Marwood Supplier Assessment

Supplier: _____ Assessor: _____

Date: _____

Self Assessment: ☐

Onsite Assessment: ☐

How to Score

(3) Green	A mature, well-defined, quality system or process is in place, being followed/utilized as directed, and the system or process does not place Marwood or our customer at unnecessary risk
(2) Yellow	Quality system or process is in place, but is not followed/utilized as intended
(1) Red	Quality system or process is not evident, or the current system or process in place puts Marwood or our customers at significant risk

#REF! **Overall Score**

Green = OK / Yellow = Correct/Monitor / Red = Development

Item #	Requirement	Guidelines (What To Look For)	Score	Comments
Standardized Work				
1	**Standardized Work** All work is documented using a standard format including what, how, why tasks are performed and meets all safety, quality and element time requirements. Visual Standards referenced in work instructions as well as posted throughout the facility reference "good" and "bad" quality standards. Workplace organization is implemented such as 5S . Standardized Work is detailed enough to ensure that operation is performed a standardized way on each cycle.	Check that Standardized Work is available at the workstations and followed. Check that workplace organization such as 5S rules are identified, followed and reviewed. Ask team member how 5S is implemented and check how it is reviewed (through LPA , 5S audit, etc.). Compare instructions to work performed by operators. Observe 3 full cycles of the job in station & verify that the major steps & key points are followed and understood.		
Visual Management				
2	**Visual / Tactile / Audible Standards - Communicated & Understood** Visual Standards are clearly communicated to the team member at the workstation and incorporated or referenced in standardized work. Team members are knowledgeable of the Visual Standards.	Team members shall know the content of Visual Standards. Interview a minimum 3 operators. All shall fulfill the requirements. Visual Standards shall be referenced in standardized work documentation.		
Building Teams				
3	**Training** Training process is standardized and effective. Training is documented.	Check that there is standardized process for training such as 4 step (Harvey Ball). Interview some team members about how they are trained. Verify training records.		
Communication				
4	**Feedback / Feed Forward** There is fast feedback /feed forward flow between Verification Station (Final Inspection / CARE / GP12) and the manufacturing team leader and between production teams. Quality Alerts are posted at the operation for issues detected downstream.	Look for fast feedback / feed forward flow between the Verification Station (Final Inspection /CARE / GP12) and the manufacturing team leader and between production teams and shifts. Confirm that quality alerts are posted at the operation for issues detected downstream.		
Rework/Repair Control				

Item #	Requirement	Guidelines (What To Look For)	Score	Comments
5	**Rework / Repair Confirmation / Tear Down** Repairs (both on and off line) are compliant with approved standardized work. Repaired, reworked or reprocessed material is processed at a minimum through an independent repair confirmation (2nd person or machine after repair). Reintroduction of reworked part includes all downstream checks in order to ensure that all control plan inspections & tests are performed.	Confirm that repaired, reworked or reprocessed material is processed at a minimum through an independent repair confirmation (2nd person or machine).		
Call for Help				
6	**Andon System Implementation** A well functioning andon system is implemented in all production areas to support the team member when abnormal conditions occur and they need to communicate relevant information.	The andon system enables the team member to call for help and supports the concept of "Do Not Accept, Build or Ship a Defect". Andon calls can be radio, pager, stack lights, andon boards, etc. Check that the requirements of an effective andon system are present in all production areas. Take a few operator stations in different areas as an example. Ask team members and team leaders how the andon is working and validate the effectiveness.		
7	**Alarm and Escalation** Nonconforming product has sufficient alarms limits with escalation. Alarms are responded to according to the alarm and escalation process (reaction plan).	Verify that nonconforming material has sufficient alarm limits with escalation. Confirm that alarms are responded to. Reaction plan is followed if alarm reached.		
Nonconforming Material / Identification				
8	**Nonconforming Material / Material Identification** Team members have standardized work and understand what to do with non conforming / suspect material. Conforming material is handled, stored and identified appropriately. Non conforming / suspect material is clearly identified and / or segregated for review / disposition. A containment method is in place to ensure that an effective breakpoint has been established. Containment activities and results are documented. Traceability is applied according to the traceability methods of the finished product, and reworked parts when needed.	Sample audit to verify that team members understand what to do with nonconforming / suspect material. Confirm that conforming material is handled, stored and identified appropriately. Confirm that nonconforming / suspect material is clearly identified and / or segregated. Audit that all parts removed from the process are identified, accounted for (FTQ), and reconciled to eliminate mishandling of material. Verify use of Containment Worksheets, with potential parts locations by operation identified to ensure no parts are missed during a containment and all parts are reconciled. The containment worksheets must cover from the incoming material, process and shipment. Scrap or suspect parts/containers clearly segregated from other parts. Auto Reject stations with locked reject bins have controls on how bins are emptied to ensure all parts are reconciled.		
Managing Risk				

