INTRODUCTION TO BACK TO BASICS

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CREATING ENQUIRING MINDS BY GOING BACK TO BASICS

- Many employees are frustrated by their inability to influence the system in which they operate. They find that they are prevented from doing their best and are unable to influence others to make changes when they are needed. Pride in craftsmanship is destroyed and morale sinks.

- **B2B** is the start of creating self directed work teams which is a critical element in any asset management program using best operating practices.

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SELF DIRECTED WORK TEAMS

- Small interlocking multi-skilled work teams
- **Team responsibilities**
  - Daily meetings & checks
  - Workplace Organisation
  - 1st Line maintenance – planning & execution
  - Self discipline
  - Measurements
  - Quality
  - Performance
  - Continuous Improvement
  - Problem Solving
  - Mentor Training / Coaching

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EMPOWERMENT/OWNERSHIP?

- During our WCMS Audits there are usually a number common problems highlighted…
  - Communication
  - Housekeeping
  - Lack of Knowledge relating to the process
  - Lack of focused Skill Development
  - Limited Mechanical Knowledge by Operators
  - Operator Empowerment, Accountability, Ownership and Self Discipline
  - Silo behavior

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OUR AIM

- A set of initiatives that are:
  - simple to implement
  - focused
  - offer immediate results
  - offer continuity

- Focus on achieving the 3 zero's of world class manufacturing:
  - Zero Breakdowns
  - Zero Accidents
  - Zero Waste

OUR SOLUTION

- A practical hands-on program run 1 day a week over 6 consecutive weeks.

- At the end of each day the teams are given tasks to complete for the next session. This allows them to practically use the new information learnt in their workplace.

INTRODUCTION

- Ensure Management Support through
  - Back to Basics Presentation
  - Agree on Management function in the process
  - Agree on Goals, Measurements and Targets
  - Select Champion

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INTRODUCTION

- It is important that shifts function together as a team to maximise the benefits.
- Each team will be put through a 2 day Team Building workshop.

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WORKSHOP CONTENTS - BASICS

Workplace Organisation

- Clear the clutter & clean
- Everybody has a Monkey
- Everything in its place
- Develop Visual Controls
- Red Tag System
- Create Action and Tag Lists
- 5 Senses sweep
- Learn your equipment
- Make inspections easy
- Basic Problem Solving
- Create and use idea sheets
- Communication using notice boards and flip charts
- 5S Audits

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WORKSHOP CONTENTS - SKILLS

Transferring Skills

- Everybody gets involved
- Influencing Measurements and Results (OEE)
- Basic Process Mapping
- Develop Job Descriptions
- Develop a skills matrix
- Develop a training needs analysis
- One Point Lessons
- Develop/Review L.D.T. Modules
- Review and revise existing procedures
- Displaying existing S.O.P.'s
- Planned and Predictive Maintenance
- Focused Improvement Teams

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NEW SKILLS

- On the completion of this workshop your teams will be able to…
  - Find, Highlight and Repair faults using Tag Sheets & Action Lists
  - Practically use Root Cause Analysis techniques
  - Process Mapping
  - Write their own Job Descriptions & Task Analysis
  - Draw up their own Skills Matrix to identify their training needs
  - Design their own training material through One Point Lessons
  - Coaching (Peer Training in the workplace)
  - Review and Modify Operational SOP's, Maintenance Schedules and Measurements
  - Implement Continuous Improvement Programs

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5 Why Analysis Sheet

Area/Equipment: Sidel Blow Molder

Start Date: 21st June 2001

Effect of Fault:
The fuse on the control panel of the Sidel blows after approximately 4 hours of continuous Production. This results in 45 minutes of downtime because the electrician has to be Called away from other work during the day. At night we lose double that time because The electrician must be called from home.

Draw Problem in detail:

Hand drawn picture or photo showing the problem and suggested solution. This form should be posted on a notice board close to the equipment in question so that other operators on other shifts have the opportunity to place their comments and suggestions on this form. Having the form in public view will also make sure that those responsible will be constantly reminded of their responsibility, if not by reading the notice then by other team members reminding them.

Cause Analysis **Team Leader:** Jakes Ndlovu

1st Q Why did machine stop?
Why:
A Fuse blew due to an overload.

