



The Wonderful World of Workplace Organisation (5S)

Chas Goldring

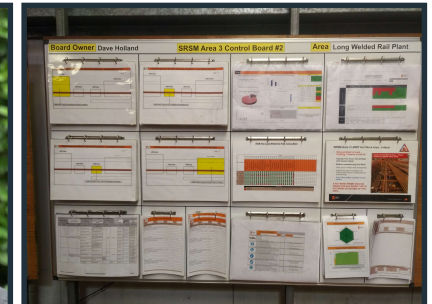
AGC Training and Consultancy

Introduction



Chas Goldring

- Started with British Steel in 1986 on Teesside, UK.
- Worked for 25 years in various roles (Operational Management, Order progressing, Customer Service, Stock and Contract Management).
- Joined the Tata Business Excellence Team in 2011.
- Joined Long Products in August 2015 then British Steel (again!) in June 2016 becoming their Improvement Manager.
- Created GoldringLeanConsulting in March 2020
- Lean Six Sigma Master Black Belt accredited with the British Quality Foundation.



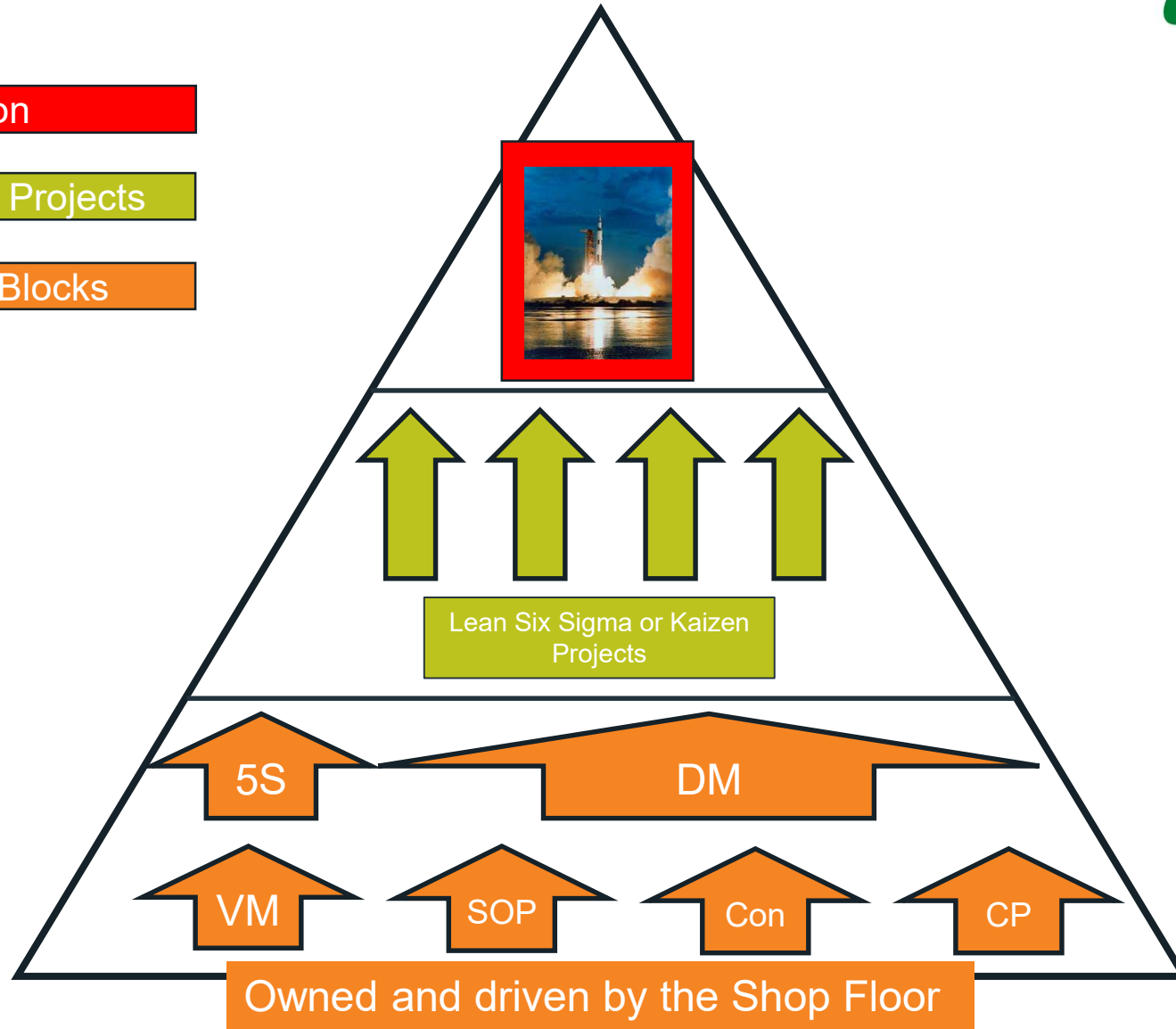
Daily Management and 5S provide the Foundations to all Improvement activities and ultimately Transformation



