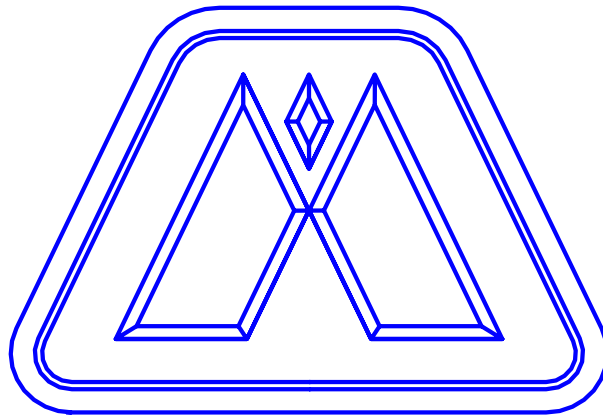


MODERN INDUSTRIES, INC.
SUPPLIER HANDBOOK



MODERN INDUSTRIES, INC.

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Introduction

Modern Industries, Inc. (MII) is leading machining resource and manufacturer of innovative products for the industrial market. At Modern Industries we know that our success in the marketplace is tied directly to our ability to manufacture quality products. Our goal is to set the standard for quality and performance in the markets we serve. Modern Industries is dedicated to the absolute standards of conformance to all customer requirements. Toward this end, we realize that every employee, customer, and supplier is a vitally important part of the overall process of continuous improvement.

To achieve Modern Industries' goal of market leadership we need the full participation and cooperation of the organizations which supply us with materials, components, and assemblies. MII looks to these selected suppliers for technology leadership in design, manufacturing, and continuous improvement. Our supplier quality policy underscores this point. Modern Industries is absolutely committed to providing defect-free product and services to our customers. As we work in cooperation with our suppliers, we expect these suppliers to adopt a commitment toward quality and continuous improvement that is similar to our own.

For every product Modern Industries offers, we strive to fully understand the requirement that exceed the needs of our internal and external customer; understand the needs of our individual jobs; and understand our roles within the supply chain. Exceeding these requirements means that without exception "we will do it right the first time."

Purpose of Handbook – Modern Industries, Inc. supplier handbook is provided to its current and potential suppliers to:

- 1) Clearly define Modern Industries performance expectations; to communicate MII's internal and external customer demands and requirements; and to provide clear understanding of MII's commitment to supplier sourcing continuity and growth opportunity for the best performing suppliers

and

- 2) Aid MII suppliers in meeting performance requirements through detailing the quality resources and tools available from MII serving to enable the development of a world-class supply base and supply chain organization.

Supplier Quality Statement – The supply chain activities at Modern Industries are implemented to support the following quality philosophy:

Modern Industries is committed to work collaboratively with its suppliers to achieve shared sales growth opportunity and profit improvement performance, while exceeding all customer requirements.

Section 1 - Supplier Approval

1.1 Second & Third Party approval

3rd Party Certification - Modern Industries shall accept 3rd party registration of potential suppliers to the quality standards of ISO 9001:2000 standard or AS9100 Rev. A from nationally and internationally recognized registrars.

Minimum proof of registration must include:

- 1) Copy of registration certificate
- 2) Summary report of most recent quality audit
- 3) Schedule of surveillance and recertification audits

Registration from lesser known registration services must include all items listed above as well as specific information pertaining to registrar, registrar accreditation procedures, location, surveyor qualifications, and other information as may be required.

2nd Party Certification - Modern Industries will accept 2nd party certification to ISO 9001 or AS 9100 compliance on a limited basis. The conditions under which MII will accept a 2nd party certification are as follows:

- 1) From those supplier which are customer directed, and which that customer has conducted the 2nd part audit
- 2) A 2nd party certification from “major” OEM and tier-one suppliers provided those company’s are ISO 9001 or AS 9100 certified.
- 3) Other 2nd party certification than described above may be accepted by MII conditional upon the review of the audit results, findings action plan, and improvement demonstrated.

1.2 First Party Approval

In the absence of certification standards, MII will conduct supplier audits to assess the suppliers’ ability to comply with MII’s quality system requirements. These audits may be in the form of an on site visit or desk audit. The form of these audits may be either ISO 9001/AS9100 based, or from a method developed internally by MII supplier development staff.

1.3 Review & Audit Procedures (ref QCI-1013-03 ss5.2)

Supplier audits will be conducted every 12 months for critical suppliers. Audit format maybe in the form of an on site visit or desk audit. The type of audit depends on the certification level a supplier has achieved and the composite rating reported by MII based on a 12 month rolling average.

- a) Suppliers holding ISO 9001/9002, AS 9100 or equivalent certification by one of MII’s customers or have third party registration will require a desk audit as long as they maintain a long term status as described in the stratification section below.
- b) Suppliers that maintain a preferred long term status will not require additional review audits.

Section 1 - Supplier Approval continued

1.4 Supplier Stratification

Continuous performance indicators and assessment results will determine supplier stratification affecting continued sourcing opportunity. Stratification is determined by the lowest performance measurement. The stratification levels include: Preferred Long-Term, Long-Term, Probation, and Disqualified. It is the results of this stratification methodology which will be the basis for business continuation with MII. Details of the stratification methodology can be found in section 3.4.

Section 2 - Supplier Selection

2.1 Request for Quote (RFQ):

All product and service sourcing authorized by MII will be initiated by a formal request for quote (RFQ) (form MII-FRM-00078). MII's purchasing organization will have sole responsibility for soliciting request for quotes. Requests from any other MII function or person shall be deemed as informational only, and no sourcing authorization can be granted. Any formal quote package, including an RFQ reply form and necessary documents (such as drawings and procedures) describing the requirements, will be issued exclusively by purchasing.

All supplier quote responses must be provided on the RFQ reply form, including completion of all quote and information details. Failure to fully complete the RFQ reply form may be considered a "no quote" by the responsible buyer. Product and process specification feasibility is incorporated into the quotation response (at the quoted price) and is considered a condition of response unless otherwise noted. The RFQ reply and all associated documents should be thoroughly reviewed for completeness as re-quotes will not normally be considered.

