

Providing Latam the leading technology to feed humanity

REVIEW



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EDITORIAL

Standing up to **Market Challenges**



2016 hasn't been easy in many countries where we operate.

The frequent combination of low prices of export commodities (especially oil), surplus food production and political changes, form a cocktail whose toxic result endangers economic health in entire regions and slows down business initiatives and investments.

For those like us who are in the business of providing solutions to the industry as complete projects or individual machines, the situation is equally complex and has forced us to reinvent ourselves. When the industry is not in the capacity of making new investments, it turns its eyes to process optimization. It tries to produce more and better by updating its technologies and making better use of the existing resources to ride out the storm.

We have become through the years into the bridge between the industry's needs and manufacturers. **CBH** is proud to be part of finding the solutions to these challenges and to understand those cultural differences, acting in accordance with them to benefit our customers and suppliers, aiming to achieve an efficient win-win formula.

CBH has a positive and objective outlook of its long term goals. Agribusiness' global challenge is to determine how are we going to feed to 10 billion people by 2050 and how water is going to be preserved. If we take a look to Latin America, a third of the world's available water sources are located in our region. Latin America has become the world's lungs, where new technologies have been developed which will make it possible to make contributions of paramount importance to the world's food supply. Our purpose as **CBH** is to provide Latin America with cutting-edge technology to feed humanity under our values of Leadership, Integrity, Innovation and Commitment.

I want to take this occasion to reaffirm our commitment and thank every single one of you for letting us be your integral partner and to the **CBH** team for being with me during the challenges and opportunities that our industry presents. I wish you and your families a year filled with health, happiness and many blessings in 2017.

Caroline B Hofland
CEO – CBH International

MEMORIAL

Eggo Haschke's life

With a heavy heart we would like to notify all of Eggo's friends, co-workers, and customers that Eggo Haschke passed away on August 6, 2016. After his long winning battle with cancer, other health issues arose and the good Lord called Eggo to him.

We all know Eggo is in a better place now.

Eggo was a legend in clipping and poultry packaging.

He was born in Breslau, Germany in 1943, during WW II. Growing up his family did not have much, since all was lost in the War. He turned to athletics and became a semi-professional volleyball player, travelling all over Europe, while studying Engineering. He completed his apprenticeship and earned a degree in Engineering. He joined the packaging industry in 1977 and he moved to the United States to take over an existing distributor and to develop the US clipping market. He succeeded in this job. Over the next 36 years he this business in the US from a company with 3 employees to a company with over 70 employees and worldwide sales. It was his idea to use clips to close poultry bags, not only sausages. Today hundreds of millions of bags a year are being closed by a clip.

Upon his turning 70 and a devoted career, the company decided to move in a different direction and ways were parted. Eggo was not finished working or ready to



retire, due to the work ethic he learned from athletics. He continued to use his ideas and know-how in packaging to help in the formation of E-Tek, a new processing and packaging innovation company.

Eggo was a good friend to all of us and would always give his last shirt to whomever needed it.

We miss him dearly.

*Eng. Klaus Benz
Managing Director
E-Tek Company*



A company's results can be expressed by the following equation:

Business Results = Strategy + Execution

Less than 10% of effectively formulated strategies are correctly executed. In other words, strategy execution is highly related to project direction and it represents the fundamental reason for its importance within leading organizations, nowadays.

In general, the typical project environment is usually presented as follows:

- Projects end late and with higher costs
- Little or no formal training in project management
- There are no methodologies, standard processes

or similar forms

Current trends are focused on the creation of Project Management Offices (PMO) as a better way to implement standard methods. When creating a PMO where there hasn't been a previous project management culture, we have to be careful when determining the initial scope and coverage. The implementation shouldn't drown in the complexity of the model. Since 2013, I've had the opportunity to organize and implement a PMO for the execution of



investment projects, covering the following fields: engineering, constructions, equipment, assembly and asset maintenance. The management model is based on the PMI guidelines. However, a simplified scheme has been adopted:

1. Organization and Project Planning

The PMO has a simple technical structure whose function is to plan the project's life cycle and to supervise the execution in its different stages.

It's fundamental to assign the proper importance and time to the planning stages and engineering. Is phrase : "If you fail to plan, you are planning to fail".

2. Information Management

Projects should be supported with sufficient and concrete information that allows keeping under control the three constraints: scope, budget and time. The model is supported on MS Project and Project Server, as well as ERP.

