on the respective specifications, the following details need to be on the packaging: quantity, the supplier's name, batch tracing no., lot no. and production date. (there may also be additional details on the purchase order no. and best before date upon a special request). All the different types should be separately packaged and shipped and never be mixed with other types.

2.2.9 Environment, Health and Safety Requests

The suppliers are required to comply with all the legal regulations concerning occupational health and safety, environmental protection, use of toxic and hazardous substances and free trade. The suppliers are also required to comply with the applicable legal and local regulations of the country, where they produce, and of the countries to which they sell. All the suppliers are asked to have ISO 14001 Environmental Management Certification. A Material Safety Data Sheet (MSDS) should be sent in accompany with the first shipment of all chemical substances and whenever a change is made to the ingredients of a product.

2.2.10 ROHS / REACH

A European Directive (EC) No. 1907/2006 on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) entered into force as of June 2007. A supplier is required to ensure that the products it supplies to Alpplas are in compliance with all the requirement of REACH. Alpplas expects its supplier to establish their own supply chains and fulfill their information requirements as per REACH within these supply chains. REACH applies to all the industries including the Automotive Industry (AI). Manufacturers of vehicles within the Automotive Industry (AI) and their sub-suppliers within their supply chains have various roles and responsibilities under the scope of REACH. A "REACH Guidance for the Automotive Industry" has been developed by all the world's automotive industry representatives to explain REACH related responsibilities for the Automotive Industry.

Please visit the following websites to get information on this guidance and REACH:

www.acea.be/collection/Reach_publications/
www.ec.europa.eu,
http://reach.immib.org.tr/

All the raw materials / materials purchased to be used for the manufacturing of products need to be in compliance with the applicable legal and legislation requirements in the countries, where the production and sales are made. These must fulfill the applicable legal and safety restrictions in respect of prohibited, restricted, toxic and hazardous substances and also environmental, electric and electromagnetic. Therefore, all the suppliers within the List of Approved Suppliers are selected considering the respective product safety requirements and legal occupational safety and environmental regulations concerning the respective raw materials / materials.

In addition to a Purchase Agreement, a Prohibited/Restricted Materials Declaration Form (GNL.FR.01-006) is requested from the companies from which Type 1, Type 2 and Type 3 materials are supplied. Together with the Purchase Agreement, the respective company will sign and seal this Prohibited/Restricted Materials Declaration Form (GNL.FR.01-006) and deliver them to the Procurement Department of Alpplas in order to declare whether it is in compliance with the applicable national/ international standards and limits. This form warrants that the said company is in compliance with the respective standards of Alpplas Endüstriyel Yatırımlar A.Ş.

2.2.11 International Material Data System (IMDS) Reporting

An MSDS report (Material Safety Data Sheet) is also requested from the supplier for the approval of chemicals (paints, inks, adhesives, flux, thinners, solvents, isopropyl alcohol, oil etc.) raw materials and masterbatches.

All the automotive suppliers are required to comply with the applicable legal regulations for all the products and materials they supply to Alpplas. As part of the production part approval process, by means of using the IMDS, the supplier is required to report all the chemicals contained in the products and raw materials it supplies to Alpplas. For this IMDS reporting, please visit: www.mdsystem.com.

To log on to the IMDS system: **Company ID:** 138471. **Company Name:** Alpplas Endüstriyel Yatırımlar A.Ş. A first sample approval is not given for the respective products or raw materials before this log on.

2.2.12 Alpplas Conflict Minerals Policy

As part of our commitment for environmental compliance and the protection of human rights, the suppliers are required to ensure that none of the products they supply to Alpplas contain "conflict materials" (metals that are obtained from and that contribute to the conflicts in the Democratic Republic of the Congo (DRC) and its neighboring countries (tantalum, tin, tungsten or gold).

The suppliers of the compounds that contain these metals are expected to communicate this requirements that these metals should be obtained from non-conflict resources throughout their supply chains. The suppliers are required to declare that all the products they supply are of "non-conflict". Accordingly, all the suppliers are required to submit a Conflict Minerals Declaration Form (GNL.FR.01-013) in order to be able to work with Alpplas Endüstriyel Yatırımlar.

2.2.13 Emergency Case Plan

The suppliers are required to prepare an Emergency Case Plan for potential disasters, epidemics and other conditions that may prevent them from supplying their products to Alpplas. This plan should contain the contingency plans for products, computers and sub-suppliers as a minimum requirement. The suppliers should immediately Alpplas and the concerned persons of the course thereof during this period.

