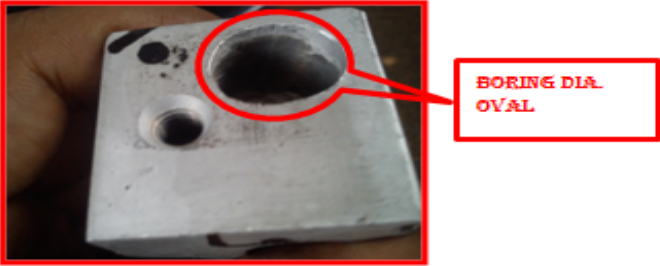
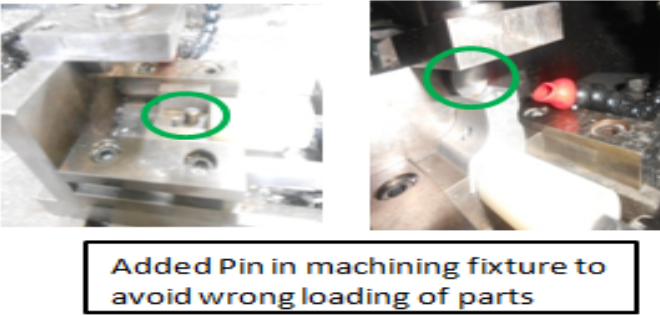
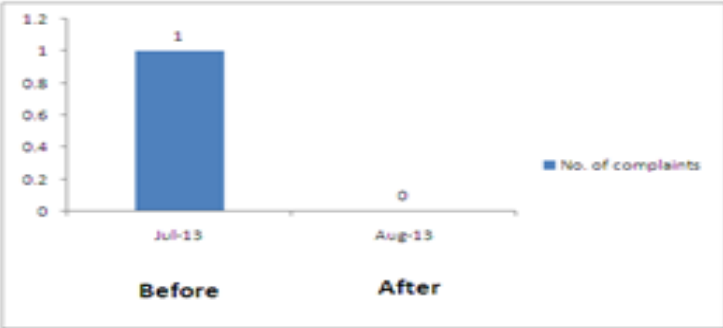


|                                                                                                                                                                                                                                                                     |                     |                             |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--|--------------|--------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------|---|--------------------------------------------------------|---------------------------------------------------------------|-------------|--------|--------------------------|------------|----------|
|                                                                                                                                                                                     | <b>Equipment :</b>  | Nissan Outlet drill machine | <b>Loss Type :</b>                                                                                                                          |  | Failure Loss |                    |   |                                                                                                                                                                              |   |            |   | <b>KAIZEN IDEA SHEET</b><br><br><b>Kaizen ID : 591</b> |                                                               |             |        |                          |            |          |
|                                                                                                                                                                                                                                                                     | <b>Department :</b> | Production                  | <b>Result :</b>                                                                                                                             |  | N            | P                  | Q | C                                                                                                                                                                            | D | S          | M |                                                        |                                                               |             |        |                          |            |          |
|                                                                                                                                                                                                                                                                     | <b>Cell :</b>       | CNC Machine Engine          | <b>Type :</b>                                                                                                                               |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| <b>Unit Name :</b>                                                                                                                                                                                                                                                  |                     |                             | Kalyani Technoforge Ltd - Chakan Plant, Pune                                                                                                |  |              | <b>Operation :</b> |   |                                                                                                                                                                              |   |            |   |                                                        | Nissan Outlet drilling                                        |             |        |                          |            |          |
| <b>Kaizen Theme:</b>                                                                                                                                                                                                                                                |                     |                             | ID oval dure to wrong drilling operation                                                                                                    |  |              | <b>Idea :</b>      |   |                                                                                                                                                                              |   |            |   |                                                        | Avoid wrong loading of parts in fixture.                      |             |        |                          |            |          |
| <b>Problem / Present Status</b>                                                                                                                                                                                                                                     |                     |                             | <b>Counter Measure</b>                                                                                                                      |  |              |                    |   | <b>Benchmark :</b>                                                                                                                                                           |   | 0 defect   |   |                                                        |                                                               |             |        |                          |            |          |
| ID oval dure to wrong drilling operation                                                                                                                                                                                                                            |                     |                             | Eliminate chances of part wrong loading in fixture                                                                                          |  |              |                    |   | <b>Target :</b>                                                                                                                                                              |   | 0 defect   |   |                                                        |                                                               |             |        |                          |            |          |
|                                                                                                                                                                                                                                                                     |                     |                             |                                                                                                                                             |  |              |                    |   | <b>Start :</b>                                                                                                                                                               |   | 02/08/2013 |   | <b>Finished :</b>                                      |                                                               | 02/08/2013  |        |                          |            |          |
|                                                                                                                                                                                                                                                                     |                     |                             |                                                                                                                                             |  |              |                    |   | <b>Note :</b>                                                                                                                                                                |   |            |   |                                                        |                                                               |             |        |                          |            |          |
|                                                                                                                                                                                     |                     |                             |                                                           |  |              |                    |   | <b>Team Members :</b>                                                                                                                                                        |   |            |   |                                                        |                                                               |             |        |                          |            |          |
|                                                                                                                                                                                                                                                                     |                     |                             |                                                                                                                                             |  |              |                    |   | 1. Mr. Ram More<br>3. Mr. Sunil Joshi<br>5. Mr. Ajay Patil                                                                                                                   |   |            |   |                                                        | 2. Mr. Ravi Kumar<br>4. Mr. Amit Mane<br>6. Mr. Akshay Shelar |             |        |                          |            |          |