2.2 Sourcing Criteria

Sourcing decisions will be based on a number of criteria including quoted price, quality and delivery performance, on-going cost improvements, location, payment terms, and other elements as determined by the MII commodity buyer. Preferred long term suppliers will be given sourcing preference where possible, with sourcing ultimately competitively determined from quotation responses from preferred and long term suppliers as listed on the MII Approved Supplier Listing (ASL). Purchasing may seek sourcing recommendations from engineering, manufacturing and quality assurance teams as appropriate. The recapitulation results, along with consideration to recommendations that the buyer may have received, will determine supplier selection.

2.3 Approval & Authorization

Sourcing approval and authorization will originate from purchasing only. Quotation analysis and sourcing recommendation must be approved by the appropriate level of MII management prior to commencement of any work. Authorization other than official purchasing notification will not constitute any contract nor commit MII for any financial obligation. Work completed prior to formal approval and authorization may not be recoverable from the supplier, and should be taken solely at supplier's risk.

Section 2 - Supplier Selection (continued)

2.4 Standard Terms and Conditions

MII will issue standard terms and conditions, which along with other commercial and quality expectations govern all purchase agreements. Supplier T&Cs will not be accepted as a condition of supply to MII. Any supplier exceptions to the MII standard terms and conditions must be included in the quotation response, and explicitly accepted by MII as evidenced by a notation on the final purchase order to be considered a condition of purchase. The standard T&Cs may be modified from time to time, with the latest version available upon request from MII purchasing department. When feasible, MII shall make the T&Cs available in its supplier portal through a secured access site.

“Blanket” purchase orders, representing estimated annual volumes and a single annual purchase order price may be used by MII. The typical term of these purchase orders is one year, and normally includes annual usage pricing, annual planning volumes, lead-time, payment terms, etc. Material releases shall be issued against these blanket orders referencing original commercial terms. MII contractual obligation shall be limited to the “fabrication” and “material” authorizations as indicated on the material releases, with maximum obligation being the high point release in the most recent quarter in which obsolescence may occur. MII suppliers are expected to utilize the firm and forecasted release information to plan their own manufacturing and inventory strategy, each of which is considered a normal condition of business.

Section 3 - Performance

3.1 Annual Objectives

At the conclusion of each calendar year, MII's supply chain organization shall develop supplier performance objectives for the coming year. These goals shall become the basis of the on-going performance measurements, carrying all the effects as outlined in this hand book. The objective setting process is designed to provide for sustained significant improvement in all areas of supplier performance. Upon the completion of the objective setting process, suppliers will be provided their respective performance objectives and may be required to review these in detail at MII's facility.

3.2 Standard Performance Measures

MII's customers have stated their expectation that MII and its suppliers achieve annual improvement in cost, quality, delivery and other performance areas. As such, MII has established the critical measure against which supplier performance will be measured. The key areas of performance are as follows:

- 1) Supplier Quality Performance – 40 points
- 2) Supplier Service Performance – 30 points
- 3) Supplier Cost performance – 30 points.
100 points total

The individual points for each major area of evaluation are detailed in section 3.3 of the supplier handbook. The allocation of points in each major area or subsection may be changed from time to time as deemed necessary by MII's supply chain management group.

3.3 Scorecard Report & Methodology

In 2002 MII introduced a supplier scorecard system which provided a general assessment of supplier performance. The following information provides a summary description of the supplier scorecard and methods of calculation. This information is provided for reference only, and will be modified as necessary.

Monthly performance results will be made available, and will reflect latest monthly results for automated calculations and latest quarterly results for manual calculations. Annual supplier performance objectives shall be provided to MII critical suppliers no later than January 31st of each calendar year. Scorecards will be issued on a quarterly basis (form MII-FRM-00079).

Section 3 – Performance (continued)

3.3.1 Supplier Quality Performance – Total Points 40

1) Product & System Quality – Total element points available 25

Overall supplier quality part per million (PPM) defect rate not to exceed 5,000 (individual commodity level and supplier specific goals will be established).

- Score assigned per the formula of $5,000/\text{Actual PPM} * 25 = \text{score}$
- Cumulative PPM based on 12 month rolling average calculation

2) Supplier Corrective Action Request (CAR) – Total points available 10

Root cause corrective action is required for all product “critical” rejects.

- Critical rejects are defined as any reject which directly effect part fit, form, or function. Failure modes such as dimensional variance, material failure or lack of appropriate certification, cosmetic defects, and functional failure are examples of these areas. Immediate corrective action is required in all cases of critical rejects. See section 4.1 for details.

CARs may be required for non-critical failures on a case by case basis.

- Major and minor “non-critical” rejects include, but are not limited to: quality system deficiencies, repeated minor defect rejections, and major delivery issues. See section 4.1 for details.

Points are assigned as a direct calculation of % on time *10 = score

3) Quality Management Systems – Total points available - 10

Consistent with sections 1.1 & 1.2 above, quality management systems will be evaluated and scored as part of the overall supplier performance.

- Nationally/Internationally known registration to AS9100 Rev. A or ISO9001/2:2000 – 10 points
- Lesser know registrar – 8 points
- 2nd Party certification by MII direct customer 6 points (Non MII OEM – 4 points)
- 1st Party certification by MII – variable score results * 10 point potential
- 1st Party desk certification based on supplier self assessment – 3 points
- No Certification – 0 points

4) Rating deductions

Reductions from quality performance elements may be made for the following

- Field issues – Quality reject issues at MII’s customers discovered as caused by supplier product “failures”

Section 3 – Performance (continued)

- Stop Shipments – Customer delivery held as MII due to suspect supplier components
- Excessive corrective action delay – additional deductions may be taken when a supplier exhibits inability or unwillingness to complete required corrective action reports on time as listed in section 3.2.1 of the supplier handbook

5) Other Action

Rating deductions and penalties may also result in further investigation by MII supplier quality management team. Supplier delinquency to take corrective actions within specified time period will result in elevation of the problem issue to the supplier executive level for resolution. Continued delinquency may result in supplier reclassification as “disqualified”, with status shared with MII’s customers as appropriate.

