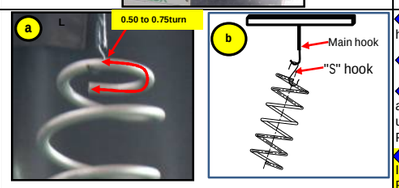
| SSSS HALOL | STANDARD WORK INSTRUCTIONS (Loading to powder coating hook) | Process / Dept | PRE - TREATMENT |
|---|---|---|---|
| | | Rev no / Date | 01 / 24.06.22 |
| | | Doc no/Page | MF-WI-008/1 of 1 |

| Seq no | Frequency | Activity ( What to do ) | How to do | Sketch | Key points | Why to do | Abnormality if not done | Responsibility |
|---|---|---|---|---|---|---|---|---|
| 1 | Cyclic | Pick the spring | Manually pick the spring from exit of Demagnatizing M/c | | ◆ Spring to be picked only from De magnetizing M/c | To ensure spring is demagnetized | | Operator |
| | | | | | ✚ Hold the spring at middle coils | For easy handling | Chance for slippage | |
| 2 | Cyclic | Load the first spring to hook (Follow - Annexure- Loading pattern ) | a) Load 1 spring to M/c hook as shown |   | ◆ Load only at first coil of spring to hook | To avoid NG part | 1. Spring may slip and fall from conveyor | Operator |
| | | | b) Ensure that spring is not falling from the hook | | ◆ Load between 0.5 - 0.75 turns | To avoid spring falling down | 2. Productivity loss | |
| | | | | | ◆ For springs with wire dia of 14.0mm and obove do not directly load to hook, use "S" hook for loading as shown in Photo (b) | To reduce powder burr at hook hanging portion | Powder burr projection at hook hanging portion will be more than 1mm ( Rejection) | Operator |
| | | | | | ◆ If spring falls during hanging process, Remove the spring from the line & pass this part through PT process of next batch. | To avoid Powder Coating defects | Powder coating defects will generate | Operator |
| 3 | Cyclic | Load second spring to hook (Follow - Annexure Loading pattern ) | a) Use 'S' hook for loading |  | | | | |
| | | | b) Fix one end of 'S' hook to first spring | | ◆ Fix between 0.5 - 0.75 turns of bottom end | To avoid spring falling down | 1. Spring may slip and fall from conveyor | Operator |
| | | | c) Load second spring to other end of 'S' hook | | ◆ Load between 0.5 - 0.75 turns of first coil | To avoid spring falling down | 2. Productivity loss | |

*** In case of Abnormality / Defect - Operator to Report Supervisor Immediately & Wait for Instruction**

**Note :**

In case of lunch time/ any break / shift change /operator called by supervisor - points to be considered

1. Operator has to inform supervisor in case of moving away from work place
2. Do not leave the running part with out completing the process
3. Do not leave the parts with out identification
4. Hand over the process to alternative operator if available or stop the process
5. In case of any emergency situatuion (accidents) alternative operator / supervisor to handle the situation

| Sl no | KEY ASPECTS | KEY IMPACTS |
|---|---|---|
| 1 | Smoke & ash generation at Hook Burning | Air & Land contamination |

| SAFETY GADGETS | RECORDS |
|---|---|
| 1. Safety shoes | NIL |

NOTE :-
DO NOT USE COTTON GLOVES FOR HANDLING SPRINGS

CHANGE HISTORY

| Rev No. | Rev Date | Change Description |
|---|---|---|
| 00 | 02.11.2018 | Initial release |
| 01 | 24.06.2022 | Work instruction added for the treatment of the fallen parts |

✚ - Safety ◆ - Quality C - Critical

| Prepared by : Paresh Chauhan | Checked by: Chetak | Approved by: Chandrasekhar |
|---|---|---|

Stumpp ,Schuele & Somappa Springs Pvt. Ltd.

Format No:PE- FR - 001
Rev No./Date: 0/10.10.04

## Training Attendence sheet

Training Programme on: Powder Coating Loading Training.

Venue: SSS. Halol

Faculty: Mr. Mahendra.

Date: 29-10-22

Time: 2:00 P.M.

| Sl.no | Name | EDP/Token no. | Deptt | Signature |
|---|---|---|---|---|
| 1) | Dadu. | 016 | PC | |
| 2) | Kalpesh. | 032 | PC | |
| 3) | Praveen Patel. | 007 | PC. | |
| 4) | Naresh Solanki. | 057 | PC. | |

**STUMPP , SCHUELE & SOMAPPA SPRINGS PVT LTD.,** Implemented Month :-12 Sep '22

# Kaizen Sheet

| Company Name | HAL | Sr. No. |
|---|---|---|
| SS&SS Pvt. Ltd. | | 27 |

| P | Q | C | D | S | M | Energy | Environment | IT |
|---|---|---|---|---|---|---|---|---|

| Kaizen Theme: | Quality improvement | Implemented Area : | Powder Coating |
|---|---|---|---|
| | | Implemented by | Mr. Shashank |

## Problem / Present Status :

- **Process:- Powder Coating.**
- Before, The hanger hole was getting contaminated during powder coating process and was not getting cleaned due to closed end hole. therfore hanger was not getting inserted completely, therefore springs were falling down.
- Now, Hanger hole is made throughout up to back side with large hole to clean easily the contaminated hole.

## Before improvement :

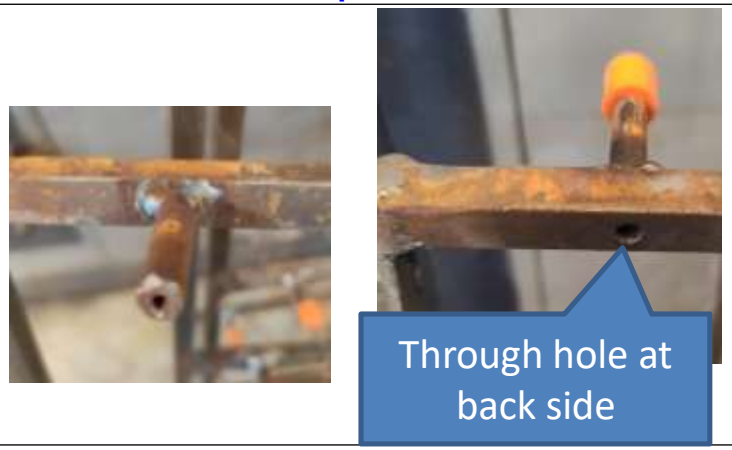
## Result / Benefit :

- **No parts will fall down due to improper insertion of hangers.**

## Root cause identification :

**Springs getting falled down from hangers**

## After improvement :




## Standardization :

**Check point added in PM checksheet to esnure hole is cleaned throught before inserting the hanger into hole.**

| | |
|---|---|
| Root Cause | Springs getting falled down |
| Idea to eliminate root cause | To clean the hanger holes completely before hanging the hangers |
| Action Taken | Hanger hole made throughout upto backside |

How many places this Kaizen can been deployed horizontally: **'00**