3. Supplier Management

Since the model is based on maintaining a very

simple structure, most of the activities are done by hiring external suppliers for engineering, execution and inspection. Consequently, the model demands the suppliers' participation as strategic partners providing comprehensive solutions.

In the particular case of **CBH**, with whom we have worked together for more than 25 years, we have been evolving from equipment and service purchase brokerage to the delivery of comprehensive solutions, and **CBH** becoming an integrator of all the fields involving project execution with the capability of offering turnkey solutions.

The biggest benefit is that their clients can focus on their core business, by delegating other subjects to qualified and efficient specialists.

*Eng. Marco Larrea
Industrial Development Director
Pronaca*

ENVIRONMENTAL CHALLENGES

In Rendering Plants

Rendering plants are very common in the meat processing industry. Whether they are integrated to cattle, pig or poultry slaughter houses or operate as independent facilities they have an important environmental impact wherever they are located.

This environmental impact is positive and can also be negative. It's positive because it helps industry process the by-products of live-stock production, slaughtering operations, food processing and food service industries which otherwise would end up in landfills.

On the other hand, the environmental impact can be negative if the rendering operations don't have the required equipment for raw materials processing and treatment of wastewater and air emissions. The use of existing technologies will successfully minimize the impact of those emissions.

A rendering plant contains a wide variety of equipment, where water or air emissions originate. Concerning air emissions, it's important to differentiate between condensable and non-condensable vapors. This article is mainly focused on the treatment of air emissions as waste water treatment has been covered in other issues of this newsletter.

Condensable vapors originating from the cookers' operation, need to be condensed first. The condensation can be done in shell and tube heat exchangers or air-cooled condensers; being the latter the system of choice in most modern plants.

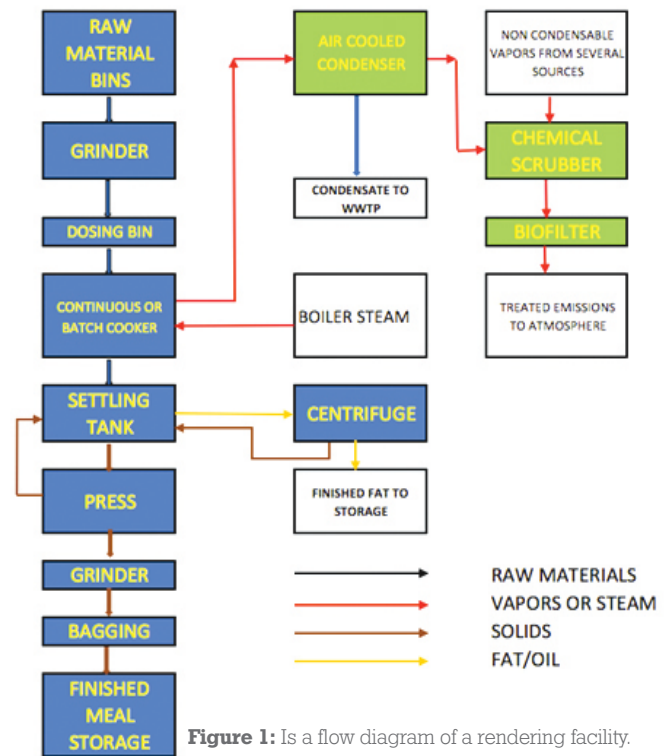


Figure 1: Is a flow diagram of a rendering facility.

Once condensation has taken place, the remaining vapors need to be further treated in a chemical scrubber where the remaining odor is practically eliminated. In this scrubber are also treated the non-condensable vapors coming from other sources in the rendering plant.

The final stage in odor treatment is the use of bio filters. A bio filter is an enclosed tank or container with a lower plenum where the air coming from the scrubbers is extracted and taken. The air then, passes through a layer of organic material, usually wood chips, where the existing bacteria take care of decomposing the remaining pollution. Treated air is released into the atmosphere.



Fig. 2: Air cooled condensers in a rendering plant

These odor control systems are managed by automated control systems which monitor pressure, temperature, air flow and other parameters of importance.

