

Clextrusion

Summary

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Change in ownership of Clextral : Interview of G.JOBARD

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Functional food for pets...

CD-rom

"tells it all" about fish feed extrusion...

In brief

This new CLEXTRUSION illustrates Clextral's commitment to our customers. First, in our pledge to provide high performance equipment tailored to our needs, we offer the Evolum range. In our quest to develop precise and reliable solutions, both product and process, we describe an installation of a pet nutriments line. Finally, in our commitment to transfer knowledge and expertise to assist in your extrusion projects, we offer a CD of our well-attended Fish Feed Seminar, held in December 2000.

Our ultimate goal is to give you, our customer, the tools for extrusion success through our development of innovative equipment and cutting edge technology.

Jean-Marie BOUVIER. Extrusion Business Director
Member of the Board of Management

www.clextrusion.com

CLEXTRAL

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Change in

CLESTRAL'S shareholder structure has changed since 19 June 2001. We met Georges Jobard, the Chairman of the Management Board, who described the changes and their consequences for the way the company works, the products and the staff.

Clextursion : *First of all, could you explain to us why CLESTRAL has changed its shareholder structure?*

G.Jobard : *CLESTRAL has seen various shareholder structures in the past. The Extrusion activity was started up in 1956 in the Compagnie des Aciéries et Forge de la Loire. That company was then merged with Creusot-Loire. In 1985, CLESTRAL became a subsidiary of the Framatome Group. Today, in accordance with the policy of the French State, Framatome is reorganizing to focus on two activities: Nuclear power and Connector techniques.*

This restructuring led Framatome to search for motivated partners for the past few years, to develop the subsidiaries whose activities were not linked to these two core activities.

As far as CLESTRAL is concerned, considering its good financial health, the growth in its sales, and the cohesion and expertise of its staff, Framatome looked for a solution that would provide good long-term prospects for the company and enhance developments without risking the company's stability, especially concerning products and services.

Clextursion : *Did you say "in the past few years"?*

G.Jobard : *Indeed, the process was a careful one. Over time, various alternatives were studied and compared, and the staff was informed; some of them were involved in the process. Finally, Framatome accepted the offer made by a group of French investors, with strong financial backing, together with Clextural's management, which is present among the shareholders.*

Clextursion : *Could you give us further details as to who these investors are?*

G.Jobard : *There are three entities. First of all ATRIA, an investment fund set up in 1999 by an experienced team coming from CFI, a subsidiary of Crédit Commercial et Industriel Bank. The second investor is the Union d'Investissement Company (UI), which is the investment subsidiary of Crédit Agricole Bank, one of the ten biggest banks worldwide, and which invests its own funds. Atria and UI have shared experience and the field of machinery and equipment, especially in food production and processing, is a familiar one for them. Their interest in Clextural is directly linked to its reputation, its highly competitive positioning, the company's solidity and its international renown. Finally, GIMECA, the investment Bank of the Fédération des Industries Mécaniques in France, was intent on acquiring a share of Clextural's capital. France is in fifth place worldwide in the field of mechanics, and GIMECA'S interest in Clextural can be explained by the image of technical innovation, quality and export successes that our company has built up.*



ownership

Interview of Georges JOBARD President of Clextral



Clextrusion : *And now, could you tell us whether these modifications will lead to changes for Clextral?*

G.Jobard : *First of all, we must realise that Clextral's progress has always been closely linked to developments among its customers. This essential point will remain unchanged.*

Our strategic approach will continue to be based on the search to satisfy our customers who purchase Clextral technology and expertise to create wider profit margins and increase their market share.

So we will continue with our R & D programmes, and intensify some of them in partnership with our customers.

This issue of Clextrusion presents the various types of Evolum twin-screw extruders that Clextral has successfully developed and marketed in the last two years. We are about to begin design work on new models, taking care to meet market needs, as we have done for existing models. It is important to remember that Clextral is the only manufacturer of twin-screw systems designed

for three types of industry: food processing, chemical and plastic production, and transformation of cellulose. Going beyond the twin-screw systems, a high proportion of our R & D resources is earmarked for the development of new applications.

