



COMPANY PROFILE

Sustainable brass **manufacturing**

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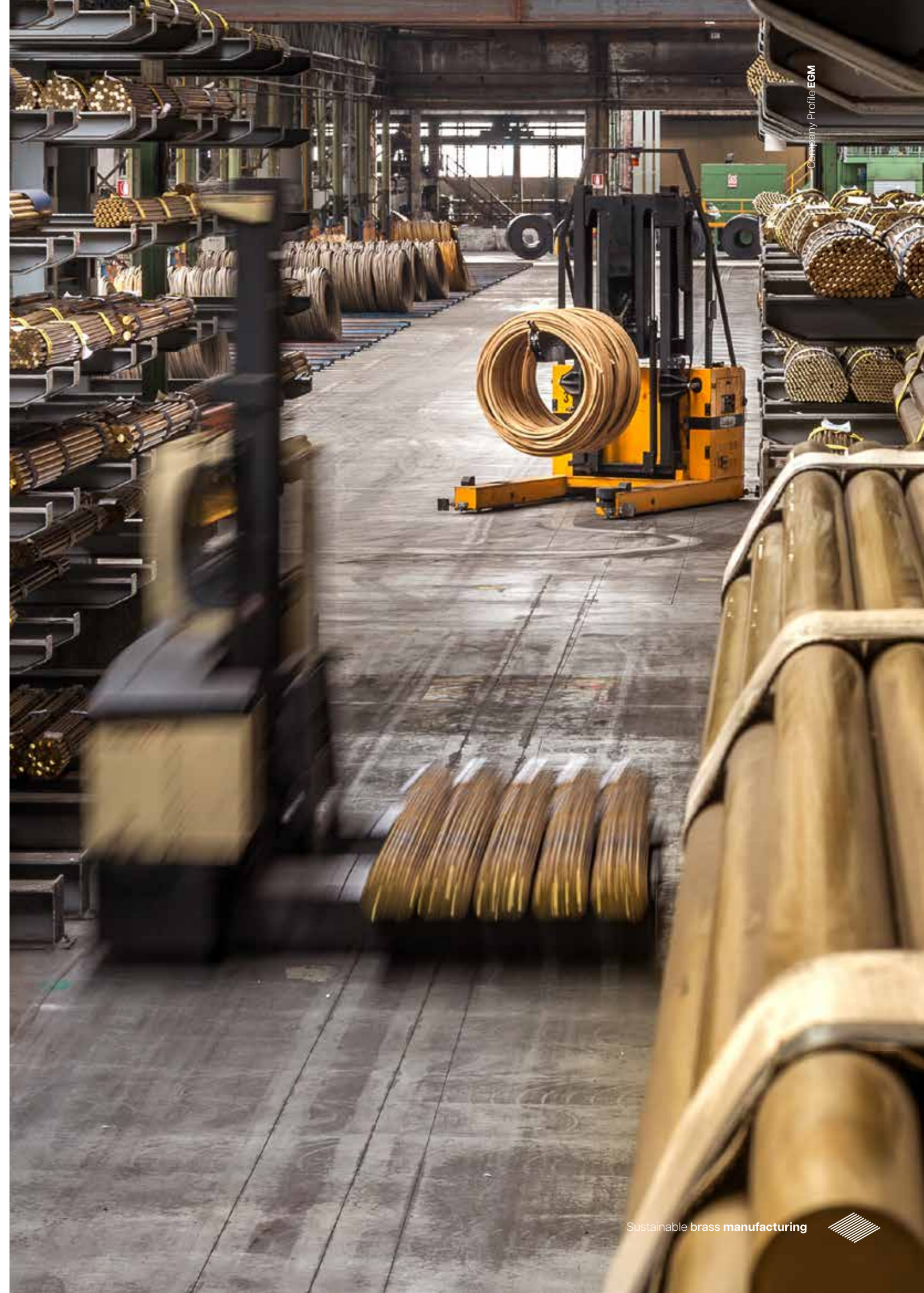
01

Introduction

Sustainable brass **manufacturing**



We produce superior quality brass rods focusing on sustainability and circular economy, and with a strong commitment in reducing our impact on the environment.



