

Clover Tool Manufacturing Ltd.**Supplier Quality Guide**



TO: Our Valued Suppliers

Enclosed is your copy of Clover Tool's up-dated Supplier Quality Guide. Please review the information within and share this with your appropriate personnel.

Purchasing and Supplier Quality Assurance here at Clover Tool are committed to sharing information with you so that we will be able to work closely together to meet Clover Tool's requirements for purchased materials. As mentioned in the Introduction section of the Supplier Quality Guide, our suppliers play an essential part in the ongoing quest for continuous improvement. Clover Tool Mfg. Ltd. is interested in the development and maintenance of long-term business relationships with suppliers who share the commitment to continuous improvement in the materials that they supply to us.

Once you and your personnel have had an opportunity to review the Supplier Quality Guide, please compare Clover Tool's expectations and requirements to your current policies and procedures to see if they match. If you find that your procedures and policies do not agree with Clover Tool's policies or procedures listed in the Supplier Quality Guide please contact the Clover Tool Buyer you work with and let's discuss the differences. We stand ready to assist in any way possible to help you in your continuous improvement efforts.

Seller's acceptance of any order from Clover Tool is limited to their terms and conditions specified in the Supplier Guideline and Terms and Conditions found on our website www.clovertoolmfg.com and incorporated by reference herein. Any additional or different terms and conditions proposed by the seller are hereby rejected unless otherwise expressly agreed in writing by Buyer and signed by Buyers authorized representative(s).

If you have any questions or would like to discuss any of the information in the Supplier Quality Guide, please feel free to contact me. Your efforts and cooperation in supplying materials and services that allow Clover Tool to meet our customer expectations is greatly appreciated.

Sincerely,

Lori Watson
905-669-1999 ext 229
L.Watson@clovertoolmfg.com

INTRODUCTION

At Clover Tool, **Quality** is the first priority. Without a constant supply of defect-free parts, there is no chance for us to achieve higher levels of efficiency and productivity. Clover Tool has long been committed to the highest level of quality - we are challenged to excellence by our market's demand for superior products and service.

Our suppliers play an essential part in the ongoing quest for continuous improvement. We recognize that for suppliers to meet our request for consistent deliveries of zero-defect parts, we must be willing to establish long-term relationships, share engineering changes, supply delivery schedules, exchange product expertise, etc. As we progress to a ship-to-WIP (Work in Process) mode of operation based on a "pull system" of manufacturing, the importance of the supplier acting as an additional work center in the production line becomes increasingly clear.

How do we get our suppliers to act as one of our own work centers? The answer, of course, lies in the development of mutually beneficial supplier partnerships, making suppliers' part of the "team". **Quality** remains the key - quality of product, information, delivery and counts, to name just a few.

We invite you to join our quality team as a partner in performance, progress, and profitability.

GOALS OF THE SUPPLIER QUALITY ASSURANCE PROGRAM

The two primary goals of the SQ. Program can be described as follows:

- Push incoming inspection tasks back to the supplier's process, where it is both controllable and correctable.
- Eliminate the costs associated with reworking, repairing, rejecting, re-handling, and returning substandard materials.

The principles to be recognized in support of this program are:

- The suppliers must assume full responsibility for the quality of their products and services.
- Clover Tool should not be required to verify that the supplier has provided acceptable product.
- Each supplier should have in place or develop an effective quality system based on defect prevention rather than defect detection to include statistically based quality planning, with goals of reduced variation and continual improvement.

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COMMUNICATIONS

The addresses for Clover Tool are as follows:

Mailing Address

Clover Tool Manufacturing, Ltd.
8271 Keele Street, Bldg. #3
Concord, Ontario
L4K 1Z1

Shipping Addresses

Clover Tool Manufacturing Ltd
8271 Keele Street, Bldg #3
Concord, Ontario
L4K 1Z1

Jenny Zhang
416-209-9170
Controller
J.Zhang@clovertoolmfg.com

Lori Watson
905-669-1999 ext 229
Purchasing and Materials Manager
L.Watson@clovertoolmfg.com

Zeljka Kelava
905-669-1999 ext 244
Buyer
Z.Kelava@clovertoolmfg.com

Tim Boothby
905-669-1999 ext 233
Quality Manager
t.boothby@clovertoolmfg.com

Please contact the Purchasing Agent or Materials Coordinator for the Shipping Address to deliver to at
Materials@clovertoolmfg.com
905-669-1999 ext 239

Any communications from suppliers should be directed to the Purchasing Department and, whenever possible, to the buyer assigned to the subject material. Inquiries regarding quotations and/or purchase orders should be directed to this same buyer.