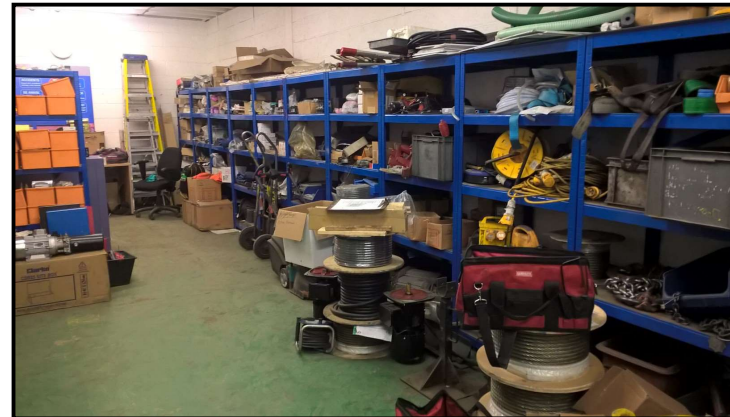
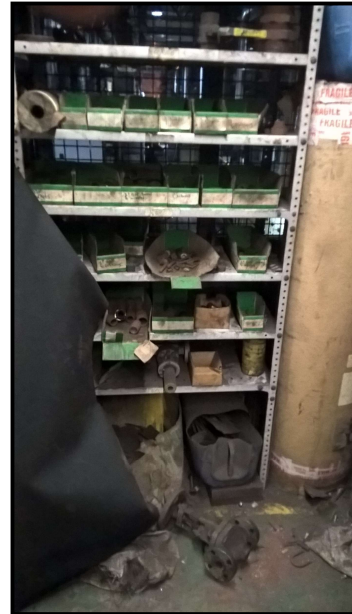
Transformation

Improvement Projects

The Building Blocks



How does this make you feel and act?



What Standard do you want for your workplace?



Workplace Organisation or 5S Overview. What is it?



Introduction

5S is a 5-step process used to **improve efficiency** and **effectiveness**. It focuses on organisation, standardisation and cleanliness using a series of defined steps.

Definition

A method for removing excess materials and equipment from the workplace and organising the required items using visual controls such that they are **easier to find, use and maintain**

Also known as

6S (+ Safety etc)

Workplace Organisation

Each step can either be done in isolation or as part of a wider workshop

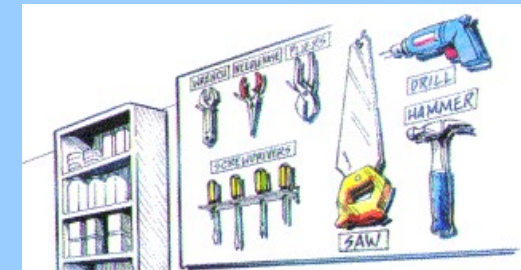
Key is that all 5 steps are completed



Clearing up - Sort
Distinguish between what is needed and NOT needed

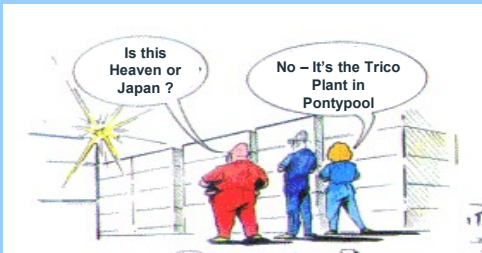


Organise - Set-in-order
A Place for everything and everything in its place



5 S - Workplace Organisation

Cont. Improve - Sustain
Audit the workplace & drive Continuous Improvement



Standardise
Standardise and Visualise all working Procedures



Clean & Check - Shine
Clean and look for ways to keep it clean & organised



Where to start?

