

LEAN CASE STUDIES

FOOD

MANUFACTURING

ENGINEERING

PLASTICS

PACKAGING

TRAVEL

www.envirocentre.ie

ROSIE & JIM GOURMET FOODS IS AN IRISH CHICKEN PRODUCTION COMPANY WHO SUPPLY DISTRIBUTORS TO THE RETAIL, FOOD SERVICE AND CATERING TRADES.

Rosie and Jim Gourmet Foods have been producing, premium quality chicken products in Dublin since 1997.

LeanStart Project Objectives

- Reduce raw material costs
- Establishing cash contribution per hour on top 4 products after raw materials, wastage, packaging and direct labour
- Reengineer products to make them more commercially attractive for the UK market
- Green – completed the green questionnaire and got an Ecomap.
- Identify any production processes that could be more efficient
- Identify any potential new sales prospects through existing sales channels

Work Programme

- Examined all the main raw materials and spoke with different suppliers for each of the products
- Carried out 4 detailed costings including Time and motion study on the top 4 products
- Reengineered both tortilla wraps and pies to make them more cost competitive for the U.K. market
- Met with the Electrician and the refrigeration engineers and completed the Green questionnaire. They also completed an initial Ecomap
- Examine OEE of existing production processes
- Identify any areas in the factory where production efficiencies could be introduced through redesigning equipment.
- Identify any potential new sales opportunities through existing sales channels

Project Outcome

1. Achieved raw material savings of €58k
2. Completed detailed costings on 4 products, which showed the company how what its cash contribution is for its top 4 selling products.
3. Reengineered wraps and pies that make the products commercially more attractive for the U.K.
4. Completed Green questionnaire and got draft 1 of an Ecomap
5. Identified two projects that will lead to better production efficiencies
 - Designing a new railway belt for the existing breading line will reduce the need to have three staff in the one area down to two operators and possibly one operator
 - Automating the filling for the tortilla wraps and the pies – Buying a Handtmann machine and manufacturing a custom build filling head

Lean tools and techniques are helping companies to address competitiveness issues within their businesses by building the capability of their people to identify problems and improve operations.

ROSIE & JIM GOURMET FOODS

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Naas Road
Dublin 12
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More Information

LEAN Business Offer
<http://bit.ly/1nKYJqI>



CALLAN BACON IS A LEADING PORK AND BACON PROCESSING COMPANY BASED IN CALLAN Co.KILKENNY

Callan Bacon is a family run business with a global profile which commenced operation in 1924. For generations, Callan Bacon has been providing retailers in Ireland and the UK with quality products. The company operates a full HACCP system and is accredited by Bord Bia PQAS and by BRC at higher level.

Project Objectives

- Provide LEAN training to relevant employees
- Involve as many people as practical in programme
- Achieve productivity improvements
- Set up and coach teams to establish a continuous improvement culture

Work Programme

- LeanPlus project

Project Outcome

- Productivity increased by 20%
- LEAN Leadership training provided to Management
- LEAN Green belt training given to 12 middle Management and
- Lean problem solving given to 10 Lead hands
- 12 teams trained and taken through a complete cycle of DMAIC projects

Lean tools and techniques are helping companies to address competitiveness issues within their businesses by building the capability of their people to identify problems and improve operations.

CALLAN BACON Co LTD

Westcourt
Callan
Co Kilkenny
Website:
www.callanbacon.com



More Information

LEAN Business Offer
<http://bit.ly/1nKYJqI>



ASHBOURNE MEAT PROCESSORS IS ONE OF IRELAND'S LEADING BEEF PROCESSORS, EXPORTING PREMIUM CHILLED IRISH BEEF ALL OVER EUROPE.

The company was established in 1985. They supply premium chilled and frozen beef products to leading retailers, manufacturers and distributors throughout Europe, Russia, Asia, Africa and the Middle East.