3.3.2 Supplier Service Performance – Total Points Available 30

1) On Time Delivery – Total element points available 15

Overall supplier delivery part per million (PPM) non-conformance rate not to exceed 10,000 (individual commodity level and supplier specific goals will be established).

- Score assigned per the formula of $10,000/\text{Actual PPM} * 15 = \text{score}$
- Cumulative PPM based on 12 month rolling average calculation

2) First Article Approval Certification – Total points available 5

All first article approval paperwork, as defined in MII First Article Submission Procedure, must be delivered prior to first product shipment. Failure to obtain first article approval may result in reject of delivery and reject chargeback as detailed in supplier handbook section 5.1 & 5.2.

Shipment certification to first article approval standards, including statistical process data as required, must accompany every sub-lot delivery. In the absence of demonstrated 5σ long term process capability for all critical and significant characteristics, suppliers must utilize 100% inspection or ANSI/ASQ Z1.4* Table It, single sampling plan for Normal Inspection, level II with an Acceptance Quality Level (AQL) of 0.65% for feature tolerance up to .0005, 1% for tolerance .0005 to .0020, 2.5% from .0020 up to .0050, 4% from .0050 up to .0100, and 10% AQL for all feature tolerances greater than .0100. Any deviation to this sampling standard must be noted on the purchase order. Performance trends may result in decreased sampling requirements to level I reduced inspection, or to level III tightened inspection as deemed appropriate. Deliveries received without proper certification are considered incomplete and subject to quality and delivery reject procedures.

* (ASQC Z1.4 replaces ANSI Z1.4, both which replace MIL-STD-105D&E)

† For sampling plan assistance based on lot size see <http://iew3.technion.ac.il/sqconline/milstd105.html> - MII does not necessarily endorse the facts presented on this site, it is provided for reference only.

Section 3 – Performance (continued)

Mill reports are required on chemical and physical composition test results for all raw material procured by MII suppliers. Likewise, sub-supplier heat treat process data and certification is required on purchased materials for MII suppliers. Suppliers are required to maintain copies of first article, in-process and final inspection reports per record retention policies. For machining process suppliers, all directly purchased raw materials must include test and inspection reports and are to be retained by the supplier.

3) Request for quotation – Total points available - 5

Consistent with sections 2.1 & 2.2 above, all request for quotation responses must comply with the standards laid out. In addition to the potential of invalidating quotations, incomplete or late quotations will result in scoring reduction. The MII commodity buyer will evaluate supplier performance for timeliness and completeness of quotation responses.

4) Supplier Communications – Total points available - 5

Each MII buyer and supplier quality engineer will evaluate supplier performance on suppliers' ability to accurate and timely communications. Considered in the evaluation will be:

- Advanced communication of late shipment or shipment reschedule
- Timely notification of potential quality reject or containment issues
- Notification of capacity limitations or shipment continuity problems
- Others communications as deemed critical

5) Service Performance Deductions

Additional service rating evaluations may be made in which points can be deducted from the total points available. This evaluation will be completed quarterly by the MII commodity buyer. The following are among the items considered:

- Trends in overall supplier performance, and support to MII
- Suppliers' initiative in understanding MII's process and customers to proactively develop potential solutions to MII product or commercial challenges
- Unwillingness to seek assistance from the appropriate MII activity for problem resolution or requirement clarification

Section 3 – Performance (continued)

3.3.3 Cost performance – Total Points Available - 25

Cost performance and price improvement has become an integral part of the markets served by MII. In support of this customer requirement all MII suppliers are expected to actively pursue cost improvement programs designed to continually improve price. Suppliers will be evaluated on their ability to meet industry, commodity, and individual performance goals in a wide range of cost containment areas.

As MII develops its procurement and commodity strategies, MII buyers will individually tailor cost reduction guidelines by commodity and by supplier. Each supplier will be annually notified of the average price reduction expected, along with a summary of historic cost performance. These ratings will be incorporated into the supplier overall performance, and ultimately into the suppliers' stratification level as detailed in section 1.4 of the supplier handbook.

1) Annual Price Improvement – Total points available - 5

Annual price improvements includes the supplier ability to regularly reduce the purchase price of its product or services based upon improvement in overall operational efficiencies and in response to changing market conditions. Evaluations in this area will be based on average net reduction for like purchase content as measured against industry averages, commodity average performance, and individual achievement.

2) Cost Target Performance – Total points available - 10

In addition to the RFQ requirements detailed in section 2.1 & 2.2 of the supplier handbook, target prices will be provided on selected material, components, and services. These targets will represent a combination of market pricing necessary to support customer prices, and cost estimates. Supplier RFQ responses need to recognize the market significance of these targets as the competitive basis on which bids are solicited.

Performance in this area will be measured against both individual conformances to target requirements as well as relative position as compared with other suppliers within a commodity grouping. Where individual price targets are not provided, the lowest competitive price will be set as the benchmark against which other bids will be evaluated. This measure will be the primary indicator of market competitiveness used by MII in evaluating its suppliers.

3) Value Management Activities – Total points available -10

Value management activities represent the suppliers' ability to improve cost structure through improved manufacturing processes and component designs. Suppliers are expected to formally submit design and process improvement suggestions, along with preliminary evaluation to MII. With its customers, MII will evaluate and disposition the suggestions for implementation.

Section 3 – Performance (continued)

This measure will be evaluated by examining the frequency of supplier contributions, along with the implementation ration, and net cost improvement. To ensure the validity of the supplier suggestion activity and to prevent system overload, suppliers may be penalized by submitting frivolous suggestions

Each supplier should review the monthly scorecard results to ensure the accuracy of the information. Any discrepancies should be reviewed with the appropriate supplier quality engineer or purchasing representative. The supplier must provide evidence demonstrating that the initial classification of reject or performance was incorrect, and the report of discrepancy must occur within one month from scorecard date to be considered. Data must be supplied indicating process and/or SPC performance on specific material or part that was labeled as discrepant and similar data on the lot from which that material was derived. For delivery issues, shipping dates and on-time performance, quantity verification, and packing slip information are required.

