



CFCM: Copper Fabricators Competitive Monitor

Year 2023 - n. 103/23 - – Excerpt for Lebronze Alloys

Cu2 Consulting's interview with Michel Dumont and Alexandra Dumont Nubery – President and COO of LEBRONZE ALLOYS, respectively - offers an interesting look at one of the most specialised companies in the field of copper and alloys processing, and an interesting insight into its development

Lebronze Alloys is a very special player in the copper and copper alloy processing industry; certainly not a producer of standard semi-finished products in large volumes, but rather a company with a very specialist profile and a leading position in various highly specialised niches.

This profile makes it a very strong player in the sectors in which it operates. However, it is perhaps a group that is less known to a wider audience both in detail and in terms of a comprehensive overview.

Moreover, the Group, which has recently undergone a strategic reorientation, is a composite reality in terms of products, markets served, organization.

The interview with **Michel Dumont** - President of Lebronze alloys since 2008, having taken over Le Bronze Industriel with a group of investors in 2006 - and his daughter **Alexandra Dumont Nubery** - COO of the Group since 2021 -, provided a better understanding of the Group's structure and organisation and an insight into the positioning of the company, its development guidelines and its objectives.

The double interview reports the initials of the respondents to the individual questions, i.e., "**MD**" for Michel Dumont and "**AD**" for Alexandra Dumont Nubery.

The Lebronze alloys (LbA) Group, based in France and formed through the integration of various companies, is a medium-sized supplier of high-performance copper and nickel alloy semi-finished products and forged & machined parts. To offer our readers a better understanding, could you start by providing information on the current scale of the LbA Group in terms of revenue, number of employees, and production

output possibly for copper semis and the rest separately?

MD: In 2022, our company generated a turnover of around €296 million, with an Ebitda slightly above €60 million. The Group currently employs 750 people, mainly divided into 3 semi-product foundry sites and 6 machining and service sites. Most of our income comes from semi-finished products: bars, wire, strips, tubes, blanks and profiles.

The LBA sites have just gone through 20 years of a very intense program of investments and adaptation to market needs: a new high-performance, high-capacity plant which cost a total of more than €200 million, major revampings in the other sites, a large number of acquisitions, a dynamic program for the development of unique manufacturing processes and the introduction of new alloys. In relation to these investments, it is therefore logical that LBA has attained its current level of performance.

Between 2011 and 2018, LbA followed a consistent and gradual organic growth path through the acquisition of 8 companies, mainly SMEs located in Europe. This expansion led to a total of 13 production sites in Europe and China. However, in response to the challenges posed by the pandemic, the company launched a comprehensive restructuring and rationalization process in mid-2020, resulting in the closure of 8 factories. The last 2 closings, Taverny and Custines in France, took place in 2022. Can we consider this reorganization process to be complete? And what key strategic directions have guided the company throughout this transformation?

AD: As early as 2019 – before the pandemic – we realized a strategic review of our portfolio of activities.

On this basis, we launched a refocusing plan to concentrate our resources on the areas where we can bring the maximum value to our customers: Cu and Ni based alloys, high specialties. The pandemic has accelerated this program and we believe we have implemented most of this plan.

While we were positioned amongst the worldwide

leaders for only about 50% of our activities, now we are one of the top 3 global suppliers for more than 80% of our activities, which are high value-added niches.

We've concentrated our efforts on exceptional metallurgy: the quality of our products is perceived by our customers as among the best, if not the best, on the market. In the last 5 years, we have deeply transformed the Group and each of its entities.



Michel Dumont
President of Lebronze alloys
Photo by courtesy of Lebronze alloys

Following the restructuring process, the LbA Group now operates 6 facilities, 3 of which are equipped with foundries (in France and Germany) while the other 3 (in France, Poland, and China) are dedicated to the production of parts and finishing processing. Considering the diverse range of products and alloys in the group's portfolio, it would be helpful to understand the internal organizational structure

in terms of BUs or Divisions. Could you please provide more details on how the Group is organized internally in this regard?

AD: Our organization is structured around 3 BUs, each of which is responsible for a specific market segment and product category. The BUs have their own industrial and logistics chains, which are adapted and aligned to the needs of their respective markets. Each BU is responsible for commercialization, product support, and production.

An illustrative scheme can be helpful for a better understanding and visualisation of our organizational structure.