Project Objectives

- Increasing throughput of the processing line
- Increasing value adding activities and eliminating waste
- Provide Lean training for the management team and select process areas to apply principles
- Improve overall competitiveness

Project Outcome

- Increased line productivity by 16%, going from 43 cattle per hour to 50 cattle per hour.
- Team introduced to Lean Six Sigma and Theory of Constraints principles through formal training and on the job mentoring.
- OEE introduced and improved by 10%.
- Bottleneck operation identified as Hide Puller, process variation on this key step reduced by 35%

Work Programme

- LEAN Start

Lean tools and techniques are helping companies to address competitiveness issues within their businesses by building the capability of their people to identify problems and improve operations.



ASHBOURNE MEATS Roscrea

Castleholding
Roscrea
Co Tipperary
Website: <http://ashmeats.ie>



More Information

LEAN Business Offer
<http://bit.ly/1nKYJqI>



KEPAK GROUP, AN IRISH BASED COMPANY, IS ONE OF EUROPE'S LEADING FOOD INNOVATORS, ENGAGED IN PROCESSING AND MARKETING A FULL RANGE OF MEAT PROTEINS IN VARIED FORMATS AND PRESENTATIONS. THE GROUP COMPRISES OF 3 STRATEGIC BUSINESS UNITS, KEPAK MEAT DIVISION (KMD), KEPAK FROZEN DIVISION (KFD) AND AGRAKEPAK INTERNATIONAL.

Kepak Meat Division (KMD) is the primary processing business unit of the Kepak Group. KMD has an array of very well invested processing facilities strategically located across Ireland processing in approximately 250,000 cattle, 800,000 sheep and 300,000 pigs a year.

KMD business is focused on supplying partner retail and food service customers across Europe. The bedrock of KMD is built on a very strong supply base from producers who are acutely responsive to customer needs.

Lean Transform Project Objectives

- To conduct a Lean Transform Program across all functions/areas of the business.
- To deliver Lean training and project mentoring to enable a 'Lean approach' culture in Kepak.
- To introduce a blend of Lean and project management methodologies to deliver targeted cost savings from Continuous Improvement.

Key Challenges

- The industry has in recent years seen an unprecedented fall in activity due to changing demographics in the farming industry.
- External factors such as exchange rates and energy cost inflation were working against us.
- Our Customers were asking for change and we were listening.

Key Changes

- A Lean Transformation Program was introduced, broken into separate work streams
 - 5S to deliver a simpler, safer and better working environment for our team.
 - Standard work to give Operations the tools to meet targets in quality, yield and efficiency
 - Visual management to improve communication and improve the speed of change.
 - Management routines including Gemba walks to bring the frontline and office staff closer together.
- A central Project Management Office (PMO) was established to coordinate Lean implementation, training & mentoring of staff and CI delivery to target.

Project outcome

- We have simplified and standardised our processes so that our sites are now managed and our products produced in a Lean manner.
- We have built a more educated, involved team at all levels through the Lean Transform Program, training in Lean principles & project methodologies, and partaking in CI projects.
- We have improved our cost base helping us to remain competitive and grow along with both sides of our supply chain.

GLENPATRICK SPRING WATER CO LTD – IS A MARKET LEADING, INNOVATIVE DRINKS PRODUCER SPECIALISING IN RETAILER HOUSE BRANDS AND BRAND CO MANUFACTURING.

Water sources are drawn from limestone rocks found beneath the southern slopes of the beautiful and conserved natural heritage area of the Slievenamon Mountain in Co Tipperary. With in-line bottle blowing facilities, sports capping and Reel-Fed label technology Glenpatrick has the solution to your beverage needs.

Lean Transform Project Objectives

Deliver competitive advantage to Glenpatrick Spring by operating the new Krones line to best in class OEE level. Take learning's from the improvement in the Krones line and implement across other parts of the business. Deliver these objectives through the implementation of the below projects:

- Lean Awareness Project – Rolled out to all employees
- New Filling Line KPI's
- Preventative Maintenance New Filling Line
- Management Development Training – Including Behaviour Assessment and coaching
- Lean Production Planning Wheel
- Warehouse Capacity Management

Key Challenges

The success of the project was to increase the OEE of the new Krones line to the rated running OEE of 85% that would sustain over a three shift cycle. In order to achieve this objective, a number of initiatives needed to be put in place:

