Automotive Industry Development Centre (Pty) Ltd

Your partner in becoming globally competitive

Tirisano Cluster Programme
Case Study

Malben Engineering CC

Company Summary

Company Name :	Malben Engineering CC
Directors :	Mr. Amerigo Smargiasso (100%)
Location :	6 4th Street, Vorsterkroon, Nigel
Employees :	63
Annual Turnover :	R15.5 Million for 2003
Contact Details :	Mr. Marco Smargiasso (Marketing Manager)
	Tel : 011 814 6500
	Fax : 011 814 1731
	Email : malben@global.co.za
Programme :	Tirisano Cluster Programme
Duration :	September 2003 to May 2004
Champion :	Mr. Marco Smargiasso (Marketing Manager)
Co-ordinator :	Mr. Luca Smargiasso (Production Manager)

Company Background

- **Established in 1976 by Mr. Amerigo Smargiasso**
- **Products : Number of different products = 300**
  - Metal Pressings
  - Welded Assemblies
  - Electroplating
  - Powder Coating
  - Tool & Die making
- **Customers :**
  - Ford
  - Lemforder
  - Kwikot
  - Bosch
- **Suppliers :**
  - Baldwins Steel
- **Market Focus :**
  - Automotive
- **Quality Systems :**
  - TS16949

Organogram

Results Summary at end Mar 04

- 67 Red Tags found of which 36 Eliminated
- 91 Wastes identified of which 34 eliminated
- Majority waste is Process
- 14 People Trained in 5C and 7 Wastes out of 63 Staff
- 60% Reduction in rework and scrap on air receiver line
- 37% improvement in throughput time on air receiver line

Focus Areas

- The air receiver line was identified as the model area for the programme
- Implement 5C and 7 Wastes in air receiver line
- Improve air receiver line layout and process flow
- Implement measures of performance
- Reduce downtime due to changeovers in press shop during programme roll out
- Train all staff in 5C and 7 Wastes
- Implement Visual Management

Days spent with company

- ½ Day Awareness Session
- 2 Days Assessment
- ½ Day Pre-diagnostics (Management Team)
- 2 Day Diagnostics (Tirisano Team)
- 10 Days Workshop (Tirisano Teams)
- 6 Days Cluster Sessions