Business Unit	Foundry	Service	Internal distribution
Bars & Design	Suippes	Breteuil, Rydzyna	LBA UK, LBA Asia
Rolled Products & ARCAP®	Bornel	Dongguan	
Rods & Wire	Lüdenscheid		

Regarding your overseas operations, the LbA Group formed two partnerships in the past decade. One of these JVs, Lebronze Tuffaloy North America (LTNA) produces resistance welding caps at Tuffaloy’s facilities in Greer, South Carolina. Is this venture successful and achieving the desired results and objectives?

MD: LTNA’s activities are in line with our objectives. This JV is a model that we could deploy for other specialty markets where local partnerships are relevant to provide finishing operations, technical support, and customer service.

On the other hand, there is no recent information available on the second partnership with SNCF, Wanlida, and ISI in China for the supply of catenary high-speed railway lines under the name SWLI. What is the current status of this partnership? Is it still active?

MD: Most of the objectives of SWLI have been achieved: the JV is now fully qualified to serve the Chinese very high-speed catenary market, a rapidly growing market. Production is ensured locally on

the basis of SNCF and LBA licensed technologies. The JV has all the levers it needs internally, so we are now less involved in its operations.



Alexandra Dumont Nubery
COO of Lebronze alloys - Photo by courtesy of Lebronze alloys

Shifting the focus to recent market trends, following the remarkable post-pandemic economic recovery in 2021, the economic landscape showed substantial growth in the first half of 2022, only to experience a gradual decline in the latter part of the year. How did your company fare overall in 2022?

AD: The course of 2022 was well balanced as a whole in terms of deliveries. As our portfolio of activities is very diversified in terms of sectors and geographies, our markets are generally not too cyclical in terms of delivery needs – except in exceptional situations such as the pandemic.

Are you observing a decrease in demand and a slowdown in order volumes in this first part of

2023? If so, which specific products within your portfolio have been most affected and which have shown resilience despite challenging market conditions?

AD: The 2022 order intake was very high. However, in 2023, we are returning to more typical activity levels, as we had anticipated in our budget.

Despite this, deliveries in 2023 are higher than in 2022. This growth is driven by our new processes, new alloys and the development of our services.

Have you noticed any specificities or shifts in market trends across diverse geographic areas during this period?

MD: It is clear that brass and electronics markets are seeing weaker activity than we might expect.

This is mainly due to overstocking of the global supply chains at all production steps, which was caused by the complex management of the post-pandemic recovery. However, the needs of our customers for the second part of the year seem

more dynamic, because inventories are gradually back to normal levels.

More generally, we observe that the prices of raw materials, to date, seem to be stabilizing, which is often a good sign for a robust demand for our activities.

In your 2021 Sustainable Development Report, there was a notable emphasis on achieving “financial transparency” and educating all employees on the concept of EBITDA. In addition, you mentioned that, excluding the impact of the COVID crisis, the Group has consistently achieved an annual increase in EBITDA of more than 10% since its formation in 2011. What was the consolidated EBITDA level and margin that your company recorded in the year 2022? And what are your targets for 2023?

AD: In 2023, we are continuing to benefit from the positive effects of our strategic plan, in particular the refocusing on the most value-generating niches.

Taking into account our order book and the



Feeding a continuous casting line - Photo by courtesy of Lebronze alloys



Feeding a continuous casting line - Photo by courtesy of Lebronze alloys

production pace of our factories, we should achieve a higher Ebitda than in 2022.

But the essence of what we meant by *"financial transparency"* is that factories and employees no longer work on a ton basis. We monitor the non-metal turnover produced per site every day. This has two main advantages given the nature of our niche business.

As we work with small orders in the vast majority of cases, visual management based on tons is very problematic. It can lead to delays in small volume orders, which is obviously not good for customer service. Management by the "gross margin produced" corrects part of this risk.

Furthermore, this approach forces us to neutralize the metal position as much as possible, which remains a real challenge in our business. How can we communicate with the teams about the monthly production and the performance, if these figures are too influenced by a metal position result?

Moving on to your main products, Lebronze alloys has established itself as a reference supplier of copper-nickel piping systems and fittings for maritime applications through the Navinic brand. However, the use of copper alloys in this sector has faced significant challenges due to the substitution with titanium. Has your company experienced a direct impact on sales due to this substitution effect? If so, is the substitution trend ongoing, or has it reached a stabilization phase?

MD: Taking into account the delivery lead times on titanium and in relation to our product range, we have not noticed any major evolution.

Now, since our position here is also on specific applications, our analysis may not be representative of the entire market.

