1.0 Change History

Revision	Date	Change Details	Who Changed
A	7/2/2019	Initial Release, update 5.8.4 to IATF	Bill Soller
B	7/12/2019	Added IMDS number, 5.1.1	B. Iisaka
C	8/23/2019	Update 5.1, 5.1.1	Melissa Wangen
D	9/12/2019	Update 5.1	Melissa Wangen
E	10/23/2019	Update 5.1.1 Statutory and regulatory requirements and 5.8.4 add supplier development process	June Liu
F	9/23/2020	Update 5.8.4 supplier scorecard action plan	June Liu
G	1/10/2021	Updated 5.1, 5.8.3 Supplier ISO certification requirement	June Liu
H	4/20/2021	Update 5.1, 5.8.3 add details to Supplier ISO/IATF certification requirements	June Liu
I	11/11/2022	Update 5.1, 5.8.3, and 5.8.4 clarify Supplier ISO/IATF certification requirements and scoring	David Webster / Mike Cavinder

2.0 Purpose

The purpose of this procedure is to assure that the raw materials, parts and services that CMT receives from its suppliers meet CMT requirements, and to assure an effective purchasing function.

2.1 Scope

This procedure applies to all sites for Core Molding Technology for all raw materials, components and outsourced processes used in the manufacture of customer specified products. This procedure also applies to Customer Directed sources of supply.

2.3 Responsibilities

a. The Purchasing Manager and his/her team, are responsible for the duties described in this procedure.

b. Joint responsibility for Supplier Quality issues rests with Purchasing and the Supplier Quality Engineer.

3.0 Reference Documents

10119	Purchasing Process

4.0 Quality Records required by this procedure

Record	Owner	Storage Location	Length of Storage	Index Method	Disposition
10125-001, Supplier Questionnaire	Facility Buyer	Network	Until supplier is no longer active	Supplier	Discard
10125-002, Supplier Audit Form	Facility Quality	Network	Until supplier is no longer active	Supplier	Discard

10125-003, Supplier Change Notice	Facility Buyer	Network	Until supplier is no longer active	Supplier	Discard

5.0 Process

5.1 General Quality System Requirements

Suppliers of production raw materials and parts used in the manufacture of Core Molding Technologies products for the heavy truck / automotive industry shall at a minimum be registered to ISO 9001 while working towards registration to IATF 16949. Customer-directed sources are absolved of this requirement. Suppliers on-boarded prior to September 30, 2019 are grandfathered to the list of approved suppliers.

Suppliers of production raw materials and parts used in the manufacture of Core Molding Technologies products for other industries should at a minimum be compliant with and/or registered to ISO 9001.

Supplier shall demonstrate conformity to ISO 9001 by maintaining a third-party certification issued by a certification body bearing the accreditation mark of a recognized IAF MLA member and where the accreditation body's main scope includes management system certification to ISO/IEC 17021, unless CMT customer directed-buy.

Supplier is responsible to share the updated certification and notify CMT if certification is withdrawn or expired.

Suppliers are likewise encouraged to be conforming to an environmental management system consistent with ISO 14001 and shall strive toward environmental sustainability.

The Automotive Industry Action Group (AIAG) has published several manuals that standardize procedures, technical classifications, and reporting formats, which are required by our customers. Suppliers are responsible to remain current with these standards.

Suppliers are expected to cascade all applicable requirements in this manual down the supply chain to the point of manufacture—especially those regarding statutory and regulatory requirements and special product and process characteristics.

5.1.1 Statutory and Regulatory Requirements

Suppliers are responsible for meeting all applicable Statutory and Regulatory Requirements for the product that they produce in the country of receipt, the country of shipment, and the customer identified country of destination, if provided. Core Sales team will determine requirements using Quote Feasibility Form. Core Purchasing team will communicate requirements to supplier through Supplier RFQ process.

Suppliers are also responsible for utilizing the International Material Data System (IMDS) for identifying and obtaining information on hazardous and controlled substances. IMDS submissions are required with each PPAP. CMT IMDS id# 29107.