2.2.14 Subcontractors

It is not possible for a supplier to place an order with a sub-contractor without a written consent from Alpplas. If this is the case, the agreement will be partly or wholly terminated and, the contractor will be held responsible for possible damages without the need to indicate any reason.

2.2.15 Product Traceability

The supplier is responsible for assuring of product traceability. If it is not possible to mark a product, the packages should be clearly distinguished from one another (part number, product name, technical drawing number, revision number and date, specification number, lot number, batch number, manufacturing date etc.).

Alpplas' purchase order number and/or specification number should be clearly defined on the respective dispatch note issued by the supplier for Alpplas in respect of additional operations carried out by sub-suppliers for Alpplas (coating etc.) and all the products supplied by Alpplas.

2.2.16 Confidentiality

All the suppliers that supply products or services to Alpplas are required to comply with the confidentiality requirements of Alpplas and the respective customers of Alpplas. Until serial purchase orders are placed by Alpplas, all the technical and financial information need to be kept confidential by the respective suppliers and subcontractors. The supplier is required to warrant that its employees and other third parties with which the supplier has commercial and other business relationships will comply with the said confidentiality requirements of Alpplas. At the stage of serial purchase order, the respective Confidentiality Agreement (GNL.FR.01-011) will be signed by Alpplas and the respective supplier and then kept on the project file.

2.2.17 Purchase Agreement

All the suppliers that supply products or services to Alpplas are required to the general purchase conditions of Alpplas and the respective customers of Alpplas. The said conditions are described in detail on the general Purchase Agreement prepared by Alpplas (GNL.FR.01-001). The annexes highlighted on the purchase agreement are prepared in duplicate.

For the new molds to be constructed by Alpplas, a Mold Order Agreement is entered into with the respective suppliers before the respective purchase order is placed (GNL.FR.01-002).

For the Logistics/Transport service to be procured by Alpplas, a Transport Service Agreement is entered into with the respective suppliers of Logistics/Transport (GNL.FR.01-014).

1 copy is delivered to the supplier after the approval from the Business Manager and, the other copy is maintained on supplier file. These approved agreements are kept by the Purchasing Responsible at the Procurement Department. Accordingly, a purchase agreement is signed by Alpplas and the respective supplier and kept on the project file.

Other Annexes:

- List of Material Prices
- Loan (Bailment) Agreement (GNL.FR.01-003)
- Indirect Material Quality Specifications (GNL.FR.01-005)
- Direct Material Quality Specifications (GNL.FR.01-004)
- Prohibited / Restricted Materials Declaration (GNL.FR.01-006)
- Technical Information Page (GNL.FR.01-007)
- Supplier Target Reconciliation Form (GNL.FR.01-008)
- List of Tariffs (FR.07.05-022)

Special requests of Alpplas are communicated to the supplier through 'Supplier Manual (EL.01-005) and the supplier is expected to operate in accordance with the special requests of Alpplas.

2.2.18 Guarantee Management System

A guarantee management process is applied within the organization of Alpplas Endüstriyel Yatırımlar A.Ş. for the products concerning which we are required to grant guarantees to our customers (in particular those for the automotive industry). This process is managed through a guarantee analysis including No-Found-Trouble/NTF products. A Claim Management System is applied for the products of Alpplas replaced under the guarantee scope or a Guarantee Management System is applied for the products sent for review.

The respective suppliers are expected to provide technical support for all the products we supply in respect of necessary analyses. For the products considered within the scope of these qualifications, the guarantee scope, the conditions of use, how a technical analysis should be carried out, the descriptions of responsibilities, and operations x responsibilities matrix are clearly specified on the respective Purchase Agreements.

A mutual understanding needs to be reached in a way that covers the time period determined with the supplier based on the "Guarantee Conditions" TDS data as specified on the respective Purchase Agreement, the component life and performance test results.

Any losses as may arise during this process will be assessed with the supplier for each case. In case of returns under warranty caused by a supplier, the respective losses will be covered by the supplier. This process will be managed by the Procurement Department of Alpplas.

2.2.19 Quality Agreement

The targets for the shipment performance and ppm to be achieved by the suppliers will be annexed to the agreement with a Supplier Target Reconciliation Form (GNL.FR.01-008). The suppliers are informed of the information concerning the respective materials via a Technical Characteristics page annexed to the Purchase Agreement. The Technical Characteristics page is prepared by the ALPPLAS Quality Management with a purchase request. The pages prepared in this manner are forwarded by the Procurement Department of Alpplas to the respective suppliers. A copy thereof signed by the suppliers are sent to Alpplas. After being approved by Alpplas, 1 copy of the respective documentation is sent to the suppliers.