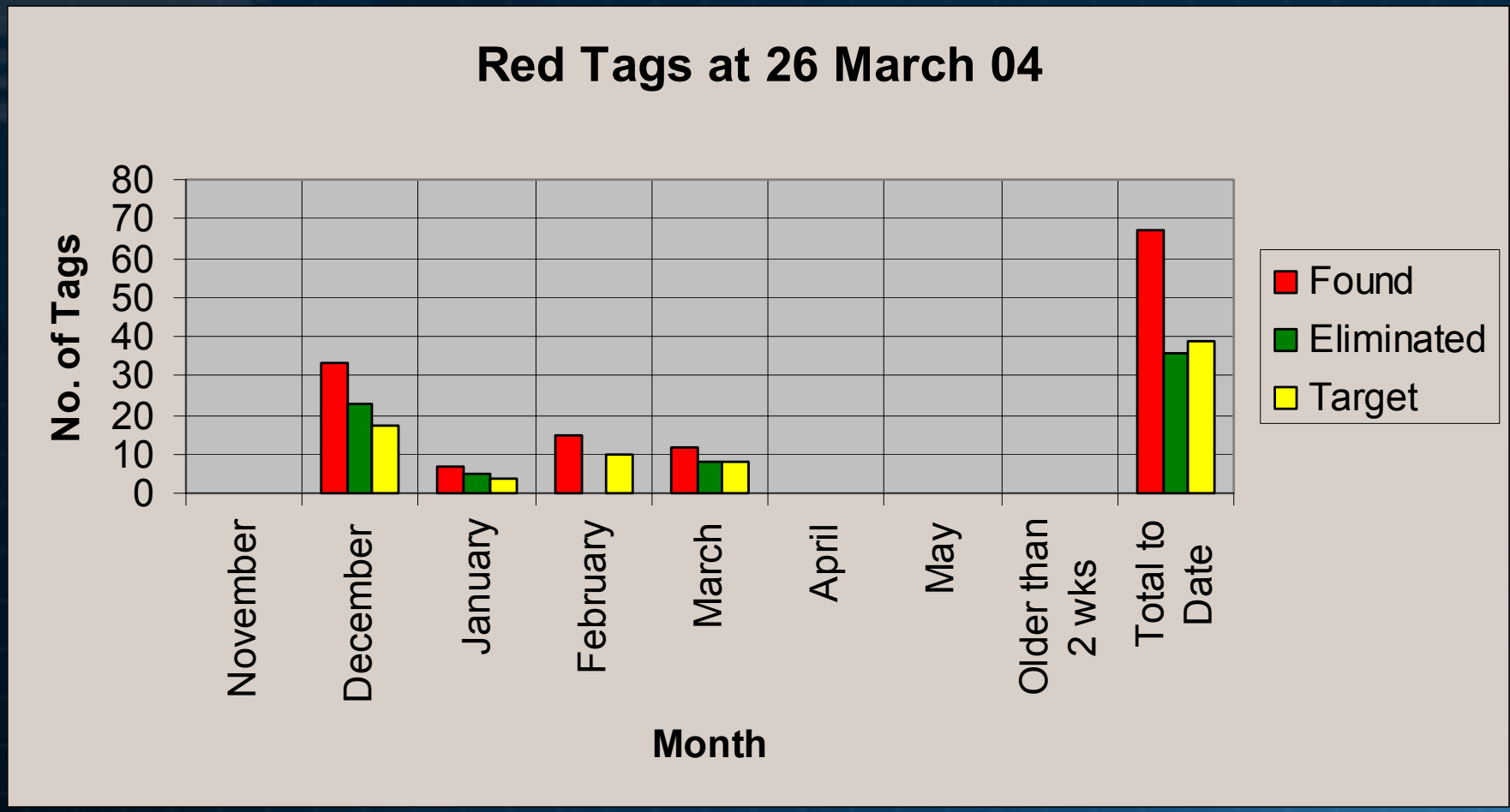
Total Days = 21 Days from September 03

Company Road Map for next 6 Months

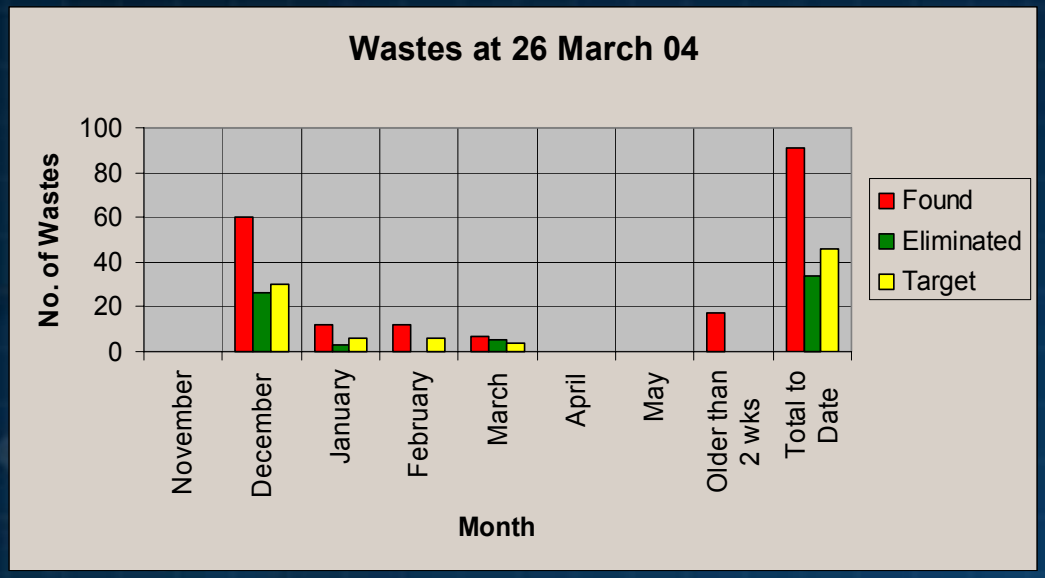
- Staff Training on 5C and 7 Wastes throughout factory
- Introduce additional performance measures to monitor productivity, downtime, quality, cost
- Set Up Reduction and improved press clamping methods
- Introduce Visual Management in all areas
- Introduce standard set up procedures and works procedures