3.4 Supply base stratification

As indicated in supplier handbook section 1.4, supplier stratification will be the criteria on which continued business continuity and growth opportunity will be based. Upon the calculation of the final annual results, MII's supplier development group will prepare a stratification matrix for use by MII commodity buyers by which the buyers will determine supplier eligibility. Any deviation from the stratification sourcing guidelines will require executive level approval. Supplier executive management may be required to participate in an onsite detailed performance review, to demonstrate viability for continued sourcing opportunities. MII customers may be notified of any customer-directed supplier falling below long term status.

Modern Industries has adopted the following stratification categories and guidelines:

- *Preferred Long-Term:* Suppliers demonstrating continuous improvement and evidence of commitment to collaboration with MII. Compliant to ISO 9001:2000, AS9100 Rev. A or equivalent, and meeting commodity specific delivery, quality and commercial performance targets within the performance range of 90-100%. Preferred status includes “preferred opportunity” for new sourcing.
- *Long-Term:* Long-term status achieved with performance scores of 89%-75. Commodity and supplier specific targets within the approved range. Approve status allows for new business sourcing potential with MII. Suppliers within the long-term status are required to submit a self-direct improvement plan, demonstrating continuous improvement and progress towards preferred long-term status.
- *Probation:* A supplier classified as probation is conditionally approved and may be allowed to conduct or continue to conduct business with MII, but on a limited and monitored basis. Performance criteria of 74-65% on-going performance measures reflecting deficit performance, or lack of demonstrated acceptable performance levels will result in this classification. Conditionally approved suppliers will not be eligible for new business opportunities.

Suppliers will be required to develop a joint process improvement plan that includes specific improvement objectives attainable within 6 months of implementation. A supplier demonstrating performance scores within the probation range for 2 consecutive years will be reclassified as disqualified – with conditions described.

Section 3 – Performance (continued)

- *Disqualified*: Disqualified classification is assigned for suppliers with on-going performance scores of 64-0. Once disqualified, a supplier will not be eligible to receive any new and may lose all existing contracts subject to MII procurement initiatives.

Section 4 – Corrective Action

Modern Industries is committed to working with its suppliers in the identification and correction of systemic and special cause problems. As outlined in section 3.3.1 of the supplier handbook, supplier performance will be in part measured against containment and identification of permanent corrective action. This section provides the MII specification and requirements for corrective action, problem resolution, and systems development.

4.1 Corrective Action Reports (CARs)

Modern Industries recognized the continuum of potential product and process failure which can occur, both internally and with the suppliers. To this end, MII has defined a supplier corrective action report procedure which reflects the severity of the quality issue. The following represents the process by which containment and root cause analysis must occur:

1) Division of problem types:

- *Critical* – the critical classification applies to all parts, processes, and systems which have a direct effect on the final product quality. Generally, critical component or process rejects relate to the function, fit, and finish of the assembly or final product. These rejects represent specification failures, cosmetic failures, material certification failures, and other similar failure modes. All crucial rejects will require a supplier completed CAR (form MII-FRM-00077).

Unless otherwise specified by the MII Supplier Quality Engineer, all CARs require the formal submission of interim corrective action and containment plan within 48 hours of notification of the issue. Root cause identification and permanent corrective action must be defined within 30 days. Evidence to the effectiveness of the containment and corrective actions may be required throughout the problem resolution period.

- *Major* – Major quality issues reflect the inability to contain repeated minor issues, suggesting a systemic quality problem with in the suppliers' operations. Requests for corrective action for major issues will be required upon the request of MII personnel. MII's supplier development engineers will serve as the liaison for all corrective action requests, regardless of the nature or original requestor. Additionally, major issues may be defines as a result of supplier performance as indicated on the supplier scorecard, or as a finding of a supplier system audit.

CAR completion requirements remain 48 hours for interim corrective action and containment, and 30 days for permanent corrective action and root cause analysis. Corrective actions for identified system audit deficiencies must be implemented & verified within three months from the assessment date.

- *Minor* – Special cause quality issues not effecting fit, form, or function may be considered Minor issues. However, corrective action may be requested by MII at any time for these issues. While these issues are normally considered "benign", when coupled with other performance indicators they may represent a leading indicator for potential quality and process issues. As they do not represent process critical issues, the 48 hour response is an acknowledgement of the issue and containment as necessary, versus an interim corrective action. The 30 day closure requirement would apply to minor issues.

Section 4 – Corrective Action *(continued)*

4.2 Development Plans

Development plans are tools used by MII to formally develop performance improvement objectives within MII's supply base. MII supplier development team will require a supplier development plan in all cases where supplier performance has fallen into the "Probation" classification. The supplier developed "Process Improvement Plan" or PIP, will include individual CAR driven interim and permanent corrective actions; identification of the process improvement team and executive champion; containment plans; and target completion date.

MII supplier development engineers will facilitate the implementation of the PIP actions within the suppliers' operations, serving as a technical quality consultant where applicable. Failure by any supplier to provide the PIP in a timely manner may result in the reclassification to "disqualified" status. Additionally, PIP or other development plans may be required of suppliers at any classification level as deemed necessary by MII. Quality of the PIP, and progress towards its completion will be reflected in the supplier quality ratings as defined in section 3.3.

4.3 Dispute Resolution

Should any errors be noted in the suppliers' performance, stratification level, or corrective action requirements, it is the suppliers' responsibility to assure the accuracy of the information used. All disputes, including rejected material must be addressed within one calendar month to be considered for evaluation.

To demonstrate that the initial rating, classification, or reject were incorrect the supplier must provide evidence with respect to quality, rating, or delivery discrepancy. Documentation requirements include: 1)Quality issues: inspection reports, process capability data (SPC data), part & material certifications, etc; 2)Delivery issues: shipping dates and on-time performance evidence, quantity verification, and packing slip information are; 3)Scorecard issues: data as deemed necessary to support dispute.