5.2 Supplier Assessment

5.2.1 New Suppliers

New suppliers to Core Molding Technologies are selected after review and evaluation of their capability to supply the requested material or part, a review of their commercial standing and a review of their quality system. The **Supplier Questionnaire, Form 10125-001** is sent to all new suppliers. Upon receipt of the questionnaire, the appropriate quality/purchasing personnel will review and approve the supplier if acceptable.

Other supplier selection criteria that is considered include the following:

- volume of automotive business (absolute and as a percentage of total business);
- financial stability;
- purchased product, material or service complexity;
- required technology (product or process);
- adequacy of available resources (e.g., people, infrastructure);
- design and development capabilities (including project management);
- manufacturing capability;
- change management process;
- business continuity planning (e.g., disaster preparedness, contingency planning);
- logistics process;
- customer service.

5.2.2 Existing Suppliers

Additional audits may be conducted based on the number and severity of SCAR's that have been issued to the supplier.

> Note: Key Suppliers are also audited using ***10125-002 Supplier Audit Form by Quality and/or Purchasing (Key suppliers are those that are determined to have a significant dollar volume by purchasing). An action plan is created as necessary for any areas requiring improvement if CMT chooses to approve the supplier.***

Suppliers with a third-party quality registration may:

- Be audited by Core Molding Technologies for conformance to their scope of registration.
- Should forward a copy of the latest certificate to Core Molding Technologies Purchasing, and any subsequent updates to that certificate.
- Be added to the Approved Supplier List as an approved supplier

Any supplier failing to meet Core Molding Technologies standards may be subject to removal and/or exclusion from the Approved Supplier Listing.

5.2.3 Supplier Development

Core Molding Technologies will provide assistance to suppliers in the following areas:

- Resolution of critical issues between the supplier and the Core Molding Technologies facilities.
- Provide direction on Core Molding Technologies policies pertaining to suppliers.
- Assist high-impact suppliers with improvement activities.
- Work with potential new suppliers to bring them to a level to be added to the Approved Supplier Listing.

- Provide resources for, and where appropriate conduct, specific training when a supplier has a need for additional knowledge.

All suppliers are urged to seek opportunities for continual improvement throughout the supply chain and within their own processes.

5.2.4 Change Control and Approvals

The supplier is expected to have a change control and approval process to manage change. This should include documenting change points upon implementation, and if needed, identifying changes to CMT on product. Changes can be temporary or permanent. Temporary changes are implemented for 90 days or less. If a change will be implemented for > 60 days, it should be managed as a permanent change.

Changes must be communicated in advance to the supplier's Purchasing contact using CMT's Supplier Change Notice, Form 10125-003. All Level 1 Temporary or permanent changes cannot be shipped to CMT without a signed PSW and any additional PPAP requirements defined.

Change Types	
New test/inspection method	Ownership of company change
Manufacturing process order change	New supplier
Material composition change	Manufacturing location change
Packaging change	
Design Changes	
Material Changes	
New product launch	
Tooling Changes (new, refurbishment)	
Organized labor force change	

5.3 Production Part Approval Process Submissions (PPAP)

When a purchased component part, assembly, or material is awarded to a Supplier for manufacture, or has undergone an engineering change, a PPAP submission is required from the Supplier. Purchasing informs the Supplier Quality Engineer when business is awarded. The Permanent Change Process informs the Supplier Quality Engineer when an engineering change occurs.

Suppliers of CMT are required to submit Production Part Approval Process (PPAP) packages for all changes, as applicable per the current version of the AIAG's Production Part Approval Process1. Please see the note under the Scope statement on page 2.

CMT requires a minimum significant production run of 300 parts run at the production site and at production rate for PPAP.

Any dimension or feature of the supplied part designated as a Special Characteristic must meet a minimum process or capability index of 1.67. Short-term capability studies should be based on a minimum of 100 data points from consecutive parts of the significant production run. Cpk should be calculated using estimated sigma and reported for PPAP production runs. Ppk should be used for ongoing capability analysis, when historical data are known and the process is stable. Calculate Ppk using calculated sigma. PPAP must be submitted with Level 3 documentation, including any CMT specific requirements. PPAP is due within three weeks of delivery of final tooling except under extraordinary circumstances which will be communicated via purchase order or by other means.