As a summary, the successful operation of an odor control system depends, among others, on the following factors:

- Raw materials' freshness. Offal, feathers, blood and other materials tend to decompose very rapidly, especially in hot weather. Therefore, the



Figure 3: A chemical scrubber (Courtesy: Reinluft)

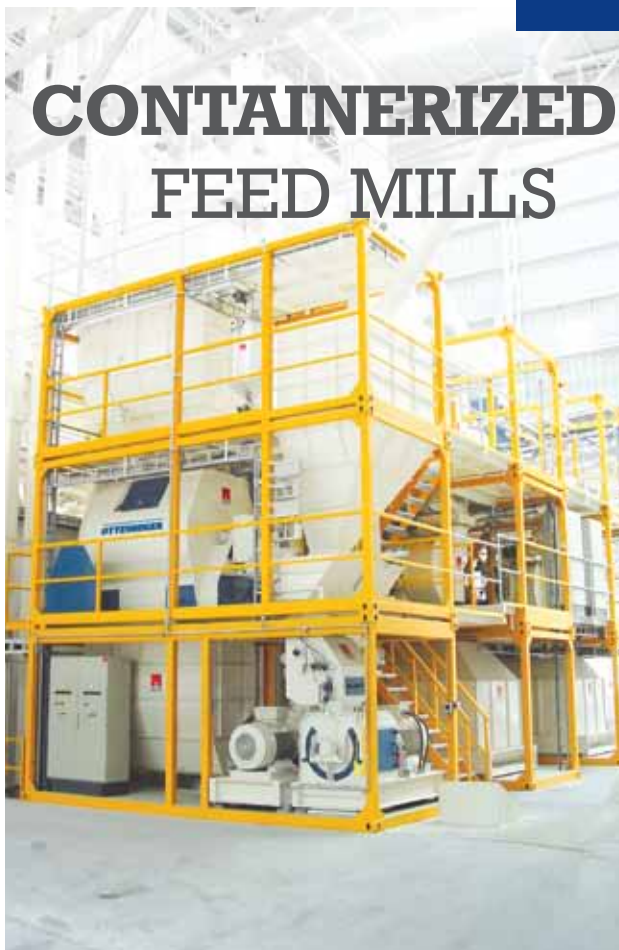
sooner they are processed the better.

- Physical design of the rendering facility. Facilities need to be completely enclosed and operate under negative pressure, therefore avoiding uncontrolled air emissions.
- Adequate equipment maintenance will help proper cooking cycles required by the raw materials being processed.
- Automation. To achieve the best results in terms of product quality and air emissions a high degree of automation is mandatory, under the control of a dedicated PLC system.

CBH International together with its esteemed partners Thor Maquinas from Brazil and Reinluft from Germany has been successfully serving its customers in the implementation of odor control systems for several years. We look forward to serving you and your company, as well, in the near future.

*Eng. Fausto S. Pérez E.
Executive Vice President CBH Intl.*

*Bibliography: Essential Rendering Meeker, David L; National Renderers Association, 2006
Render The International Magazine of Rendering, National Renderers Association, Aug. 2012*



Nowadays a feed mill could be designed and built as either a conventional or containerized plant. A conventional feed mill design requires the main building or super-structure to accommodate and support all the equipment required by the process.

Containerized feed plants are designed in a modular way, and normally contain all the plant equipment installed into a support structures with the size of one or multiple standard 20' shipping containers. These modules or containers are laid out in a main building or super-structure that becomes a "shell" protecting the plant from the external elements.

Process & Engineering Design and Functionality

Whether building a conventional or containerized plant, it should be designed to fulfill a specific feed

manufacturing function successfully. This applies for extrusion and pelleting plants.

A containerized plant ensures this responsibility is left to the supplier, and leaves the customer with more time for marketing and operational business development.

Installed, assembled and tested at point of Manufacture

In a containerized plant, all the equipment, including the electrical and process control devices, are installed, assembled and tested at the point of manufacture before shipping takes place. Days and even weeks could go to waste as customers are trying to get conventional plants and equipment tested and fine tuned before start up can take place.

Reduced Installation Time on-site

On-site preparations such as foundations take place while the containerized plant is being manufactured. Once the containerized plant arrives on-site installation can normally happen in record time. It is not uncommon to cut installation time by almost 50% in comparison to conventional plants.

No Support Structures and Lower Freight Costs

The container sized structures that already contain the installed equipment, also serve as support structures for the entire plant. In a containerized feed mill a building only needs to be designed to carry its own weight as the containers installed inside the building carry the load of all plant and equipment. No special crating and shipping materials are required as the individual container modules are simply clad with protective sheets meeting international shipping requirements and standards.