Experts in **brass**. Experts in **sustainability**.

We manufacture brass rods, like several other companies. What sets us apart from the competition is our target to produce better, rather than more, giving value to our resources, pursuing circular economy and relying more and more on renewable energy.

Our know-how results from over 160 years of experience, during which we reached the highest level of expertise.

Today what matters the most is the work we can do from now on to drive change in our industry.

This is our commitment in shaping a brighter future for those who come after us.



Eredi Gnutti Metalli Our numbers.

Establishment:

1860

Number of employees:

170

Production area:

120.000 m² of which 80.000 covered

Tons of melted material produced yearly:

110.000

(out of which **97%** deriving from scrap metal reintroduced into the melting cycle, and **only 3%** deriving from extraction).



02 Sustainability

Brass.
An eco-friendly
resource.





In EGM we focus on brass only,

a noble alloy made of copper and zinc that can be endlessly recycled without losing its chemical and physical properties.

We adopt a model of **circular economy**, as we can **manufacture new high-quality parts** out of scrap metal, with a **low impact on the environment**.

97% of our raw **materials** come from **manufacturing scraps**, which are carefully selected, processed and reintroduced into a new melting cycle after quality control.



01

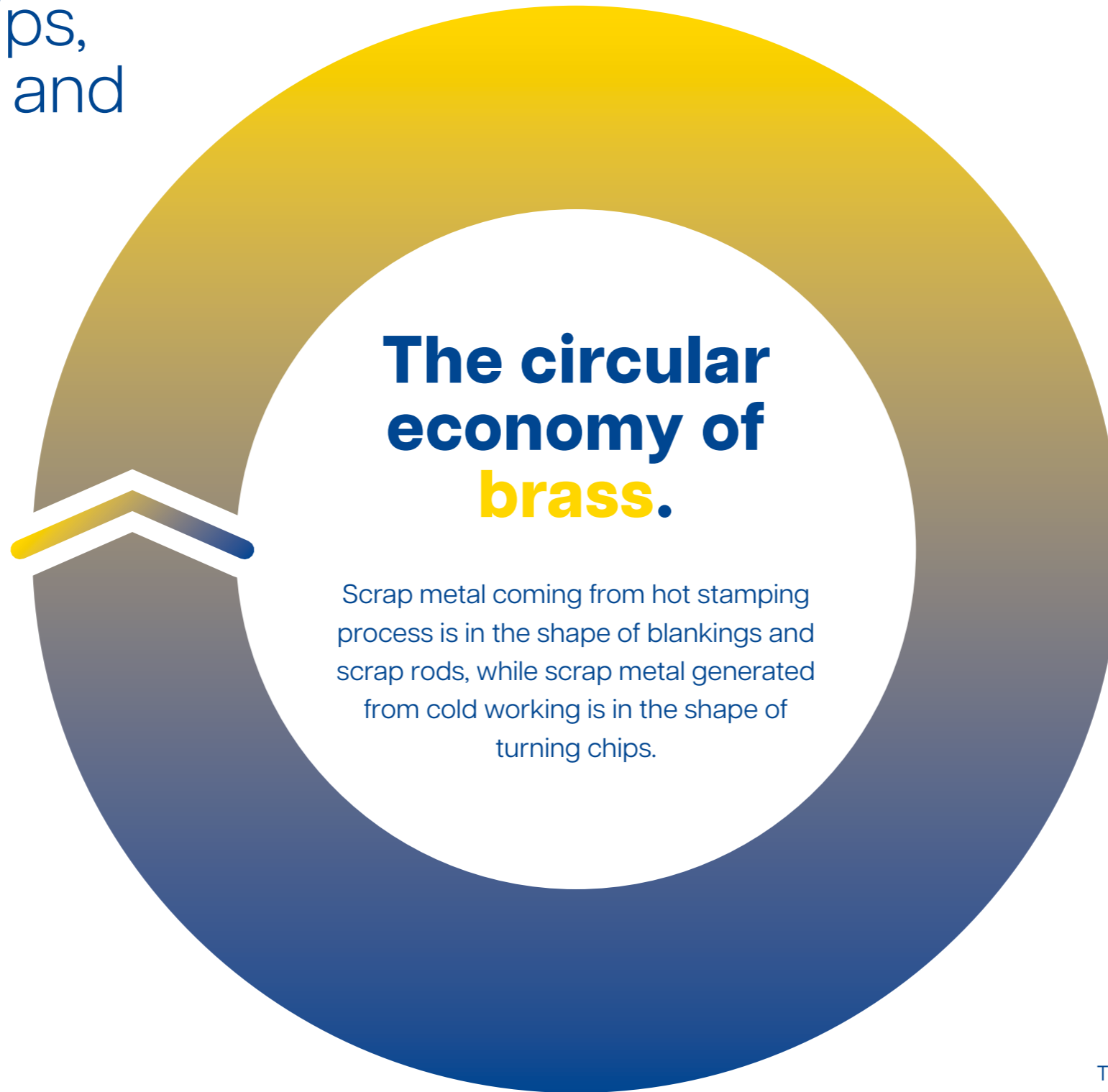
Turning chips, scrap rods and blankings

Once melted, metal gets solidified, extruded, and drawn into round or hexagonal rods.

04

End product

Our brass rods are used in several industries, especially in the production of valves, fittings, taps, and for precision metal parts.



02

Brass rods

Rods with round sections for hot stamping go through a further hot forming process which generates semi-finished products.

03

Hot stamped parts

Through further machining and finishing processes, hot-stamped parts are turned into the finished product.

Producing responsibly.

We are brass producers, and we encourage sustainability. We rely on technology to gradually reduce the impact of each and every single operation on the environment, while working in a thorough, respectful and conscious way.

Clean energy

Up to 50% of our energy consumption is generated by our own photovoltaic power station.

This translates into a reduction of CO2 emissions up to 4.485 tons per year .

* During summer

Water-saving

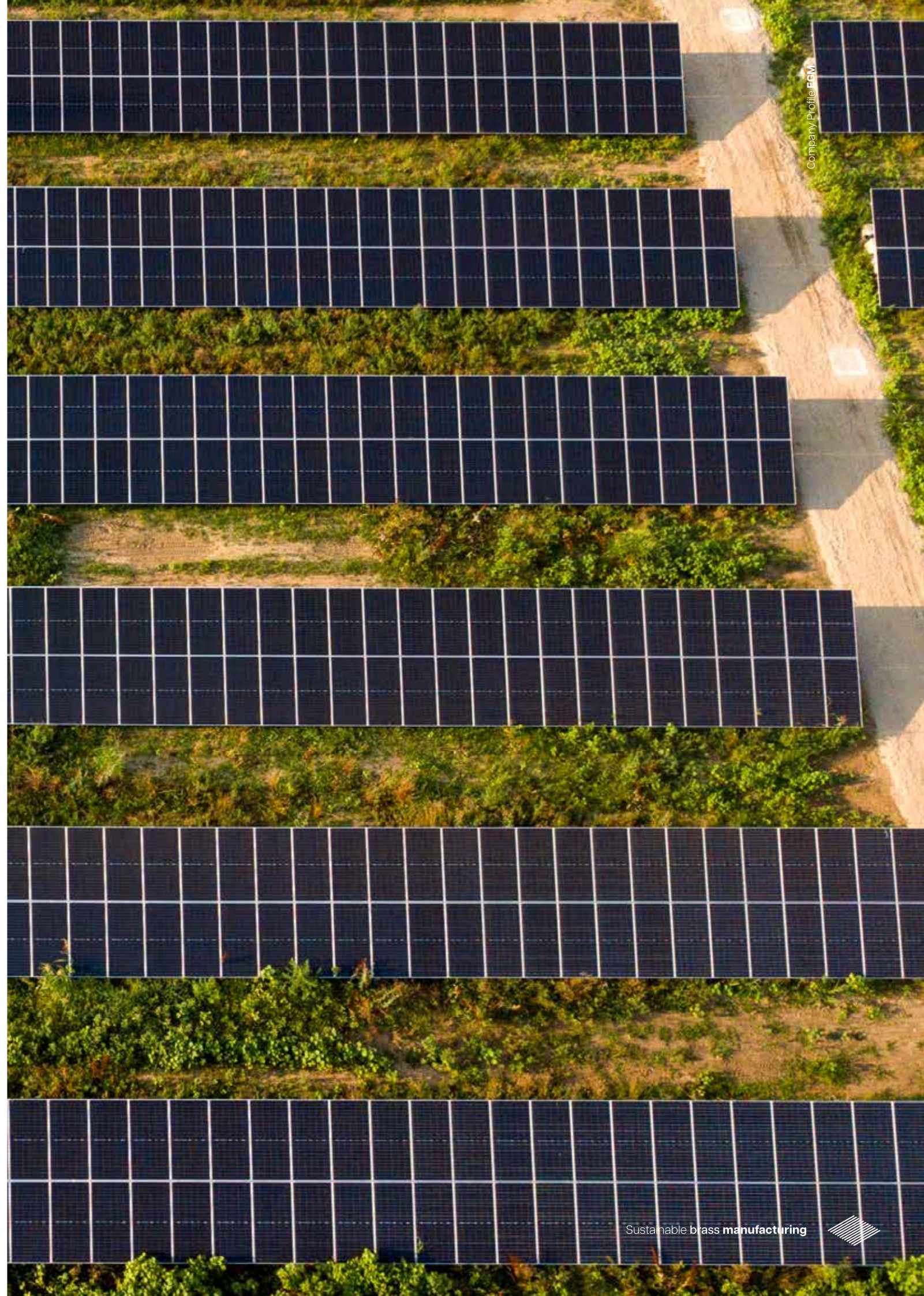
More than 30% of the water we use derives from rainwater.

