

PO QUALITY REQUIREMENTS

- Q01 THIS FORM COVERS "SUPPLIER" AND SUBCONTRACTOR WORK PERFORMED PER HI-SHEAR CORPORATION (HEREIN REFERRED TO AS HI-SHEAR) PURCHASE ORDER TERMS AND CONDITIONS LOCATED AT WEBSITE: [HTTP://WWW.LISI-AEROSPACE.COM/TELECHARGEMENT/TCP_USA_2009.PDF](http://www.lisi-aerospace.com/telechargement/tcp_usa_2009.pdf) AND [WWW.HI-SHEAR.COM](http://www.hi-shear.com).
- Q02 SUPPLIER SHALL HAVE AN EFFECTIVE QUALITY SYSTEM THAT MEETS REQUIREMENTS OF ISO 9001/ AS9100 (OR EQUIVALENT), ISO 10012, MIL-I-45208 QUALITY INSPECTION SYSTEM, AND MIL-STD-45662 AND ISO/IEC17025 FOR CALIBRATION.
- Q03 SPECIAL PROCESS SUPPLIERS (CHEMICAL PROCESSING, HEAT TREAT NDT, ETC.), SHALL BE NADCAP CERTIFIED (WHERE REQUIRED) AND SHALL BE CAPABLE OF DEMONSTRATING THE ABILITY TO MEET HI-SHEAR REQUIREMENTS FOR SPECIAL PROCESSES. REQUIREMENTS SHALL INCLUDE, BUT ARE NOT LIMITED TO; KEY PARAMETERS AND PROCESS CONTROLS PER HI-SHEAR SPECIAL PROCESS SPECIFICATIONS REFERENCED ON ANY APPLICABLE HI-SHEAR PURCHASE ORDER.
- Q04 WORK UNDER THIS ORDER IS SUBJECT TO HI-SHEAR SURVEILLANCE AT THE SUPPLIER FACILITY. HI-SHEAR QUALITY ASSURANCE REPRESENTATIVE(S) MAY ELECT TO CONDUCT INSPECTION ON A SCHEDULED OR RANDOM BASIS AND INSPECTION MAY INCLUDE UP TO 100% AS DEEMED NECESSARY. THE SUPPLIER SHALL BE NOTIFIED IF HI-SHEAR CORPORATION INSPECTION IS TO BE PERFORMED ON SPECIFIC SHIPMENTS. NO SHIPMENTS SHALL BE HELD FOR HI-SHEAR INSPECTION UNLESS NOTIFIED BY HI-SHEAR QUALITY ASSURANCE PRIOR TO OR AT THE TIME PRODUCT IS READY FOR SHIPMENT.
- Q06 HI-SHEAR, THEIR CUSTOMERS AND/OR GOVERNMENT REPRESENTATIVES (IF NON-DOMESTIC, EQUIVALENT GOVERNMENT AGENCY) SHALL HAVE RIGHT OF ACCESS TO SUPPLIER FACILITY TO PERFORM IN-PROCESS CHECK, AND TO INSPECT AND EVALUATE SUPPLIER SYSTEMS, DATA, EQUIPMENT AND PERSONNEL USED TO MANUFACTURE OR PROCESS PRODUCT FOR HI-SHEAR.
- Q07 MANUFACTURING LOT INTEGRITY CONTROL MUST BE MAINTAINED THROUGH-OUT THE MANUFACTURING, HEAT TREATMENT, CHEMICAL AND/OR COATING PROCESS CYCLE. A MANUFACTURING LOT IS A PRODUCTION LOT WHERE A QUANTITY OF PRODUCT OF IDENTICAL CONFIGURATIONS AND DIMENSIONS, FABRICATED FROM THE SAME HEAT OR MELT OF MATERIAL, PRODUCED, PROCESSED AND FINISHED AS ONE CONTINUOUS RUN, ORDER OR PART THEREOF, AND PRESENTED FOR INSPECTION AT THE SAME TIME. ACCURATE AND SPECIFIC RECORDS OF EACH STEP IN THE PROCESS FOR EACH BATCH (INCREMENTAL PORTION OF A LOT) SHALL BE ESTABLISHED AND MAINTAINED. ANY ESCAPEMENT OR NON-COMFORMANCE DETECTED BY THE SUPPLIER DURING PROCESSING OR INSPECTION OF HI-SHEAR PRODUCT SHALL BE REPORTED TO HI-SHEAR QUALITY ASSURANCE IMMEDIATELY.