Specifically for the resolution over dispute to nonconforming material classification, the supplier must complete the NCMR Reversal Request Form (form MII-FRM-00071) within 30 days from date of issuance of the NCMR. The form is then submitted to the MII SQE for consideration, and if acceptable is forwarded to the MII MRB (material review board) for re-disposition. Approval of the reversal must include both the MII SQE and MII ME. Once the reversal is approved the supplier will be notified, and any purchase order debit will be reversed.

MII has established a Material Review Board (MRB) which is charged with reviewing and dispositioning discrepant and non-conforming items. The MRB consists of supplier quality engineer (SQE), manufacturing engineering (ME), work center designee, and production control. It is the responsibility of the MRB to issue and process all NCMR, and evaluate non-conformance responsibility.

Section 4 – Corrective Action (continued)

4.4 Material Return & Rework

When material is defined as suspect and reviewed under the process described in section 4.3, the MRB will provide a disposition in one of the following categories: *Accept* – determined to meet all requirements; *Use as is* – discrepant but can be used without rework; *Rework* – reworked at MII; *RTV* – return to vendor; *Pending FA* – returned to vendor for failure analysis; and *Scrap* – scrapped as rework is not cost effective or possible. According to each classification, MII has defined specific material return and rework policies to which MII suppliers are required to follow.

4.4.1 Supplier Fault Items – parts & components

Upon determination of supplier fault, MII shall begin processing the return by providing the supplier the opportunity to provide a Return Material Authorization (RMA) to facilitate the suppliers' return processes. Receipt of the RMA by MII is not a condition of return of defective material, but provided as a courtesy to MII suppliers. In the event the supplier fails to provide an RMA within 48 hours, MII will therefore assume no RMA is necessary as part of the suppliers process.

The material will be returned to the supplier and MII will provide the NCMR # by which the material was dispositioned and rejected, the purchase order number under which the material was procured, and the RMA # if provided. Unless otherwise indicated, returned material (RTV classification) is not to be sent back to MII under any conditions and no "re-work" purchase order shall be issued. The value of the parts returned will be debited by MII to the suppliers' accounts payables. Other costs may be recovered as detailed in section 5 of the MII supplier handbook.

4.4.2 Supplier Fault Items – outside special processes

Outside special process returns will contain all the elements listed in section 4.4.1 with the following exceptions: 1) where the parts can be reworked, the receipt of parts under the original purchase order is reversed, and the parts returned for rework. The supplier expedites the rework process and re-ships under the original purchase order; and 2) if the material is scrapped, the supplier will be debited three (3) times the cost of the special process service as listed on the purchase order, or the total cost MII has invested in the part. This debit is consistent with contract protection of actual, incidental, and consequential damages. Uniform commercial code coverage, and contract liability is further detailed in section 9 of the supplier handbook.

4.4.3 Modern Industries Fault Items

Where the part failure is determined to be caused by MII, the material may be returned to the supplier for rework. In such cases, the supplier will quote the cost of the rework to MII purchasing, a rework purchase order shall be issues, and the supplier shall complete the rework in an expedited fashion. If the supplier is unable to complete the rework by the quoted date or within 45 days of the request date, the purchase order will be closed and the part debited. As indicated in section 4.4.1, the supplier will be given the opportunity to provide an RMA for the rework return.

Section 4—Corrective Action (continued)

4.4.4 Modern Industries Fault Items – Pending FA

When rejected parts or processes are defined as pending failure analysis (FA), Modern Industries assumes responsibility until the failure analysis is complete. Upon analysis completion, responsibility is permanently assigned to finalize the NCMR process. Failure analysis capability is an expected service of all MII suppliers. Under the *Pending FA* classification, material is returned to the supplier for failure analysis which must be complete with in two (2) weeks. Should failure analysis not be completed with in the two week period, the NCMR disposition shall be changed to indicate supplier responsibility with the cost of the part debited.

Upon the completion of the failure analysis, if the FA indicates MII or customer fault the supplier is to submit rework quote and lead-time. If acceptable, MII will issue a supplemental rework purchase order indicating cost and timing. Should the analysis indicate supplier responsibility, the supplier is to rework and return to MII at no incremental cost.

4.4.5 Internal rework

Under discrepant material guidelines indicated in sections 4.4.1 and 4.4.2, rework may be necessary to be conducted within MII facilities. In such circumstances, suppliers will be given the opportunity to have supplier personnel complete rework on-site at MII. Any supplier completed work, must be accomplished within the same day of request. In the event that the MII supplier is unable to complete the rework in this specified time frame, MII will complete the work. The rework cost incurred by MII, along with an administrative fee of \$250 will be charged back to the supplier.

4.4.6 Supplier Expectations

For material rework and return procedures, suppliers expectations for performance include:

- Failure analysis within two weeks
- Total rework cycle with 45 calendar days
- RMA # within 48 hours
- Timely return of rework quotations
- Return parts only on open purchase order
- Delivery within the specified delivery window (not to exceed 3 days)
- Use of required forms and processes

4.4.7 MII commitments

To support a collaborative relationships with MII suppliers with respect to return and rework, MII will ensure the following performance:

- Reply to rework quotations with in 3 days of receipt
- Notification to supplier of open purchase orders weekly
- Notification of debits taken for each NCMR
- Issue rework purchase orders as required
- Provide NCMRs to supplier customer service representatives

Section 5 - Supplier Liability

Section 5 is provided to ensure clear communication of MII's supplier performance requirements and resulting financial liability for performance failure. MII position on performance liability mirrors that of its customers, and strives to ensure the same level performance expectations in all areas of business. MII has made every effort to be equitable in determining the cost basis for supplier non-performance.