Item #	Requirement	Guidelines (What To Look For)	Score	Comments
9	**PFMEAs** All operations have been analyzed for risk using a PFMEA. PFMEA workshops must be done by cross functional teams, including manufacturing team member input. Risk Priority Number (RPN) values must be consistently applied using AIAG compliant Severity, Occurrence and Detection ranking tables. Failure modes are comprehended in the PFMEA (i.e. wrong parts, mixed parts, containment control, etc.). PFMEA has correct structure.	Look for PFMEAs to be available for all operations within the plant. Confirm PFMEA workshops are done by cross functional teams, including mfg. team member input. Confirm RPN values are consistently applied using AIAG compliant Severity, Occurrence and Detection ranking tables. Confirm that PFMEA includes all operations and make sure that labeling, handling, etc. are included.		
10	**PFMEAs - Risk Reduction & Annual Review** Annual RPN risk reduction reviews by product focused on preventing defects from leaving the work station are held to drive continuous improvement. Action plans for top issues must include: 1. Recommended Actions, 2. Responsibility, 3. Timing.	Look for evidence of annual cross functional risk reduction reviews focused on preventing defects from leaving the work station. Confirm action plans for top issues include: 1) Recommended actions, 2) Responsibility, 3) Timing.		
11	**Bypass / Deviation Management** The plant shall identify manufacturing processes and error proofing devices which can be bypassed or placed in deviation. Standard work instructions are available for each bypass / deviation process. Implemented bypass is reviewed regularly with a goal to reduce or eliminate bypass.	Look for the plant list of manufacturing processes and error proofing devices which can be bypassed or placed in deviation. Confirm that Standardized Work is available for each bypass / deviation process. Supplier locations shall have a written and approved bypass / deviation procedure that includes customer approval. PFMEA to have a documented risk identified. Check how bypass is reviewed regularly and check if there is a goal to reduce or eliminate bypass.		
Managing Change				
12	**Process Change Control** The plant follows a documented change control process for customers and internal changes. The PFMEA is updated to reflect any change, as required. The APQP process is followed for all changes.	Confirm that all plant changes are processed through the plant cross functional process change approval system. Confirm that the APQP process is followed for all changes. Confirm AIAG PPAP manual, GM 1927-03 Quality SOR (as required) and Forever Requirement Notice (as required) for product approval process is being followed. A documented process shall require consideration of production trial run for every product and process change, the results are to be documented.		
13	**Inspection Gates (Verification Station/Final Inspection/CARE/GP12)** Final Inspection / GP12 must be conducted on all finished product prior to shipping. Quality checks are included in standardized work.	Confirm that inspection gates (Verification Station / Final Inspection / CARE / GP12) is implemented per the requirement. Look for increased quality checks for launch, shut down or based on customer feedback (e.g.. Fast Response). Quality focused checks are preformed on each shift.		
Process Control				