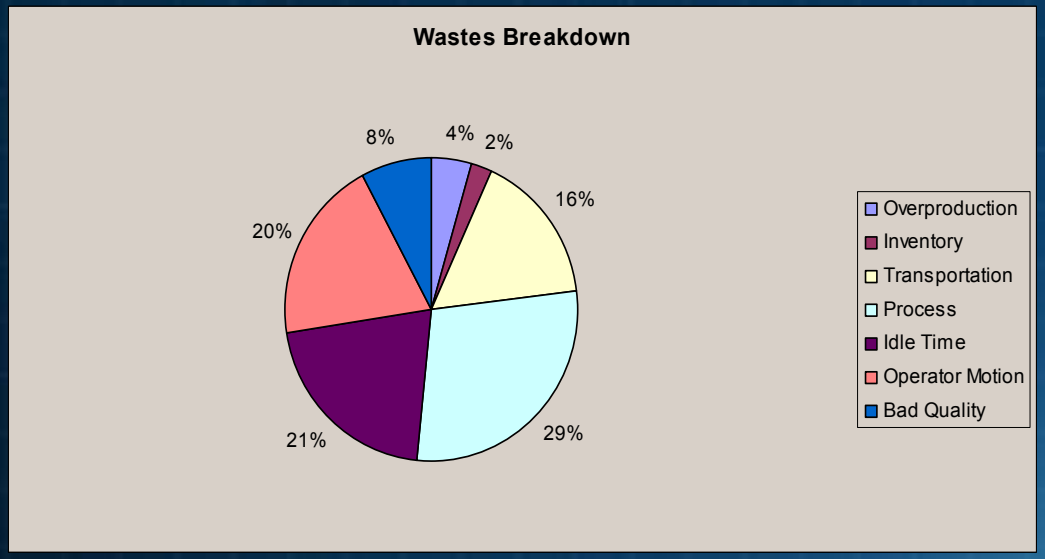
Measures of Performance

Red Tag Graph

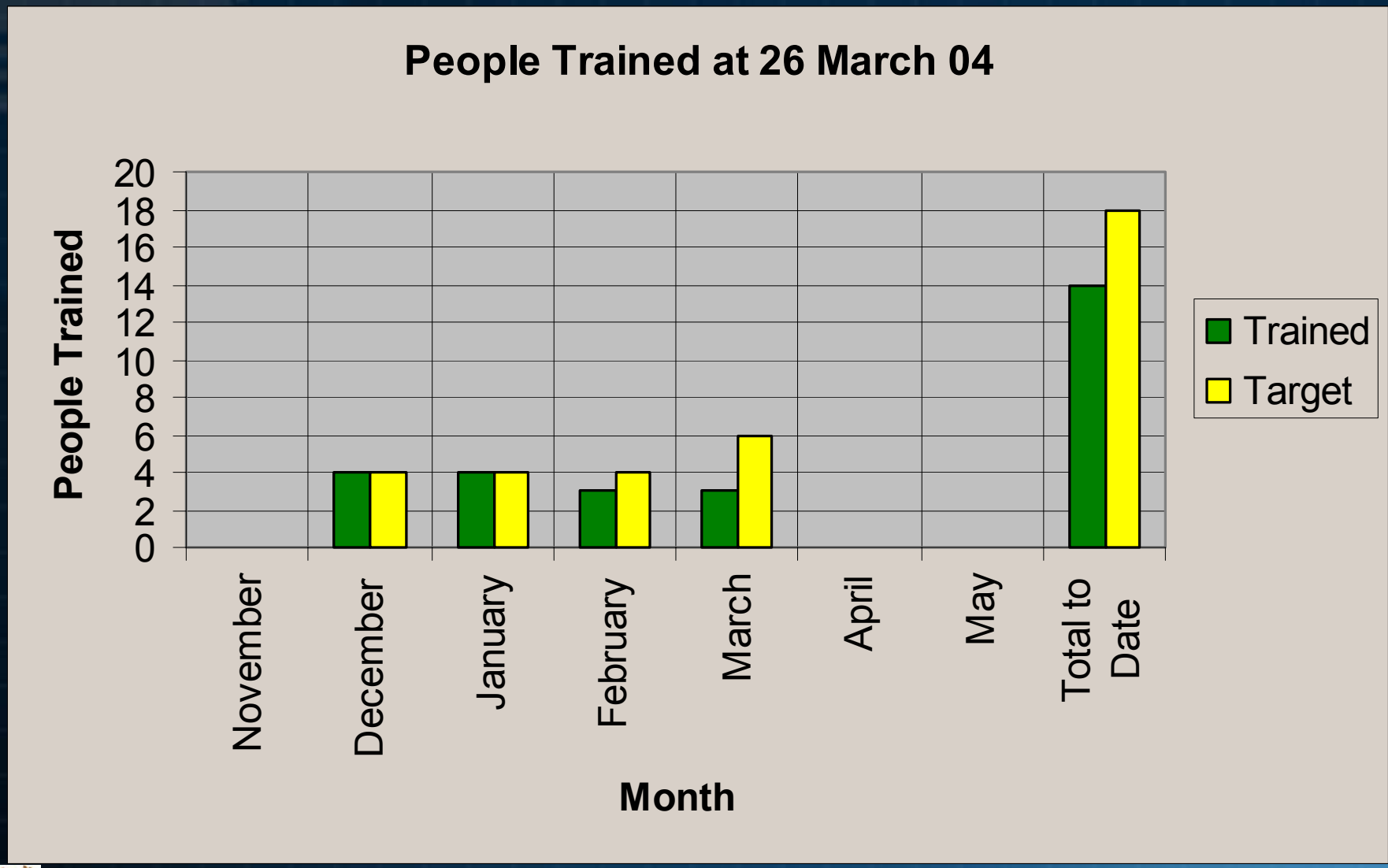