5.1 Quality reject costs

Modern Industries had reviewed the internal processes and personnel necessary to contain and address rejects due to supplier quality issues. While there undoubtedly exists a broad range of incurred costs due to varying types and magnitude of issues addressed, MII has determined a minimum resource allocation of \$250 per occurrence. Each quality reject due to supplier failure will result in a minimum chargeback of \$250. Incremental costs for larger quality "spills" will be accumulated and billed back at the actual incurred rate.

The purpose of these chargeback procedures is to facilitate a greater emphasis on incoming product quality. Through improved process capabilities and control, along with statistically valid inspection sampling protocols, suppliers should be able to improve product quality to best in class levels. Where product design or process limitations do not support 6σ (six sigma) quality levels, suppliers should protect against potential liability via risk management efforts (see section 8 of the MII supplier handbook for examples).

5.2 Inspection & sorting procedures

Where supplier quality failures result in containment actions, suppliers are deemed responsible for all containment activities whether at MII, MII's customers, or internal to the supplier. Where inspection and sorting are required either within MII's facilities or those of its customers, MII suppliers are provided with the following guidelines:

- 1) Supplier representatives shall conduct on-site sorting and inspection under MII supervision, at MII production facilities. The selection of inspection personnel will be at the discretion of the supplier, provided that MII has determined the personnel and processes are adequate to provide the needed service.
- 2) Should the supplier be unable or unwilling to provide the sorting and inspection actions, MII may use its own personnel for this purpose. The full cost of inspection, including all allocated benefits and overhead charges, plus the cost of any necessary material or equipment will be charged back to the supplier.
- 3) If MII does not have the necessary personnel resources to complete the sorting and inspection procedure or for any other reason it deems necessary, MII may contract at its own discretion a 3rd party inspection company for the purpose of completing the necessary work. The full cost of these services, plus a 10% administrative charge will be billed back to the supplier.

As with the quality reject cost initiatives, the purpose of these inspection and sorting procedures is to encourage greater supplier ownership in the quality and customer satisfaction of their parts.

Supplier Liability (continued)

5.3 Customer return liability

Customer satisfaction is MII's primary concern, and as such, MII will provide its customer with every necessary service to support their needs. In the event that a MII suppliers' part or process failure results in a quality reject, part failure, or field return of its customer's parts, the MII supplier will be held fully responsible for all costs associated with that failure. Under terms of incidental and consequential damages, MII suppliers need to account for the potential of such an occurrence through warranty analysis and statistical forecasting techniques. Mitigating efforts of risk management should be pursued for such purposes. In a customer return or failure situation, MII will provide a detailed cost roll-up itemizing internal MII containment costs, as well as charged supplier costs and penalties. MII shall not accept any contact term contrary to this standard.

5.4 Direct to stock failure

As improved and statistically reliable processes are achieved, selected MII suppliers and parts may be placed on direct to stock receiving (see section 6.4). In this process, incoming materials are placed directly into inventory or into process without passing through incoming inspection. Verification to continued product quality will be evidenced by random lot sampling.

Should random lot verification reveal product rejections, or if similar quality issues are discovered in the manufacturing process, the supplier will be subject to the reject and inspection procedures identified in sections 5.2 and 5.3. Additionally, the suppliers' service rating elements shall be downgraded to reflect the lack of performance. The supplier will be then placed back on 100% lot incoming inspection, per standard incoming inspection procedures.

Direct to stock status does not supercede MII's ability to reject parts found to be discrepant at a later date. Due to the extremely dynamic nature of MII's business segments, MII will not recognize any time limit for the later determination of quality rejects.

Section 6—Part Approval

6.1 First Article Inspection (FAI)

Prior to the commencement of production shipments, all suppliers are required to obtain First Article Inspection (FAI) approval from MII. Failure to obtain FAI approval may result in parts being rejected back to the supplier, at the supplier expense, and performance deductions taken from the supplier scorecard rating. The FAI process is as follows:

6.1.1 FAI Process

- 1) All part received by MII for the first time are subject to FAI approval
- 2) FAI paperwork must accompany the first production part for inspection
- 3) If the purchase order indicates multiple quantities, the entire lot is NOT to be shipped until FAI approval is received.
- 4) Subsequent to FAI approval, all subsequent shipments are expected to be at the exact configuration, from the same process, etc. as the part submitted for FAI

6.1.2 FAI conditions of shipment

As indicated in 6.1.1, entire lot shipments made without prior FAI approval or written deviation is subject rejection and return. The reject will be treated as a quality reject consistent with the provisions of 5.1 of the supplier handbook. Additionally, the supplier will be fully liable for the cost of return freight.

Should rework of the products be required, MII may at its sole discretion rework the material in-house as to bring the material into specification compliance. These charges will be billed back to the supplier along with provisions of section 5.1. If MII has waived on its purchase order the standard FAI and entire lot delivery requirements, rework necessitated out of FAI failure will be MII's.

If upon return of the non-FAI'd shipments, the inspection ultimately fails, the supplier must expedite rework and delivery. Any incremental costs due to FAI failure, rework, and expedited freight are solely those of the supplier.

6.1.3 Material Certification

All shipments requiring certifications must have the certification documents included in the shipments, or the delivery may be rejected. In most cases, MII will hold the delivery in suspense until the certification requirements are met. Failure to comply with these requirements will affect the supplier's on-time delivery performance and stratification results. Material will not be received into MII's material receiving system until the requirements are complete.

At the buyer's discretion, the requirement for FAI prior to production shipments may be waived. The waiver of this requirement must be included in the terms of the purchase order issued by MII.

Section 6 - Part Approval *(continued)*

6.2 Receiving inspection

To ensure on-going customer satisfaction and product integrity, MII performs receiving inspection on every lot of incoming material. It is the suppliers responsibility to ensure that their products and deliveries meet the dimension, visual, and quality standards required and approved through the FAI process. Each shipment must include inspection and certification documents as required. Inability to meet these requirements may result in shipment reject and return as defined in sections 5.1 & 6.1.