The Purchasing Department is the sole authority within Clover Tool to agree on supplier prices and delivery dates, and to commit Clover Tool to any purchase.

Suppliers shall be received in a friendly and courteous manner at any time during normal working hours.

We look to our suppliers for ideas, suggestions and creative solutions that will enable us to reduce our costs and offer our customers the highest standards of quality and

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service. We believe that first-rate suppliers will continually offer suggestions to reduce total cost through reduced manufacturing costs, innovative inventory control programs and imaginative new concepts.

Purchase order terms and conditions

By acceptance of the purchase order, supplier warrants that all merchandise shipped under the order complies with all laws and regulations of Federal and Provincial governments and this supplier Quality guide (CLOVER-43-22) which is on Clover Tool's website: http://clovertoolmfg.com/documents/Supplier_Quality_Guide.pdf

QUALITY SYSTEM REQUIREMENTS:

TS / ISO Certification:

CLOVER TOOL MFG.' Suppliers are required to be ISO9001:2008 or TS16949 registered by an accredited third-party certified body. Suppliers who are making the transition to ISO9001:2008 or TS16949 "must" have a transition plan with timing, letter of commitment from senior management, and contracted a third-party accredited registrar in order to "petition" CLOVER TOOL MFG. for a waiver to this requirement. Suppliers are required to provide evidence of their quality certification to CLOVER TOOL MFG.' procurement department annually.

Supplemental Requirements:

The Automotive Industry Action Group (AIAG) has published a number of manuals that standardize procedures, reporting formats, and technical nomenclature, which are required by ISO/TS and CLOVER TOOL MFG. It is CLOVER TOOL MFG.' expectation that our Suppliers remain current with these standards in order to fully comply with the requirements of ISO9001: 2008 / TS16949.

Supplier Audits & Access to Supplier Facility:

All suppliers of CLOVER TOOL MFG. shall be required to give full access to supplier development personnel as required to conduct "Supplier Quality System Audits" as necessary to meet CLOVER TOOL MFG. and customer requirements. Supplier will be given, at a minimum a 24 hours advance notice of these scheduled audits and the areas to be reviewed.

QUALITY REQUIREMENTS

Advanced Product Quality Planning (APQP):

All Suppliers for production and/or service programs shall use the latest revision of the AIAG Advanced Product Quality Planning (APQP) and Control Plan reference manual.

All PPAP submissions to CLOVER TOOL MFG. shall contain Product Control Plans that meet the AIAG format. Suppliers may be required to attend prototype or preproduction meetings at CLOVER TOOL MFG. or the final customer's facility. Representatives from both manufacturing and quality departments should attend the APQP program meetings.

Product Part Approval Process (PPAP):

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Suppliers shall fully comply with all requirements specified in the Automotive Industry Action Group (AIAG) PPAP manual as well as any customer specific requirements referenced on the purchase order. Where not specified it is CLOVER TOOL MFG.'s expectation to receive a level 3 PPAP. Suppliers are required to "control" their sub-contractor's material and PPAP approvals. PPAP submissions to CLOVER TOOL MFG. shall include all appropriate sub-contractor warrants, performance testing, dimensional results, material certifications, and APQP required documents. Any proposed change to part or process after PPAP submission must be communicated to the CLOVER TOOL MFG.' facility prior to implementing change, written notification is preferred. The supplier is obligated to obtain PPAP approval from CLOVER TOOL MFG. prior to implementation. IMDS documentation is required in all PPAP submissions to CLOVER TOOL MFG.

Conflict Minerals Reporting

As you may already be aware, on August 22, 2012, the U.S. Securities and Exchange Commission ("SEC") adopted a final rule (the "Rule") to implement reporting and disclosure requirements related to "Conflict Minerals" as directed by Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act"). The Rule requires manufacturers who file certain reports with the SEC to disclose whether the products they manufacture or contract to manufacture contain "conflict minerals necessary to the functionality or production" of these products that directly or indirectly finance or benefit armed groups in the Democratic Republic of Congo or specified adjoining countries (the "Covered Countries"). The Rule aims to further the humanitarian goal of ending violent conflict in the Covered Countries, which has been partially financed by the exploitation and trade of Conflict Minerals.

