



CONTROL PLAN

ParkOhio Industries (Qingdao) Co., Ltd.

| <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> PRODUCTION | | | KEY CONTACTS & PHONE NUMBER Xiong liping, Quality Engineer | | | ORIGINAL DATE: 2022/8/6 | | | REVISION DATE: - | | |
|---|------------------------------|------------------|---|---|--|----------------------------|--|--|--|--|--|
| CONTROL PLAN NUMBER: 76746 | | | INTERNAL #: 76746 | | | PART REV. LEVEL - | | CORE TEAM: Director of Global Engineering Quality Manager Quality Engineer Process Engineer Tool Engineer | | CUSTOMER ENGINEERING DATE: (IF REQUIRED) N/A | |
| PART NUMBER: FU5T-14603-MA | | | SUPPLIER PART APPROVAL DATE: | | | | | | | CUSTOMER QUALITY APPROVAL DATE N/A (IF REQUIRED): | |
| PART NAME / DESCRIPTION: GROM-WIR | | | SUPPLIER PLANT: ParkOhio Industries (Qingdao) Co., Ltd. | | | SUPPLIER CODE: | | | SUPPLIER ADDRESS: No.820 ChunYang Rd. High-tech District, Qingdao, China 266109 | | OTHER APPROVAL DATE (IF REQUIRED): N/A |
| PROCESS FLOW | | MACHINE | CHARACTERISTICS | | | CLASS | METHODS | | | | REACTION IF OUT-OF-CONTROL CONDITIONS ARE ENCOUNTERED |
| NO. | PROCESS NAME | | NO. | PROCESS PARAMETERS | PRODUCT CHARACTERISTICS | | PRODUCT / PROCESS SPECIFICATIONS | EVALUATION METHOD | SAMPLE SIZE / FREQUENCY | ANALYSIS METHOD | |
| 1 | Receive raw compound. | N/A | | | Batch type | | Batch number | Visual from label | 1 per batch | Label review by material handler | Identify on receiving document, notify purchasing for resolution. |
| 2 | Move to storage / hold area. | N/A | | | | | | | | | |
| 3 | Laboratory testing | N/A | | | Rheometer Hardness Tensile Elongation Specific gravity | | Per batch master Durometer Tensile tester Tensile tester Per batch spec. - ref. only Label with lifetime and inspection status sticked to each pallet | Material certification Material certification Material certification Material certification Material certification | 1 per ship 1 per ship 1 per ship 1 per ship 1 per ship | Master certification Master certification Master certification Master certification Master certification | Reject form completion. Hold material. Contact purchasing for resolution. |
| 4 | Storage of compound | N/A | | | | | | | | | |
| 5 | Move to pressroom | N/A | | | | | | | | | |
| 6 | Mold part (injection) | Injection molder | 10 | Cure time Cure temperature | Fully formed | | Per part routing Per part routing Flash, finish, knit lines, no splits, no blisters, no contamination, etc.. | Press settings Press settings Visual, DVS | Each setup Each setup 100% | Supervisor setup Supervisor setup DVS boundary spec review by operator. | Scrap material. Total on time card. Adjust machine. Recheck and continue. |
| 7 | Trim part | Hand | 10 | | Flash removal | | No flash that may effect functionality. | Visual, DVS | 100% | DVS Boundary specification review by operator | Scrap material. Total on time card. Adjust machine. Recheck and continue. |
| 8 | Apply Lubrication | Hand | 10 | | Lub application | | Proper Application | Visual, DVS | 100% | Visual by Operator | |
| 9 | Operator inspect | N/A | 10 | | Visual | | Digital Visual Standards | Visual per DVS | 100% | Visual by Operator | QA reject form completion. Hold material. |
| 10 | Final inspect | N/A | | | Visual | | Flash,finish,knit lines, blisters, no contamination,etc. | Visual, DVS | If carton cont has 1-200,inspect 20 pieces per carton. If carton count is 201-or greater inspt 50 pieces per carton | Visual check | QA reject form completion, hold material |
| | Packing | Manual | | Carton Size: 370X370X400mm Bar code label required for each box | Visual | | 300 pcs per box | Scale wight for quantity checking | 100% | Visual check | QA reject form completion, hold material |
| 11 | QA final inspection | NA | | | Visual | | Part number | Visual | 1 per carton | Visual | Verify part number, re-sample parts |
| 12 | Move to Shipping | NA | | | Visual | | Part number | Visual | 1 per carton | Visual | Verify part number, re-sample parts |
| 13 | ship to customer | NA | | | Visual | | Part number | Visual | 1 per carton | Visual | Verify part number, re-sample parts |
| | | NA | | | Visual | | Quantity | Visual | per shippment | Visual | Verify Quantity, re-load parts |