Looking at the sectors in which your company operates, the aerospace industry is showing

resilience and growth despite the challenging economic situation. Which of the aerospace materials in your portfolio are experiencing the highest growth rates?

MD: Our activity level in aerospace is indeed good at this stage. It should be remembered that the downturn of this sector had already started at the end of 2019, before the pandemic, following the difficulties of Boeing; the low tide continued until the beginning of 2022.

Our current growth in this sector is strong. It is the result of nearly 10 years of preparation, which led to the arrival of our new processes and new alloys on the market. This market is characterized by qualifications that span over many years and constantly increasing service and quality requirements.

Through the Hardiall® brand, your company is one of the few global suppliers of copper-nickel-tin spinodal alloys specifically engineered for applications in extreme conditions and high-strength requirements. These alloys are

commonly used in the production of bushings and bearings used in aerospace, O&G drilling, and engine parts, serving as an appealing substitute for materials like copper beryllium. Could you provide insights into the current performance of demand for these specialized products? Additionally, what are your expectations for the medium to long term regarding their market outlook?

AD: Spinodal products have been a major specialty of our factories for decades. We do believe that CuBe should gradually give way to these new alloys, but the process may be slow.

In this context, we have launched a new original production process whose potential we are gradually discovering. Our Hardiall® range, depending on the application, meets or sometimes exceeds the performance of CuBe. Therefore, the dynamics of the transition can vary a lot according to the applications and is not easy to anticipate.

Beyond Hardiall®, our specificity is that we offer a complete range of spinodal alloys, which allows us



Extrusion press - Photo by courtesy of Lebronze alloys



Cold Rolling in Bornel, France - Photo by courtesy of Lebronze alloys

to guide the customers by finding the best compromise towards their exact needs: metallurgical advice is part of our "raison d'être" and makes it possible to address medium/long term needs, by integrating the CSR objectives.

Regarding rolled products, your French facility in Bornel (formerly Clal) produces strips and sheets in spinodal CuNiSn alloys, nickel silver, and pure nickel. Have you considered expanding your product range to include copper and other copper alloys within your offer?

AD: Our product range in rolled products includes not only the ones you mention, but also current sensing alloys, low alloyed coppers and alloy 400.

Actually, we combine the alloy ranges cast in our foundries with the variety of our hot and cold processes in all the factories. This allows us to address most customer requirements in high specialty copper or nickel-based solutions.

We are dynamically developing new products/new markets, while sticking to our strategy of being

among the world leaders in each niche application that we cover, thereby avoiding dispersion.

In September 2022, your company initiated the Miniaturization Project with funding from the French government. The project aims to manufacture specialty alloy rolled products with a thickness of less than 100 µm for precision electronics applications, such as smartphone components. Given that your current minimum thickness for rolled products already stands at 30 µm, could you give details about the alloys you intend to produce under this project?

AD: This project is well under way. The applications of our rolled products require ever more precise geometrical parameters and better surface quality. Consistency is key. This evolution of customer requirements is happening for all our families of alloys. To be able to offer and produce increasingly precise products, metallurgical know-how must be constantly in progress.

We believe that the full integration of all production steps facilitates our continuous quality

improvement and reassures our customers when developing new products.

The LbA Group plays a significant role as a supplier not only to heavy-duty industries but also to lighter sectors like eyewear, fashion, watchmaking, and stationery. The German plant in Lüdenscheid serves these sectors by providing a diverse range of brass and other copper alloy rods, wires, and profiles, with a notable focus on lead-free materials. Are you witnessing a constant and increasing trend in the percentage of lead-free products within your overall sales?

AD: For the time being, we are seeing a sharp increase in the number of enquiries from our customers seeking to find low leaded alternative solutions for the coming years. The addition of Pb to brass has been a solution for decades to ensure easy machinability.