Clextrusion : *Could you give us some examples of development programmes that Clextral is carrying out at the moment?*

G.Jobard : *Concerning the "foodstuffs" applications, we have developed protein fibrillation, and we are continuing to fine-tune it, on the basis of HMEC (High Moisture Extrusion Cooking). This innovative application, whose development was carried out in partnership with a French company, Protial, has been well received by the market and by the trade press, and detailed in an earlier issue of this newsletter. We are also working on another application, which will be covered by a patent and presented to you by our process engineers in the next issue of Clextrusion.*

In the field of chemicals and plastics, we are concentrating our-

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efforts on processes with high added value. Industrial installations, based on innovative processes, will be put into service on our customers' premises in the coming months; we will keep you informed as to these technological advances, some of which are linked to recycling plastics.

Clextusion : And what about the field of cellulose?

G.Jobard : *The process, which was patented about twelve years ago, has enabled us to sell complete industrial installations making pulp for currency paper. We will continue to pursue these opportunities. It is important to remember that the process presents numerous advantages as compared with the traditional process - technical ones, of course, but also economic and ecological ones. We have also developed a similar process providing the same advantages, for making printing and writing paper from cotton fibres. It is this process that is being installed in Uzbekistan. Our engineers are developing techniques using various types of cellulose fibres which enable specific needs to be met by adapting the functionalities of the fibres.*

Clextusion : Clextral also has an activity as a manufacturer of dosing pumps. Do you plan to continue with this activity?

G.Jobard : *DKM pumps are very often integrated in the processing lines we supply, so it is logical for us to conserve this activity. Moreover, DKM pumps are*

renowned for their reliability and their sturdiness. We will continue to carry out our policy in this field by developing our service capacities for users.

Clextusion : Speaking of service, this is one of Clextral's well-known qualities. What are your plans in this domain?

G.Jobard : *It is obvious these days that for industrial companies, the value of an equipment manufacturer is measured both by the quality of the equipment it designs and manufactures, and by the quality of the service it provides to its customers. Of course, we will continue to apply our current service policy, and seek to move even closer to our customers, especially from a geographical point of view. We are also developing new services, which will be announced in the near future. Along this line, within our American subsidiary Clextral Inc, in Tampa, we have set up a full "product development platform" dedicated exclusively to our customers, including an "equipment, logistics (offices, telephones, etc.), process engineer, and labour" unit. This has been operational for over a year now, and demand is increasing, including demand from companies in Europe. This development gives customers access to cutting edge technology and expertise at a more local level.*

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Interview of Georges JOBARD President of Clextral

Economically, it is a service that provides immediate profitability and enables the R & D engineers to carry out their developments more quickly, in full confidentiality, which is an integral aspect of Clextral's company culture.

Clextrusion : *You have just mentioned your American subsidiary. What are Clextral's plans on an international level?*

G. Jobard : *Clextral currently makes over two thirds of its sales outside of France. We have to be close to our customers and take into account the specific requirements of each part of the world, or even each country. The quality of our international network is and will remain one of our priorities.*

Our American subsidiary based in Tampa will retain its present structure. This is also the case for our Asia-Pacific office based in Singapore. We are currently exploring new locations

that would enable us to meet our customers' service needs even more rapidly. Finally, we will continue to rely on agents in certain countries, as we have always done.

Clextrusion : *Changes in shareholder structure are often harbingers of changes at management level. Is this the case for Clextral?*

G. Jobard : *Before dealing with the subject of staff, let me say that as a result of this change, the head office of Clextral SA will be in Firminy, in the Loire Department. This is where our activities began. The industrial fabric of the region is dense, especially in the field of mechanical engineering. The Rhone-Alpes region is the French region with the highest level of activity in mechanical engineering. The companies in the sector are grouped in associations to progress together faster, both in the Loire Department (Mécapole) and in the Rhone-Alpes region (Visio-Méca association).*



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To return to your question, the men and women who work for Clextral, with their experience and their expertise, are the secret of the company's success. The company management, who are members of the Management Board, have been able to win customer confidence for many years; they will keep their posts, and will also have shares in the capital. The Board of Directors is made up of three members who have been central to Clextral's development in recent years.

Jean-Marie Bouvier, who has been very active in the revival of food engineering in France and whose expertise in the field of extrusion technology is recognized internationally, has been responsible for Clextral's development for the last seven years. He will continue to have operational responsibility for

the extrusion activity.

Since 1993, Charles Travaglini has been the administrative and financial manager of the company. Throughout that period, Clextral has always had positive operating results. He will conserve his present functions.