7 Wastes Graph

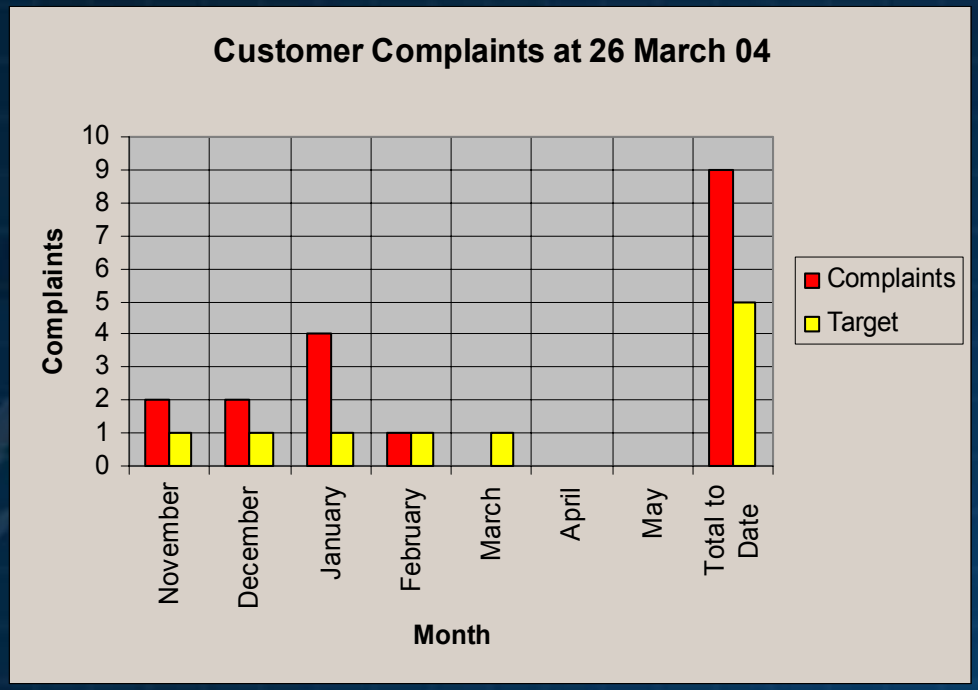


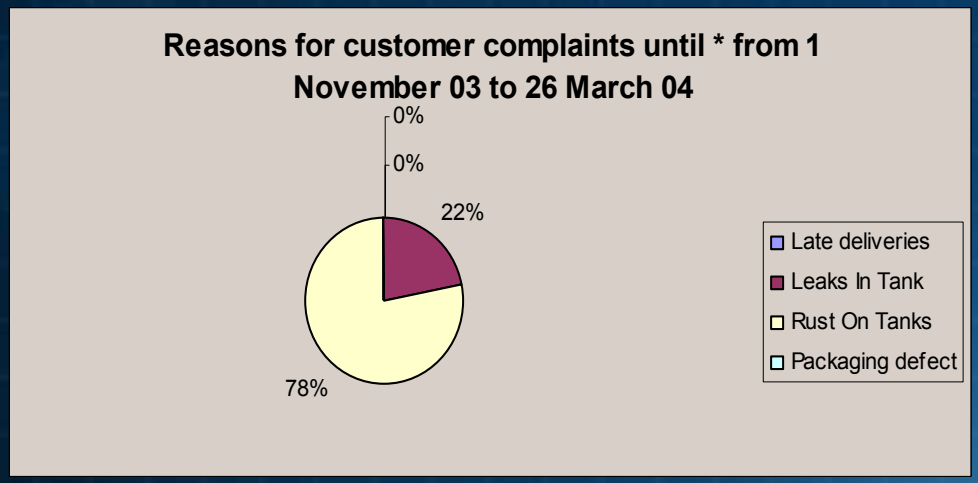