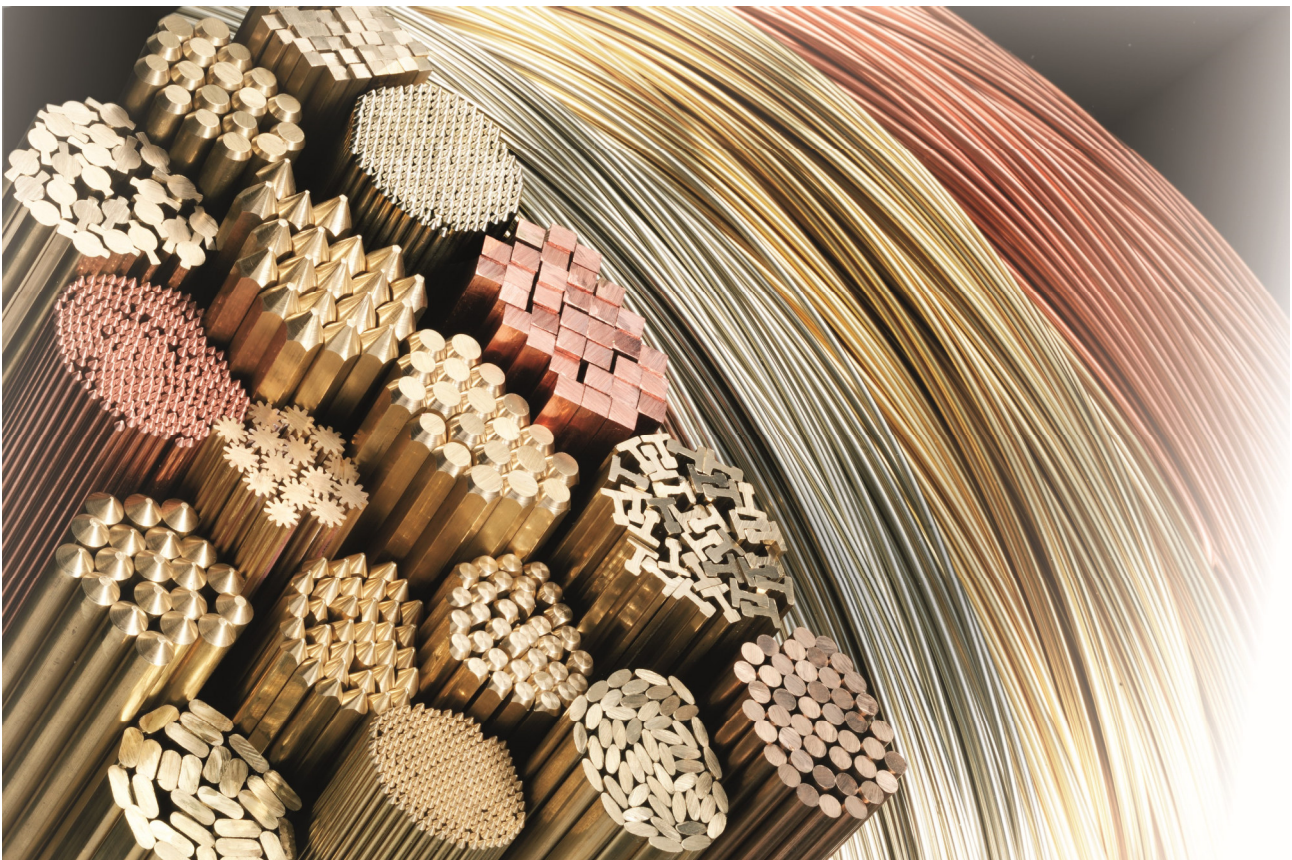
The transformation performance of our Pb-free brasses is now often as good as Pb-based brasses

by the combination of the alloys offered and the appropriate toolings. We have the feeling that the switch to lead-free brass is gradually being launched, driven by market requirements and CSR expectations of all stakeholders: some major customers have decided to switch to lead-free brass in the next 2 or 3 years.

The Lüdenscheid site was designed and transformed to take an important place in the market for small dimensions. We are getting ready for the new demand by focusing our efforts and limiting our activities to be ready to respond quickly to new demand.

Is your factory in Lüdenscheid still serving the drinking and sanitary application segment, or are you actively transitioning away from this segment to focus on more promising sectors such as automotive and electronics, in addition to those mentioned earlier?

MD: Indeed, Lüdenscheid is experiencing a major



Full range of specialty wires and rods - Photo by courtesy of Lebronze alloys



Rods in the shipping area – Suippes plant, France - Photo by courtesy of Lebronze alloys

shift in its customer base and the markets it serves, both geographically and in terms of the products it offers. This is in line with the rest of the Group.

Within your Group, there is significant forging and machining capability. Has demand for these products increased in recent years? If so, which end markets predominantly require these custom-designed components?

MD: We have refocused our forging and machining activities on the transformation of our own copper and nickel alloys, or on metals that we are capable of remelting: consequently, steel activities have been stopped in 2022.

We have real machining skills on difficult Cu-based alloys (hard, sticky, etc.), which helps some customers. Tangible synergies with semi-products and specific metallurgical know-how are necessary in order to deliver value to our customers.