The Conflict Minerals currently covered by the Rule are: Columbite-Tantalite (Coltan) and its derivative metal Tantalum; Cassiterite and its derivative metal Tin; Wolframite and its derivative metal Tungsten; and Gold. The U.S. Secretary of State may designate additional minerals in the future.

Clover Tool intends to make reasonable efforts:

- (i) to know, and to require each Clover Tool supplier to disclose to the Company, the sources of Conflict Minerals used in its products; and
- (ii) to eliminate procurement, as soon as commercially practicable, of products containing Conflict Minerals obtained from sources that fund or support inhumane treatment in the Covered Countries.

To ensure compliance with the Rule, Clover Tool must request information regarding the use of conflict minerals from its suppliers, who in turn, must solicit that information from the next tier of suppliers, continuing down the supply chain.

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Accordingly, Clover Tool has introduced to its global supply chain, a requirement that suppliers assist the Company in complying with the disclosure requirements mandated by the Dodd-Frank Act, and the Rule, as well as any related laws and rules.

Early Containment:

Suppliers shall utilize the early production containment plan for all preproduction requirements to CLOVER TOOL MFG. facilities and must follow GP-12 guidelines (or equivalent customer standard as applicable). Early production containment must be in place until all exit criteria specified by CLOVER TOOL MFG. and the OEM customer is complete.

SUPPLIER PERFORMANCE AND MONITORING

Supplier Quality Performance requirements are “Zero Defects” on all product supplied to CLOVER TOOL MFG and 100% on time delivery. Deviation from this requirement will result in the issuance of a Non-Conformance Report (NCR) and subsequent applicable charges.

Key product characteristics established on a product supplied to CLOVER TOOL MFG. may require the supplier to submit product capability reports on an ongoing or requested basis to show conformance to customer requirements. This requirement will be set-up during the PPAP process and added to the supplier’s control plan. A minimum of a 1.67 Cpk is required of all key product characteristics on an ongoing basis. Deviation of this requirement must be received in writing from the CLOVER TOOL MFG. plant being supplied.

SUPPLIER SELECTION

The Purchasing Department is responsible for supplier selection and has the authority to choose the best supplier for Clover Tool’s needs from qualified or approved suppliers. Assistance from other departments within Clover Tool is utilized to assure that the supplier can consistently meet our specifications.

Clover Tool requires each potential supplier to complete an evaluation form, which provides us with essential information along with other criteria necessary in our supplier approval process.

Approval will be completed only after the appropriate Clover Tool department completes a Quality System Survey of the supplier and a pre-production sample run is approved, where applicable. The survey will evaluate procedures for control of drawings, adherence to specifications, inspection procedures, testing equipment, manufacturing capability, SPC activity and other associated quality control procedures. Heavy emphasis is placed on the supplier’s planning and commitment to quality. Any suppliers registered to the ISO or TS 16949 system shall be exempt from this survey.

DELIVERY

Purchase orders are placed with specific delivery dates to be received at our dock. Our Materials Control Department provides these dates to Purchasing. It is imperative that these dates be adhered to in order that our production schedules are not impeded. If the supplier determines that delivery dates cannot be met, the Material Coordinator or Purchasing Agent should be advised of the situation immediately.

Clover Tool has a lifting capacity of 5 tons for our cranes and up to 15,000 lbs. for our forklifts.

Shipments in excess of 10% above the quantity ordered will not be accepted except by **prior** approval.

Clover Tool discourages early deliveries and in some cases may return shipments collect. Furthermore, no shipment should be split unless authorized.

It is preferred that the supplier contact the Clover Tool Material Coordinator to establish material receiving times. Regular receiving hours are 7:00 am to 10:30 pm Monday to Friday. However, Production / Customer requirements may change. It is the Supplier's responsibility to periodically re-confirm receiving times. Materials receiving is limited to the hours between 10.00am to 6.00pm.

Delivery performance is monitored as part of the overall performance evaluation.

It is the responsibility of the supplier to advise Clover Tool when the expected delivery date will not be met. If Clover Tool is not advised of a late delivery, purchase orders reaching a past due status will be followed up by our Purchasing Department or Material Coordinator and supplier will be rated with late arrival.