2nd Q Why was there an overload?
Why:
A Bearing lubrication was inadequate.

3rd Q Why was bearing lubrication Inadequate?
Why:
A Lubrication pump is ineffective.

4th Q Why is lubrication pump ineffective?
Why:
A Pump spindle is worn.

5th Q Why is spindle worn?
Why:
A Metal filing contaminated lubricant.

Action:
1. Order new part - 2 week delivery.
2. Replace spindle.
3. Move welding bay away from lubrication bay.
4. Update planned maintenance and lubrication procedure.
5. One point lubrication lesson for operator.

Date Cause Validated: 24/6/01

Parts Ordered: O/N 2631 Simon - Stores

Job Card Raised No: 2631 Simon - Stores

Time Planned: 6/7/01 3pm Jakes - Responsible

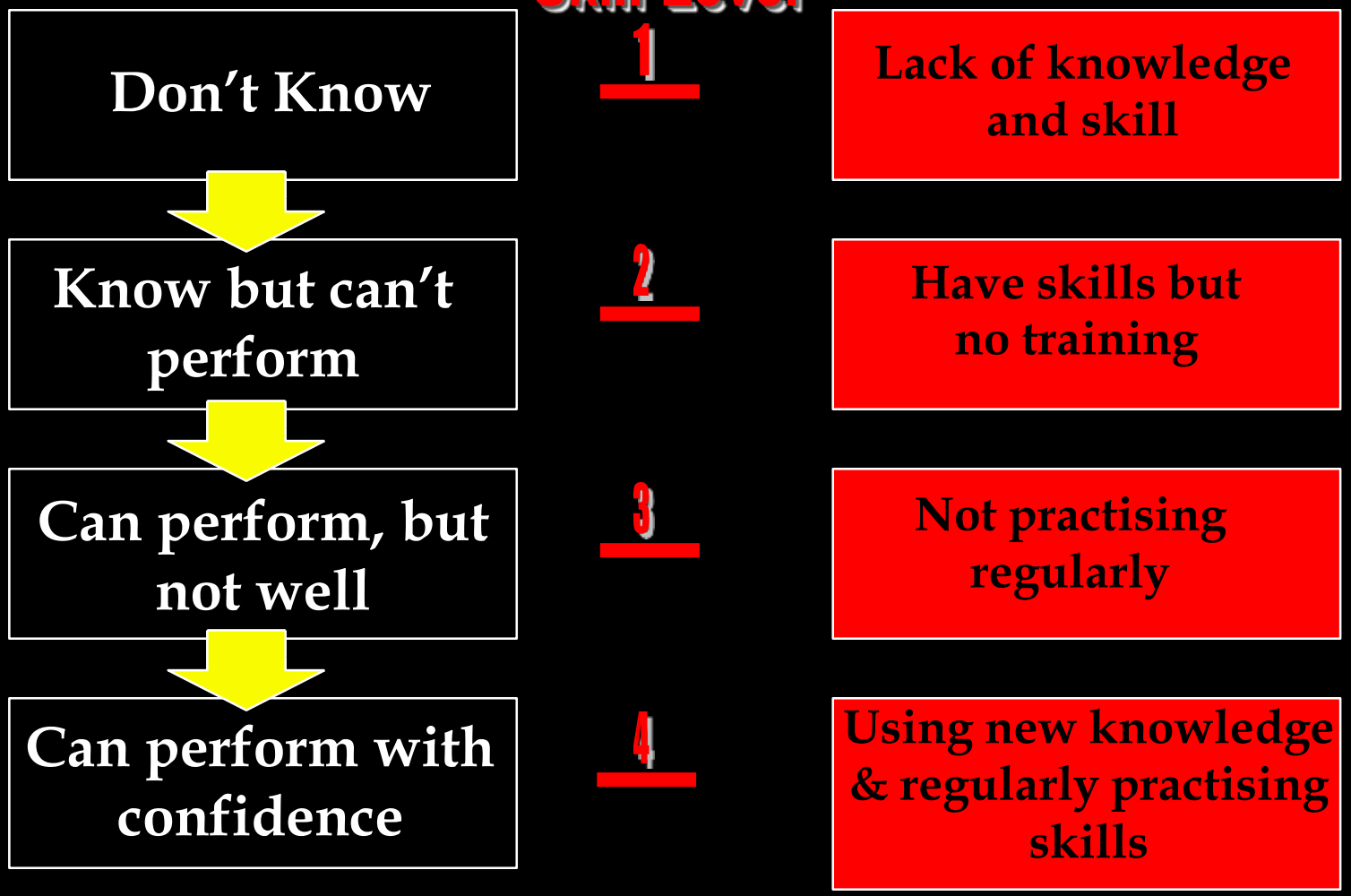
SOP Drawn up 17/7/01 3pm Jakes - Responsible