Let's move on to your commercial organization. LbA currently operates two distribution centres,

in the UK and Hong Kong. You also have numerous partnerships with distributors worldwide. Are these partnerships solely with specialized distributors based on product type or application, or do you also have exclusive partnerships with distributors responsible for selling your entire product range? Do you consider this approach to be adequate to serve the market, or do you have plans to set own commercial branches in key geographical areas?

AD: Our internal service centers are highly specialized and distribute products that are rarely multi-client. They are therefore positioned on specific needs and are complementary to the services provided by our factories, and also to our distributors and agents.

Most of our products are customized per customer one way or another. Therefore, we know the final customers and applications for more than 90% of our activities, even when they are served daily by our partners.

Increasingly, our distributors and agents are real partners. We are going to be very agile in order to keep on providing adequate services and technical support to each customer, regardless of the sales and distribution channel.

When it comes to sustainability, LbA made a noteworthy commitment in 2021 by announcing its intention to achieve Net Zero status by 2030 “as part of an exemplary approach.” Your target is undoubtedly ambitious in comparison to the majority of suppliers of semi-finished copper and copper alloy products. Can you please share the main elements of your strategy for achieving carbon neutrality? Additionally, how well-aligned are you with the trajectory to achieve your goal?

AD: This topic is central for our general management with regular meetings, recruitment of experts. We have done an in-depth diagnostic of the situation, in order to measure our carbon footprint.

The results show that our carbon footprint (scope

1&2) has already decreased significantly between 2018 and 2022.

Our Suippes factory, recently designed and constructed according to best-in-class environmental standards, is a remarkable model of sustainability performance: low energy consumption, low carbon emissions, low water use, metal upcycling, etc.

We’re pursuing an in-depth action plan to go further within the framework of SBTi:

- Reduce our Scope 1&2 emissions by 50% between 2018 and 2030.
- Reduce our Scope 3 emissions by 25% between 2021 and 2030.

In 2021, you completed the installation of the Upcycling workshop at your primary facility in Suippes. This workshop facilitates the recycling process by recovering slags generated during production. Through various cold transformation methods, these slags are



Machined parts, all sizes - Photo by courtesy of Lebronze alloys

processed to extract reusable materials that can be reintroduced as raw materials. Could you provide information about the types of alloys being processed in the workshop? Furthermore, what are your targets concerning the processing and transformation of "secondary foundry materials" through the Upcycling workshop?

AD: In 2022, all the slag from the Group's foundries was cold processed in our Upcycling workshop, which is based in Suippes but designed to serve the whole Group. This represented 1,500 tonnes of dross treated and valorized, which were beforehand sent to external recyclers with longer and more energy intensive metal recovery methods.

Is the Upcycling recycling process based on a proprietary method developed by your company? Are there any plans to replicate similar recycling lines at your other production plants?

AD: The Upcycling workshop represented an

investment of several million euros, so a certain volume of activity and internal recycling capacity are needed for this type of project to be relevant.

The machines were installed according to in-house specifications and are fully adapted to the processing of the Group's alloys and to the optimal re-use in our foundries.

Moving on to product innovation, are you working on new alloys and new shapes? And what is the main R&D focus of your company at the moment? Could you also provide some insight into the strategic direction you have set for your development efforts?

MD: Our R&D is focused on the market needs and often driven by specific projects.

While we cannot provide in-depth details, our innovation aims to develop new alloys, but not only that. Its two other missions are to make our current alloy families ever more sustainable by working on the life cycle, and to generate breakthroughs in our



Wire drawing - Photo by courtesy of Lebronze alloys



Suippes offices, France - Photo by courtesy of Lebronze alloys

production methods. In our niches, products and processes must be addressed jointly.

Given the significant financial challenges associated with operating in the NF metal sector and the ongoing struggle to develop and maintain competitiveness, the support of financial institutions remains paramount, particularly for medium-sized family businesses. With rising interest rates and high inflation, are you finding it more difficult to renew existing credit lines or access new ones? Have you considered collaborating with additional investors or seeking partnerships to address these matters?

MD: We are fortunate to be particularly well supported by all the major French banks, some large French debt funds and some international banks. They have just collectively renewed their confidence and we have significant means for our development.