2.2.20 Raw Material Conformity Report

The supplier is required to get a material conformity report for the raw materials it supplies (such as components, consumables, solders, adhesives, solvents etc.) and sent the same to Alpplas Endüstriyel Yatırımlar A.Ş. for each batch.

2.2.21 Responsibilities

The supplier is required to fulfill the above-mentioned conditions. Otherwise, Alpplas Endüstriyel Yatırımlar A.Ş. is entitled to return and charge back the products it has received and review the purchase orders.

3.0 SUPPLIERS ASSESSMENT

3.1 SUPPLIER ASSESSMENT

Assessment of the supplier's performance is an important function within the quality process of Alpplas. With a supplier performance assessment system, Alpplas put into use a formal method in order to assess the suppliers. The supplier performance assessment constitutes of 4 main criteria: Quality, Environment Certification, Shipment and Penalty Points.

A supplier receives a supplier performance assessment report at regular intervals or at least once a year. The assessment criteria will be used to identify the continuous improvement areas of Alpplas and the suppliers. These assessments will also be used for the supplier selection process. The suppliers with low performance will be informed accordingly and asked to make use of the same to initiate corrective actions and provide feedbacks. Low performance on a continuous basis will cause the respective supplier to be removed from the List of Approved Suppliers. On a monthly basis, actions are opened for suppliers with a total score below 70 and suppliers with a score below 70 for 3 months are added to the annual audit plan(FR.07.05-011).The main headings of Alpplas Supplier Assessment System are as follows:

3.1.1 Quality Performance (40 Points)

> RETURN PPM

RETURN PPM	Penalty Point
Less than 500 ppm	0 point
500 - 1000 ppm	-5 points
1000 - 2000 ppm	-10 points
2000 - 5000 ppm	-15 points
More than 5000 ppm	-20 points

In case of a return for the months in which no shipment is made, PPM will be calculated according to the quantities in the previous shipment.

> INCOMING MATERIAL QUALITY POINT (30 POINTS)

The incoming material quality point should be calculated as GKK Acceptance + 30 points and -30 points. For site returns, a penalty point is applied in a way that Return PPM penalty points are valid.

> PRODUCTION REFUSAL POINT (-30 POINTS)

-30 points is imposed for a non-conformance found during the production.

> CONDITIONAL ACCEPTANCE (-10 POINTS)

-10 points is imposed for conditional acceptance for the production.

> PACKAGING AND LABELLING (Point for Conformity with the Agreement and Labeling) (5 POINTS)

A supplier is given a score for the conformity of the packages and labels of the materials it supplies. Full score is 5 points. In case of non-conformance in respect of packaging and labelling, 0 point is given.

> MATERIAL REPORT / MSDS (5 POINTS)

The supplier is given +5 points if the material is supplied in accompany with the respective MSDS. 0 point is given in case of the failure to provide it.

3.1.2 Quality and Environment Certification Performance (YSP) (20 Points)

+3 points for ISO 9001 certification; +2 points for ISO 14001 certification; +2 points for ISO 127001 certification; +2 points for ISO 50001 certification; +7 points for IATF 16949 certification; +4 points for ISO 45001 certification.

3.1.3 Shipment (40 Points)

The Supplier Shipment Performance for the Type 1, Type 2 and Type 3 Suppliers is calculated by the Purchasing Responsible and Incoming Quality Control Officer considering the following criteria. The assessment for the Type 4 suppliers is carried out by the Department of Administrative Affairs.

For each purchase, the Purchasing Responsible enters on the Supplier Assessment Form (FR.07.05-013) the following details: purchase order number, material name/number, deadline compliance, quantity compliance etc. and sends the same to the Quality Assurance Department. The Incoming Quality Control Officer enters the label and packaging related details and the material incoming quality score, and then calculates the shipment performance for each supplier accordingly. The quality system score is followed up by the Purchasing Responsible. These assessments are followed up by the Purchasing Responsible on a monthly basis.

> DELIVERY DATE COMPLIANCE (On-Time Delivery)

Our expectation for 100% shipment compliance is specified on the general purchase agreement signed by each supplier.