- Workplace Organisation – Rollout of A frame Change Parts
- Standard Work – Implementation of Front Line Asset Care by operators
- Standard Work – Identification of best practice for each of 17 changeover equipment points on the line and rollout of point of use training material to operators across 3 shifts
- Implementation of Preventative Maintenance for the Krones line with software package to manage the PM annual program
- Rollout of A3 problem solving

Rollout Behaviour Assessment to Operation Manager and Production Managers and rollout of Core Behaviour Matrix to all employees to ensure right behaviours are aligned to job needs to drive the required performance.

Improvements delivered on the Krones line were rolled out across the glass line and in support departments across the business

Project Outcome

Through the successful implementation of the lean transform program, the company has gained a competitive advantage over its competitors by operating the site through lean as the way it now operates the business. Standard work is in place to ensure people do the job in the approved way they have been trained.

A3 problem solving is used to correctly define a problem and put in place corrective action counter measure. Cockpits are used effectively daily to run the business, ensuring performance is tracked, good communication exists and everyone is held to account in doing their jobs.

Core behaviours have been rolled out as part of a performance management process to ensure people's mindsets are aligned with the job requirement to drive high performance across all areas of the business.

OEE line performance on the Krones PET line has been increased from 60% to 76% and yield loss has been reduced from 2.5% to 1.4%. This has resulted in an annualised cost saving of €750,000. Lean tools and practices are now embedded in the daily execution of the process to enable the team to continue the improvement journey to achieve 85% OEE.

The lean training of tools and practices has been extended to the glass line with positive impact on metrics.

Glenpatrick Spring Ltd

Powerstown
Clonmel,
Co. Tipperary

Website: www.glenpatrick.com



More Information

LEAN Business Offer
<http://bit.ly/1nKYJql>



THE SHABRA GROUP IS IRELAND'S ONLY INTEGRATED RECYCLING, REPROCESSING, MANUFACTURING & SUPPLY COMPANY WHICH RECYCLE AND REPROCESSES ON SITE ALL TYPES OF PLASTICS, INCLUDING FILM AND POST CONSUMER BOTTLES.

Shabra uses its own feedstock to manufacture recycled sacks and also exports recycle material. Shabra reprocesses Post Consumer PET Bottles, Post Consumer HDPE Natural Bottles and Baled Industrial LDPE/LLDPE Film and exports the finished PET flake, HDPE/LDPE flake.



Rita Shah



Oliver Brady

“The Lean Plus process has made a significant positive impact on our business. It has given all employees greater visibility and input into our business”

Rita Shah & Oliver Brady,

Lean Plus Project Objectives

- Educate the organisation on the concepts, applications and benefits of a Lean implementation.
- Develop an understanding of the current recycling and manufacturing value streams. Identify and implement improvements to improve overall business performance.
- Increase overall sales for recycled flake/pellets. Increase the supply of bottles for recycling.
- Develop and implement key business metrics to provide greater visibility of performance in the production and customer service areas.
- Implement 5S in the warehouses and production areas to improve housekeeping, process flows and reduce waste.
- Increase communications across site through better use of visual management.
- Support the personal development of key management staff in the understanding / implementation of the lean journey

Key Challenges

- The economic climate in Ireland during the period of the lean implementation – 2011/2013.
- The increased cost of doing business in Ireland – rates, local charges, insurance costs.
- The increased levels of inferior imported product driving down pricing in the tender process.

Key Changes

- Several significant plant layout changes based on 5S principles have been implemented to improve plant performance and housekeeping. These include equipment layout changes, greater access to resources by operators and simplification of processes.
- A Balanced Scorecard was developed for the business to identify, monitor and act on key metrics. A weekly governance structure has been established to review operational performance.
- Greater use of Data Analysis and Closed Loop systems to control key processes.
- An Operational model of Production Capability was developed which identifies the best manufacturing option based on Customer Demand, Production & Materials Costs.
- A Stock Kanban replenishment process has been developed to eliminate stock outs due to insufficient finished goods / inventory inaccuracies.
- Increased communication has been achieved through additional departmental meetings and posting of performance metrics.

