

Automotive Industry Development Centre (Pty) Ltd  
Your partner in becoming globally competitive

# ***Tirisano Cluster Programme Case Study***

## ***Lectrolite (Pty) Ltd***



# Company Summary



**Company Name :** Lectrolite (Pty) Ltd

**Directors :** Mr. John Gibson (Managing Director)

**Location :** Wankel Street, Isando

**Employees :** 111

**Annual Turnover :** R170 Million for 2003

**Contact Details :** Mr. Anton Pretorius (Production Manager)  
Tel : 011 397 4070  
Fax : 011 397 4326  
Email : [apretorius@lectrolite.ih.co.za](mailto:apretorius@lectrolite.ih.co.za)

**Programme :** Tirisano Cluster Programme

**Duration :** September 2003 to May 2004

**Champion :** Mr. John Gibson (Managing Director)

**Co-ordinator :** Mr. Anton Pretorius (Production Manager)





# Company Background



- **Subsidiary of Imperial Holdings Ltd**
- **Established in 1948**
- **Products : Number of different products = 2 Main products**
  - Bougicord ignition cables assembled under license
  - NGK Spark Plugs assembled under license
- **Customers :**
  - FORD    - Toyota    - Nissan    - VW
- **Suppliers :**
  - E'Fil (France)                    - NGK Japan
- **Market Focus :**
  - Automotive Original Equipment
  - Parts and Accessories
  - Aftermarket
- **Quality Systems :**
  - ISO9002; VDA 6.1 ; VDA 6.3 ; QS9000; ISO14001; ISOTS16949





# Organogram





# Results Summary at end Mar 04



- 131 Red Tags found of which 130 Eliminated
- 128 Wastes identified of which 84 eliminated
- Majority waste is Process
- 33 People Trained in 5C and 7 Wastes out of 111 Staff
- 80% improvement in Bougicord line throughput time (highest volume)
- 50% improvement in product output on RoCam line
- 25% reduction in floor space utilisation on Bougicord line





# Focus Areas



- Implement 5C and 7 Wastes on RoCam and Bougicord Line
- Improve layout and process flow of Bougicord and RoCam lines
- Implement measures of performance on internal performance
- Train all staff in 5C and 7 Wastes





# Days spent with company



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

Total Days = 18 Days from September 03





# Company Road Map for next 6 Months



- 5C and 7 Waste Training for all Staff
- Training on Work Station Design
- Training of all Staff on Single Piece Flow
- Revise Internal Measures
- Time Studies on RoCam and Bougi Cord Line
- Revise Visual Management
- Stock Holding Reduction