Shipment Status	Points
On-Time Delivery	20 points
Early Delivery for 0-10 days	10 points
Late Delivery for 0-7 days	5 points
Late Delivery for 7 days and more	0 points

> COMPLIANCE WITH QUANTITY ORDERED (Quantity Compliance)

Shipment Status	Points
Shipment with Quantity Requested	20 points
Shipment with Quantity More Than Requested by 0-20%	10 points
Shipment with Quantity Less Than Requested by 0-20%	5 points
Shipment with Quantity More or Less Than Requested by 20%	0 points

3.1.4 Penalty Points

> REOCCURRED MISTAKE POINT (-15 POINTS)

In case of a reoccurred mistake, **-15 penalty points** are imposed.

> CPA/8D RESPONSE PERFORMANCE

Calculated as from the date of closure of CPA for the supplier

Response Performance	Penalty Point
Late response for 0-10 days	-5 points
Late response for 10-30 days	-10 points
Late response for 30-60 days	-15 points
Late response for more than 60 days	-20 points

> REFLECTION OF CUSTOMER LINE STOPPAGE ON PERFORMANCE POINT (-30 POINTS)

In case of failure to send a shipment to a customer in due time due to the late delivery of the purchased materials to Alpplas or in case of failure to make the production and/or send a shipment because of an error in the supplied material attributable to the supplier, then not more than **-30 points** of penalty are imposed on the supplier on the condition that it is to be reflected to the total supplier classification score. This score is determined by the Quality Assurance Manager considering the severity of the respective complaint.

> CUSTOMER WARRANTY RETURN POINT (-15 POINTS)

-15 points are imposed for a return from a customer due to a supplied material.

> CUSTOMER CSL POINT (Customer CSL Application due to a Supplied Material) (-20 POINTS)

-20 points are imposed in case a CSL is initiated by a customer due to a supplied material.

> FREIGHT NON-COMPLIANCE (-10 POINTS)

-10 points are imposed as penalty points for the failure to comply with the specified freight route or partial shipment.

> FREIGHT NON-COMPLIANCE FOR MATERIALS FROM CUSTOMER

In case of materials supplied from a customer, the Production Planning Team Leader makes a follow-up of the material return PPM values and expensive freight fees to inform the respective customer on a monthly basis.

3.1.5 Supplier Classification Point Calculation and Classification

Supplier Classification Point (SP)	=	Management System Point (MSP)	+	Performance Point (PP)

Supplier Classification Point (SP) **=** Score that is used to classify a supplier.
Management System Point (MSP) **=** Score that is depending on certification. (3.1.2)
Performance Point (PP) **=** Score that is calculated by subtracting the penalty points from the Quality and Shipment Performance points.

The supplier classification point is calculated by the Procurement Department on a daily basis and notified to all the suppliers by the Purchasing Responsible by means of a Supplier Performance Notification Form (FR.07.05-016) on quarterly periods.

Supplier Classification	Point	Description
Group A Supplier	**85-100 points**	**Capable of developing and applying quality efforts**
Group B Supplier	**70-84 points**	**Should improve the level of product quality reliability**
Group C Supplier	**50-69 points**	**Insufficient level of product quality reliability; should improve and apply accordingly with external technical assistance**
Group D Suppliers	**0-49 points**	**Insufficient or inefficient level of product quality reliability. Not recommended to work with.**

The target is that the supplier is within Class A. The suppliers are required to comply with the Supplier Manual (EL.01-005) of Alpplas Endüstriyel Yatırımlar A.Ş. The suppliers are also notified in writing of the shipment performance targets and the product quality targets (PPM).

Supplier Classification	Expectation	Audit Issuance Date
GROUP A SUPPLER:	Expected performance level that should be maintained	An Audit Plan within 2-3 years for Quality System.
GROUP B SUPPLER:	Suitable for new product and projects. Expected to carry out actions to enhance performance	
GROUP C SUPPLER:	On-site process / system supervision or asked to provide a detailed action plan.	An Audit Plan within 1-2 years for Quality System.
GROUP D SUPPLER:	Not recommended to work with for new projects. Alternatives are sought for.	Re-audit within not later 6 months for Quality System. Given 6 months to increase points and otherwise: - Alternative supplier is sought for if there is no alternative supplier - All the orders are transferred to the alternative supplier if any. This decision is recorded by means of a meeting minutes.

3.2 INSPECTION ON SUPPLIED PRODUCTS

3.2.1 Non-Conforming Products

In case of non-conforming products or services from a supplier, the supplier will be informed via e-mail of this non-conformance with a decision of conditional acceptance or refusal by means of a quality control report issued by Alpplas. Alpplas will then require the supplier to prepare a corrective action in the form of **8D**. The supplier is required to indicate the quality control report number on the 8D report. An 8D report that contains provisional measures, possible root causes and the target application date will be prepared by the supplier and sent to Alpplas within 24 hours. The supplier is required to complete the 8D report by the target application date it indicates. The 8D report needs to be fully completed and sent by the supplier to Alpplas within 15 days. From time to time, the respective end user of Alpplas may ask for an urgent response. In this case, Alpplas may ask its supplier to provide a preliminary correction action report formally prepared and reviewed within an appropriate period of time.