*Eng. Hennie Pieters
Aquatic Feed Engineer
Ottevanger Milling Engineering*

Aqua Industrial Watertreatment BV Marel changed into **Marel Water Treatment BV**



CURIEAU 2.0 mejorado

AQUA Industrial Watertreatment B.V., being part of the MPS group, joined Marel in January 2016. United, the two groups are at the forefront in developing full-line solutions and equipment for the food related industry. AQUA has continued to operate under the "AQUA Industrial Watertreatment" brand. As of January 1st 2017 this will change and all AQUA /MPS operations will be included under one brand identity: Marel.

Marel will still provide you with the services, systems and support you are used to rely on. Marel Water Treatment will work with the experts in Marel's other areas to develop new technology and add to their knowledge. Marel will be able to draw on an industry-wide expertise to help you strengthen your business.

VOLTAFLOT: a new compact anaerobic treatment system

In the nineties of the last century Aqua introduced

the now well-known BIOFLOT® system for aerobic biological systems. Now Marel Water Treatment has made this technology available for anaerobic treatment with the VOLTAFLOT system. It reduces the size of the anaerobic reactor by adding a DBF (Dissolved Biogas Flotation) unit resulting in higher conversion rates. VOLTAFLOT uses this proven flotation technology to ensure fail safe & flexible operation.

Water Scarcity? Re-use waste water with CURIEAU®

In 2008 AQUA introduced the CURIEAU process for turning waste water into re-usable process water. Our CURIEAU 2.0 new re-use system has been introduced in 2015 in Asia and is now also available in North and Latin America. It's a smart setup that purifies pre-treated waste water so the water loop can be closed and both intake & discharge volumes can be significantly reduced.

*Eng. Mark Beerten
Managing Director
Marel Water Treatment BV*

CBH INTERNACIONAL

OUR CORPORATE VALUES



Five years ago, a few months after I joined CBH, the company presented me with the challenge of getting involved in sales. It was a great pleasure to accept this challenge, that gave me the opportunity to broaden my horizons, grow up professionally and as a person, meet clients and suppliers, and make friends.

Several factors are combined when you start new challenges; you have more receptivity and discretion in things. I realized that more than machines and equipment, costumers needs solutions and long term commercial relationships; in other words a strategic partner.

In **CBH** we aren't only in our customers' shoes, we walk with them.

In this way following our corporate values, we have a guide to satisfy our clients' needs:

INTEGRITY. Relationships with customers are created before placing a purchase order and must remain the same after shipping takes place,

that's why we must be consistent with what we think, say, and do. That's what makes us trustworthy in our clients' eyes.

LEADERSHIP. We place ourselves in front of the customer's needs by listening and advising them, by making their dreams and projects ours.

INNOVATION. In **CBH** we prepare ourselves on a daily basis, searching for the best technological options and providing reliable equipment from renowned brands.

COMMITMENT. We share time with our clients in the field, when their cargo arrives and during the installation of their equipment.

Thanks to these corporate values our clients have placed their trust in us. I'm happy to be part of their success.

Econ. Alex Salguero
Senior Sales Manager Central América

CBH SOCIAL RESPONSIBILITY
THE MAJESTY CHARGE
Fighting against Prostate Cancer



Every year **CBH International**, as part of its social commitment donates part of its net profit to the Prostate Cancer Foundation (PCF) to finance the research on better treatments for the cure of prostate cancer. PCF has financed over 1500 programs in almost 200 research centers in over 20 countries.

This initiative was started to honor the life and accomplishments of Bas W. Q. Hofland.

Bas was born in The Netherlands and from an early age he knew what he wanted and steadfastly traced the course of his life. In his short lifespan, his passion and intensity made him reach many accomplishments, both in his private and professional life. He was an innovator within the food industry. His legacy is present as the creator of the well-known "Buffalo Wings".

Bas finished studying in the USA; he decided to settle there and found in Caroline the love of his life. Both spouses' careers progressed, they found a wonderful home in Suwanee GA and were blessed with the birth of their daughter Nicole.

Given his sudden illness he was forced to change plans, but he never admitted defeat. He faced the battle and was successful to use the time he had left. All the way to the end he kept control and was entirely devoted to his family, leaving as a legacy his spirit and his teachings.

For donations: www.pcf.org/BasHofland





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