

Beverage Can South America - Recife Ends

Corporate overview

Rexam is a global consumer packaging company with a turnover of £4.9 billion in 2010. We employ some 22,000 people in more than 90 plants and offices in 20 countries around the globe. Headquartered in London, England, we are an established member of the FTSE 100, a global leader in the manufacture of beverage cans and one of the world leaders in rigid plastic packaging. We are business partners to some of the worlds most famous and successful consumer brands such as Coca-Cola, InBev and PepsiCo, and blue chip global brand owners such as Proctor & Gamble and GlaxoSmithKline.

Our vision to "be the *best* global consumer packaging company" is strongly supported by Rexam's four embedded core values: Continuous Improvement, Trust, Teamwork and Recognition. We have been committed to a path of Lean Enterprise across all our operations as a way of putting our Values into practice for over ten years. This approach is an essential part of what we call the "Rexam Way".

Continuous improvement process

Rexam has operated a global system of Lean Enterprise since 2005. It is structured around building capability in specific tool sets of Culture, VSM, 5S, TPM, SMED and Six Sigma. Internal assessors review progress annually and award a merit of bronze, silver or gold depending on performance levels.

Recife Ends achieved Gold level at its first assessment, in 2005, and Gold again in 2006, the same year the Plant was awarded the Chief Executives award of Rexam's Best Lean Business.

In 2008 our best plants were invited to participate in a more sophisticated assessment known as "Beyond Gold", where the implementation of lean *systems* was appraised. Again a system of merit is used to recognise achievement starting at *emerald*, then *sapphire*, and finally *diamond*. Recife Ends demonstrated a sapphire level of performance at the first time of asking and subsequently moved to diamond in 2009 and again in 2010.

The Recife Plant pioneered the concept of "Six Sigma Kaizen" which has since rolled out globally in Rexam.

Since the implementation of Lean, the Plant has accomplished 151 kaizens, 41 Six Sigma projects, 45 SMED events and nine Lean Business initiatives.

All employees are involved across the entire Plant in the use of Lean tools, and in particular our 100% participation in TPM has improved equipment availability from 93% to 96% in just three years, making Recife Ends a world class Plant.

The Plant's commitment to continuous improvement through Lean Enterprise has led it to be the first Rexam *Ends* site to apply for the Shingo Prize.

The Recife Ends plant

Operating since 1998, the Recife Ends facility, in northeastern Brazil, is one of the 12 facilities that make up our manufacturing sector known as Beverage Can South America (BCSA).

Of the 239 people on site, 213 are involved in factory operations and 26 are engaged in human resources, finance, logistics and distribution. The 115,000 sq ft facility has one aluminium end manufacturing line that is fully dedicated to clients such as InBev, Heineken, Coca-Cola and other global brands, with a total production of 12 million ends each day. The factory operates 24 hours a day, seven days a week. With a strong lean culture and continuous improvement, the plant's OEE rose from 82.5% in 2007 to 88% in 2010.

Product and process

The aluminium end production process is simple but we ensure we plan and execute production under controlled conditions, using modern quality techniques, administrative programmes, training and a rigorous approach to safety, ensuring an excellent customer service.

The process features four distinct phases: cutting and shaping of the basic ends from aluminium rolled stock, the cutting shaping and addition of a ring pull, or *tab*, application of the sealing compound, and packing of the finished ends. Possible value-added variations include, coloured ring pulls or laser engraving an image on the upper part of the tab.

In 2011, our local Rexam team developed and patented a technology for the "cut-out tab" and also a novel "tab embossment" technology.

Recife Ends achievements

- Awarded high recognition in customer audits from: Nestlé, Heineken, Anheuser Busch, Carlsberg and Coca-Cola
- Rexam Risk Management Best Practice Award (can/ends) - Environment/Health & Safety category)
- Lean Enterprise achievements:
 Gold status 2005-2006
 Beyond Gold Emerald status 2007
 Beyond Gold Sapphire status 2008
 Beyond Gold Diamond status 2009-2010
- Coca-Cola Social Compliance Audit compliant to 100% of the requirements of the protocol
- Rexam BCSA Award Best in 2010 in Customer and Supplier Relations
- Winner of the State SESI Award for Quality at Work (PSQT) — Large Companies Division in the Innovation and Environment for Safety and Occupational Health categories.



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Safety & environment

- ISO 14001 Environmental accreditation since 2003
- OSHAS 18001 Safety accreditation since 2003
- ISO22000 Food Standard accreditation since 2010
- Our "Risk Elimination Programme" has identified and treated more than 7,000 unsafe conditions and potential accidents since 2006
- Our BBS (Behaviour Based Safety) Programme now has 85% employee participation and rising
- Zero Lost Time Accidents in over 2 years
- All Plant waste is treated or recycled
- Zero environmental accidents in over 12 years.

Quality

- ISO 9001:2000 Quality accreditation since 2003
- Three Black Belts (Process Analyst, Lean Supervisor, Production Manager) and five Green Belts
- 40% reduction in customer claims, comparing the average 2007-2008 with 2009-2010
- Plant has produced 700 million laser engraved ends for Coca-Cola with zero claims
- HACCP and GMP certified by the National Food Security Programme. (Hazard Analysis and Critical Control Points and Good Manufacturing Practices)
- QAS and QAS Minitab real time SPC and process monitoring for 100% of production.

Employee morale

- The Plant aims to continually improve performance by teamwork and trust in every employees ability
- Rexam runs regular employee engagement surveys and did so again in 2010. Recife Ends achieved a response rate of 100%, with an Engagement Index of 77% favourable. (Sector rate: 76%)
- Annual awards are given to employees that engage highly in Lean and Safety activities
- Continuous development of all employees based on a personal development plan
- The Plant "Good Day" Programme drives continuous improvement and morale. Every time the Plant breaks performance records, it makes donations to a charitable institution chosen by the employees themselves. The Plant has reached 68 records since 2004.

Delivery performance and cost reductions

- Performance in OTIF has risen from 89% in 2009 to 96% in the first two months of 2011
- Improvements are driven by focused VSM mapping aimed at identifying bottlenecks related to client needs and the production process
- Reduction in power consumption of 7% since 2008
- Reduction in spoilage of 7.5% since 2010, becoming the Rexam benchmark
- Reduction in composite sealant consumption of 13% since 2008.

People

Rexam, globally, sees its employees as its main asset. We are therefore dedicated not only to their wellbeing, but also to their career development and education. Recife Ends is no exception. All 239 employees at the facility are engaged in twice yearly performance appraisals and objective setting, and 100% of our people currently have personal development plans.

15% of our employees are female and more than 25% of all employees have technical qualifications or are graduates.

Since 2008, over 98% of vacant positions have been filled through internal promotions. This generates high self-motivation and individual commitment.

Recife Ends has a mature, active Lean Manufacturing and Six Sigma Programme allowing for a high level of employee engagement in structured continuous improvement activity. Our kaizen culture has been particularly successful when applied to the area of safety.

Spanning 13 years, Recife Ends has retained 53% of its employees with over five years service within the business.

The engagement of employees is demonstrated through their participation in programmes such as the "Rexam Hints Programme" in which 168 kaizens have been completed since 2004 and 30 Innovation projects implemented since 2008.

The Plant actively encourages two-way communication between the employees and the leadership team through constant alignment meetings, a suggestion Programme called "Open Channel" and other events.

Employees have access to translated corporate communication channels such as monthly newspapers, posters, special campaigns and regular intranet news updates on Company guidelines and policies.

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