A product or service may also be refused after GKK. In case of a non-conformance found during the production processes of Alpplas, the supplier will be informed to initiate a corrective action and prepare an 8D report as described above. The costs that may arise during this process will be charged upon the supplier according to the then-current agreed upon Tariff List of Alpplas.

Non-conforming products or doubtful products are not allowed to be sent until and unless they are approved by Alpplas. This approval should be documented and cover the respective quantity and time. These types of shipments should be labelled with the specified labels and the deviation permit number and date should be defined on the label.

The supplier is required to measure the efficient of the corrective actions.

Upon the request (for automotive suppliers), after the corrective action, the supplier makes necessary changes on the Process Flow Diagram, FMEA and Control Plan and, provides Alpplas with the most recent copies of these documents in accompany with the respective samples.

Faulty products, wrong quantities, inaccurate labelling etc. may have a significant impact on the general performance of Alpplas and also negatively affect the commercial relationships of Alpplas with its end-customers.

All the costs associated with faulty products supplied by a supplier will be charged upon that supplier and, all faulty products as identified will be returned to the supplier.

3.2.1.1 Quality Firewall Application

For such non-conformances, the root cause of which fails to be identified, and which could not be prevented from being repeated or which repeat due to the failure to take efficient actions, the respective supplier may be asked to block the respective shipments and carry out a Quality Firewall Application.

A firewall is a request that a supplier is expected to place an additional inspection process (above and beyond normal controls) in order to sort out faulty materials. In order to insulate the faulty products from our production, the respective supplier may be asked to carry out this application. Data obtained from an additional inspection carried out by the supplier are of crucial and should be used to improve the respective processes.

For the products about which a Quality Firewall Application is requested, the supplier may be asked to provide and confirm new samples depending on the severity of the error. The shipments pertaining to the products may be refused.

3.2.2 Supplied Products Guarantee Management and Product Recall Management

Any losses due to returns under warranty from customers of Alpplas and product recalls due to the supplied products are of the responsibility of the respective supplier.

3.2.3 Application of Tariff Lists

Sorting out/rework labor fees and invoices for production halts due to a fault attributable to a supplier will be charged upon the supplier based on the then-current Tariff List (FR.07.05-022) signed by the supplier on the Purchase Agreement.

A decision for sorting out/rework labor may be made by Alpplas Endüstriyel Yatırımlar A.Ş. in a way that covers the minimum purchase order due to restrictions such as production emergency. The decision on product returns, conditional uses or reworks for the remaining quantities will be managed together with the supplier in a way that does not hinder the purchase orders of Alpplas. All the losses that arise due to this process will be calculated based on the tariff fees that are specified on the tariff and that are agreed upon with the supplier. The losses calculated in this manner will be charged accordingly after an assessment carried out with the supplier.

In case Alpplas stops a customer line due to a mistake/shipment problem that is attributable to the supplier, each case will be separately assessed with the supplier accordingly.

This process is to be conducted within the responsibility of the Procurement Department of Alpplas.

3.2.4 Verification at Supplier Site

Alpplas and the customers of Alpplas – if deemed necessary – may carry out a verification process at the supplier site in an area that is acceptable to the supplier for the respective products on the condition that the supplier will be notified beforehand. This verification will not supersede the Incoming Quality Control Approval for the products. The respective patch may be refused and returned by the Incoming Quality Department if it is found to be non-conforming.

4.0 SUPPLIER QUALITY REQUIREMENTS

4.1 ADVANCED PRODUCT QUALITY PLANNING TEAM

Alpplas uses a team approach for the management of the Advanced Product Quality Planning (APQP). The Advanced Product Quality Planning Team (the APQP Team) is an interdisciplinary functional that is responsible for fulfilling the customer requirements for a new product. The APQP Team follows a structural method to define the customer requirements and, create necessary steps in order to provide a customer with a quality product at the lowest cost.

A typical interdisciplinary functional APQP team consists of the representatives from the departments of project, production, quality, procurement and from the supplier. Depending on the complexity of the new product, a supplier may be asked to participate in Alpplas' APQP Team.

Independent of this team, the supplier is required to form a functional team in order to coordinate its own APQP activities.