Results

- > €200K savings per year identified and achieved
- Increased Flake/Pellet Sales (Recycled Plastic Sales) has increased by 88% from Q1'2011 to Q3'2013.
- OTIF PET Recycled Plastic Sales - Customer Service Performance has increased from 45% (2011) to >95% (2013).
- Plastic Sales Customer OTIF has increased from <50% (2010) to >95% (2013).
- Production Schedule Adherence has increased from <50% (2010) to >95% (2013).

The Shabra Group
Rita Shah/ Oliver Brady

Killycard Industrial Estate
Castleblanay
Co Monaghan
Website: www.shabra.com



More Information

LEAN Business Offer
www.enterprise-ireland.com/en/Productivity/Lean-Business-Offer/

TOPFLIGHT TRAVEL GROUP IS ONE OF THE UK AND IRELAND'S LEADING PRIVATELY-OWNED TRAVEL COMPANIES WITH BRANDS WHICH INCLUDE TOPFLIGHT HOLIDAYS, TOPFLIGHT FOR SCHOOLS, DIRECTSKI.COM, SKI BEAT, SKI MCNEILL AND BLISS CAMPING.

Its dublin head office is home to the company's senior management, sales, operations, finance and software development teams The company has offices in Brighton (UK sales) and the French Alps (resort and chalet operations). The company's staff levels vary from 70 to 220 in line with the seasonal requirements of the business.

Lean Transform Project Objectives

- Instil 'Lean Culture' throughout the organisation, the business had become fragmented with various different mergers and the plan was to tie it all together with the Lean Philosophy.
- Apply cost savings to our key processes and eliminate waste throughout entire course.
- Develop clear communication lines so that everyone shares in and strives towards the common goals of the organisation.

Key Challenges

- Difficult to find similar service companies who employed lean methodologies, so it made the path a difficult one to navigate.
- Processes in our industry are not as visible as those in manufacturing environments. They cross geographical silos and encompass many different departments and they're fairly complex making it more difficult to identify the waste. It required much more detailed process mapping, investigations and strong problem solving tools before true waste was discovered.

"The Tools and techniques are important but, if they are to benefit an operation, they need to be used and implemented by people."

Key Changes

- Although it sounds obvious, we focus our energies at all times now on the end customer.
- Now, we eagerly challenge the status quo.
- Finally as a result of Lean, the culture in the company has shifted significantly and with various different projects undertaken has resulted in the business surviving in extremely difficult market conditions.

Results

- Kaizen event, where we looked at making improvements to transporting our customers from the airport to their ski resorts.
 - 32% reduction in cost per guest (€250k savings)
 - 45% improvement in transfer planning efficiency
 - Improved customer service, reduced poor responses by 36%
- Technology – the introduction of agile processes including Kanban, improved on project delivery, last year 100% of projects undertaken were completed within 2 weeks of scheduled completion.
- Yellow Belt training & certification, resulted in the following improvements
 - Pricing tool – enabled more specific manipulation of holiday prices increasing our margin year on year by an average of €30 per booking.
 - Streamlining the processes and procedures in both our sales & operations department resulted in department running at 6480pax per FTE in comparison to 3751per FTE the previous year.

TOPFLIGHT TRAVEL GROUP

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www.topflight.ie



More Information

LEAN Business Offer

www.enterprise-ireland.com/en/Productivity/Lean-Business-Offer/

BUTLER MANUFACTURING SERVICES IS A SPECIALIST DESIGNER AND MANUFACTURER OF WASTEWATER TREATMENT PRODUCTS. THE COMPANY IS LOCATED IN LONGFORD.

Butler Manufacturing Services Ltd. (BMS) was established in 1986. BMS has implemented a World Class Manufacturing (WCM) programme since 2002. BMS products are now in over 37 countries world-wide.