# Measures of Performance

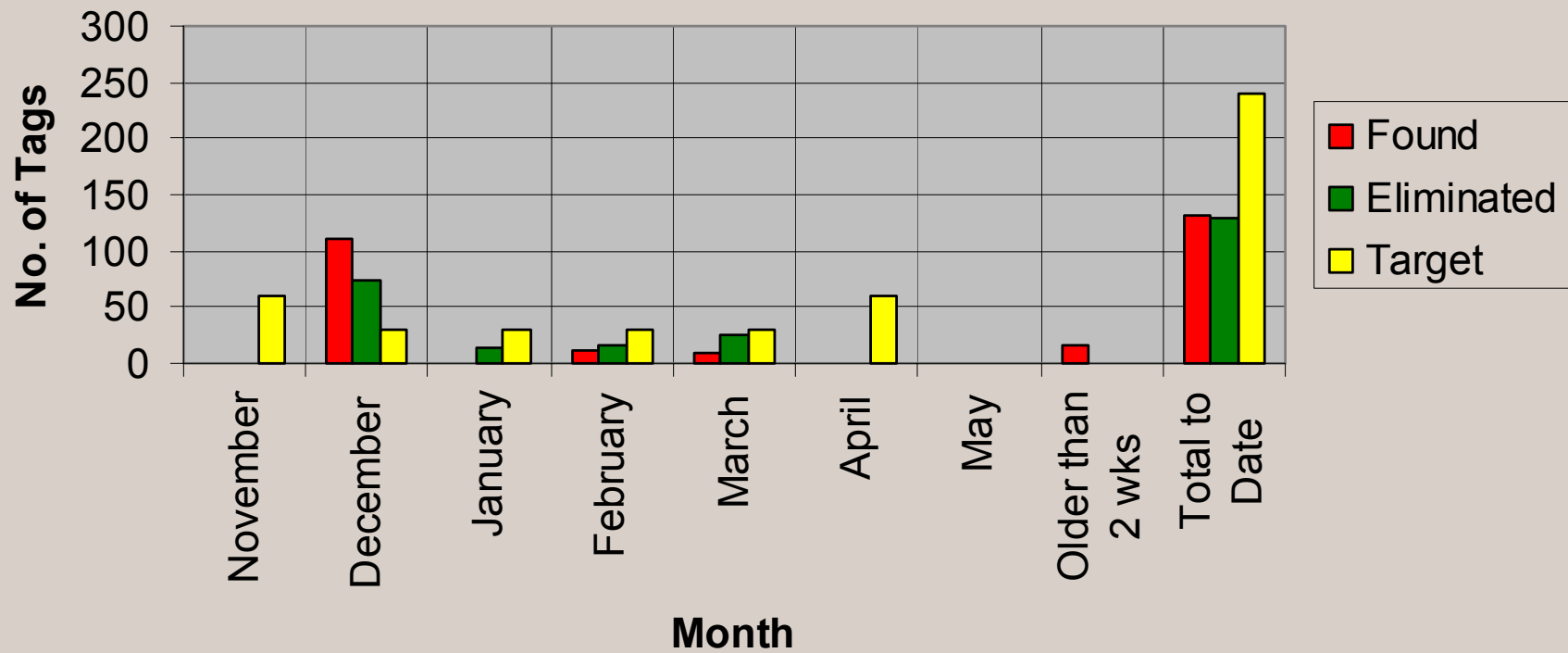




# Red Tag Graph

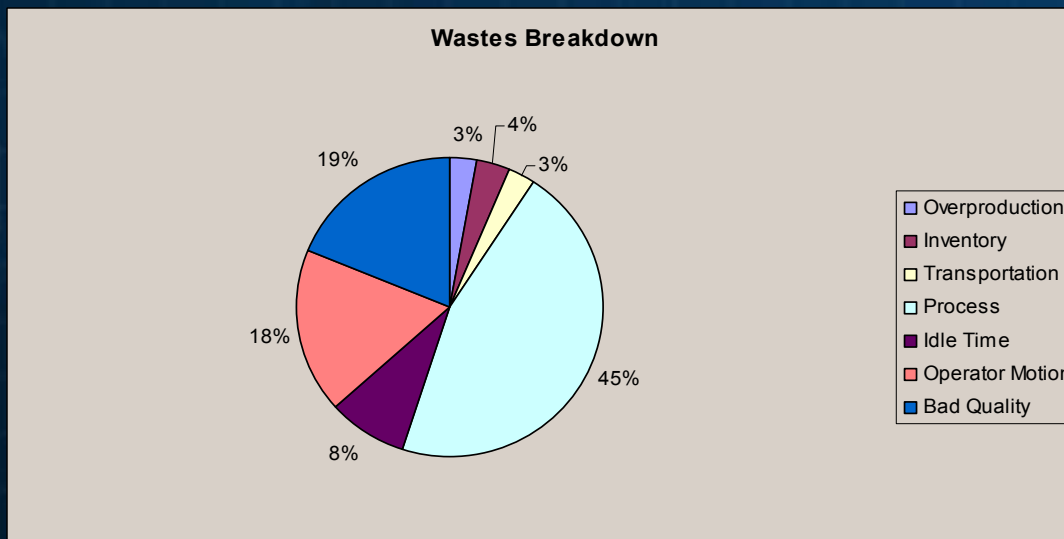
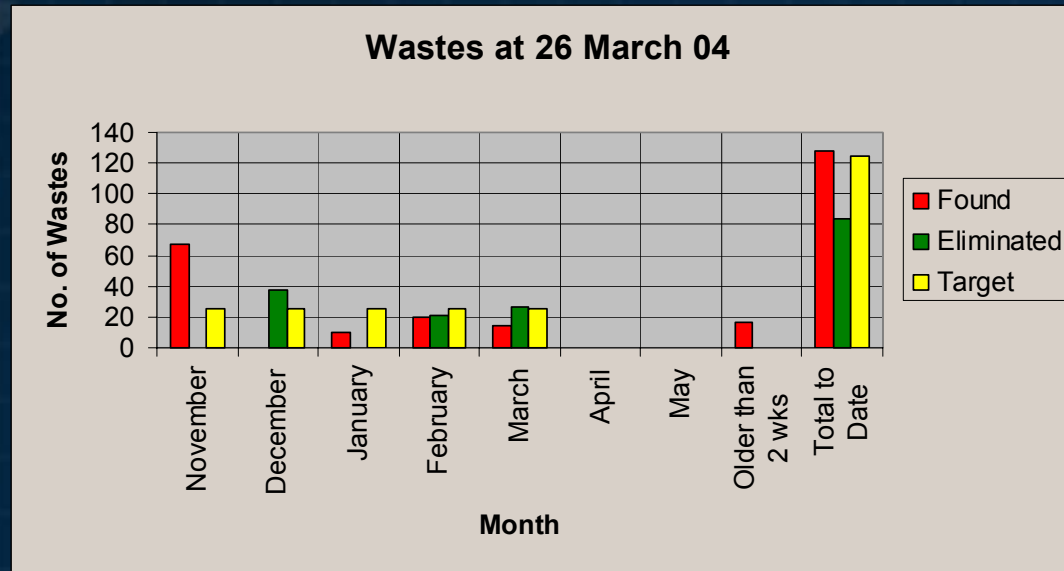