Outputs of the APQP Team's activities:

- Elect the respective persons and disciplines and identify them under the scope of the APQP activity,
- Define the roles and responsibilities for each area represented,
- Identify internal and external customers,
- Define the customer requirements,
- Understand the customer expectations,
- Perform a design feasibility study for the product offered,
- Determine the cost, time and restrictions of the processes to be used,
- Identify the supports to be asked from the customer,
- Complete all the needs for APQP as may be requested by Alpplas.

The process of the APQP process needs to be documented to ensure that all the parties are aware of the outputs completed and of the program requirements.

Activities of the APQP Team may be documented as follows:

- APQP Team Procedure – defines the team membership, the program scope, the important timing milestones and the significant outputs.
- Product Development Report (Time Schedule) – defines all the milestones of the program.
- Review Report – defines the program scope and ensures that the product specifications are reviewed.
- List of Ongoing Issues – a document intended to follow up all ongoing issues from start to end. A living document that reviews the team efforts.

Quality Planning Requests – are indicated together with the end dates in accordance with the planning purpose. Should contain the following documents as a minimum requirement:

- Process Flow Diagram
- Process FMEA
- Control Plan
- Inspection Standards
- Engineering Change Records

All the significant process steps from the stage of design to the stage of trial production should be listed on the PPAP documentation. The planned and actual dates for each process step should be listed.

4.2 PROCESS FMEA

The Process FMEA document is a necessary document for the PPAP submission.

PROCESS FAILURE MODE AND EFFECTS ANALYSIS is an analytical technique that is used by the Process Engineer or the Production Team to analyze and address the possible failure modes that may occur on the process and, the reasons associated therewith. PFMEA is an important form that summarizes the concerns of the responsible engineer or team in connection with a process that is being developed.

Process FMEA is intended to:

- Analyze and define the possible failure modes associated with the product process based on past experience and complaints.
- Analyze the effects of the potential failures on the customer.
- Define the potential failure reasons for the production and assembly process.
- Define that which process variables should be focused on in order to troubleshoot the failures and reduce the reoccurrences thereof.
- Develop of a list of potential failure modes to create a priority system for corrective actions.
- Document the results of the production and assembly process.

At the beginning of a PFMEA process, it is expected that an engineer and representative from each area that is affected are directly and actively present.

PFMEA assumes that the product design meets all the design requirements. It is not mandatory to include potential failure modes that may arise due to design mistakes or weaknesses into the PFMEA, but they may be included if requested. Potential failure modes that may arise due to the design are analyzed by DFMEA.

To get more information on the Process FMEA, please see the most recent versions of the AIAG Advanced Product Quality Planning and Control Plan (APQP) Reference Guidance and the AIAG Potential Failure Mode and Effects Analysis (FMEA) Reference Guidance. You are recommended to use the VDA FMEA format considering the current developments.

4.3 PROCESS FLOW CHART AND INSPECTION PLAN

THE PROCESS FLOW CHART and INSPECTION PLAN is the documentation requested for PPAP submission.

The Process Flow Chart is a schematic representation of a valid or recommended process flow. It may be used to analyze the machines, materials, methods and the labor that is spent from start to end of the production and assembly process. The flow chart also helps to analyze all the process together rather than an individual analysis of each step of the process. The flow chart also helps the development of the PFMEA and Control Plan.

A Control Plan is a written representation of the systems used to minimize the process and product variations. The Control Plan offers a structural approach that helps manufacture products in line with the customer requirements. The Control Plan is an integral part of the total quality process and should be considered a live document.

The Control Plan defines the activities that are necessary during each stage of the process. The Control Plan ensures that the control methods and processes are traceable in order to control the characteristics that are to be used during a mass production. Since it is expected that the processes are continuously updated and improved, the Control Plan should reflect a strategy that addresses these changes.

The Control Plan should be maintained and used as long as the product is active.

An interdisciplinary team should be formed in order to grasp a better understanding of the process and develop a Control Plan by means of using certain information such as those listed below:

- Process Flow Chart
- Design Failure Mode and Effects Analysis
- Process Failure Mode and Effects Analysis
- Special Characteristics
- Critical Characteristics
- Experiences from Similar Parts
- Team’s Process Details
- Design Review
- Optimization Methods

For further information on the control plans, please see AIAG Advanced Product Quality Planning and Control Plan (APQP) Reference Manual, the most recent edition.

