

## PANATERE'S SOLAR RAW MATERIALS SET THE STANDARD WITH NEAR-CARBON NEUTRAL MANUFACTURING.

***PANATERE, a Swiss company specialising in the transformation of raw materials and a major player in the watch and medical industries, has become the first in its sector to offer sustainable raw materials. Following on from its fully recycled and recyclable stainless steel, the Jura-based SME has just taken delivery of its first "solar" steel melts. For the first time in Switzerland, studies have been conducted on a regional solar furnace located in Watch Valley with the eventual aim of developing the ultimate production solution for solar materials. But it doesn't end there... For the public good.***

*Saignelégier, 21st April 2021*

The watchmaking sector is currently undergoing significant development with a shift towards innovative sustainable material solutions. One such example is fully recycled and recyclable steel. This locally manufactured and traceable product comes from steel waste and offcuts produced by companies operating in the Jura region's watch and medical sectors. This type of production incorporates closed loops, short supply chains and the Swiss circular economy. PANATERE, a Swiss company specialising in the transformation of raw materials, has disrupted the traditional production process to create the Rolls-Royce of steels and become the first in its sector to join the "Circular Economy Switzerland" movement.

AISI 316L steel grade 4441 and straps made from organic grape or fennel waste are among its most recent exciting developments, and used in the products of ID Genève, a pilot brand for this project. These are PANATERE's first high-end sustainable products. Founder Raphaël Broye has taken things even further by introducing the company's first solar energy ingot, produced just a few weeks ago in an industrial furnace in the Pyrenees. To change the perception of recycled materials in the fine watchmaking and medical sectors, the teams at PANATERE worked tirelessly to fulfil their long-standing ambition to be able to produce solar materials within 50 km of the company's premises in the near future.

The reasoning behind a local solar furnace is quite simple: this facility in Watch Valley will enable PANATERE to produce approximately 200 tonnes of solar steel every year. The company currently produces 50 tonnes a year of our fully recycled and recyclable steel, employing the services of our partner steelmakers based within 250 km of our site. Adopting a solar "industrialisation" approach and obtaining various innovation grants for our work will help us to become more competitive. This will enable us to offer material prices per kilogram equivalent to those of standard steel manufacturers. But more importantly, this exciting solar steel solution will help bring our carbon footprint down to a level 165 times lower than that of standard steel; in other words, almost carbon neutral. A revolution in the raw materials market – the planet's number one polluter.

The first solution currently offered by PANATERE is responsible and sustainable. This fully recycled and recyclable steel scenario offers a tenfold reduction in the carbon footprint compared to a standard scenario<sup>2</sup>. "PANATERE has spent years developing the recipe for this fully recycled AISI 316L grade 4441 stainless steel, which can be reused at the end of its life. "We are proud to be able to contribute to the local economy, with short supply chains coupled to the circular economy", explains project manager Liselotte Thuring, who is keenly aware of the systematic nature of this approach and continues to take a broad view with the rollout of the industrial solar steel project. By 2022,



PANATERE aims to install its first regional industrial solar furnace – a public commodity to be made available to other industries to safeguard the future of their business and promote clean energy and the local economy. PANATERE is also a proud member of the SOLAR IMPULSE program which aims to promote solar energy for a cleaner future.

Advice for energy-intensive partners, and maybe for you...

1. Source: <https://www.achats-responsables.ch/leguide/parse/materiaux/31/2>
2. Source: QUANTIS "Carbon Footprint" report, November 2020



## ABOUT PANATERE

A 'panatère', in local dialect, is a type of wicker basket used by peasants to collect their harvest and hold their precious fruit. Similarly, PANATERE collects scrap from the production of watch and medical components to give it a second – equally precious – life.

PANATERE is based in Saignelégier, Switzerland. It uses a highly sophisticated process to recover and transform scrap raw material, enabling it to be fully recycled, primarily into bio-components which are themselves 100% recyclable.

PANATERE is part of "Circular Economy Switzerland" movement, combining short supply chain production with a circular economy to offer a responsible and sustainable solution. To realize its vision of a cleaner future, the company is planning to install a regional industrial solar furnace to produce energy with a carbon footprint approaching zero.

PANATERE SA acquired WISER SA in 2012, safeguarding the future of its expertise in watch case production. The development of Private Label projects forms a large part of its business, which includes the production of complete timepieces.

## PANATERE CONTACT INFORMATION

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## APPENDIX I. FOUNDER OF PANATERE



### RAPHAEL BROYE (Fondateur)

It's hot. Very hot. Although it's summer, I open the double doors of my air-conditioned cellar. I shiver slightly as I feel the coolness, which mingles with that peculiar smell of damp you get in poorly-ventilated basements. Are you familiar with that smell?

I behold my bottles, perfectly aligned on their racks. They gleam, invitingly. It's magnificent. 15 years' of collecting; 15 years spent tracking down the best vintages.

Yet already I can hear the sound of wine merchant's van. He's here for me... He will enter my refuge, where all is calm. Where no-one crosses the

threshold without being invited, without striving to fully appreciate the extraordinary work of winegrowers and oenologists represented here. The art of translating the essence and uniqueness of a terroir into a single bottle has been one of my passions.