Number of People Trained

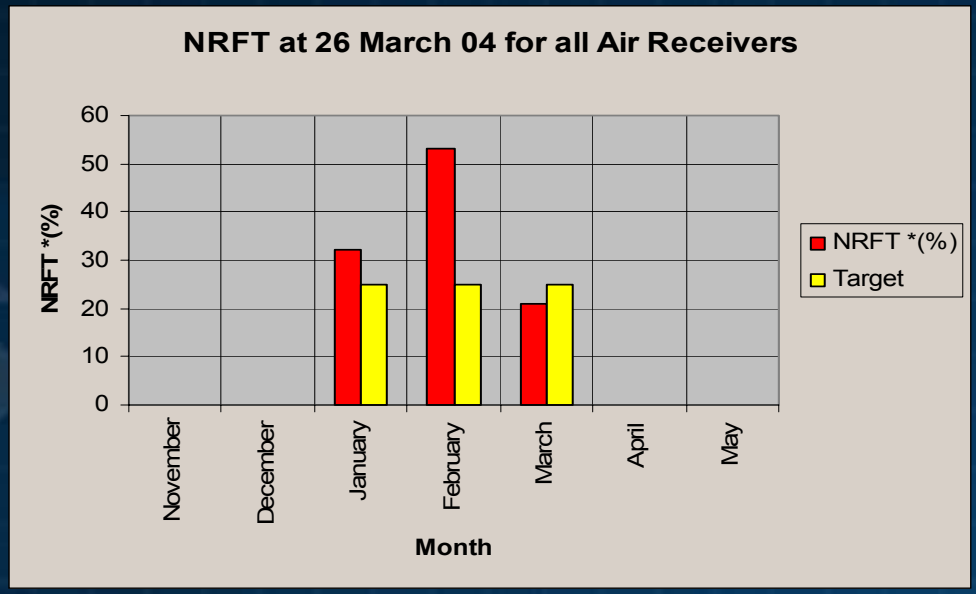


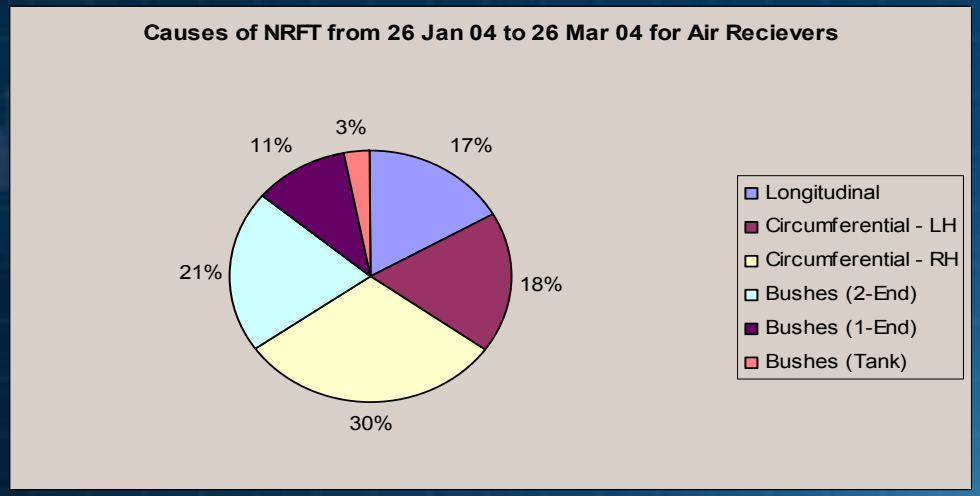