4.4 PROCESS ADEQUACY STUDIES

Comparison of the variables within the process structure with the identified tolerances is called process adequacy. One should remember the importance of analyzing and controlling the significant process characteristics in order to get the process adequacy. The suppliers are recommended to use the most recent editions of the AIAG Reference Manuals: Statistical Process Control (SPC), Advanced Product Quality Planning (APQP) and Control Plan during the performance of the process adequacy studies.

Process adequacy:

	SHORT TERM	LONG TERM
Expectation Process Adequacy	Stable Ppk > 1,67	Stable Cpk > 1,67
Expectation is not met but the products are within the specifications	Corrective Actions applied	Corrective and Preventive action applied
Expectation is not met but the products are not within the specifications	100% control Procurement Department contacted Corrective Action applied	100% control Procurement Department contacted Corrective Action applied

In case of a special request from the customer, there may be some other values than those specified on the table above.

4.5 ENGINEERING CHANGE AND/OR PROCESS CHANGE

The supplier must have a system for controlling and tracking engineering and process changes.

Engineering Changes:

In case of an engineering change required to be made to a supplied product, Alpplas' Procurement Department will inform the supplier in writing of the respective change. Prior to applying an engineering change, the supplier is responsible for updating all the quality plans, inspection standards and control equipment according to the new engineering change. The supplier should present a new sample submission with PPAP after the engineering change(s). An engineering change requested by the supplier should be notified to the Procurement Department of Alpplas – Engineering and Processing Changes via e-mail prior to the application thereof. No change is allowed to be applied for a mass production unless and until it is approved by Alpplas.

An engineering change should be applied in due time and in accordance with the respective instructions from Alpplas. The engineering change level of all the products supplied to Alpplas should be clearly specified on the label. In addition, the supplier should maintain a document that indicates the history of all the engineering changes on the product.

Process Changes:

In case a supplier plans to make any change to its production processes, the supplier is required to inform the Procurement Department of Alpplas before the application of the change. This notification should be sent by e-mail and in a format that contains detailed information on the recommended situation after the change.

An Engineering and Process Change may be made to such issues that are including but not limited to:

- Product material changes or material supplier changes
- New production tools or revisions
- New or improved production processes
- Production site changes
- Product design changes
- EOL components

Alpplas will ask for a sample to inspect and assess such recommended changes. Depending on the process change level, Alpplas may ask its supplier for:

- DFMEA and / or PFMEA
- Product Validation Tests
- Adequacy Analysis
- PPAP Presentation

In these cases, the supplier is not allowed to ship such products it manufactures with a process / engineering change to Alpplas until it is approved by Alpplas that this change does not affect its own product performance.

5.0 SAMPLE PRESENTATION AND ASSESSMENT

Definitions and Descriptions:

PROTOTYPE: A prototype is a sample requested to validate a design in case of a new design or development. The respective purchase order placed with the suppliers should indicate that it is an order for PROTOTYPE.

FIRST SAMPLE: A First Sample is manufactured under mass production conditions and requested to approve the approval process of the production part of the supplier.

5.1 PROTOTYPE PRESENTATION

Unless otherwise indicated, a prototype should be presented as follows.

For the prototype production, the supplier is required to fulfill the requirements of the applicable norms and specifications. In case there is no certain quantity specified on the purchase order, the suppliers will send not less

than 10 samples, 5 of which should be reported as follows, to Alpplas. In case a destructive test is required, e.g. a cross section, 1 piece of these parts should be sent together with the samples.

The documents that need to be sent to Alpplas together with the prototypes:

- Prototype (first sample) control report
- Comprehensive material report
- Reports for the required tests
- Heat treatment report, if necessary
- Deviation and change requests, if any

Approval is granted after the inspections specified for the incoming prototype trials. The supplier is not allowed to conduct a mass production upon the approval of a prototype sample. Unless otherwise indicated, it is required to make 3 PPAP level submissions and get approval from the samples manufactured under mass production conditions before the start of the mass production process.

5.2 PRODUCTION PART APPROVAL PROCESS (PPAP)

Unless otherwise indicated, the suppliers are required to make a level 3 PPAP presentation.

The supplier will use the Production Part Approval Process (PPAP) as evidence that the product and the product realization processes are carried out as planned. The Production Part Approval Process preferred by Alpplas is AIAG PPAP Manual, but similar methodologies (such as VDA - PPF etc.) may also ve used.