5.4 Quality Expectations

5.4.1 Supplier Corrective Action Request (SCAR)

When nonconforming supplied material is detected at either a Core Molding Technologies location or at a customer facility, product will be dispositioned following the CMT Return to Vendor (RTV) process. Upon receipt of the RTV request, supplier has 3 business days to respond with authorization to either return or scrap product. No response by the deadline will be considered authorization to scrap. It is the supplier's responsibility to maintain accurate contact information to support the timeliness of disposition requests. Product returned will be at the supplier's expense. If the material is to be returned, it should be removed from the plant within 1 week from time of its disposition or Core Molding Technologies will scrap or ship it back to the supplier at the supplier's expense. Flexibility of removal deadline will be considered in special cases such as overseas suppliers, supplier plant shutdowns or arrangements that need to be made with CMT customers to return product.

A SCAR shall be issued to suppliers when nonconforming supplied material is detected at either a Core Molding Technologies location or at a customer facility. Material disposition shall be completed in a timely fashion. Core Molding Technologies will request authorization to sort, scrap, rework, repair or return parts (at the supplier's expense) prior to completing these activities. If supplier does not provide authorization within 2 hrs of request, containment actions will be initiated by CMT and charged back to the supplier. Core Molding Technologies reserves the right to proceed without authorization prior to contacting the supplier to protect the Customer.

The issuing Core Molding Technologies plant shall forward a copy of the SCAR to the supplier. Upon receipt the supplier shall complete the following:

- Arrange for immediate containment of suspect product located at Core Molding Technologies, including providing documented sort or rework instructions that are approved by the CMT supplier contact before use.
- Initiate the corrective action process to identify root cause and eliminate the nonconformance
- Isolate and inspect all suspect material to ensure no further potential defects are released to Core Molding Technologies. Communicate to Core Molding Technologies the disposition of any product en-route to Core Molding Technologies
- Communicate to Core Molding Technologies the clear identification methods of sorted materials

For resolution of complex issues, it is preferred that the supplier be present at the Core Molding Technologies plant to fully understand the nature of the nonconformance and appreciate the impact of the issue on Core Molding Technologies. This may also assist the supplier in root cause analysis and corrective action.

If sort and/or rework of supplier product are required at a Core Molding Technologies or customer location, the supplier may choose to subcontract the work. All sorting and/or rework performed by Core Molding Technologies due to supplier nonconformance will be charged at a flat rate to be determined by each operating facility. Additional charges assessed to Core Molding Technologies by our Customer due to supplier nonconformance will also be charged back to the supplier.

For product that is returned to the supplier for sort, it is the supplier's responsibility to notify Core Molding Technologies plants when changes to nonconforming quantities identified on SCAR's are required. When data needs correction, contact the initiator of the SCAR for resolution. Failure to perform this step may result in poor supplier performance ratings and may affect future business awards.

All supplier non-conformances (SCARs) shall be formally documented.

The supplier shall:

- Submit a documented initial response within 1 business day to the Core Molding Technologies plant.
- Drive towards root cause analysis and implementation of permanent corrective action to eliminate the nonconformance and the possibility of recurrence.
- Submit a completed SCAR by due date.
- Submit a request and obtain Core Molding Technologies approval for additional time to close out corrective actions. Supplier will be notified of SCAR closure via e-mail and/or corrective action review.

Periodically, Core Molding Technologies personnel may visit the supplier location and verify the effectiveness of the corrective actions. During specific instances, the supplier may be asked to present the corrective action in person at the Core Molding Technologies plant, the Core Molding Technologies Headquarters or at a Customer Location. A targeted supplier for the presentations or the visit, could be one with a high PPM rating, repeat non conformances for the same issue, or be based on the seriousness of the nonconformance.

5.5 Charge-Back Guidelines

Core Molding Technologies reserves the right to issue charge-backs to suppliers in the event of defective product, and/or discrepancies in delivery. The actual charge to the supplier is determined by the costs incurred by Core Molding Technologies resulting from non-conformances to quality and delivery. Charge-backs are typically transacted as a debit against open invoices.