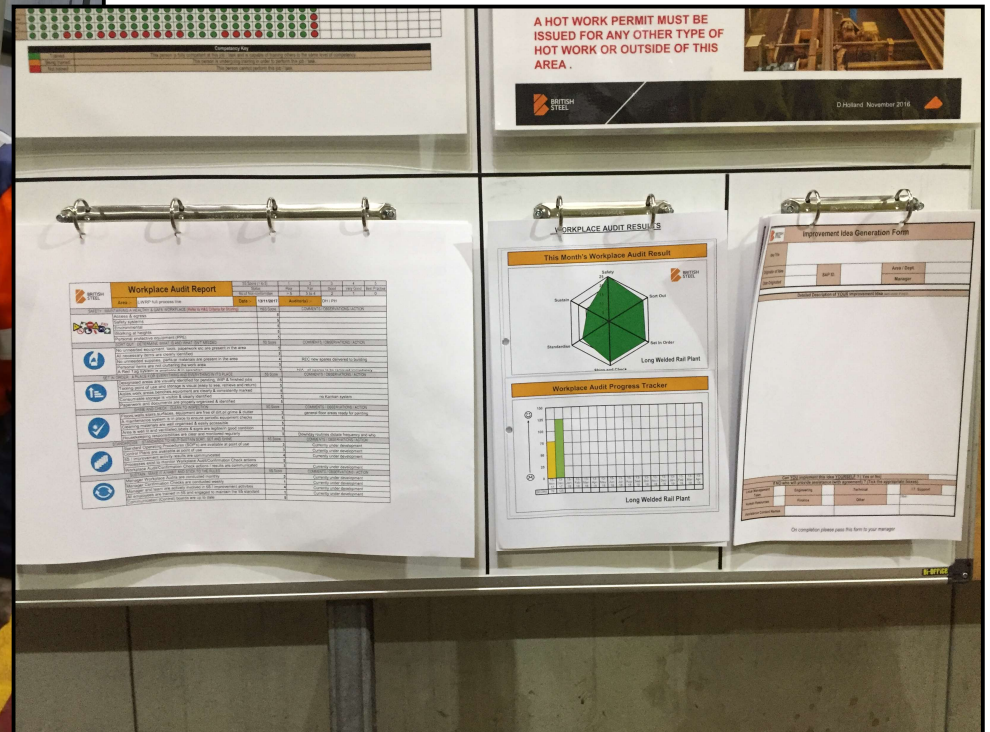


- Best practice starts with an audit. Where are we currently? Improvement is then driven by a desire to improve the “score” and comparison with other areas. Typically the audit is undertaken together with a Planned General Inspection (PGI)

| BRITISH STEEL | Workplace Audit Report | | Score (1 to 5) | | | | | |
|---|------------------------|---------------|----------------------------------|-------------|----------------|-----------|----------------|--------------------|
| | | | Status | 1 | 2 | 3 | 4 | 5 |
| | | | No of Non-conformities | Poor > 5 | Fair 3 to 4 | Good 2 | Very Good 1 | Best Practice 0 |
| Area :- | Date :- | Auditor(s) :- | | | | | | |
| SAFETY : MAINTAINING A HEALTHY & SAFE WORKPLACE (Refer to H&S Criteria for Scoring) | | H&S Score | COMMENTS / OBSERVATIONS / ACTION | | | | | |
| SORT OUT : DETERMINE WHAT IS AND WHAT ISN'T NEEDED | | 5S Score | COMMENTS / OBSERVATIONS / ACTION | | | | | |
| SET IN ORDER : A PLACE FOR EVERYTHING AND EVERYTHING IN ITS PLACE | | 5S Score | COMMENTS / OBSERVATIONS / ACTION | | | | | |
| SHINE AND CHECK : CLEAN TO INSPECTION | | 5S Score | COMMENTS / OBSERVATIONS / ACTION | | | | | |
| STANDARDISE : PREVENTING THE AREA FROM HAVING ABNORMAL OPERATING CONDITIONS | | 5S Score | COMMENTS / OBSERVATIONS / ACTION | | | | | |
| SUSTAIN : MAKE IT A HABIT AND STICK TO THE RULES | | 5S Score | COMMENTS / OBSERVATIONS / ACTION | | | | | |