The PPAP file is prepared in English or Turkish. The language preferred by Alpplas is English. Some documents may be prepared commonly for similar products and product groups. The content of a PPAP file is as follows:

1. 5 sample parts (*1)
2. Copy of the Purchase Order
3. Part Submission Warrant (PSW)
4. Part's technical drawing (copy of the most recent revision)
5. Quality Targets
6. Design FMEA (if there is a design responsibility and if the design is made by the supplier)
7. Process Flow Chart
8. Process Failure Mode and Effects Analysis (PFMEA) (*2)
9. Control Plan (*3)
10. Dimensional Measurement Report (ISIR) for five parts prepared as samples (*1)
11. Picture showing the measurement points as numbered bubbles
12. Packaging conformity approval
13. List of Suppliers showing material supplier and alternative suppliers used on the PPAP file for each component
14. Performance and life test reports for finished products / parts
15. Raw material conformity reports, material certification
16. Table showing the Special Characteristics, critical characteristics and control method
17. Measurement Systems Analysis (MSA) for Special and Safety characteristics (*4)
18. Process Adequacy Studies for Special and Safety characteristics (*5)
19. Part Appearance Approval (if necessary)
20. Laboratory Certification or Scope when an external laboratory is used (*6)
21. Deviation Requests (if any)
22. Engineering Change request (if any)
23. Prohibited Material Declaration
24. Safety Information concerning Hazardous Chemicals in Products Containing Chemicals

(*1): Unless otherwise indicated, concerning parts manufactured with multi-cavity mold or more than one mold, 5 parts are to be prepared as samples for each mold or mold cavity. Non-destructive testing is to ne conduced for these samples. In case a destructive testing is required, 1 sample will be prepared as an extra and, measurement and inspection activities will be carried out on this sample; e.g. non-combustibility tests.

(*2): FMEA will be prepared based on the most recent version of the AIAG Manual. The VDA FMEA recommended.

(*3): Control Plan will be prepared based on the most recent revision of the AIAG – APQP Manual.

(*4): Unless otherwise indicated, the MSA will be prepared based on the most recent revision of the AIAG – MSA Manual. R&R study will be carried out for devices that are used to assess the Major and Significant Characteristics.

(*5): Process Adequacy Studies; the most recent version of the AIAG – SPC manual may be taken as a reference for the application.
(*6): For the List of Prohibited Materials, the requirements as set forth under the Article 2.2.10 of the Alpplas Supplier Manual will apply.

The supplier will prepare a PPAP file based on the content listed above and keep a copy thereof within its organization. Unless otherwise indicated, the supplier will send the whole of the documents listed above to Alpplas in the form of a file.

5.2.1 PPAP Approval Process

The supplier is not allowed to start mass production before the PPAP submission is approved. The Production Part Approval Process (PPAP) Submission and the sample parts are inspected by Alpplas. After the approval of the PPAP submission, the Part Submission Warrant (PSW) is signed and a copy thereof is sent to the supplier. Once the PSW is signed, the supplier is allowed to initiate mass production.

5.2.2 Production Process Audit

The Production Process Audit is conducted according to VDA – 6.3 for the purpose of verifying the conformity of the supplier's process if needed by Alpplas or a customer of Alpplas. An audit may also be conducted together with the customer if needed.

6. RECORDS

- Supplier Performance Notification Form (FR.07.05-016)
- Supplier Assessment Form (FR.07.05-013)
- List of Approved Suppliers (LS.04.01-010)
- CSL1 Label (FR.01.01-127)
- Conflict Minerals Declaration Form (GNL.FR.01-013)
- Change Request Form (FR.07.12-012)
- Supplier PPAP File Revision Follow-Up Schedule
- Supplier Basic Information Form (GNL.FR.01-017)
- Direct Material Quality Specifications (GNL.FR.01-004)
- Indirect Material Quality Specifications (GNL.FR.01-005)
- Alpplas Tariff List (FR.07.05-022)
- Purchase Agreement Technical Specifications Page (GNL.FR.01-007)
- Supplier Target Reconciliation Form (GNL.FR.01-008)
- Prohibited / Restricted Materials Declaration (GNL.FR.01-006)
- Loan (Bailment) Agreement (GNL.FR.01-003)
- Supplier Returns Follow-Up Form (FR.08.11-067)
- Supplier Failure Notification Form (FR.08.09-006)
- Supplier Audit Form (FR.07.05-014)
- Supplier Risk Analysis Form (FR.05.01-009)
- Supplier Audit Questionnaires (FR.07.05-012)
- Transport Service Agreement (GNL.FR.01-014)
- Supplier Emergency Case Checklist (FR.06.03-001)
- Purchase Agreement (GNL.FR.01-001)
- Mold Agreement (GNL.FR.01-002)
- Sampling Instructions (TL.08.02-003)