|                                                                                                                                                                                                                                                                     |                     |                             |                                                                                                                                             |  |              |                    |   | <b>Benefits</b>                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
|                                                                                                                                                                                                                                                                     |                     |                             |                                                                                                                                             |  |              |                    |   | Q No customer complaints Nos 1.00                                                                                                                                            |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| <b>Why Why Analysis :</b>                                                                                                                                                                                                                                           |                     |                             | <b>Result :</b>                                                                                                                             |  |              |                    |   | <b>Kaizen Sustenance :</b>                                                                                                                                                   |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| W1 : Why Drill dia getting oval ?<br>A1 : Part loading from wrong side<br>W2 : Why Part loading from wrong side ?<br>A2 : Wrong side part loading possibility in fixture<br>W3 : Why Wrong side part loading possibility in fixture ?<br>A3 :<br>W4 : Why ?<br>A4 : |                     |                             | No complaint from customer end from last 1 month<br><br> |  |              |                    |   | What To Do : Validation of pokyake<br><br>How To Do : During First piece Insoection<br><br>Frequency : Daily                                                                 |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| <b>Root Cause</b>                                                                                                                                                                                                                                                   |                     |                             |                                                                                                                                             |  |              |                    |   | <b>Cost Incurred For Making Kaizen :</b>                                                                                                                                     |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| No full proof pokayoke available in fixure                                                                                                                                                                                                                          |                     |                             |                                                                                                                                             |  |              |                    |   | <table border="1"> <tr> <td>Material Cost</td> <td>Labour Cost</td> <td>Total</td> </tr> <tr> <td>12000.00</td> <td>600.00</td> <td>12600.00</td> </tr> </table>             |   |            |   |                                                        | Material Cost                                                 | Labour Cost | Total  | 12000.00                 | 600.00     | 12600.00 |
| Material Cost                                                                                                                                                                                                                                                       | Labour Cost         | Total                       |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| 12000.00                                                                                                                                                                                                                                                            | 600.00              | 12600.00                    |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| <b>Date :</b>                                                                                                                                                                                                                                                       |                     |                             |                                                                                                                                             |  |              |                    |   | <b>Scope &amp; Plan For Horizontal Deployment :</b>                                                                                                                          |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| 02/08/2013                                                                                                                                                                                                                                                          |                     |                             |                                                                                                                                             |  |              |                    |   | <table border="1"> <tr> <td>Equipmnet</td> <td>Target</td> <td>Status</td> </tr> <tr> <td>MAZAK H.M.C. 630 N(200.2</td> <td>02/08/2013</td> <td>COMPLETE</td> </tr> </table> |   |            |   |                                                        | Equipmnet                                                     | Target      | Status | MAZAK H.M.C. 630 N(200.2 | 02/08/2013 | COMPLETE |
| Equipmnet                                                                                                                                                                                                                                                           | Target              | Status                      |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| MAZAK H.M.C. 630 N(200.2                                                                                                                                                                                                                                            | 02/08/2013          | COMPLETE                    |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| <b>Registered By :</b>                                                                                                                                                                                                                                              |                     |                             |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| pournima.menge@opexworks.com                                                                                                                                                                                                                                        |                     |                             |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| <b>Manager's Sign :</b>                                                                                                                                                                                                                                             |                     |                             |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| Mr. Ashwini Daftardar                                                                                                                                                                                                                                               |                     |                             |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |
| ----- Kalyani Technoforge Ltd -----                                                                                                                                                                                                                                 |                     |                             |                                                                                                                                             |  |              |                    |   |                                                                                                                                                                              |   |            |   |                                                        |                                                               |             |        |                          |            |          |