As far as I myself am concerned, I guided the company in its expansion towards supplying complete production lines in the early 1990s, and I have been its Managing Director since 1992. From now on, I will be Chairman of the Board of Directors.

The Company's management and its industrial project will thus develop in continuity.

Clextrusion : Thank-you for all your explanations.



Mr Charles TRAVAGLINI

Mr Georges JOBARD

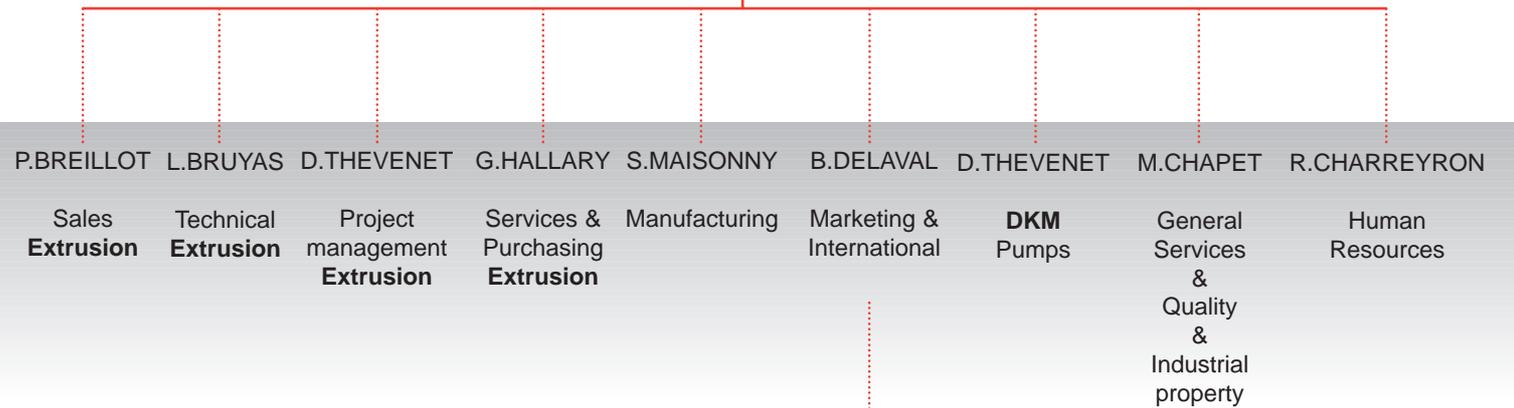
Mr Jean-Marie BOUVIER



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Interview of Georges JOBARD President of Clextral

CLEXTRAL S.A. MANAGEMENT BOARD



R Realizations



Functional food

Two biologists-nutritionists move into Pet Food extrusion :

The pet food market has seen considerable growth in recent years.

Preparation of fresh products in the home has given way to canned foods, semi-moist products (morsels) and dry foods.

The sector of pet treats and products for cats and dogs to chew has seen phenomenal expansion.

The segment of dry foods is showing strong growth and it still has exponential development potential.

Demand is moving towards more and more sophisticated products, in terms of both shapes and composition. Twin-screw extrusion technology offers many opportunities in connection with this market.

Among these original projects, Clextral recently installed a complete production line on the premises of **LABORATORIO DOTTORI PICCIONI**, in Gessate, not far from **Milan** in northern **Italy**.

Piccioni is a veterinary establishment with a staff of ten specializing in production of various types of food and medicines for pets such as dogs, cats, fish and birds, etc.

The company has always had a strong tradition of innovation: its reputation was built on the processing of laboratory animal feed in the field of biomedical and zootechnical research.

The range of products made by Piccioni included products coated with vitamins for which the mixtures were extruded by a local subcontractor.