6.3 Sample audit procedure

MII has adopted an inspection sampling procedure similar to that defined in section 3.3.2 element 2, using ANSI/ASQC Z1.4 inspection standard. Based on the individual supplier receiving performance data, individual products or suppliers may be placed on a direct to stock basis. With the demonstrated ability to continually meet production and acceptance standards, the direct to stock program reflects MII confidence in supplier performance. Once on direct to stock program, continued specification conformance move more fully to the supplier, with increased responsibility for customer satisfaction.

6.4 Direct to stock procedure

When determined as feasible for implementation, MII may adopt a direct to stock procedure for receipt of incoming material and components. MII is not obligated to adopt this at any time nor for any supplied products, but solely at its discretion.

- 6.4.1 Upon the completion of the tenth (10th) error free shipment, the product may be placed on direct to stock program.
- 6.4.2 To ensure continued performance and compliance to part specifications, parts on direct to stock program will be subject to random incoming audits, with frequency not greater than 10 shipments.
- 6.4.3 Failures identified during random incoming audits, or discovered in production for direct to stock items require immediate on-site supplier containment. Supplier responsibility for this process is outlined in section 5.4.
- 6.4.4 After one (1) failure during audit process or in production reject, the part is immediately placed on 100% incoming inspection, and must recertify for the direct to stock program.
- 6.4.5 Part documentation and certification requirements on direct to stock items are unchanged, with all paperwork to be provided with each delivery.

Section 7 – Shipping & Delivery

7.1 Demand forecasting and authorization

MII intends to make use of “blanket” purchase orders when and where feasible, providing for estimated annual usage pricing, lead-time, payment terms, etc. Material releases shall be issued against these blanket orders referencing original commercial terms. Due to the varying nature of the markets served by MII, extended release forecasts may not be available or may be inaccurate. The nature of this inaccuracy is due to the rapidly changing customer demands for products. MII suppliers must be able and willing to react to these changes accordingly.

Where blanket purchase orders are used, MII may release required quantities through EDI (electronic data interchange) or other means to reflect required delivery and forecasted demand, typically using 830 (weekly) releases. MII may select to use 862 (daily) releases for high volume or rapidly changing demand components. MII's liability shall not exceed the firm release quantities as indicated on the release. The firm release timeframe will typically be 4 weeks in duration. MII shall provide demand forecasts for a 13 week period beyond the firm authorization. It is the suppliers' responsibility to utilize the data for purposes of production and capacity planning. Shipment delays due to forecast changes shorter than the standard lead time will not be acceptable to MII for changes within 25% of original forecast. Expedite charges for such changes will be the responsibility of the supplier.

Suppliers delivering product per blanket purchase orders and material releases may be required to provide ASNs (advanced shipping notices) via EDI 854 communications. The interface between 830, 854, and MRP (material requirements planning) provide for the greatest level of demand and inventory accuracy, and directly impact MII's ability to service its customers in a timely fashion.

Where “spot buy” or limited quantity purchase orders are used, MII's liability will not exceed the quantities indicated on the face of the purchase order. Typically, demand forecasts are not provided for these purchase order types.

7.2 Shipping frequency

With the continued compression of lead time requirements from the customer, and the implementation of advanced lean manufacturing techniques, suppliers may be required to increase shipping frequencies from once per week or month, to multiple weekly or even daily shipments. With increased shipping frequencies, suppliers must provide the necessary support to allow for uninterrupted production schedules. Where minimum buy quantities may be included in the negotiated terms in either the blanket or spot buy purchase orders, minimum ship quantities will not be accepted.

7.3 Lot size compliance

Consistent with release and shipping frequency, delivery lot size compliance must be followed by all suppliers. Lot sizes outside the released demand must be negotiated with and accepted by the buyer. Any material delivered in excess of the planned level may be returned to the supplier, held by MII, or scrapped at MII discretion. Only the material received per schedule and purchase order will be submitted for payment.

Section 7 – Shipping & Delivery (continued)

7.4 Delivery window

All materials delivered to MII must conform to the delivery scheduled issued as part of a material release or spot buy purchase order. “On-time” deliveries will be those received within plus three (+3) minus zero (-0) days of the planned delivery schedule*. Any products received earlier than one day prior to scheduled delivery will be considered non-complaint to the delivery window, and will be reflected in the supplier delivery ratings and scorecard performance. Early material may be held until scheduled delivery date, or if exceedingly early may be return to the supplier at the suppliers’ expense. Any material received beyond the delivery date is considered late, and may require a deliver corrective action report to address the root cause of delivery failure.

7.5 Packaging compliance

All materials delivered to MII must comply with the packaging and labeling specifications as determined by MII or its customers. Packaging information will be made part of the specifications, drawings, and purchase order, or made generally available via the supplier portal on the MII website. Packaging compliance may include bar-coding requirements as determined by MII. Bar-coding requirements and specifications will be forward to individual suppliers as necessary.

Unless explicitly stated on the purchase order, the minimum following packaging is required in order to ensure safety in transport and proper identification of product:

- Protectively package the product in plastic bag, bubble bag, and an outermost box. For large parts such as chambers, package in specially designed crates.
- Enclose in an envelope associated certs and inspection reports. Affix a label to the envelope indicating the enclosure. Where each part needs a CofC and the parts are not serialized, package the parts individually and enclose a CofC in each package.
- Label the outermost packaging with the following information: name of supplier, part name, part number and revision level, and quantity of parts contained in package.
- On the packing slip and invoice, be sure to indicate the part number, revision level, lot number, purchase order number and if the parts are serialized, include their serial numbers of the parts.

* MII’s ultimate goal is to revise delivery to +0 days, and may therefore revise standard delivery window from time to time to reflect the increasing level of performance.

Section 8 – Risk Management

Section 8, risk management elements are those which suppliers need to implement for purposes of business continuity, and customer protection. Whether for support of MII requirements, or other customer needed, suppliers are strongly recommended to evaluate their preparation in these areas. MII includes in its supplier expectations the ability to manage risk in the areas indicated below.