Out of a 60.000 m³ yearly water requirement.

REACH

Registration, Evaluation, Authorisation and Restriction of Chemicals.

Our production follows the guidelines for the Registration, Assessment, Authorization, and Restriction of chemical substances.



03 Values

**We do what
we believe in.**



We base our decisions on our beliefs, and we prioritize respect for the environment: these are the guiding principles that shape our actions.



We believe in **sustainable** development.

Future generations deserve to live in a planet where air is breathable and resources available for everyone. It's our responsibility to make it possible.

We encourage the green-brass revolution.

We encourage our industry to fully commit to a gradual reduction of the lead percentage in brass alloys. We are committed to engaging with institutions and other companies to build regulations and identify the most efficient solutions.

97% of our products come from recycled materials

Giving new life to scrap metal means converting waste into resources. This helps in reducing mineral extraction in a market of increasingly scarce raw materials.

18% of our energy requirement is self-produced.

Our two photovoltaic power stations cover over 50% of our power demand during summer daytime.

Over 30% of the water we use comes from rainwater.

All water used in our production is reused thanks to two process water treatment plants.



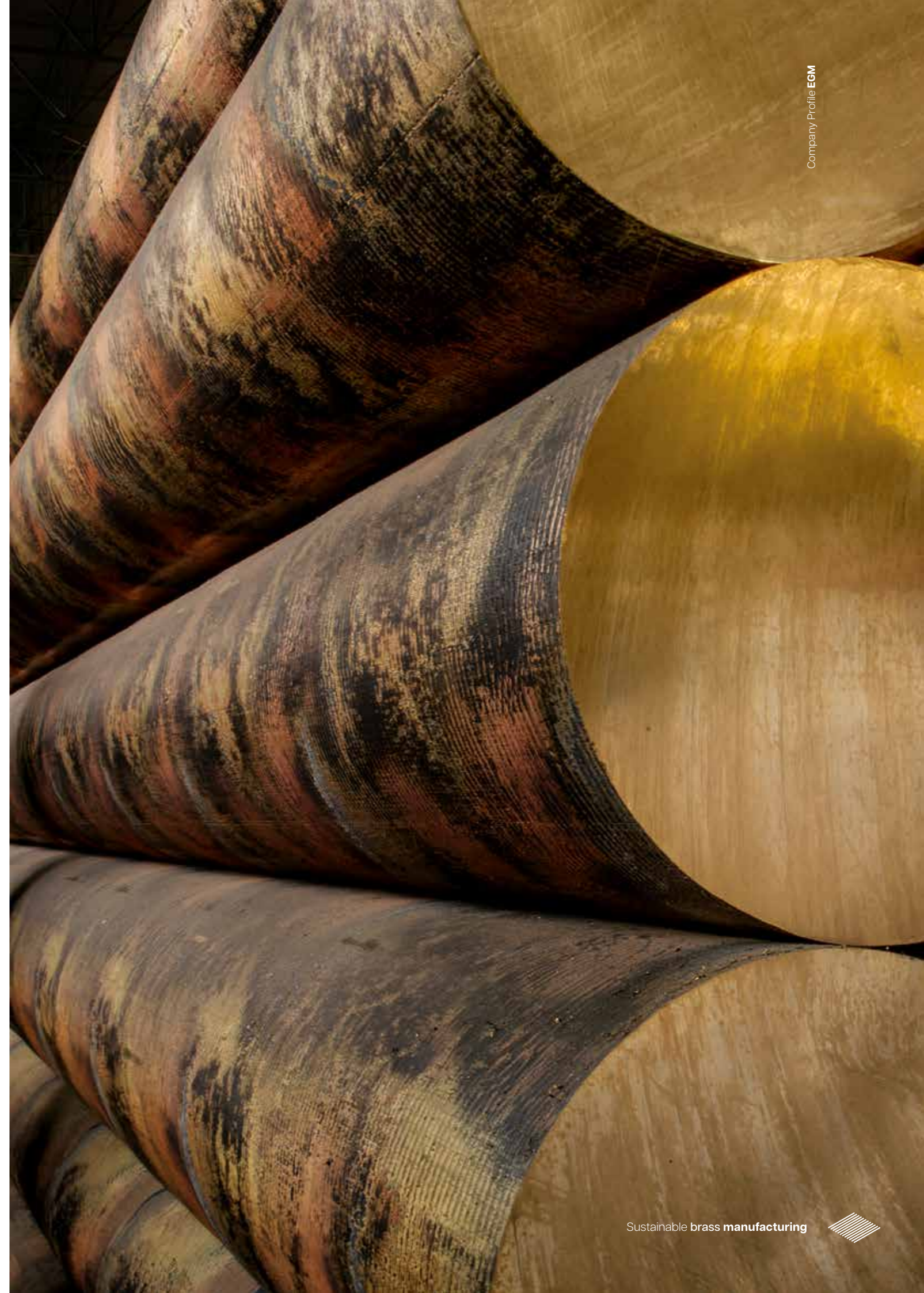
04 Industries

A green alloy
with endless
applications.



The technical features and aesthetic properties of brass make it the best choice raw material for several industries.

Brass is an extremely **versatile** material, easy to work, and with the great advantage of being **reusable**, thus reducing the impact on the environment.





Heating and sanitation

A water-friendly material

Thanks to its copper content, brass is a suitable material for drinking water distribution. Brass does not release toxic substances, does not absorb organic ones, and prevents viruses and bacteria from reproducing. It also does not age, it withstands high-pressure and temperature, and has a great aesthetic appearance. These features make it the perfect choice for taps, fittings and bathroom furniture.



Building

Building responsibly

Popular for high-quality finishes, brass is widely used in the construction industry for being durable, versatile, and for its aesthetic appearance. Brass is also one of the preferred materials in sustainable construction, where it is used in structural reinforcements, plumbing and heating.



Automotive

Towards green mobility

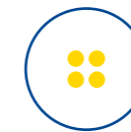
Brass is one of the leading materials in the technological transition towards sustainable mobility, facilitating the switch from traditional combustion engines to more environmentally friendly options, such as CNG or LPG propelled vehicles.



