

Thursday 2 July 2009
Monday 6 July 2009
Tuesday 7 July 2009
August and October 2009

Master of Science in **Industrial Engineering** and management of logistics and production systems (MLPS)

Thursday 2 July 2009

14h



Ivan HUERTAS (*Colombia*)

Airbus France [44 Bouguenais, France]

Visual Management deployment and animation of 5S workshops within the framework of OPAL (Optimized Panel Line) Project.



Airbus Nantes is one of the four French establishments of the company EADS, world actor of foreground in the sectors of aerospace, defence and associated services. The site of Nantes produces all of the central wing boxes of the Airbus range and is also specialised in the achievement of structural parts out of composite materials.

The purpose of OPAL project is to optimize the workshop area under a Lean approach, in order to reduce and control the manufacturing flows of carbon panels and to reach the capacity required by the A380/A400M programmes.

The internship integrates two missions:

- To design and deploy a workshop management tool in order to pilot the resources, the industrial means, the raw materials and the parts flows, while meeting the requirements of the users. This tool has as objective to improve the effectiveness in terms of quality, costs and service level.
- To achieve a preliminary project for the installation of a pull production system.

Monday 6 July 2009

9h



Tatiana VANEGAS MORALES (*Colombia*)
Reckitt Benckiser [91 Massy, France]

Inventory model to optimize the tradeoff between service-level and costs in health and personal care products.



Reckitt Benckiser is a global force in household, health and personal care. The biggest challenge is always getting the right products to the right places at the right cost. But there are many other complex challenges on the long route from the raw materials to the final customers' homes. One of these is for example; medicine regulation constraints, price and commercialization rule changes, fast-changing global product portfolio. The mission is to optimize all cost factors while anticipating trends that will impact future operation.

The main objective of the internship is to determine an optimal stock model for healthcare products in order to minimize the total cost of inventory and increase the service level. In order to fulfill the objective 3 specific objectives have to be completed.

- To implement opportunities of improvement in a short term identified in the flow information analysis in order to increase the reliability of the inputs, and reduce uncertainty during the planning activity.
- To reduce forecast error by the implementation and adjustment of Lewandowski forecasting model parameters and improvements in the S&OP information flow.
- To implement a methodology to determine an optimal inventory policy.

10h



Jitendra MISTRY (*India*)
Saint-Gobain Glass [93 Aubervilliers, France]

Developer MKT2: "Manufacturing Know How Transfer and Training".



Saint-Gobain Glass, world leader in glass manufacture created an international project MKT2 «Manufacturing Know How Transfer and Training» at the International Technical Department (DTI), Paris; which involves training of production operators to 30 factories around the world, with 22 project managers, 30 MKT2 developers and 3000 people trained per year.

MKT2 program is based on e-learning session mixed with field training. It is a computerized visual simulation package by which production operators can train and experiment with changing elements of the glass-making process to see what would happen without affecting the real-life process, thus building knowledge and improving understanding using a hands-on approach. The e-modules they are using to train production operators look like PowerPoint slides with Flash animations and videos. This system helps to ensure greater consistency in the best working practices in all factories, allowing the same manufacturing quality to be obtained in all facilities.

The mission of the internship is to understand the functioning of the patterned and wired glass production process and to create two reference e-learning modules (in terms of production, quality, EHS Environment Health and Safety, etc); which will after are used for all facilities manufacturing patterned glass (e.g.: Germany, Spain, China).

Tuesday 7 July 2009

11h



Ima RAHMANIAR (*Indonesia*)
Airbus France [44 Bouguenais, France]

Transforming the Production and Logistics System of the Ailerons A340 from Push to Pull.



AIRBUS, a part of European Aeronautic Defense & Space Co (EADS) is a leading aircraft manufacturer, with the most modern and comprehensive aircraft family. Among all of the three Airbus sites in France, Airbus Nantes is a leader in the manufacturing of structural parts in reinforced carbon fiber sections, such as Ailerons for A340 and A380.

Currently, these production lines are organized in a push mode, and as a consequence they are suffering of a large amount of work in progress and significant surfaces are monopolized by warehouses and storages. Therefore, the proposed project is to identify opportunities to introduce Pull Systems (a customer order-driven production system) into the Ailerons A340 production lines, which decides how to manage demand to meet customer requirements, locate and size supermarkets or buffers between the designated process and give advice to deploy changes in detailed part, sub assembly or assembly areas. And also to select and implement appropriate pull signals.

This optimized system is planned to minimize work in process and storages, optimize floor space usage, simplify production signals and improve on-time delivery to the customers.

14h



Brenda JIMENEZ (Mexico)

Procter and Gamble [41 Blois, France]

To put in place new supply chain work processes for shampoo labels.

The plant of Blois produces shampoos of the brands Pantene/Head&Shoulders and Herbal Essence for Europe and a part of the Middle East. The customers request more and more differentiation of products and reactivity. The supply of the labels is one of the major things that limit the reactivity of the plant of Blois. In this context, the plant of Blois created a team to change the way of receiving the labels and set up the supply chain of this in Just in time. Two new suppliers were selected for the implementation of the project.