In addition to the above administrative charges, additional costs below may also apply:

- Any and all CMT customer charges incurred as a result of our supplier's nonconforming product
- Any and all costs to CMT incurred for time spent sorting and/or reworking supplier's nonconforming product
- Any and all line stoppage costs based on man-hour idle time and recovery cost
- Any warranty costs due to supplier issues

Debits for charges incurred will be made in the currency specified on the CMT purchase order and shall equal the above amounts in American dollars converted to that currency based on current exchange rates.

Supplier charge-back forms will be completed at the receiving plant. Whenever a form is completed or updated a copy will be sent to the supplier, the buyer and to accounts payable.

The supplier will have 10 working days to review and challenge the charge-back in writing from the date the chargeback is signed and issued to the supplier. The challenge must be in writing to the appropriate Quality Manager, Materials Manager, or Plant Manager of the receiving site. If the supplier does not respond within 10 working days, the supplier will be deemed to have accepted the debit. A debit memo will be issued and/or the amount will be debited from the next payment.

5.6 Purchasing Process and Requirements

5.6.1 Purchasing – General Requirements

The Purchasing function is critical to Core Molding Technologies overall objectives. At Core Molding Technologies, we strive to work together with our suppliers to meet our customer needs. This section identifies the activities involved in Purchasing, the processes they follow and cost savings activities.

5.6.1 Purchasing Department

The Purchasing Department will handle the purchasing activities for all production suppliers after product is launched and PPAP approval is granted. Each Buyer will be focused on, and will maintain an approved supplier list for a particular commodity such as metals, plastics and miscellaneous (includes rubber, foam, packaging and outside processes). The Buyer will set commodity strategies for the Purchasing Department to implement. Buyers will also be involved in supplier quality/delivery related issues, as well as negotiating with suppliers on long term agreements and other cost savings or continual improvement programs.

5.6.2 Request for Quote (RFQ) Process

It is the responsibility of the Buyer and/or Supplier Development to request and receive quotations from potential suppliers. These suppliers will be identified by either market tests or customer-directed sources.

The content of the RFQ shall include but not be limited to:

- Request for Quotation Form (See Appendix 1)
- Prints
- Specifications
- Cost Breakdown
- Part Feasibility
- Tooling Breakdown
- Shipping and Handling Method(s)
- Packaging

5.6.3 Award Process

Core Molding Technologies reserves the right to award any new or existing business based on the following factors:

- Development Lead Time
- Required Technology
- Supplier Performance Status
- Piece Price
- Tooling Cost
- Delivery Lead time
- Supplier Scorecard results
- Logistics Costs
- Other applicable information

Once the business is awarded, the Buyer is responsible to ensure the proper distribution of all Purchase Orders and subsequent revisions to the Supplier.

5.6.4 Purchase Orders

The CMT Supply Chain team will send a purchase order to the supplier for the goods & services awarded. These purchase orders will communicate the supplier's responsibilities and also include CMT's Terms and Conditions.

5.7 Material Control Expectations

5.7.1 Delivery Requirements

Suppliers are required to ship the correct quantities of product to Core Molding Technologies locations 100% on time.

Each supplier must be responsible for managing its own supply chain.

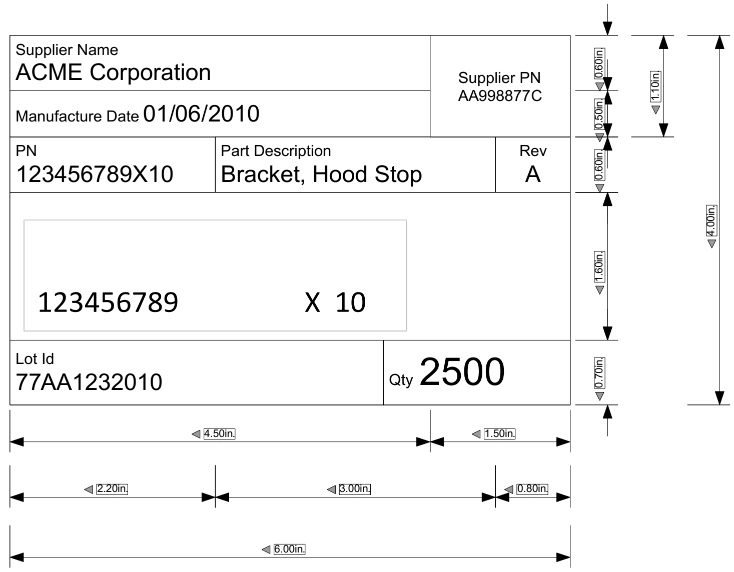
In the event that a delivery to a Core Molding Technologies facility is in jeopardy for whatever reason, it is the supplier's responsibility to communicate this information to the receiving facility as soon as possible. This will permit Core Molding Technologies to act accordingly, adjust its manufacturing schedules as required, and ensure that the Core Molding Technologies customer is not impacted by the delivery issue.