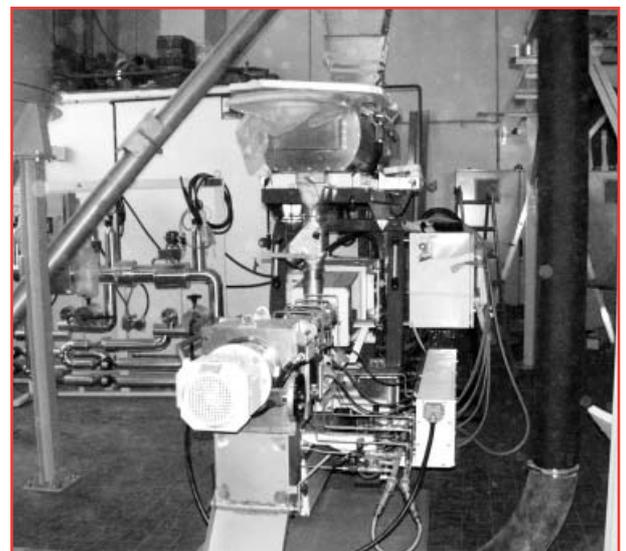
This solution was not always satisfactory, in terms of both quality and flexibility, and this led to the decision to integrate this element of production.

After successful tests in December 1999, Clextral's equipment and know-how were finally selected.

Piccioni required the production of small batches of food of very high quality, with original shapes, and a wide variety of compositions.

Clextral achieved their objectives with the design and manufacture of a complete extrusion line with an output of 500 to 700 kg per hour of very high quality food, for use in animal health products.

This innovative project was built round an **EVOLUM HT53H** model.



Work in progress in February 2001 - line under assembly

for pets

The flexibility provided by the hydraulic systems used to open the barrel was a decisive factor in the choice of this installation. The "automatic opening" feature made it possible to manufacture small batches thanks to the ease of frequent stopping and cleaning during production cycles.



Steam control units supplying the preconditioner and the extruder.

In addition to the high performance levels of the machine with its 66 kW motor, quality options were included for the equipment as a whole:

The Evolum is fitted with a High Capacity (HC) cutter with interchangeable blades to produce perfect shapes at high production rates. This cutter, designed by Clextral, is ideal for frequent changes in production.

Very special care was taken with the choice of peripheral equipment: dosing equipment and pumps, a 75-litre preconditioner, steam control unit, cooler dryer and coater.

The control equipment for the line, developed by our team of control engineers, is made up of an operator interface terminal of the Fitsys type, with the display fixed to the extruder frame. The line was installed and put into service in March 2001. Initial training on extruder was provided for the production staff. When the first products from this line reached the shelf, it brought to a close the initial phase of a fine example of collaboration ...



Core production unit (buffer hopper, preconditioner and extruder).



A CD-ROM "tells it all" about fish feed extrusion...

The fish feed market has shown strong growth in the last several years.

Last December 5 and 6, the CLEXTRAL sales, marketing, engineering and process teams held a seminar dedicated to the manufacture of fish feed using extrusion. The main objective of this meeting was to enable our customers, partners and contacts to share our knowledge.

We hosted an enthusiastic group of 17 people, some of whom had travelled a long way to attend the seminar. The interest generated by this workshop led us to design a CD-ROM presenting the main elements of Clextral's expertise in the fish feed application.

The **CD-ROM** is organized into 6 sections, with complete narration.

- The **CLEXTRAL** section presents our extrusion systems, their applications, our presence worldwide and our test centres.
- A short **VIDEO** shows production of fish feed on an EVOLUM machine.
- The **TECHNOLOGY** section describes the fish feed extrusion line with an animated synopsis, and provides information on the process; cooking, cooling, degassing and texturing.
- The **ADVANTAGES** section gives details of productivity, quality, flexibility, ergonomics, and services.
- The **WEB** section provides hyperlinks for communication with the CLEXTRAL sites.
- The **CONTACT** section gives the addresses and other details for Clextral establishments.

The CD is available in French, English and soon in Spanish.



In brief...

Jean-Claude RIOCREUX, is leaving his post as sales engineer to assume the position of **head of the extruder assembly workshop**.

Mohammed IAMMI has been assigned head of sales for French-speaking Africa, the Middle East, and Egypt.

He will be present on a stand that **CLEXTRAL** is sharing with its partner **AFREM International** at the **Algiers International Fair** from **13 to 24 June 2001**.

CLEXTRAL will be present on stand **14 A 49** at the 2001 edition of **K**, in **Düsseldorf**, from **25 October to 1 November 2001**.

An American Clextral team will be present at **AACC** from **14 to 16 October 2001** in Charlotte, NORTH CAROLINA.

New dates for VICTAM :

6 to 9 November, in Utrecht, **THE NETHERLANDS**, where we will have the pleasure of welcoming you...

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