## Red Tags at 26 March 04





# 7 Wastes Graph

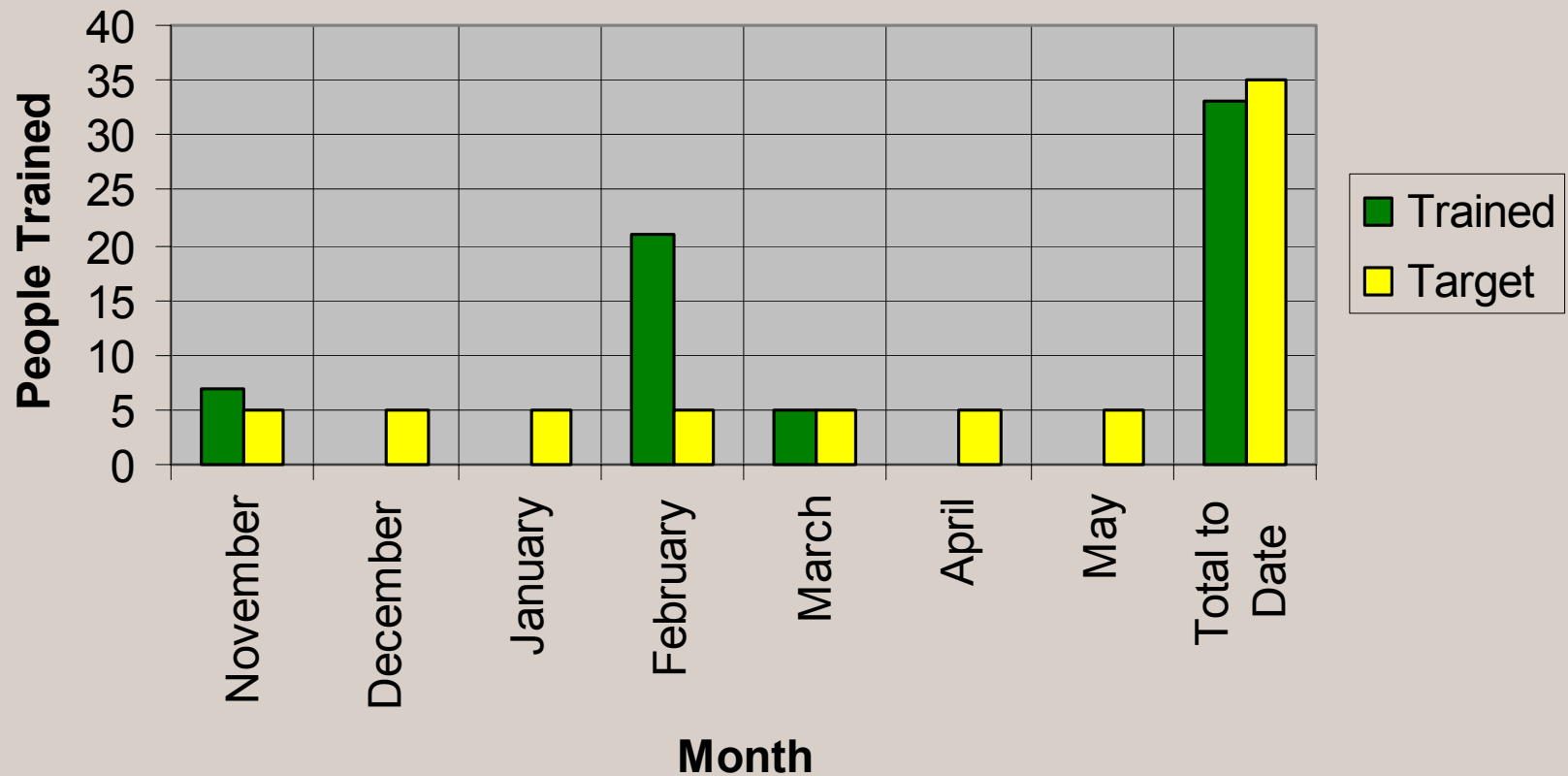




# Number of People Trained



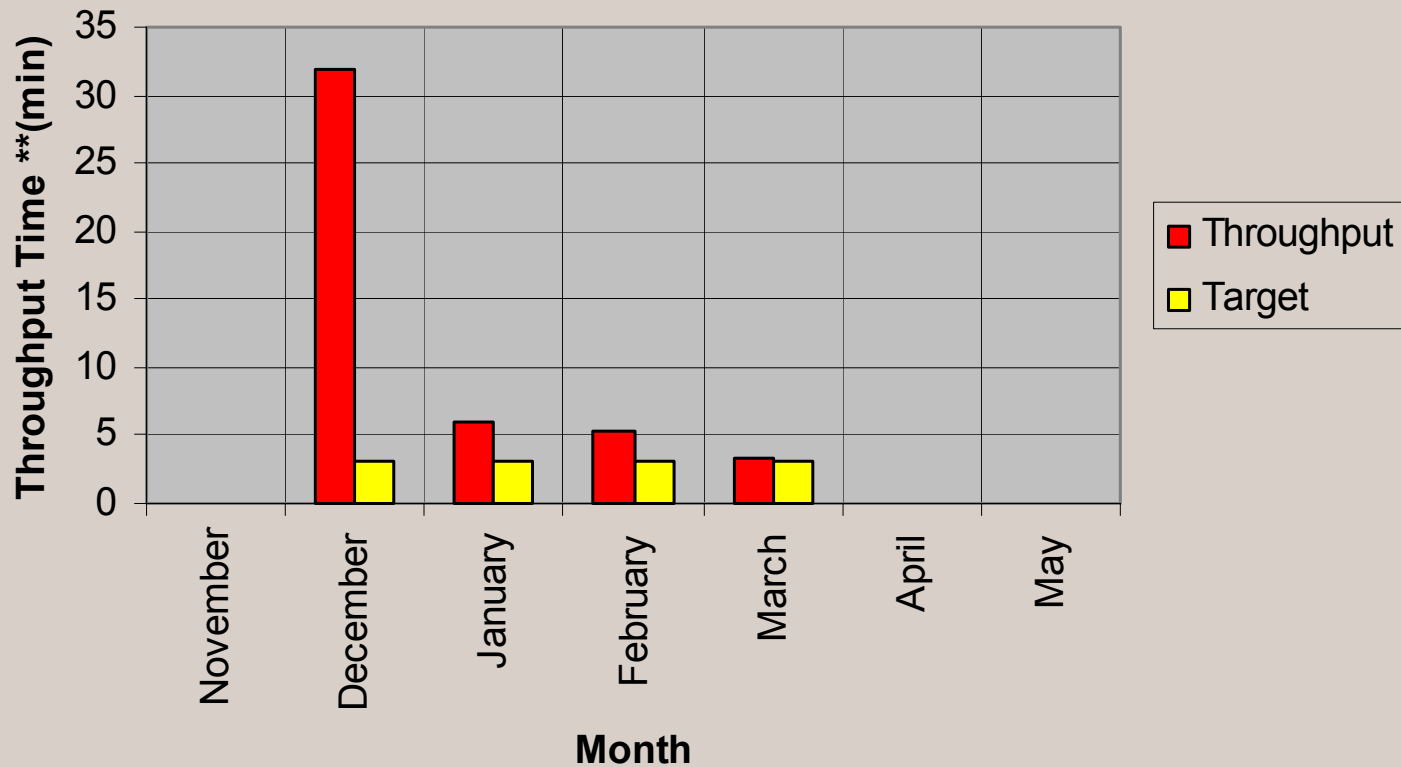
People Trained at 26 March 04





# Throughput Time

Throughput time at 26 March 04  
Highly Complexed Sets

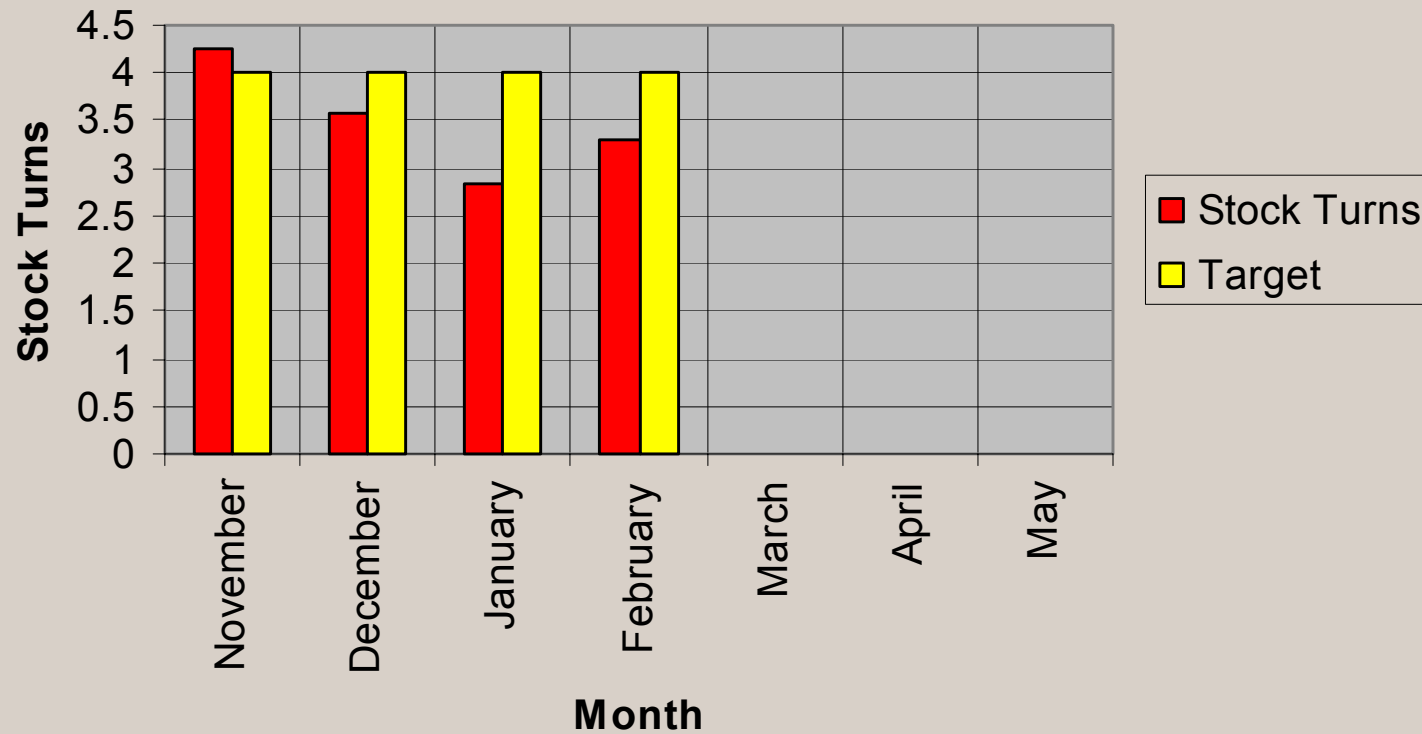




# Stock Turns



Stock Turns at 26 March 04 for \*Finished Goods Store





# Top 5C Implementation



Before :

Operator motion

No fixed location for station and  
WIP

No demarcation for materials  
and product

After :

New workstation design using  
5C methodology

Improved cycle time

Reduced operator fatigue  
through ergonomic work stations





# Best Improvement



## Improved production output on RoCam Line by 50%

- **Focused improvement activity on RoCam line to**
  - **balance the workload,**
  - **reduce process waste and**
  - **improve quality**
- **Extensive training on**
  - **5C, 7 Wastes and**
  - **1-piece flow with RoCam line staff**
- **Improved line supervision**







# Conclusion



- Benefit to company
  - Improved production outputs and flexibility to production changes
  - Improved line layouts
  - Reduced work in progress
  - Improved process flow
  - 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
  - Openness to change
  - Strong support from MD for current and future projects





# 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



- Stock holding reduction project
- Further improvements to RoCam line to increase production for new demands
- Improved process changes from eccentric to hydropneumatic presses
- New factory layout
- Additional training modules