In some cases, depending upon the supplier's geographical location, Clover Tool will make arrangements to pick orders up from the supplier.

PACKAGING

All parts and materials shipped to Clover Tool are to be packed and protected to prevent transit and handling damage and mitigate the risk of corrosion.

Any coils with a 12" width or less must be delivered lying flat on a skid. If there are several coils on a skid, there must be a 3" hardwood spacer wrapped in paper or if spacers are not wrapped a sheet of paper must be placed between each layer to

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prevent moisture damage. Paper interleave must never be used (when a layer of paper is wrapped up in the coil).

Any coils with a width over 12" must be sent standing up. If there are several coils strapped together, *there must be a 3" hardwood paper wrapped spacers between the coils* and the total weight should not exceed 15,000 lbs.

Each coil has 4 straps per coil and 1 around the outside of the coil. *Edge Protectors are also required.*

All coils must meet the following criteria minimum outside diameter: 48", Minimum 20" Coil ID, Maximum Coil Weight 15,000 lbs. Maximum outside diameters will be outlined on an item by item basis.

All HRPO coils must be marked with Green spray paint on the ID/OD lip that has a Manganese Mn level under 0.60, Chromium Cr:<0.05, Phosphorus P: < 0.03, Copper Cu: < 0.15 or less.

Suppliers are responsible for assuring that every coil is tagged

The aforementioned criteria for coil material applies unless otherwise specified by Clover Tool Mfg. Ltd.

Suppliers are responsible for special packaging methods as indicated on the purchase order or in the applicable engineering or material specifications.

The supplier will notify the buyer prior to any packaging change.

When materials with different part numbers are shipped together, the purchase order number, part number and quantity of each part number must be clearly marked on the outside of each box and visible without unloading a pallet.

AIAG Bar-coded labeling on product packaging is preferred by Clover Tool, other labeling format should be pre-approved by quality assurance department as part of the PPAP submission.

MATERIAL CERTIFICATIONS

Certification for proof of material and/or process control is required for all outside processors, i.e. Steel suppliers, coaters, parts mfg. etc, where so stated on Clover Tool prints, specifications or as otherwise requested by Purchasing, Engineering, Quality Assurance and/or Supplier Quality Assurance.

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Failure to supply required certifications or evidence of process control can result in rejection of the shipment.

The supplier is responsible for assuring that he has the needed drawings and specifications. Verification of revision status of new copies may be obtained by contacting the buyer responsible for the material.

SUPPLIER PERFORMANCE

To assist suppliers in gauging their performance, Clover Tool's Purchasing Department compiles what is termed a "Supplier Performance Report" every month. This report quantifies each supplier's delivery and quality performance, SQA and Supplier Rating based on the following criteria:

1. Delivery Rating: 1 = 0 late deliveries per month
2 = 3 or less late deliveries per month
3 = 4 or more late deliveries per month
2. Quality Rating: 1 = 0 rejections per month
2 = 3 or less rejections per month
3 = 4 or more rejections per month

SUPPLIER RATING

The Supplier's overall rating is determined once the two categories are calculated and the average of the two will generate a rating from 1.0 to 3.0.

- 1.00-1.75 Acceptable
- 1.75-2.75 Marginal, some improvement is required
- 2.75-3.00 Unacceptable, corrective action is required

Other items taken into consideration regarding supplier performance include, but are not limited to, the following:

- Cost: Purchasing decisions based on total value, which considers inventory-carrying costs, freight, warranty policies, etc.
- Flexibility: Schedule changes and lead-times are always important aspects of meeting customer requirements.
- Supplier Support: Contributions to the continual process of product development and improvement leading to the mutual enhancement of competitiveness.

After the sub-contractors supplier rating has risen above 2.76 (unacceptable) the sub-contractor will be notified by a non-conformance and a plan of action should be taken. If

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after two consecutive rating reviews no improvement is made the sub-contractor may be subject to removal from the Approved Vendors Listing. When it is a customer requested sub-contractor the customer will be advised of sub-contractors disposition.

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All incoming material is subject to inspection, although our direction is toward “inspection-less receiving”, with parts “accepted as received” to enhance our JIT efforts.

When defective material is received, two alternatives are considered:

Whenever possible and practical, rejected material will be returned to the supplier, at his expense, for replacement and/or credit.