Project Objectives

- The LeanStart initiative focused on :
- Establishing a cost of sales model covering materials and labour for main products
- Developing a P&L for 2011
- Identified and Quantified improvement programmes to bring company costs back into line
- Objective was to identify improvements that would bring company into breakeven situation

Work Programme

- LeanStart

The Lean approach places an emphasis on teams and team-working where the power of a well-functioning team can be the difference between success and failure.

Project Outcome

The key improvement measure used was Operating Expenses as a % of turnover. This was tracked back on various P&L's to 2008. Based on the status quo, Operating Expenses will account for 64% of sales. As a result of implementing agreed initiatives this Operating Expenses will reduce to 41% of sales. The initiatives include:

- 20% Reduction in overheads
- 10% reduction in material costs
- 25% increase in productivity
- 30% increase in sales
- 5% increase on selling price

Meeting these objectives in 2011 would result in the company achieving a 10% net profit.

BUTLER Manufacturing Services Ltd

Strokestown Road
Longford

Website: www.butlerms.com



More Information

LEAN Business Offer
www.enterprise-ireland.com/en/Productivity/Lean-Business-Offer/

KLASMANN-DEILMANN IRELAND HARVESTS PEAT MOSS AND MANUFACTURES HORTICULTURAL SUBSTRATES FOR PROFESSIONAL GROWERS.

Klasmann-Deilmann Ireland [KDI] was founded in 1982. The company's products are now distributed throughout the world with 96% of its revenue being generated from exports. KDI is the first SME in Ireland to partake in all stages of Enterprise Ireland's Lean Programme.

Lean Transform Project Objectives

- Maximise the peat harvest by reducing collection times from 3 ½ days to 2 days.
- Embed a 'problem-solving' culture in the company.
- Eliminate non-value add activities in the office, factory and peat production areas through process standardisation.
- Increase factory output by implementing quick changeovers.
- Increase employee engagement through A3 improvement projects and weekly improvement meetings.

Key Challenges

- Labour intensive industry.
- Competitors with lower labour costs.
- High transport costs and increased lead-time due to export nature of the business.
- Highly weather dependant industry.
- Some employees feel 'too busy' for Lean activities.
- Not all staff engaged with the process initially.

"The single greatest benefit of our Lean journey has been the engagement of all our people in the process. Now everyone at every level in the organisation feels empowered to initiate improvement actions."
John Neenan, MD

Key Changes

- Increased communication through weekly improvement meetings.
- Gradual shift from reactive to proactive thinking.
- Increased participation of all staff in improvement activities.
- Greater sustainability through weekly waste walks.
- Front-line employees now lead projects affecting their area of work.
- Successful Yellow and White Belt Certification for 20 employees leading to a greater understanding of Lean concepts.

Results

- 10% reduction in processing time for sales orders.
- Reduction of 35% in time taken to screen peat materials, leading to an annual saving in excess of €60,000.
- Increase in milled peat production by 66%, leading to cost savings of €34,000 and increased sales revenue of €200,000 per annum.
- Implementation of 300+ improvements through weekly idea meetings since 2013.
- Greater awareness of production performance through key metric tracking on 'hour by hour' boards.

Klasmann-Deilmann Ireland
Limited
Killinagh
Rathowen
Co. Westmeath
Website: www.klasmann-deilmann.com



More Information

LEAN Business Offer
<http://bit.ly/1nKYJqI>



STERIPACK IS THE PARTNER OF CHOICE FOR CLEANROOM STERILE PACKAGING SOLUTIONS AND CONTRACT MANUFACTURING SERVICES FOR MANY OF THE WORLD'S MEDICAL DEVICE, PHARMACEUTICAL AND ALLIED HEALTHCARE INDUSTRIES OFFERING THE COMPLETE SUPPLY CHAIN SOLUTION FROM INITIAL CONCEPT TO FINISHED PRODUCT

SteriPack has a strong global presence with manufacturing facilities located in Ireland, Poland Malaysia and the USA

Project Objectives

- ▶ To enhance a Problem Solving Culture.
- ▶ Use data to drive Continuous Improvement activity.
- ▶ Enhance teamwork.
- ▶ Create a visual work floor where abnormality at a glance was possible.
- ▶ Invest more time to coach and develop our people who are our most valuable asset.
- ▶ Create an environment that allows us to set expectation and challenge our workforce in a positive way.