5.7.2 Labeling and Packaging Requirements

The supplier is responsible for developing packaging methods to ensure the integrity of product during shipment unless otherwise directed by CMT, and should be specified in the supplier's quote. Wood packaging and pallets must be in compliance with the requirements of the International Standards for PhytosanitaryMeasures ISPM 15, Regulation of Wood Packaging Material in International Trade2. Supplier developed packaging methods must have the approval of CMT Supplier Quality and CMT Engineering. The following Sample Label is an example only.

All product labels must contain the following information:

- **a.** Core Part Number Bar Code (not required at this time – supplier will be notified when this requirement goes into effect.)
- **b.** Core Part Number
- **c.** Core Part Description
- **d.** Print Revision Level (as applicable)
- **e.** Supplier Name
- **f.** Supplier Part Number (as applicable)
- **g.** Manufacturing Date
- **h.** Quantity



Sample Label

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2 Found at https://www.wto.org/english/thewto_e/coher_e/wto_ippc_e.htm.

i. Lot Number or other Lot Identification

The outside of each shipping container must be clearly marked and identified as to the contents within. Any special packaging, additional labeling or identification requirements are specified on the purchase order.

5.7.3 Shipping Requirements

Refer to the Supplier Labeling/Packaging/Shipping Specifications Document for specific shipping instructions.

5.7.4 Product Identification and Traceability Requirements

Core Molding Technologies requires the supplier to establish and maintain procedures for identifying the production lots from receipt of raw material through shipment of final product. This system should permit the segregation of suspect material and the reporting of quality and production data, based upon the unique barcode label on each container

All required paperwork such as material certifications, inspection reports, shall be retained by the supplier, and available to Core Molding Technologies upon request.

5.7.5 Premium Freight

The supplier shall pay all additional premium freight costs incurred as a result of a failure to accomplish agreed upon delivery due to supplier error. Suppliers are required to track and report quarterly these premium freight charges, as well as any premium freight incurred due to a breakdown in the supply chain, to the using Core Molding Technologies plant for that period.

5.7.6 Restricted Substances

Suppliers shall establish a process to ensure that current governmental and safety constraints on restricted, toxic and hazardous substances/materials are in compliance relative to the purchased products as stated on purchase orders. Suppliers shall identify all hazardous materials and provide Safety Data Sheets for all restricted, toxic or hazardous materials per OSHA regulations and the AIAG PPAP requirements.

Safety Data Sheets for all other materials shall be retained by the supplier and made available to Core Molding Technologies upon request.

5.8 Supplier Performance System

Core Molding Technologies utilizes a rating system to monitor and assess supplier performance. The rating system uses Quality Performance, Delivery Performance, and Quality System Certification to calculate an overall Supplier Performance Rating. This scorecard is sent to the **key** suppliers quarterly.

The following criteria shall be used to rate the Core Molding Technologies key supply base:

5.8.1 Quality Performance – 40% of the overall rating.

50% for PPM – the number of parts supplied by a supplier that do not conform to Core Molding Technologies' specification divided by the number of parts shipped to Core Molding Technologies, multiplied by 1,000,000. PPM score will be calculated using a trailing 6 month average.

50% for SCARs (Supplier Corrective Action Request) issued – the score will be derived by the number of SCARs issued to a supplier by Core Molding Technologies

5.8.2 Delivery Performance – 40% of the overall rating

Delivery Rating – This rating is defined by a shipment of the correct quantity to the desired location, on the correct day indicated on the releases ± the supplier's allotted grace period. It shall be a measure of the actual delivery versus the scheduled delivery. Delivery demerits shall be awarded for deviations from schedule.