Item #	Requirement	Guidelines (What To Look For)	Score	Comments
14	**Development of Process Controls (PFMEA - PCP - SW)** PFMEAs, Process Control Plans, and standardized work documentation are comprehensive, sufficient, and flow one from the other. Safety Product is identified accordingly in the process documents & standardized work.	Sample PFMEA, Process Control Plan and standardized work documents to ensure process controls flow one from the other. Review any safety product to ensure they are identified accordingly at the operation and in the standardized work.		
15	**Process Control Plan Implemented** Process Control Plan checks are performed at the correct frequency and sample size as well as refer to measurement, test and inspection data. Checks are documented using the proper control method (i.e. control charts, check sheets). Reaction plan(s) from the Process Control Plan are present, followed and effective.	Sample process control plans and ensure checks are performed at the correct frequency and sample size. Confirm that checks are documented using the proper control method (i.e. control charts, check sheets). Check that reaction plans from the process control plan are present, followed and effective. Verify that sample size and frequency adequately protects the customer so that product does not ship to the customer before the completion and results of the inspection / test are known.		
Layered Audit				
16	**Layered Audit** Audit plan shall include multiple levels of Management. A documented audit structure is in place including auditor level and frequency of inspection. Audits are tracked and their results recorded. Customer complaints or rejections trigger a layered audit on the process that was the cause of the issue. Follow up to address non compliance is in place.	Leadership utilizes an audit process by going and seeing on the shop floor to check process compliance, employee behavior and knowledge. Leadership uses Layered Audit as an opportunity for coaching. Ask Leadership how layered audits works in the organization, who is involved in the layered audit process, what is the frequency of layered audits. Is the layered audit sheet content relevant for the user? Layered audit questions are reviewed from time to time to focus on the plant weaknesses. Check that all findings are recorded on the audit sheet and those not solved within the shift are transferred to countermeasure sheets and there is an action plan to monitor until closure. Interview auditors how they perform audit and compare results with shop floor major findings.		
Fast Response				
17	**Team Problem Solving Process** A well developed, standardized problem solving process exists at all levels of the organization. Issues are identified, root causes analyzed and robust actions completed in a timely manner. Review minimum two(2) recently closed corrective actions.	Ask how many formal problem solving activities the team has worked on in recent months? Look for a standardized process that includes: issue description and definition, containment, probable cause analysis, root cause analysis (5 Whys), countermeasures, implementation plan, verification, approval to close, and escalation or read across if needed. Look for documented problem solving process such as issues tracked through to closure, daily review of issues by a multi-disciplined team including plant management, daily reviews are documented, all levels of the organization are included in the problem solving process, timely closure of corrective action(s) including exit criteria, initial containment is well documented by the use of a containment worksheet or similar. Look for Leadership involvement (reviews, coaching, escalation, support, read across, etc.)		
Error Proofing				

Item #	Requirement	Guidelines (What To Look For)	Score	Comments
18	**Error Proofing / Detection Verification** All Error Proofing Devices are checked for function (failure or simulated failure) at the beginning of the shift. Otherwise according to the process control plan. Red Rabbits (when used) are clearly identified & calibrated as applicable. Records of verification are available. Reaction plan is standardized and understood in case of error proofing devices malfunction	Confirm that a list of error proofing devices is available. Identify which can be bypassed; considering safety, severity and overall RPN rating. Confirm that the method of the error proofing verification is defined and documented in the standardized work. Verify that all error proofing devices are checked for function (failure or simulated failure) at the beginning of the shift. Otherwise according to the process control plan. Look to see that red rabbits (when used) are clearly identified & calibrated as required. Confirm records of verification are available. Verify that a reaction plan is available and make sure it includes containment in the event of error proofing device failure and is understood by the team member.		
Gauge Control				
19	**Gauge Calibration / Measurement System Analysis** Gauge R&R of monitoring and measuring equipment is determined and the equipment is certified / calibrated at a scheduled frequency.	Evidence of Gauge R&R and certifications are completed on time per procedure. Check that results are studied and action taken if results is not satisfactory. Check that no gauges are past due for calibration. Write down gauge numbers at random and verify they are in the gauge control system and on some calibration schedule.		
Material Flow Management				
20	**FIFO / Material Handling Process** A plant FIFO / Material Handling process is documented and practiced in all operations. Visual aids assist in process flow. WIP containers, racks and bins protect parts from damage.	Visual management includes process diagrams, FIFO tools, rotation schedules, etc. Ask for FIFO process for entire plant. Team Members and Team Leaders should be able to explain the process. Check the FIFO / Material Handling in each department / area. Containers, racks and/or bins used for WIP storage and movement protect the parts from damage and easily identify the parts as WIP. WIP is not kept or stored in Marwood returnable dunnage.		
21	**Shipping Approved Packaging** Material is shipped in the designated production container with proper labeling for regular production.	Verify product is packaged in designated containers.		
Maintenance				
22	**Maintenance** The spare parts and their storage are managed. The critical parts are identified or contingency plan is available. The maintenance planning must cover machines and tooling, for preventive maintenance and where applicable the predictive maintenance should be developed.	Look for evidence that PM schedule generates work orders and that these are closed as scheduled must cover machine, toolings and Gauges. Look for PM frequencies appropriate to needs are frequencies followed.		
Contamination Control				
23	**Contamination Requirements** Product is protected from contamination.	Supplier indicates sources of possible contamination within their manufacturing facility that can cause product contamination. Sources can be fluid sediment, raw material contamination, excessive regrind, excessive oil, dirt, grease, dirty containers, or rust. Confirm the plant follows it's contamination control requirements.		
Tiered Supplier Management				