Customer Complaints



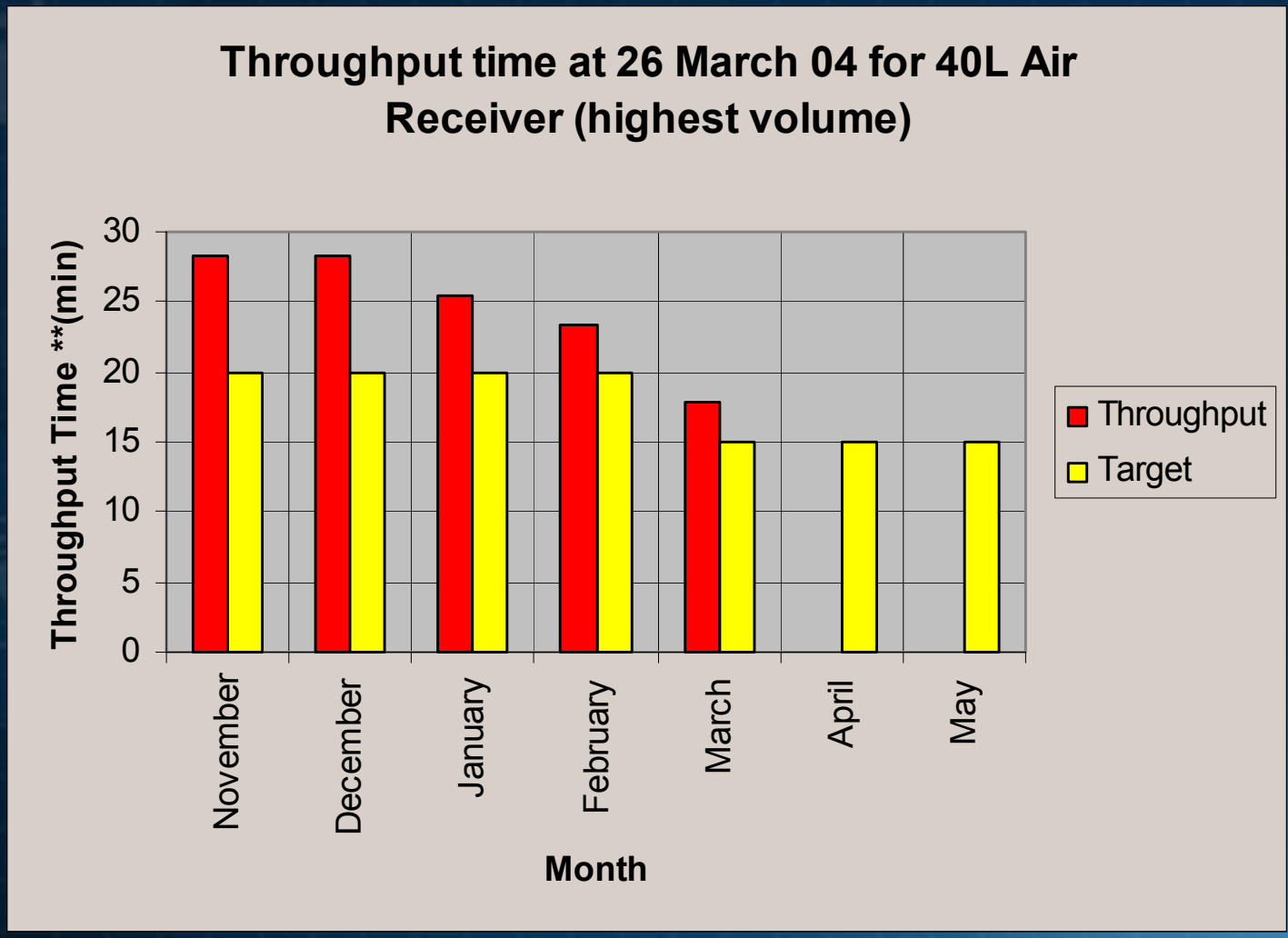


NRFT – Air Receivers (Scrap & Rework)