Key Challenges

- ▶ Different approach to data collection to drive activity.
- ▶ Increased engagement of operators during Problem solving.
- ▶ Looking at Organisation structure to improve support during Continuous Improvement.
- ▶ Trending Re-occurring issues affecting production using data and displaying it visually beside the machines.
- ▶ To increase operator ownership of problems through increased engagement.
- ▶ To allow Supervisor more time by allocating a Team Leader to handle day to day issues usually handled by Supervisor.

"Our Kaizen is driven by data collected by our operators, by doing this we tackle their biggest issues with the best possible solution to prevent re-occurrence, not only do they collect the data but they form the teams responsible for fixing the problems." Steripack

Key Changes

- ▶ Employed Toyota to develop key staff to coach and develop a new data driven Problem Solving Culture.
- ▶ New Line side KPI's which drive Kaizen activity.
- ▶ Pilot Team Leader role introduced to support Pilot area and generate reports based on KPI's.
- ▶ Regular structured Kaizen Meetings to tackle biggest issues.
- ▶ Layered Confirmation is used every day to sustain progress made.
- ▶ Organisation structure supporting Continuous Improvement.
- ▶ Time to coach, develop and challenge our workforce.

Results

- ▶ Increased availability and schedule adherence in Pilot Area.
- ▶ Increased OEE in Pilot Area.
- ▶ Decrease in re-occurring issues.
- ▶ New systems developed and successfully implemented.
- ▶ Projects based on data collected by Operators themselves.
- ▶ Increase in team based projects.
- ▶ Increase in ownership.
- ▶ Faster escalation of issues which means quicker resolution.
- ▶ Time invested into coaching our Operators.
- ▶ Team Leader dedicated to Area to support Production and help drive Improvement.

STERIPACK

Kilbeggan Road
Clara
Co Offaly
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SteriPack

More Information

LEAN Business Offer
<http://bit.ly/1eCo7iJ>



BURNSIDE EUROCYL IS A HIGH QUALITY HYDRAULIC CYLINDER MANUFACTURER WITH OVER 40 YEARS EXPERIENCE IN THE DESIGN AND MANUFACTURING OF HYDRAULIC CYLINDERS FOR THE OEM MARKET.

Burnside Eurocyl is a Carlow Town based company with leading European customers such as JCB and The Wirtgen Group. Burnside uses industrial processes such as machining, welding and manual assembly on all cylinders produced in-house.

Lean Transform Project Objectives

- Develop the workforce to become lean minded with the ability to identify wastes and suggest improvements.
- Focus on KPI's in order to achieve savings and increase revenue streams in the most beneficial areas.
- Develop a system of planning production across all manufacturing processes within the company in order to get the most out of our existing resources.
- Improve the layout of the factory to make material flow in an efficient and ergonomic manner.

Key Challenges

- Company going through a period of expansion reducing availability of key staff to work on lean projects.
- Wide variations in end products reducing the potential for streamlining of processes.
- High levels of stock needed to smooth out disruptive supply chain.

"A lean production system requires not only tools but the dedication of management and the buy in of all personnel"

Key Changes

- Development of standard work practices and workstations using 5S principles.
- Accurate system for measuring the output of each cell and operator.
- Reduction in the number of tools required for assembly.
- Removal of non-value adding processes.
- Development of tailor made MRP system to optimise material stock.
- System introduced to reduce process times and increase quality of the finished product from machining and welding operations.
- Development of in-house built machinery to automate work intensive processes.

Results

- Reduction of setup times for machining operations.
- Reduction in the amount of stock raw material.
- Better flow of material with less work in progress.
- Increase in profitability of low volume batches.
- Productivity increase of 8%
- Reduced quality issues by 10%

Burnside Eurocyl

O'Brien Road,
Carlow

Website:
www.burnside-eurocyl.com/



More Information

LEAN Business Offer
www.enterprise-ireland.com/en/Productivity/Lean-Business-Offer/