Audit information is held close to the Process



Clearing up - Sort

Definition

Identification and removal of unnecessary items from the workplace



Purpose

To allow successful organisation of **ONLY** those items that are needed
To remove clutter and free up space



Organising – Set-in-order

A Place for everything and

Definition

Arranging necessary items in good order in the appropriate location



Purpose

The workplace supports the immediate retrieval / return of any item by any person



Good Visualisation is critical



Good Workplace Organisation and Visual Management

**needs no interpretation & provokes a
reaction!**

LIGHTS - COLOURS - SIGNS



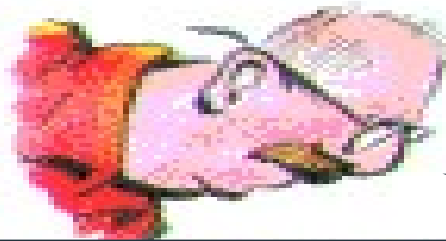
Organising – Set-in-order



Cleaning & Checking - Shine

Definition

A process for eliminating dirt, grime and labour intensive checking



Purpose

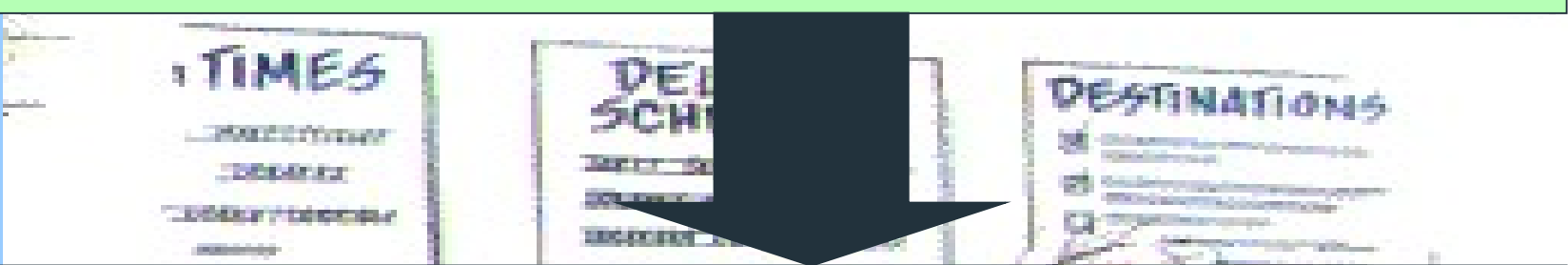
To ensure that the process is brought back to as good as new condition and easily kept that way



Standardising

Definition

Compliance to disciplines that maintain standards in workplace organisation

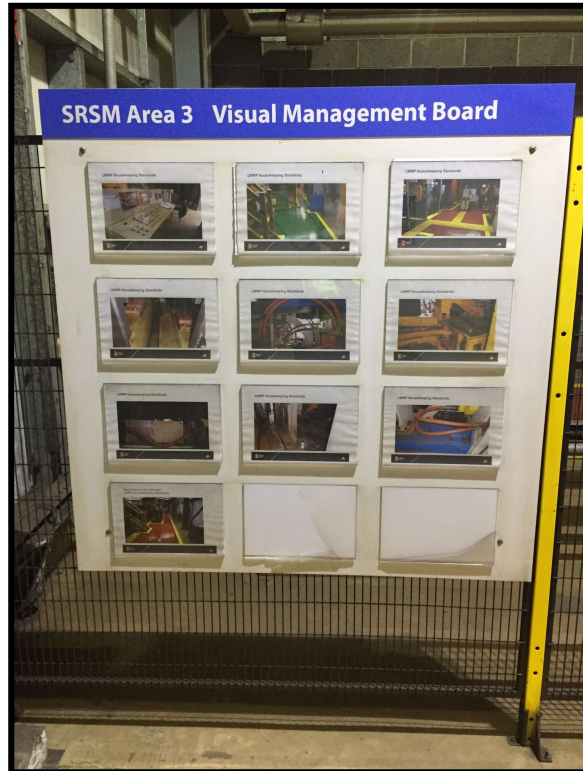


Purpose

- To demonstrate benefits and visualise performance
- To deploy and measure the business improvement objectives into the workplace.



