

# DAUMET

Grow the future of gold

### THE STORY

### FROM ELECTRONICS TO LUXURY

Founded in 2016, DAUMET is a company born and based in Paris-Saclay. **DAUMET is a greentech whose innovative technology saves gold and offers new uses for it.** The company has a concrete and decisive impact on current environmental and social issues.

In 2011, Cyrile Deranlot, the company's founder, is working at the CNRS/Thales joint laboratory (Palaiseau, France) with Albert Fert, 2007 Nobel Prize in Physics. Their research focuses on the design of future electronic components, which require new materials.

It was in this context that they succeeded in mixing gold and tungsten, the hardest of metals, for the first time. Beyond its interest in electronics, this innovative material will prove to be relevant for many industrial applications. Convinced of its applicative potential, Cyrile Deranlot left the CNRS in 2016 to found DAUMET and thus develop one of the exceptional properties of this new material: the gold/tungsten alloy turns out to be the whitest 18-carat gold in the world.

Spotted by the LVMH group in 2017, DAUMET was selected among the 32 finalists for the prestigious LVMH Innovation Award at Vivatech. The startup then joined the first two classes of the group's accelerator at Station F, La Maison Des Startups LVMH. With a closer look at the luxury houses, the company gradually developed an unrivalled expertise in exceptional gilding.

At the end of 2018, DAUMET became the only company in the world to affix gold designs to leather. This art craft then became the cornerstone of the company's development.

In 2021, a rare event in the world of luxury, Hermès allows the company to communicate on their partnership, notably on the Sac A Malice Space presented at the beginning of 2021.

In 2022, Cyrile Deranlot received one of the most prestigious award in luxury world: the Talent du Luxe et de la Création-Category Invention. DAUMET works on in its firts fundraising in order to develop its production facilities and meet the growing demand of the luxury and jewellery sectors.

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### THE TECHNOLOGY

Patented internationally by the CNRS, the new family of gold-based materials developed by DAUMET opens up a wide range of possibilities:

1. saving gold by replacing it in part with tungsten

2. to open up new uses for gold thanks to its hitherto unknown properties The whitest gold in the world and the exceptional gilding mastered by DAUMET are the first examples of these innovative uses.

The technology has received numerous recognitions in the fields of luxury and environmental protection.

DAUMET's technological solution is today used in the luxury world for craftsmanship, but many industrial applications are envisaged after a wider R&D. Tomorrow, DAUMÉT will use these new generation golds to treat differently (medtech), limit air pollution in our cities (catalytic converters)...

DAUMET's technology responds to the end of abundance and to environmental issues through a more sober consumption of precious metals.



### ITS IMPACT

The mining of precious metals is one of the most polluting activities on the planet and generates major social problems (child labour, prostitution, organised crime, etc.). If DAUMET's technology were deployed on current thin film gold applications, it would allow

- save 100 tons of gold per year
- save 100% of the carbon footprint of the city of Paris and 10 years of its water consumption each year
- preserve tens of thousands of hectares of forest and their biodiversity to limit as much as possible the mining of the seabed

DAUMET ensures a controlled supply of gold by working only with recycled gold or gold from Fairmined labelled mines.

DAUMET is in line with several UN Sustainable Development Goals. (more details on page 8)

















## PARTNERSHIPS

In the world of luxury, it is customary for suppliers not to name their

However, we can confirm that our know-how is used by the largest luxury groups in the world, most of them based in France, Switzerland and Italy.

DAUMET's technology is one of the 1000 ecological and cost-effective solutions to the current environmental challenges, labelled by the Solar Impulse Foundation.

DAUMET uses recycled gold or gold from Fairmined mines, an eco-responsible label that guarantees the highest international standards in terms of mining.



















01 / LVMH 02 / Hermès 03 / CNRS

04 / European Union 05 / Région Ile-de-France

06 / BPI France

07 / Solar Impulse Foundation 08 / Fairmined

09 / ChangeNOW

# OUR MANAGEMENT TEAM

### Cyrile Deranlot

FOUNDER AND CEO

Trained as a metallurgist, long experience in materials research, inventor of gold/tungsten alloys, entrepreneurial training at HEC.

A strong taste for taking responsibility.



### Isabelle Boillot

CHIEF SALES OFFICER

Graduate of the EDC business school and the MBA ESG. B2B luxury expert with 20 years of experience in business strategy, international key account management and project management.



# A PRESTIGIOUS SCIENTIFIC COMMITTEE

### Albert Fert

#### PHYSICIST, 2007 NOBEL PRIZE IN PHYSICS

At the origin of the work on gold/tungsten alloys for microelectronics, supported Cyrile Deranlot in her entrepreneurial approach.

An exceptional scientist for great ideas.



### André Behlouli

#### WORLDWIDE EXPERT IN GOLD METALLURGY

Materials engineer, former Technical Director of CLAL, one of the main manufacturers of primed metals in Europe. Materials and corrosion expert for the French, European and international courts.



# SOME ACHIEVEMENTS



THE WHITEST 18K GOLD

### SUSTAINABILITY

*«THE WORLD HAS SEEN PEAK GOLD PRODUCTION, AND THE INDUSTRY IS NOW IN STEADY STRUCTURAL DECLINE.»*, Mr. Garafolo, Gold Royalty CEO, Interview mining.com, 28 May 2021

#### ABUNDANCE OF ELEMENTS

Precious metals are rare so their mining are very polluting (tons of mining waste, water consumption and pollution...).

Tungsten abundance is 1000 times higher thand the gold one so its environmental footprint is much lower (see cited references). For example, the Global Warming Potential (GWP) is 12500kg for 1kg of gold while it's 12kg for 1kg of tungsten.

The whitest gold developed by DAUMET is composed of gold and tungsten. It means tungsten replaces palladium and rhodium, two of the four rarest elements in the earth. This alloy is today controlled for coating and DAUMET will finalize R&D to propose it for casting and/or 3D printing. A sustainable approach to decrease the white gold cost and save rare resources.

The susbtsitution of rare raw materials by more abundant one is one of the key issue for next generations.

#### PEAK GOLD

Face to peak oil, humans look for alternatives for production and for environment: renewable energies, nuclear energy...

In the same time, we reach now **peak gold production** so we need to find new processes to work with gold.

**DAUMET is one of the game-changer in gold metallurgy** by developing new materials and new processes able to save gold and to propose new uses for it.

A sustainable and cost-effective solution recognized by several international labels.



THE GAME-CHANGING TECHNOLOGY OF GOLD

### PRESS CONTACT

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