And yet, my decision is made: I must sell my wines. The merchant begins carrying them out, box after box. It's all too much. On the stairs, emotion gets the better of me and I dissolve into tears. To compose myself, I think of my two children, my wife, their quality of life, our home... I need the money to get my business off the ground.

Looking back, I don't regret this seemingly drastic decision one bit. I can now ascribe meaning to it. It allowed me to create several companies in industry and property, two of which I am particularly proud of.

You may be familiar with them: the *Just for Smiles Foundation* for people with disabilities, and *PANATERE SA*, which develops zero carbon materials. For those not acquainted with these organisations, I invite you to explore solutions that will inspire you to discover your purpose, your creativity and your drive to excel.

Shrugging off my old identity as a wine collector gave me freedom and allowed me to build my first business: the business of my own life.

Welcome home.

## APPENDIX II. PANATERE GLOSSARY

- **Standard process or production:**

Produced without solar energy, and requiring the addition of primary minerals

- **Short supply chain:**

Product distribution chain designed with the aim of reducing the distance between partners: manufacturers, distributors and customers.

- **Circular economy:**

In a circular economy, resources are managed in chains which are as closed as possible. Resources are deployed using circular materials which can be recycled using processes that produce minimal waste.

The system is autonomous and regenerates itself thanks to the sophisticated design of the materials, the products, the commercial models and the processes, ensuring waste is avoided and minimising demand for primary raw materials. (SwissRecycling.ch)

- **Carbon footprint:**

The "carbon footprint" is the sum of the greenhouse gases emitted and captured in a system of products, expressed as CO<sub>2</sub> equivalent, and based on a life cycle analysis which addresses one single Impact Category only: climate change (standard ISO 14067).

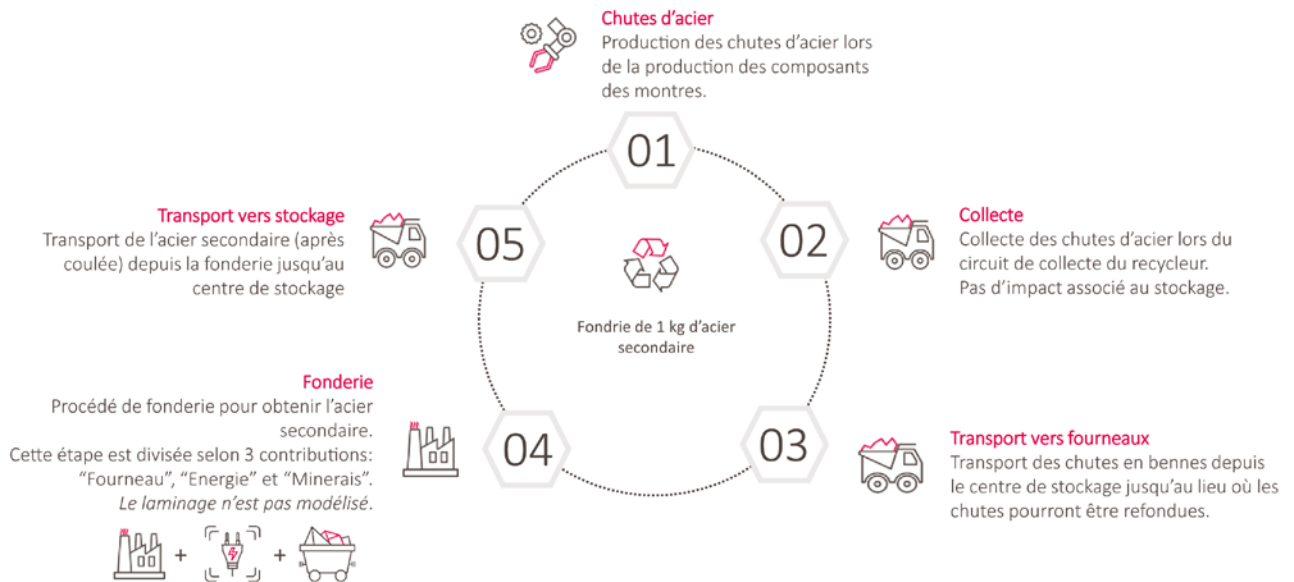
- **316L stainless steel, grade 4441:**

Each steel composition has its own grade (just like a colour and its Pantone code) and hence its own properties.

For example, 316L is used for surgical instruments, since the recipe contains molybdenum which, among other properties, is hypoallergenic.

Grade 4441 is the Rolls Royce of this category. Its recipe makes it extremely homogeneous and, once polished, its appearance does not deteriorate over time. (ID Watch)

## APPENDIX III. PROCESS FOR TRANSFORMING STEEL



Source: QUANTIS "Carbon Footprint" report, November 2020

## PARTNER.

PANATERE, pioneer in sustainable solutions  
We are partner with :  
Circular Economy Switzerland  
[www.circular-economy-switzerland.ch](http://www.circular-economy-switzerland.ch)