Standardise and Visualise



| Daily Management: Standard operating procedure (SOP) | | | | | | | | | | | | | | |
|--|---|----|----|--|--|-----------------------------------|--|-------------------------------------|---------------|--|---------------|------------|---|--|
| HEADER INFORMATION | | | | | | CONFIRMATION AND DOCUMENT CONTROL | | | | | | | | |
| WORK AREA | TSC - HDM1432 CIRCULAR SAW | | | | | Issue No. | 1 | Original | CRIG FLETCHER | Issue | CRIG FLETCHER | Authorised | JOHN HORTON | |
| VISUAL STANDARD REFERENCE | SOP-XXXX-XXXX-0005 | | | | | Rev. No. | 1 | Reason for Revision | | | | | | |
| PROCESS DESCRIPTION | TSC-HDM1432 DAILY CLEANDOWN | | | | | Rev. No. | 1 | ACTION/REASON AND SIGNATURE OF TEXT | | | | | | |
| Sheet | 1 | of | 1 | DETAILED OPERATION SEQUENCE OF TASKS | | | | Estimated Time | 30 MINS | | SOP Code | | | |
| 1 | STEP 1. RETURN THE SAW TO THE HOME POSITION | | 2 | STEP 2. IMMOBILISE THE SAW BY REMOVING THE KEY | | 3 | STEP 3. BRUSH THE CLAMP SO THAT IT IS CLEAR OF ANY SWarf | | 4 | STEP 4. BRUSH TABLE AND UNDERTABLE CLEAR OF ANY SWarf | | 5 | STEP 5. REMOVE THE BOTH SWarf TRAYS FROM THE RACK AND EMPTY SKIP | |
| 6 | STEP 6. WIPE DOWN MITRE PHOTO SENSOR USING A CLEAN RAG | | 7 | STEP 7. SWEEP/HOOVER AROUND INPUT MITRE TABLE | | 8 | STEP 8. SWEEP/HOOVER AROUND OUTPUT MITRE TABLE | | 9 | STEP 9. SWEEP/HOOVER AROUND THE REAR OF SAW | | 10 | STEP 10. CHECK THE LUBRICANT LEVEL AND REFILL IF REQUIRED WITH THE LUBRICANT STORED | |
| 11 | STEP 11. RUN THE DOGS TO THE FRONT OF THE INBANK AND CHECK FOR ALIGNMENT. | | 12 | STEP 12. RUN THE DOGS TO THE FRONT OF THE OUTBANK AND CHECK FOR ALIGNMENT. | | 13 | STEP 13. SPRAY INBANK AND OUTBANK DOGS WITH CHAIN LUBE. | | 14 | STEP 14. CLEAR WORKSTATIONS OF ANY RUBBISH AND GIVE THEM A WIPE DOWN USING A CLEAN RAG | | 15 | STEP 15. SWEEP OUT THE STORE ROOM AND REMOVE ANY RUBBISH | |

SAFETY NOTE:--MANDATORY PPE REQUIRED APPROPRIATE TO WORK AREA



Sustain

Definition

The setting of targets within key business processes supported by workplace organisation



Is this Heaven
or Japan ?