8.1 Capacity planning requirements

In a dynamic marketplace, like that in which MII operates, significant shifts in demand are a common place occurrence. As such, the ability to accurately manage available capacity and adjust labor and facilities content as necessary is an expected part of doing business. As MII's customers expect capacity planning performance from MII, so does MII with its suppliers. As part of a risk management program, MII suppliers should have current accurate information regarding existing capacity availability for labor usage, facilities usage, and equipment usage.

Contingency plans should be in place for both dramatic increases in demand and decreases in demand. The inability to reply quickly to demand changes can mean a permanent loss of revenue for both MII and its suppliers. The contingency plans should include hiring (or layoff) and training plans, as well as equipment and capital acquisition (divestiture) strategies.

8.2 Disaster recovery planning – Force Majeure issues

Most commercial terms and conditions provide for force majeure exclusions of liability for acts of nature, government, strike, etc. which are reasonably beyond the control of the seller. The protection is also provided to the buyer in that they buyer has the ability to set aside any contractual obligations in order to secure supplies from other sources. Disaster recovery planning as part of risk management should be employed by MII suppliers to provide for protection against business interruption and to insure post-recovery business continuity.

MII is committed to a collaborative relationship with its preferred long term suppliers. However, MII's first obligation is to its customers, and meeting those customers' demands. In the absence of specific disaster recovery plans, MII may be forced to change sourcing to ensure adequate supply of components. Once committed to a new supplier, it may be unlikely that MII will revert back to a previous supplier. With an in place disaster recover plan, MII will maintain the on-going business relationship with its suppliers to the extent feasible.

Disaster recover is a formal set of guidelines detailing the steps for a quick recovery to a level of business functionality that existed prior to the disaster. Elements of a contingency plan can include:

- Storing backup CDs, programs, formulas and other valuable information at an off-site facility (redundancy plan)
 - Negotiating with key suppliers to secure emergency access to their equipment
 - Developing alternate supply sources that have minimal or no process variation
 - Maintaining a strong financial reserve for relocation to an alternative facility from the disaster zone.
- Securing a sound insurance policy that will provide for efficient recovery

Section 8 – Risk Management (continued)

8.3 Economic contingency planning

MII strongly encourages its suppliers to have in place economic contingency and down turn plans. In its primary markets of aerospace and semiconductor equipment, MII has witnessed sudden and drastic down turns in market demand. MII and its suppliers should be prepared to quickly respond to these economic changes to ensure continued competitiveness. In times of economic down turns, cost and price improvement gain heightened importance with MII and its customers. MII suppliers must be prepared to respond to the savings requirements at a time when revenues and profits are decreasing. Only through cost management and contingency plans will suppliers be able to satisfy their customer demands, while remaining financially viable.

8.4 Record retention policy

Record Keeping: Because of the criticality nature of the quality records, MII requires that suppliers do the following:

- Maintain quality records for a minimum of 7 years (or longer as required by law or customer) from the receipt date for each purchase order line item or delivery.
- Where practical, maintain a master matrix and work order system to include the name of the pertinent quality records, their current revision levels and areas of disposition. In the absence of the matrix or work order system, identify current versions of revised documents by the overriding document. For control purposes, this document must indicate an issue or effective date.
- Design and implement a disaster recovery plan to protect vital information as outline in section 8.2

Section 9 – Additional Commercial Requirements

9.1 Uniform Commercial Code (UCC) applicability

All material, components, and services provided to MII are subject to the MII standard purchase order terms and conditions (T&Cs), along with all contractual obligations as outlined in the Uniform Commercial Code (UCC) of the United States. Suppliers should familiarize themselves with the commercial protections provided to a seller, and obligation towards the buyer. In general, as defined by §1-102 of the UCC, the purpose of the UCC is to “simplify, clarify, and modernize the law governing commercial transactions; to permit the continued expansion of commercial practices through custom, usage and agreement of the parties; to make uniform the law among various jurisdictions.” As an Arizona based company, MII also recognized the use of Arizona UCC under codes §§47-1101 to §§47-1209.

The purpose of referencing the contractual protection and obligations of the T&Cs and UCC applicability is to reinforce the important contractual nature of the relationship between MII and its suppliers. Understanding of these requirements aids in eliminating any confusion regarding commercial decisions made on behalf of MII.

9.2 Actual, incidental, and consequential damages

The products offered by MII to its customers include significant value added process, and often are sub assemblies for high value items. As such, relatively low cost purchased components and materials can have a very serious impact on high value products. Supplier obligation for product performance may exceed the value of the components significantly.

In the event that a supplier component, material or service results in a higher level assembly or final product failure to which MII is obligated for payment, the supplier will be held financial responsible for “actual, incidental, and consequential” damages as provided for in UCC §2-715. As such, suppliers should familiarize themselves with the protection under this clause.

9.3 Risk Insurance

MII recommends that supplier insure themselves for the potential liabilities they may face in disaster recovery, economic downturn, and part/material/service liability as indicated in sections 8 and 9. The supplier should make use of product failure and warranty analysis to determine the appropriate level of coverage required. MII makes no recommendation of levels of coverage, coverage terms, or carriers. Each supplier is responsible for their risk coverage practices.

9.4 Inventory return and restocking requirements

As a basis of its dynamic customer markets, MII may from time to time be faced with significant slow moving or obsolete inventory from its suppliers. MII will negotiate in good faith with its suppliers to an agreed upon “restocking” charge in which material will be returned to the supplier. Any subsequent “resale” of these parts/materials to MII will include an offset in price for the restocking charge previously applied.

Appendix

MII divisions and locations:

Modern Industries Corporate Office and Headquarters
4755 E. Beautiful Lane
Phoenix, AZ 85044

Main Aerospace Division
3229 E. Washington
Phoenix, AZ 85034

South Mountain Technical Center
4755 E. Beautiful Lane
Phoenix, AZ 85044

High Technology Center
3242 E. Jefferson
Phoenix, AZ 85044

Module Manufacturing
3332 E. Jackson
Phoenix, AZ 85044

Austin Part Depot
9601 Dessau Rd. #302
Austin, TX 78754

Central Service Center
3230 E. Washington
Phoenix, AZ 85034