Item #	Requirement	Guidelines (What To Look For)	Score	Comments
24	**Supply Management** Tier supplier targets are defined and their performance are tracked. Supplier audit schedule exists and audits are performed accordingly, issues found are tracked until closed.	Ensure there a process for tracking internal and external supplier issues. Check that supplier has periodic system audits of their suppliers to improve performance.		

Corrective Action Response Review

Supplier: _____

Date: _____

Assessor: _____

Self Assessment: ☐

Onsite Assessment: ☐

QUALITY ISSUE #	FAST RESPONSE PROCESS USED	CONTAINMENT USED	QUALITY ALERT POSTED	ADDED TO CARE / GP12	PROBLEM SOLVING FORM COMPLETE	ADDED TO LAYERED AUDIT	CORRECTIVE ACTION EFFECTIVENESS MONITORED	ERROR PROOFED	ERROR PROOFING VERIFICATION COMPLETE	PFMEA UPDATED	CONTROL PLAN UPDATED	STANDARDIZED WORK UPDATED	TRAINING COMPLETED	ENGINEERING CHANGE REQUEST / PROCESS CHANGE REQUEST	READ ACROSS TO SIMILAR LINES / PROCESSES	CHANCES OF RECURRENCE	ISSUE DESCRIPTION

* Instructions - Get 2 Closed Problem Solving Issues from the Supplier (different plant/product) and review each with the above check list to measure the effectiveness of the problem solving.
* Supplier: Be prepared to show documentation/evidence that supports completion of the key components of effective problem solving identified in the chart above.

Marwood On-Site Supplier Assessment - Summary

#	Requirement	Score	Countermeasures	Responsibility	Target Date
1	Standardized Work				
2	Visual / Tactile / Audible Standards - Communicated & Understood				
3	Training				
4	Feedback / Feed Forward				
5	Rework / Repair Confirmation / Tear Down				
6	Andon System Implementation				
7	Alarm and Escalation				
8	Nonconforming Material / Material Identification				
9	PFMEAs				
10	PFMEAs - Risk Reduction & Annual Review				
11	Bypass / Deviation Management				
12	Process Change Control				
13	Inspection Gates (Verification Station/Final Inspection/CARE/GP12)				
14	Development of Process Controls (PFMEA - PCP - SW)				
15	Process Control Plan Implemented				
16	Layered Audit				
17	Team Problem Solving Process				
18	Error Proofing / Detection Verification				
19	Gauge Calibration / Measurement System Analysis				
20	FIFO / Material Handling Process				
21	Shipping Approved Packaging				
22	Maintenance				
23	Contamination Requirements				
24	Supply Management				