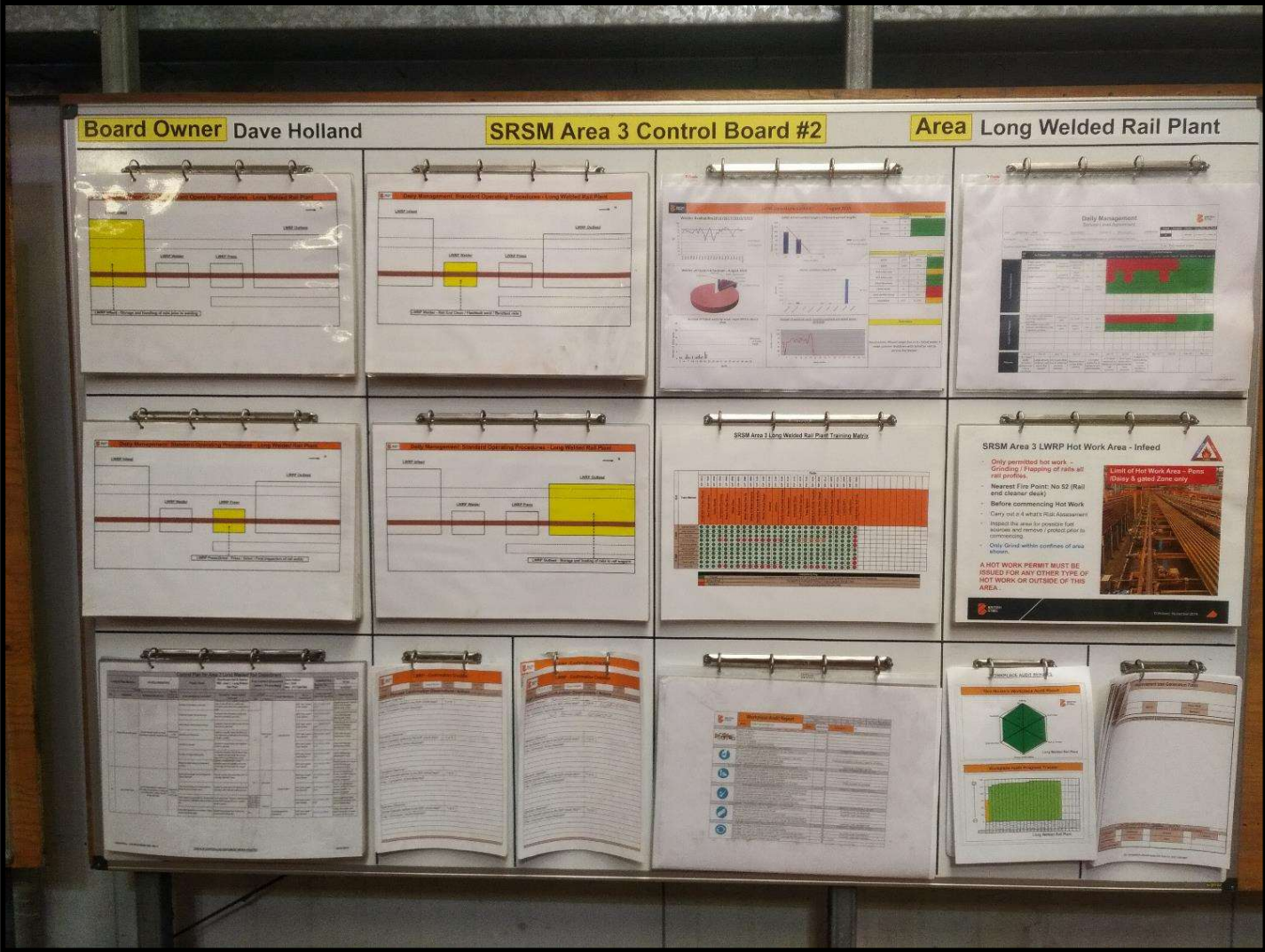
No - It's typical our
Plant

Purpose

To ensure standards are met or exceeded and drive ongoing business improvement objectives.