The objectives of this project are the following:

- to take part in the definition of the new work process.
- to coordinate and put in place Just in time work processes with new suppliers.
- to develop the plan of implementation for the second supplier
- to ensure the communication between the supplier, the plant and the technical support
- to carry out an analysis of the risks and to measure the advance of the project

August 2009



Sixto Alexander LOPEZ DIAZ (Venezuela)

CVG Venalum [Bolivar – Venezuela]

Approach for Modeling and forecasting Aluminium prices from both a technical and fundamental point of view.

KOBE STEEL - CVG VENALUM is a Primary aluminum Smelter, 4.000 employees, turnover of 1,25 billions \$/year, Project: Efficiently estimating and distributing limited financial resources is an important challenge at strategic level. At the beginning of each budget cycle (Preparation; Execution; and Evaluation) the Budget Department has to respond to the operational plans (after a carefully review of them) that the others managers and department heads have submitted. These plans outline the organization's programs, the Budget Department then have to determine into what extent the financial needs of these programs can be fulfilled, and will propose funding initiatives to meet these needs.

One of the main factors that has a great impact on the estimation of the Company budget for a specific cycle is the aluminum price, thus it is necessary to have a good forecast of the prices, forecasting primary commodity prices is not easy, due to its random behavior and the large amount of risk, speculation and uncertainty of the market, the idea is to develop a model that provides aluminum prices forecast in the short, medium and long term taking into consideration not only the technical analysis but also the fundamental aspects of the market, such a model in combination with the information provided by the external analyst services will allow a better approach in the price forecast and in consequence less deviations and corrections on the budget plan implementation, generating savings in time and manpower utilization.

This will involve extensive research and analysis; the participation in aluminum price strategy meetings held in combination with the others plants of the holding (ALCASA and BAUXILUM), reviewing and analyzing market outlooks and prices' forecasts reports generated for our information providers and build a good communication strategy with them in order to obtain the most of their services, good management of the information system and software applications, and excellent communication skills, analytical attitude, vision and reliability.



Amma Nyamekye BREW (Ghana)

Adwinsa Group of Companies [Legon-Accra, Ghana]

Assessing and Optimizing the Supply Chain of Adwinsa Group of Companies'



The Adwinsa group of companies is one of Ghana's leading and most respected business groups. The Group's businesses spread over 5 different business Units. These Business Units include the Publishing and Printing Division, the Hotel and Hospitality Division, the Quarry Operations Division, the Real Estates Division and the Educational Division. It currently operates in four (4) different countries in Sub-Saharan Africa with the headquarters in Accra, Ghana. The Group employs a total of about 300 people in all its Subsidiaries. The company was established as a limited liability company on the 5th of July, 1977. Adwinsa Group of Companies develops its products in response to customers' needs and the rapidly changing market conditions. The business development team works closely with producers to quickly define and deliver new and enhanced products. Adwinsa distributes its products through an extensive network of Retail and Wholesale Producers.

The company has identified from recent audits that procurement and supply activities contribute the most to its operational costs. There are also frequent occurrences of late deliveries especially in the Publishing Division. As an intern and the leader of a team of four the main objective is to find ways of cutting the costs that emanate from the Supply department of the company. The main tasks are to undertake an overview of the major activities of the Supply Department as well as the department's Information flow with clients both within and outside the company, carrying out a diagnosis of the current state of supply and procurement activities within the company's subsidiaries and propose solutions to optimise the chain to reduce cost, cycle time and slack.

From the preliminary stage, we have identified that a higher percentage of the cost comes from procurement and sourcing of goods and services especially those that are imported. Since the company's overseas procurement is done in partnership with the Ghana Supply Company, the current phase of the entire project is being done in conjunction with them (GSCL).

The result of the project will result in proposing a stimulus package to be implemented to help cut cost by about 30% and reduce slack by at least 25%.

October 2009



Macarena VALLEJOS VARGAS (Chile)

Valeo Services (93 Saint-Denis, France)

Logistics Coordinator.



Valeo is an independent industrial group focused on the design, production and sale of components, integrated systems and modules for cars and trucks, and ranks among the world's top automotive suppliers.

The group has 121 plants, 61 R&D centers, 10 distribution centers and employs more than 51,200 people in 27 countries world-wide.

Within the aftermarket area, Valeo Service, the internship's goal involves the consolidation and analysis of the Supply-Chain performance indicators for the 10 worldwide logistics platforms, optimizing the Inter-platform flows, supporting the Pull-flow deployment and analyzing LT & MOQ reduction opportunities.



Rocío ZAVALA (Mexico)

Vam Drilling – Vallourec (59 Aulnoye-Aymeries, France)

Development of a Supplier's Qualification System. Optimization of the Purchasing Department.



VAM Drilling is part of Vallourec group which is the world leader in seamless tubes manufacturing. It offers a complete range of high-performance products and services for the toughest drilling applications, including drill pipe, heavy weight, drill collars, accessories and performance drilling systems.

The project is developed in the purchasing department of the company; the final goal is to improve the supplier's evaluation system, in order to eliminate the non conformities obtained in the audit, and prepare the department for ISO 9001:2000 certification's renewal