The Delivery rating shall be calculated by the following formula:

Delivery Rating= $\left(40 \times \frac{\text{Quantiy of Ontime Receipts}}{\text{Quantiy on Order}}\right)$

5.8.3 Quality & Environmental System Certification – 20% of the overall rating

Certifications – Suppliers will be rewarded for achieving and maintaining IATF 16949 or ISO 9001 and ISO 140001 certification.

5.8.4 Calculation Method and Rating Scale

The following breakdown shall be used in calculating the Supplier Performance Rating:

Supplier Rating System

*Quality Score**

40 Total Points Possible

PPM Scale		SCAR Scale	
PPM Score	Points Awarded	# of SCARs	Points Awarded
0-100	20	0	20
101-500	19	1	18
501-1250	18	2	16
1251-2000	17	3	14
2001-3000	16	4	12
3001-4000	15	5	10
4001-5000	13	6	8
5001-6500	11	7	6
6501-8000	9	8	4
8001-10000	7	9	2
10001-12000	5	$\geq$ 10	1
12001-14000	3		
14001-16000	2		
$>$ 16001	1		

*Delivery Score***

40 Total Points Possible

$$\left(40 \times \frac{\text{Quantity of On Time Receipts}}{\text{Quantity on Order}}\right)$$

*Certification Score****

20 Total Points Possible

Certification	Points
IATF 16949	20
ISO 9001	5
ISO 14001	5
Plan with Target Date to Become Certified	2
No Plan to Become IATF Certified	0

Supplier Score =		
Score	***Rating***	***Actions Required***
85-100	Satisfactory	None
70-84	Above Average	Improvement Action Plan may be requested
55-69	Average	Improvement Action Plan will be required
35-54	Below Average	Improvement Action Plan is Required & an onsite audit will be scheduled to visit supplier
<35	Unsatisfactory	Improvement Action Plan is Required, an onsite audit will be performed and Supplier must maintain Positive Performance Trends or Supplier will be resourced

**PPM will be calculated from a "Trailing" 3 Month Average & SCAR's will be calculated on Monthly Totals*

***Delivery Score will be calculated from a "Trailing" 3 Month Average*

****If Supplier maintains both IATF 16949 & ISO 9001:2015 certification they will only receive the 20 points for the IATF 16949 Certification.*

Supplier Development Process:
The rating system above will be used to prioritize improvement and sourcing activity for IATF 16949 Certified suppliers.
For suppliers without IATF 16949 Certification, additional supplier development activities will be performed based on the following risk assessment:

a) Suppliers who receive supplier scorecards will be prioritized;
b) Annual supplier ratings will be assessed and ranked from highest to lowest score;
c) Annual supplier audits will be performed on the bottom three suppliers if annual scores below 70.

This plan should be forwarded to Core Molding Technologies Supplier Development/Purchasing for approval within 15 days of receipt of your performance report.

Suppliers must maintain an approved rating to remain a fully active part of the Core Molding Technologies supply base.

5.8.5 Distribution

The Supplier Performance Rating system is administered by the Corporate Purchasing function for all Key production suppliers.

Suppliers are advised to track these and other key performance indicators to help analyze and maintain a lean manufacturing approach.

5.9 Business Contingency and Continuity Plan

All suppliers that are compliance to ISO 9001 and IATF 16949 shall have a Business Contingency and Continuity Plan.

The organization shall:

a) Identify and evaluate internal and external risk to all manufacturing processes and infrastructure equipment essential to maintain production output and to ensure that the customer requirements are met;
b) Define contingency plans according to risk and impact to customer;
c) Prepare contingency plans for continuity of supply in the event of any of the following: key equipment failures, interruption from externally provided products, processed, and services; recurring natural disasters; fire, utility interruptions; labor shortages; or infrastructure disruptions;
d) Include, as a supplement to the contingency plans, notification process to the customer and other interested parties for the extent and duration of any situation impacting customer operations;
e) Periodically test the contingency plan for effectiveness (e.g., simulations, as appropriate);
f) Conduct contingency plan reviews (at a minimum annually) using a multidisciplinary team including top management, and update as required;
g) Document the contingency plans and retain documented information describing any revision (s), including the person (s) who authorized the change (s).

This documentation shall be retained by the supplier and made available to Core Molding Technologies upon request.