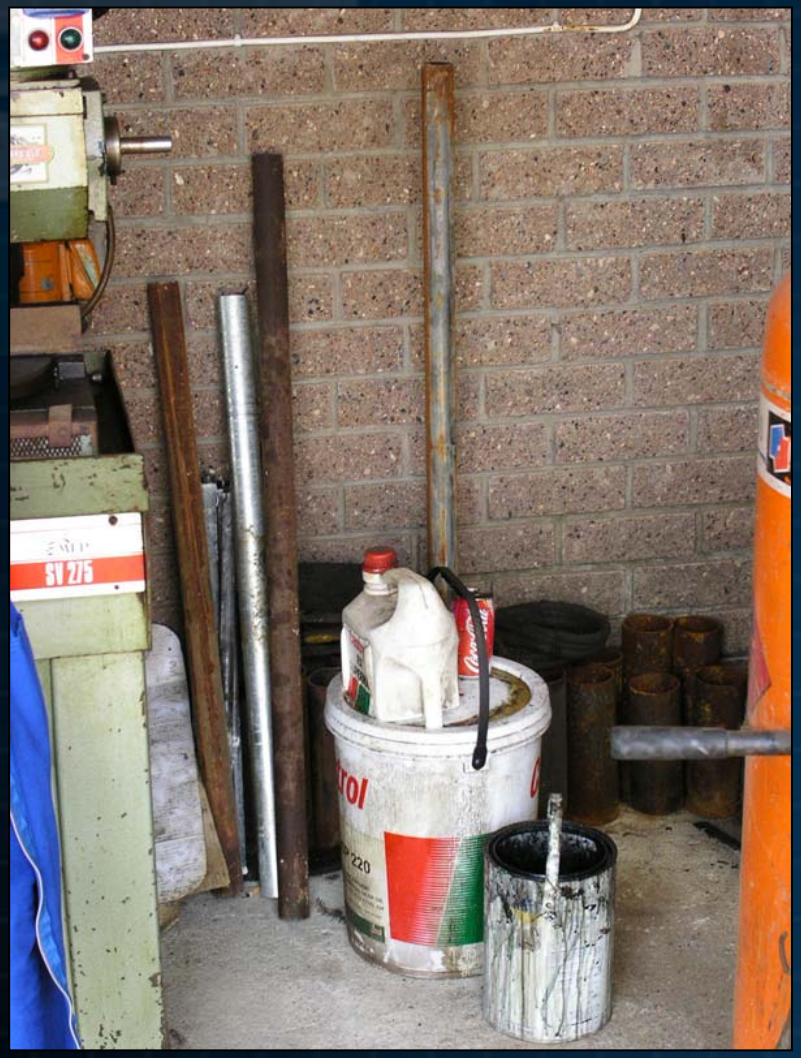




Throughput Time



Top Worst Point Photo



The champion tries to walk around every two weeks to take worst point photo's. The area selected as the worst point was the cut off saw area.

This area is situated at the back of the building and is often ignored leading to a build up of offcuts. The team intends putting 5C into practice in the area and making one person responsible for auditing the area on a monthly basis. The benefit to the company will be two fold namely: financially in that we will be able to scrap a fair percentage of the offcuts and recover the balance; the area will be far more presentable.

Top 5C Implementation

Before :

- Inefficient work flow
- Excessive operator motion and transportation
- Items in the area not required for the production of air receivers
- No proper demarcation of equipment and facilities

After :

- Clear out of obsolete stock
- Safer working environment
- Increased space availability
- Increased throughput time
- New equipment introduced

Best Improvement

Achieving 37% Improvement in Throughput time on the air receiver line and a 60% reduction in scrap and rework .

Output has increased by 60% on average.

- Awareness Training
- Elimination of process and operator motion wastes
- Improved layout and process flow
- Improvement of equipment and process methods
- Implementation of quality monitoring and improvement system

Conclusion

- Benefit to company
  - Improved capacity of air receiver line
  - Focus on measuring of quality and uptime performance
  - Using measures of performance to focus improvement activities
  - Improved company sustainability
  - Adherence to training requirements and quality management system
  - Understanding the needs of the customer

- Cultural changes
  - Awareness training
  - Involvement from staff
  - Development of openness to new ideas and industry changes
  - Localised buy-in for change

Lessons Learned (Across the Cluster)

- No retrenchments to be contractually agreed
- Future programmes to run for atleast 1 year per company as done in India which runs up to 3 years
- Training of all management personnel through joint sessions prior to programme commencement
- Enforcing preliminary measures prior to programme commencement
- Performance appraisal of participating companies throughout the programme
- Improve programme organisational structure and responsibilities
- Improve timing of monthly review meetings
- Additional involvement from STA personnel from the OEM

Potential Future Projects

- Factory Layout
- Press Shop : Improved feeder systems
- Further reduction of Changeover times
- Implementation of 1-piece flow on air receiver line
- Total Productive Maintenance principles across factory
- Organisational development