Effect of counter measures:
21/7/01 - no downtime recorded due to blown fuse since countermeasure was installed.

5 WHY'S

- Using the 5 Why system operators can not only look for the root cause of problems but can offer their opinion as to the cause of the problem and suggest solutions when they fill in SR's.

STAGES OF SKILL DEVELOPMENT



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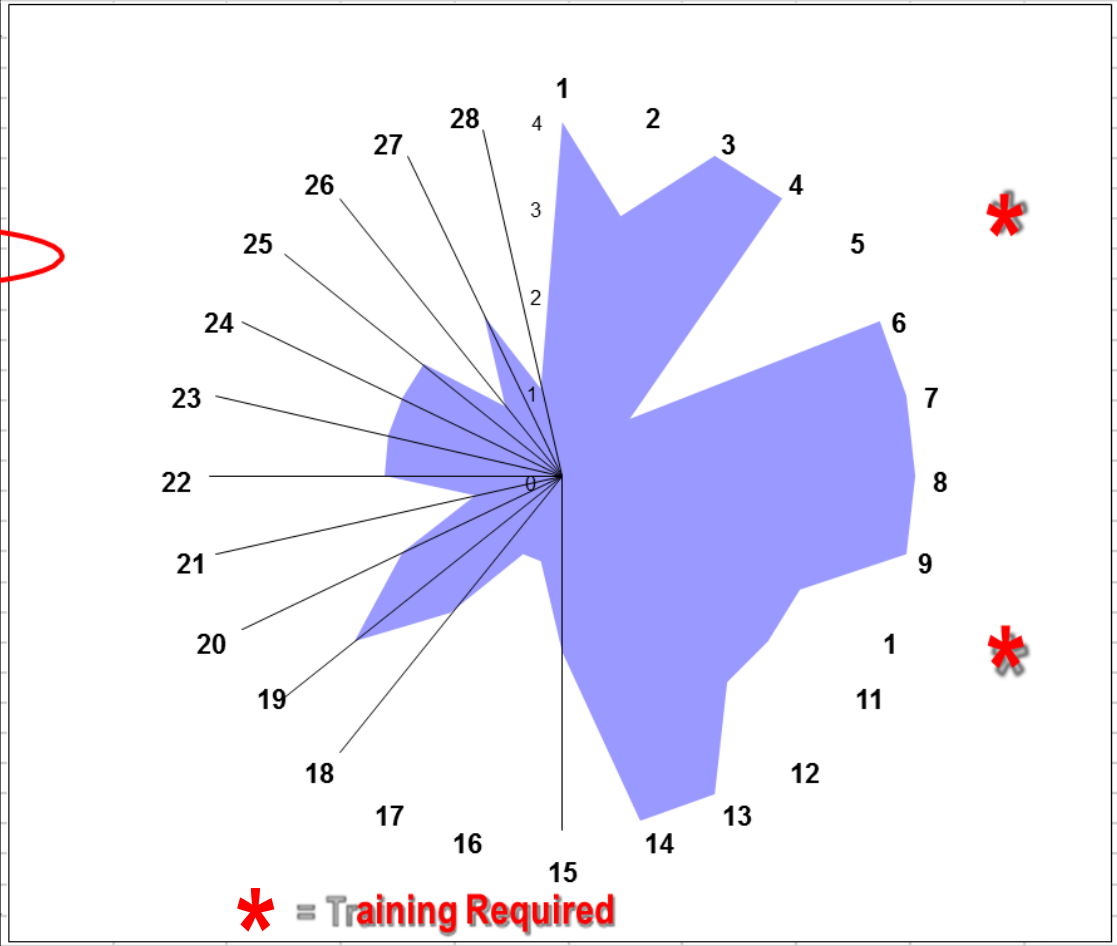
OPERATORS SKILL ANALYSIS