- Q08 ACCURATE PART COUNTS ARE AN INTRINSIC PART OF LOT INTEGRITY CONTROL. PARTS SHALL BE COUNTED UPON RECEIPT AND THE PART COUNT RECORDED ON RECEIVING DOCUMENTATION AND PRIOR TO SHIPMENT, WITH THE PART COUNT RECORDED IN THE SHIPPING DOCUMENTATION AND CERTIFICATION. HI-SHEAR TOLERANCES FOR PART COUNTS ARE $\pm 3\%$ OF THE LOT QUANTITY. PART COUNTS EXCEEDING THE SPECIFIED TOLERANCE RANGE REQUIRE A DOCUMENTED INVESTIGATION AND NOTIFICATION OF PART COUNT DISCREPANCIES PRIOR TO SHIPMENT. PART COUNT DISCREPANCIES NOTED UPON RECEIPT MUST BE RESOLVED PRIOR TO STARTING THE JOB.
- Q09 THE SUPPLIER SHALL CERTIFY THAT MATERIAL AND/OR FINISHED PARTS SHALL BE CONTROLLED, PROCESSED, INSPECTED AND TESTED AND SHALL MEET OR EXCEED HI-SHEAR PURCHASE ORDER REQUIREMENTS, WITH ALL APPLICABLE RECORDS MAINTAINED ON FILE SUBJECT TO EXAMINATION. SUPPLIER FURTHER AGREES TO FURNISH CERTIFIED COPIES OF TEST AND/OR CONTROL DATA WHEN REQUESTED OR SPECIFIED ON THE HI-SHEAR PURCHASE ORDER. THE SUPPLIER AGREES TO FLOWDOWN ANY/ALL APPLICABLE REQUIREMENTS – INCLUDING KEY CHARACTERISTICS – SPECIFIED ON THE HI-SHEAR PURCHASE ORDER TO ANY/ALL SUB-TIER SUPPLIERS.
- Q10 SELLER MUST PROVIDE EVIDENCE OF ACCEPTANCE BY ITS QUALITY CONTROL DEPARTMENT ON ALL SHIPMENTS. EVIDENCE INCLUDES, BUT IS NOT LIMITED TO CERTIFIED PHYSICAL AND METALLURGICAL TEST REPORTS WHERE REQUIRED BY CONTROLLING SPECIFICATIONS, OR A SIGNED, DATED STATEMENT ON THE PACKING SHEET CERTIFYING SUPPLIER QUALITY CONTROL HAS INSPECTED PRODUCT, AND IT MEETS OR EXCEEDS ALL APPLICABLE DRAWINGS AND OR SPECIFICATIONS.
- Q11 WHEN REQUIRED, SAMPLING PLANS SHALL BE BASED ON ZERO DEFECT ACCEPTANCE CRITERIA. SUPPLIER SHALL SUBMIT THE SAMPLING PLAN UTILIZED TO PERFORM THE REQUIRED INSPECTIONS AND TESTS AT RECEIVING, IN-PROCESS AND FINAL INSPECTION.
- Q12 SUPPLIER AGREES NOT TO MAKE ANY CHANGE IN PROCESS, MATERIALS OR DESIGN DETAIL WHICH WOULD AFFECT THE PART OR ANY COMPONENT PART THEREOF, SPECIFICALLY PART NUMBER IDENTIFICATION AND PHYSICAL OR FUNCTIONAL INTERCHANGEABILITY.
- Q13 PRODUCT SUBMITTED FOR EVALUATION BY HI-SHEAR PRELIMINARY MATERIAL REVIEW TEAM (PMRT) SHALL BE DOCUMENTED AND SUBMITTED BY THE SUPPLIER QUALITY REPRESENTATIVE TO HI-SHEAR PURCHASING.
- Q14 FOR SPECIAL PROCESSES, APPROVED REWORK PROCEDURES SHALL BE IDENTIFIED BY THE SUPPLIER AND APPROVED IN WRITING BY HI-SHEAR AUTHORIZED MANUFACTURING ENGINEERING, QUALITY ASSURANCE OR ENGINEERING PERSONNEL PRIOR TO SPECIFIED REWORK PROCESS. NO REWORK SHALL BE PERFORMED WITHOUT WRITTEN APPROVAL FROM HI-SHEAR.
- Q15 NON-CONFORMING PRODUCT DETECTED BY HI-SHEAR RECEIVING INSPECTION OR DURING SUBSEQUENT EVALUATIONS SHALL BE PROCESSED PER INTERNAL NON-CONFORMING PRODUCT PROCEDURES. SUPPLIERS SHALL RECEIVE A WRITTEN NOTIFICATION WHICH SHALL INCLUDE ALL PERTINENT DETAILS OF THE NON-CONFORMANCE. SUPPLIER SHALL FURTHER IDENTIFY AND PROVIDE FULL ACCOUNTING OF ANY WORK IN PROCESS, PRODUCT IN STORES, OR SHIPPED PRODUCT THAT MAY BE AFFECTED, AND SHALL TAKE ANY/ALL MEASURES NECESSARY TO ENSURE ALL NON-CONFORMING PRODUCT IS ISOLATED AND PREVENTED FROM UNINTENDED USE OR INSTALLATION. WHEN REQUIRED, SUPPLIER SHALL MAKE AVAILABLE ALL QUALITY DATA AND RECORDS PERTAINING TO A SPECIFIC NON-CONFORMANCE WITHIN (24) HOURS.