Should Clover Tool elect to do so, and should certain criteria be met, the parts may be accepted under deviation, sorted to remove the unusable parts or reworked before they are accepted into Clover Tool stock.

All expenses related to sorting and rework will be accumulated and back-charged to the supplier.

Purchasing or QA Department will contact the supplier for return authorization and arrange for the return of the defective material. The supplier’s account is debited at the time the material is returned. If inbound freight charges are incurred by Clover Tool a 3% add-on will be applied to the debit.

Purchasing may issue a new purchase order to cover the return of reworked and/or replacement parts.

The supplier is responsible for analyzing the defect and providing an 8D or *similar format* Corrective Action to our Quality Assurance Department. *The requirement for corrective action response timing will be as follows:*

-Initial action response within 24 hours

-Direct, detection and systemic Root causes must be defined within one week

-Permanent actions must be determined and submitted within 10 business days.

Repeat non-conformances will require the Suppliers senior management (at a minimum a representative from QA and Production) to present the Corrective Action to the Clover management team at a meeting that will be conducted at Clover Tool Mfg.

The submission of Corrective actions is mandatory and failure to submit a Corrective action may result in chargebacks.

Rejections and deviations become a part of the supplier’s performance record and will be reflected in the periodic Supplier Performance Report compiled by the Purchasing & QA Department.

In the effort to process the nonconforming material within timely manner and ensure material flow, Clover has developed the following policy:

Supplier notification to Clover:

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Suppliers must always notify Clover Tool in cases where nonconforming products, or suspected nonconforming products have been shipped. Once notification has been given to Clover Tool, the potential non-conformance by a supplier shall be followed up by:

- containment, including 3rd party where necessary at Clover Tool facility to include replacement (certified) material if requested
- written initial corrective action response with containment method/identification within first 24 hours when requested
- Direct, detection and systemic Root causes must be defined within one week*
- written long term corrective action response with root cause and irreversible corrective action(s) within 10 days.

Processing suspect/nonconforming product

- supplier is required to contact Clover within 24 hours after the receipt of complaint
- supplier will be required to immediately respond with certified replacement product expedited at sufficient intervals to minimize the impact to Clover or to our customers.
- supplier will be required to issue RMA# and rejected material to be disposition within 7 days from the receipt of complaint
- if the rejected material has not been disposition within 7 days from the receipt of complaint and no RMA# issued, product will be sent back at supplier's expense
- *Material deemed non-conforming and dispositioned as "Return to vendor" is to be picked-up within 30 days of the NCR being issued or the material will be scrapped at the supplier's cost and no re-course can be taken.*

Supplier Charge-backs and penalties

-Clover Tool will debit suppliers for incurred cost associated with handling, processing, sorting and managing supplied nonconforming product in our facility and/or at our customer facility (include standard sorting fees)

The applicable fees are as following:

- administration charges initial - \$250 Repeat Issues- \$500
- downtime charges - \$300/hour
- forklift – \$65/hour
- operator sort – \$25/hour
- Quality support- \$85/hour

Suppliers to Clover Tool are expected to understand and comply with the conditions of business as described within the Clover Tool Supplier Quality Guide. This addendum is specific and unique to Clover Tool.

For purpose of clarification you are encouraged to contact Quality or Purchasing Group at Clover Tool.

ADVANCED DEVIATION

Clover Tool's Quality Assurance Manager should be notified immediately by the supplier of any defective materials shipped.

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Authorization for deviation from specifications may be obtained through the buyer responsible for obtaining the material. A deviation number will be issued after Engineering and Quality Assurance agree to the deviation. The shipping papers and parts containers will be marked with the deviation number.

Clover Tool will furnish suppliers with notices of rejection or deviation.

Clover Tool gives preference to those suppliers who handle problems **before** parts have been shipped.

COMMODITY SUPPLIERS

The same policies apply to suppliers who furnish Clover Tool with commodity items (with the exception of quality surveys). This is due to the fact that such companies normally do not produce the products they sell.

We encourage these suppliers to be motivated and suggest ways in which we can more efficiently perform a job and/or realize cost savings.

Systems, procedures and requirements contained within this guide are reviewed annually in addition to normal ongoing review procedures in order to promote an assessment of effectiveness. Suppliers are invited to forward any input which is felt may assist in this process.