We've closed the reorganisation of our capital and raised a global sustainability-linked funding. This operation allows, on the one hand, to strengthen the control of the Dumont family over Lebronze alloys and, on the other hand, to give to LBA the

means to pursue its development in France and abroad. The structuring of the financing is in relation with ESG criteria reflecting the ambition of LBA in terms of greenhouse gas emissions and water consumption.

In our profession, cash flow generation is strategic vis-à-vis all stakeholders. When one generates cash, there are more opportunities than difficulties, even if it must be recognized that interest rates and inflation end up postponing certain projects.

From a strategic standpoint, once the reorganization process is finalized, do you have plans to pursue new M&A initiatives or engage in bolt-on acquisitions?

MD: It is clear that the subject of external growth, especially the strengthening of partnerships, arises. We are working on different subjects, but it is too early to talk about them.

Your family and other partners took ownership of the company in 2006. In 2018, you voted for a capital increase to allow employees to buy LbA's shares, and by 2021, a third of your workforce in France were both employees and shareholders.

Five years after its inception, has the implementation of this scheme achieved the desired objectives in terms of team commitment, retention, and engagement?

MD: We took over the first company of the Group 18 years ago and we have built Lebronze alloys in particular by relying on an experienced team of executive managers who also hold shares in the company. In addition, we have opened our capital to many employees.

AD: We have received requests to initiate another round of capital increase exclusively for the benefit of our employees. We are thoroughly considering this possibility, as fulfilling this request would be a source of great pride for us.

Alexandra, the Lebronze alloys is undergoing a major generational transition, as evidenced by your appointment as the Group's first COO in 2021. In your new role, what personal contributions do you aspire to make towards the development of the Group?

AD: In addition to team management and the operational implementation of the Group's strategy, I consider that one of my key roles is to support the Group's sustainable development strategy, which I have named **BRONZE** and which translates our actions and ambitions into 6 key pillars.

- **B**uild Together
- **R**esponsible Purchase
- **O**ptimized performance
- **N**et zero carbon footprint
- **Z**ero accident
- **E**co-Solution

My other ambition is to build the new generation of high-potential executives, benefiting from the experience and mentorship of our more experienced executives.

Our businesses attract talent because they offer the opportunity to work on a wide range of challenging projects that have a positive impact on high-tech/high-stakes industries.



Marcel Dumont and Alexandra Dumont Nubery at Lba HQs in XXXX-

Photo by courtesy of Lebronze alloys

Looking ahead to the next five years, what do you see as the most significant opportunities and challenges for LbA?

AD: The first challenge is to continuously improve metallurgical quality so that customers can use less metal, less hazardous substances, less energy, while ensuring the safety and reliability of their applications.

The second challenge is responsiveness: we must offer short delivery times but also speed up the qualification processes for new products, shapes, standards, etc., so that the entire value chain adapts more and more quickly to the needs of its customers and to the changing market.

What strategies do you have in place to leverage

those opportunities and address these challenges?

AD: To address these challenges, we must remain very agile and constantly attentive, in particular to engineering offices, designers and prescribers who are key decision-makers in guiding developments in our profession of *Métallurgie d'exception*.

Lebronze Alloy\Development

See the article below for some details on the capital reorganization and financing recently completed by Lebronze alloys and briefly mentioned by Michel Dumont in the interview on page 12.

LEBRONZE ALLOYS completed a new capital reorganization ad financing linked to CSR criteria

France's Lebronze Alloys (LbA) Group has completed a capital reorganization and secured new financing amounting to € 255 million. This has resulted in the **Dumont family's ownership stake increasing to over 70%**. The funding includes specific allocations for investments, acquisitions, and partnerships, and it will be linked to CSR criteria.

Michel Dumont, serving as Chairman, and Alexandra Dumont Nubery, acting as CEO, led the operation, garnering support from the entire family and other existing shareholders, including shareholder-executives, LBI Investissements, Bpifrance, Socadif Capital Investissement, and Société Générale Capital Partenaires.

In addition to the existing supporters, LbA received backing from new financial lenders, namely Arkéa Banque Entreprises et Institutionnels, BNP Paribas, BPCE group, Crédit Agricole Ile-de-France, LCL, SaarLB, and Société Générale, along with three investment funds (Eiffel Investment Group, Tikehau Capital, and Zencap Asset Management).

"This operation constitutes a new major step by strengthening the family block with simplified control structures and by securing the financing of developments. It allows the LBA Group to project itself with enthusiasm and confidence into the future, to

strengthen employee shareholding and to prepare for the next stages of growth and transition," Michel Dumont said.

LbA\Financing

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