Operator Skill Analysis

Name: Ronald | **PM3 Master Operator** | **Date:.....**

Skill Listing		
Task No.	Task	Level
1	Paper Quality Furnish (Raw)	4
2	Drive Clamp Truck	3
3	Conveyor Operation	4
4	Filling Log Book	4
5	Basic lubrication	1
6	Water & Quality Control	4
7	Pulp Quality & Lab. Test	4
8	Sludge Press Operation	4
9	Start, Operate Stock Plant	4
10	Change Fabrics	3
11	Basic Maintenance	3
12	Computer Literacy - Pragma	3
13	Health, Safety, Isolation	4
14	Housekeeping	4
15	Paper Quality (Forming)	2
16	Change & Prepare Blades	1
17	Start & Operate Machine	1
18	Crane Operation	2
19	Chamical Knowledge	3
20	Condition M/C Fabrics	2
21	Boiler & Steam Plant	1
22	Core Extractor Operation	2
23	Reel Wrapping	2
24	Re-Winder Operation	2
25	Hydraulics	2
26	Fire Training	1
27	Reel Label, Weigh & Stack	2
28	Loading Trucks	1



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OPERATORS OPERATION MANUAL

- Take one piece of equipment at a time and divide it into it's working parts (Asset Number)
- Shift specialists work together to create an One Point Lesson (O.P.L.) for each part
- Maintenance, Lubrication etc. will create a O.P.L. for their specialist section

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ONE POINT LESSON

One Point Lesson Sheet Date:

Prepared by: SAMSON Approved by: ROTIMI

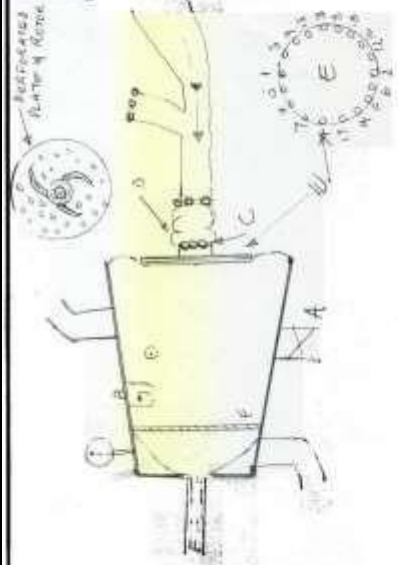
Theme: CLEARING BLOCKAGES

Equipment: FIBERIZER

Question: HOW TO CLEAR BLOCKAGES FROM FIBERIZER

Action: FOLLOW THE PRINCIPLES

Drawing:



Principle:

1. OPEN JUNK VALVE 'A'
2. ISOLATE FIBERIZER MAIN DRIVE AT MCC
3. INSPECTION HOLE 'B'
4. REMOVE BOLTS CONNECTING BELLOWS TO THE DOOR 'C'
5. RETRACT BELLOWS BY THEN TIGHTENING NUTS ON THE 2 THREADED BARS 'D'
6. REMOVE BOLTS FROM THE DOOR IN SEQUENCE SHOWN AT 'E'
7. PULL DOOR OPEN 'E'
8. CLIMB INSIDE FIBERIZER AND CLEAN BLOCKAGES USING BRUSH SCRAPER, HANDS AT SCREEN 'F'
9. CLOSE DOOR USING REVERSE SEQUENCE. #78 —— #1

Educational Achievements	Date:					
	Learner:					

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MAINTENANCE SCHEDULES

- Operators review each asset's maintenance schedule and discuss suggested changes (giving reasons) with maintenance team.

Red = Operator
White = Maintenance
Blue = Electrical
Yellow = Supervisor

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CONCLUSION

- It is vital that employees see continuity in the continuous improvement processes being implemented
- It is therefore important that any new intervention be seen as supporting and enhancing initiatives and procedures already in place.

You will never get any better if you Repeat the same mistakes tomorrow!

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