- Q16 UPON RECEIPT OF NOTIFICATION OF NON-CONFORMANCE, THE SUPPLIER SHALL TAKE IMMEDIATE ACTION TO IDENTIFY THE ROOT CAUSE AND PROVIDE A CORRECTIVE ACTION PLAN. ROOT CAUSE SHALL INCLUDE, BUT IS NOT LIMITED TO: CONTAINMENT ACTIVITIES, PROCESS AND PROCEDURE REVIEW, TRAINING OR RE-TRAINING, MISTAKE-PROOFING, ETC. SUPPLIER IS REQUIRED TO PROVIDE INITIAL ROOT CAUSE AND CORRECTIVE ACTION WITHIN (30) CALENDAR DAYS, WITH IMPLEMENTATION AND FOLLOW –UP WITHIN (90) CALENDAR DAYS. FAILURE TO RESPOND TO HI-SHEAR REQUEST FOR TIMELY ROOT CAUSE AND CORRECTIVE ACTION OR TO PROVIDE WRITTEN FOLLOW-UP INDICATING A SUCCESSFUL IMPLEMENTATION PROCESS SHALL RESULT IN SUSPENSION, FINAL NOTICE AND POTENTIAL PERMANENT REMOVAL FROM HI-SHEAR APPROVED SUPPLIER LIST.
- Q17 HI-SHEAR SHALL ISSUE A SUPPLIER CORRECTIVE ACTION REQUEST (SCAR) FOR REPETITIVE NON-CONFORMANCES. REPETITIVE NON-CONFORMANCES ARE DEFINED AS NON-CONFORMANCES OF THE SAME TYPE OR DESCRIPTION THAT OCCUR WITHIN A (90) DAY PERIOD. REPETITIVE NONCONFORMANCES MAY ALSO BE DEFINED AS NON-CONFORMANCES THAT RECUR BEYOND THE (90) DAY PERIOD, DEPENDING ON THE CRITICALITY OF THE NON-CONFORMANCE AND THE EFFECT ON END ITEM REQUIREMENTS.
- Q18 SUPPLIERS SHALL BE REQUIRED TO SUPPLY STATISTICAL PROCESS CONTROL (SPC) DATA FOR ANY KEY CHARACTERISTICS IDENTIFIED ON THE HI-SHEAR PURCHASE ORDER, SUPPLIER HI-SHEAR DRAWINGS, WORK INSTRUCTIONS OR KEY CHARACTERISTIC CATALOG.
- Q19 SUPPLIERS SHALL BE REQUIRED TO MAINTAIN ALL QUALITY DATA AND RECORDS PERTINENT TO WORK OR PROCESSES PERFORMED FOR HI-SHEAR. RECORDS SHALL INCLUDE, BUT ARE NOT LIMITED TO: HI-SHEAR PURCHASE ORDER, DRAWING(S), SUPPLIER CERTIFICATIONS, SUPPLIER SHOP CARDS/TRAVELERS, SPECIAL PROCESSES (PLATING, COATING, HEAT TREAT, BRAZING) LOT AND BATCH CONTROL DOCUMENTATION – PROCESSING LOGS, CHARTS, REPORTS, CERTIFICATIONS, ETC. SUPPLIER SHALL MAINTAIN QUALITY/PROCESS RECORDS ON FILE FOR AN INDEFINITE PERIOD. ALL RECORDS SHALL BE MADE AVAILABLE FOR REVIEW BY LISI AEROSPACE AND LISI AEROSPACE CUSTOMER REPRESENTATIVES.
- Q20 MACHINING SUPPLIERS SHALL NOTIFY HI-SHEAR PURCHASING OF ANY OVER-RUN QUANTITIES REALIZED FROM HI-SHEAR SUPPLIED MATERIAL. MACHINING SUPPLIERS SHALL RETURN ALL UNUSED MATERIAL, GAGES, TOOLING AND EQUIPMENT AFTER WORK HAS BEEN COMPLETED. SUPPLIER SHALL NOT KEEP, STORE OR HOLD ANY HI-SHEAR OVER-RUN QUANTITIES WITHOUT EXPRESS WRITTEN CONSENT FROM HI-SHEAR CORPORATION.