Sustain: SRSM Area 3: Local

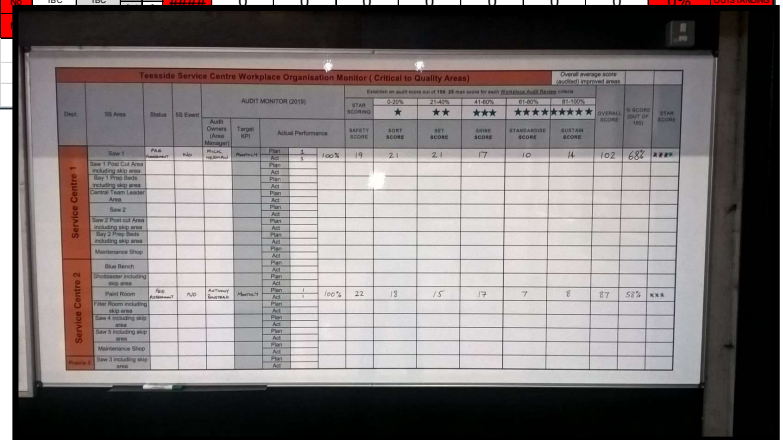


Sustain: "Star" System



| SCUNTHORPE ROD MILL WORKPLACE ORGANISATION MONITOR (CRITICAL TO QUALITY AREAS) | | | | | | | | | | | | | Overall average score (audited / improved areas only) | | | |
|--|---------------------------------|-------------------------|------------|-----------------------------|----------------------|--------------------|--------------|-----------|-----------|-----------|---------------|----------------------|---|------------|-----|------|
| Dept. | SS Area | Status | SS Event | Audit Owners (Area Manager) | AUDIT MONITOR (2019) | | | | | | OVERALL SCORE | % SCORE (OUT OF 150) | STAR SCORE | | | |
| | | | | | Target KPI | Actual Performance | SAFETY SCORE | 50% SCORE | 75% SCORE | 90% SCORE | | | | 100% SCORE | | |
| SERVICES | Giraffe House | WP | Yes Nov 18 | Sean Rodgers (in Simpson) | MONTHLY | Plan 0 Act 6 | 100% | 24 | 20 | 19 | 22 | 22 | 15 | 122 | 81% | ★★★★ |
| | Hot Work Area / Roughing Guides | Started with June Audit | No | | MONTHLY | Plan 2 Act 6 | 100% | 9 | 8 | 6 | 8 | 12 | 13 | 56 | 37% | ★★ |
| | Machinery / Finishing Guides | Started with June Audit | No | | MONTHLY | Plan 1 Act 1 | 100% | 22 | 3 | 0 | 14 | 7 | 10 | 56 | 37% | ★★ |
| | Mini Mill / Grinding Area | Started with June Audit | No | | MONTHLY | Plan 1 Act 1 | 100% | 20 | 3 | 0 | 8 | 7 | 12 | 48 | 32% | ★★ |
| | Chock & Roll Build Up | Started with June Audit | No | | MONTHLY | Plan 1 Act 1 | 100% | 21 | 11 | 2 | 18 | 2 | 11 | 65 | 43% | ★★★ |
| | BDM Build Up | Started with June Audit | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| STOCKYARD | Bay | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Charge Banks | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Office | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| FURNACE | Gated Areas | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Emergency Equipment | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Incoming Gas Supplies | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| ROLLING | Break Down Mill | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Roughing Mill | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Intermediate Mill | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Finishing Mill | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| STEMMER | Maintenance Room | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Conveyor Area | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Pulpit | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| COL HANDLING / DISPATCH | 2nd Stage | NOT STARTED | No | | TBC | Plan 1 Act 1 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Compactors | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Tally Stand | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| WAREHOUSE / STORAGE (HANGAR/AVES) | Loading Area | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | ACW | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | RSC | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | NCW | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| TECHNICAL INSPECTION | TRAILER PARKS | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Area 1 - Laboratory | COMPLETE | NA | | MONTHLY | Plan 6 Act 6 | 100% | 23 | 15 | 17 | 13 | 19 | 15 | 102 | 68% | ★★★★ |
| ENGINEERING | Inspection Stage | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Mechanical Workshop | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | Electrical Workshop | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |
| | North End A-Bay | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | |

| SCUNTHORPE ROD MILL WORKPLACE ORGANISATION MONITOR (CRITICAL TO QUALITY AREAS) | | | | | | | | | | | | | Overall average score (audited / improved areas only) | | | |
|--|---------------------------------|---------------------------|------------|-----------------------------|----------------------|--------------------|--------------|-----------|-----------|-----------|----------------------|----------------------|---|------------|-----|-------------|
| Dept. | SS Area | Status | SS Event | Audit Owners (Area Manager) | AUDIT MONITOR (2019) | | | | | | LATEST OVERALL SCORE | % SCORE (OUT OF 150) | STAR SCORE | | | |
| | | | | | Target KPI | Actual Performance | SAFETY SCORE | 50% SCORE | 75% SCORE | 90% SCORE | | | | 100% SCORE | | |
| SERVICES | Giraffe House | WP | Yes Nov 18 | Nick Gibbons | MONTHLY | Plan 12 Act 12 | 100% | 24 | 19 | 19 | 21 | 23 | 17 | 123 | 82% | ★★★★★ |
| | Hot Work Area / Roughing Guides | Started with May Audit | No | | MONTHLY | Plan 8 Act 8 | 100% | 18 | 11 | 11 | 14 | 14 | 19 | 87 | 58% | ★★★★ |
| | Machinery / Finishing Guides | Started with June Audit | No | | MONTHLY | Plan 7 Act 7 | 100% | 22 | 12 | 10 | 16 | 13 | 12 | 85 | 57% | ★★★★ |
| | Mini Mill / Grinding Area | Started with June Audit | No | | MONTHLY | Plan 7 Act 7 | 100% | 24 | 15 | 10 | 13 | 9 | 13 | 84 | 56% | ★★★★ |
| | Chock & Roll Build Up | Started with June Audit | No | | MONTHLY | Plan 7 Act 7 | 100% | 22 | 14 | 9 | 12 | 14 | 16 | 87 | 58% | ★★★★ |
| | BDM Build Up | Started with June Audit | No | | MONTHLY | Plan 7 Act 7 | 100% | 21 | 20 | 16 | 21 | 12 | 18 | 108 | 72% | ★★★★★ |
| HOT END AREAS | Break Down Mill | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | OUTSTANDING |
| | Stockyard | Started with Sept Audit | No | | TBC | Plan 4 Act 4 | 25% | 11 | 14 | 16 | 11 | 7 | 5 | 64 | 43% | ★★★ |
| | Furnace | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | OUTSTANDING |
| COL HANDLING / DISPATCH | Rolling - RMT7 to NTM Exit | Started with April Audit | No | | TBC | Plan 4 Act 4 | 25% | 12 | 11 | 13 | 7 | 7 | 5 | 55 | 37% | ★★ |
| | Stelmor | Started with Sept Audit | No | | TBC | Plan 4 Act 3 | 50% | 14 | 15 | 14 | 13 | 7 | 6 | 69 | 46% | ★★★ |
| | 2nd Stage | Started with July Audit | No | | MONTHLY | Plan 3 Act 3 | 100% | 22 | 16 | 9 | 9 | 6 | 5 | 67 | 45% | ★★★ |
| | Trimming / Insp Stage | Started with August Audit | No | | MONTHLY | Plan 3 Act 3 | 100% | 22 | 14 | 9 | 11 | 6 | 7 | 69 | 46% | ★★★ |
| | Compactors | Started with August Audit | No | | MONTHLY | Plan 2 Act 2 | 100% | 22 | 15 | 10 | 9 | 6 | 6 | 68 | 45% | ★★★ |
| | Tally Stand (new seating area) | Started with July Audit | No | | MONTHLY | Plan 4 Act 4 | 100% | 22 | 15 | 9 | 10 | 6 | 8 | 70 | 47% | ★★★ |
| TECHNICAL INSPECTION | RSC | Started with July Audit | No | | MONTHLY | Plan 2 Act 2 | 50% | 20 | 22 | 15 | 20 | 16 | 16 | 109 | 73% | ★★★★ |
| | NCW | Started with Sept Audit | No | | MONTHLY | Plan 4 Act 2 | 50% | 23 | 21 | 22 | 19 | 14 | 13 | 112 | 75% | ★★★★★ |
| | TRAILER PARKS | Started with April Audit | No | | MONTHLY | Plan 8 Act 8 | 100% | 21 | 13 | 20 | 16 | 12 | 15 | 97 | 65% | ★★★★ |
| | Laboratory | COMPLETE | NA | | MONTHLY | Plan 12 Act 12 | 100% | 25 | 19 | 20 | 24 | 20 | 15 | 123 | 82% | ★★★★★ |
| ENGINEERING | Mechanical Workshop | Started in Dec Audit | Yes-TBC | | MONTHLY | Plan 1 Act 1 | 100% | 18 | 5 | 5 | 5 | 5 | 5 | 43 | 29% | ★★ |
| | Electrical Workshop | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | OUTSTANDING |
| | North End A-Bay | NOT STARTED | No | | TBC | Plan 0 Act 0 | #### | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | OUTSTANDING |



5S Summary



- Separate the **essential** from the **non-essential**
- Ensure essential items are **safe** and fully operational
- Relocate **unnecessary** 'to the waste bin'
- Retain only those items that are needed
- Keep items that are **frequently used close at hand**
- Repair or dispose of broken equipment and tools
- Make it easy to find things
- **Set the standard of the workplace & maintain it**

An Improvement Intervention will often start with Workplace Organisation



Any Questions?

CATCH
TECHNICAL

agc
TRAINING &
CONSULTANCY

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