Mechanics

An industry based on circular economy

Great workability makes brass the preferred material to produce a wide range of mechanical components, such as valves and precision parts. Manufacturing scraps are not thrown away, rather they are reintroduced into the melting cycle, thus contributing to build circular economy.



Fashion

Elegance with low environmental impact

Zippers, buttons, eyelets, and parts for lighting and furniture design: brass is the right choice for the fashion and design industry, for its mechanical properties, and for being versatile and shiny. Brass has beautiful aesthetic qualities, and it is sustainable and safe, thanks to a low percentage of lead in its alloys.

05

Manufacturing
process

**The 7 stages
of brass
production.**



The production of brass rods involves several stages. Each step must be performed with **great accuracy to avoid including in the process materials that are not suitable to ensure consistent **high-quality standard**.**



Scrap metal and production waste go through **radiometric check** to identify any possible presence of contaminated material.

Machining chips go through a chip **dryer** to remove cutting oil, residual humidity and the ferrous component (through deferrization). The scrap metal coming from industrial demolitions are **shredded** into tiny pieces to ease transportation and make the next steps smoother.

All incoming loads are subject to **visual, physical** and **chemical inspection** to make sure they meet all quality criteria.

The selected raw materials are now ready for the **melting process**.

The 7 stages of brass production

From the foundry, the molten metal goes through horizontal **continuous casting** and is solidified into large cylindrical ingots called **billets**.

After optional pickling process, wire rods are **drawn** to final size (round or hexagonal section), **cut** to length, **packed** in bundles, and sent to the warehouse ready to be **dispatched**.

The **billets** are heated up and **extruded** (through indirect extrusion presses) into wire **rods** or **round bars**.



06 Products

A solution
for every need.



We manufacture **brass rods** for hot **stamping** (hot forming process) and for **turning** (cold machining process by chip removal).

We offer a wide range of products developed from **9 different brass alloys**, including **lead-free alloys** suitable for drinking water application, and for the fashion and design industry.



CW617N – DIN

Standard alloy for hot stamping, also suitable for turning and drinking water application.
Included in the 4MS Positive List.

CW614N – PB3

Standard alloy for turning with excellent machinability.
Included in the 4MS Positive List.

CW612N – 612

Alloy for free machining with high copper content to increase ductility and cold formability.
Included in the 4MS Positive List.

CW611N – 611

Alloy for hot stamping and free machining with high copper content to increase ductility and cold formability, and low lead content.

CW602N – ADZ

Anti-dezincification alloy with high copper content and presence of As in its composition, to ensure strong resistance against aggressive waters.

CW510L – USA

Alloy with low lead content, suitable for drinking water applications (USA market). Available for both hot stamping and machining.
NSF/ANSI/CAN 372 certified.

CW511L – USB

Anti-dezincification alloy with low lead content. Strong resistance against aggressive waters. Suitable for drinking water applications (especially in the USA and Northern European markets).
NSF/ANSI/CAN 372 certified.

CW509L – USC

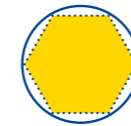
Alloy with high lead content suitable for drink water applications (USA market). Available for both hot stamping and machining.
NSF/ANSI/CAN 372 certified.

CW510L – PBO

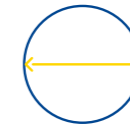
Special lead-free alloy (max 80 ppm) designed for the fashion industry.
NSF/ANSI/CAN 372 certified.



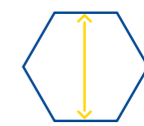
Range of products



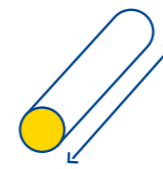
Section:
round or hexagonal



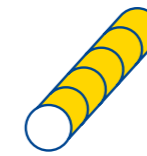
Round bar diameter:
6 to 120 mm



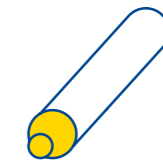
**Hexagonal bar dimension
(across flats):**
6 to 42 mm



Bar Length:
3.000 to 5.000 mm



Finishing:
pickled / non-pickled



Bar ends:
cut+ cut
point+chamfer
point+cut
chamfer+cut



07

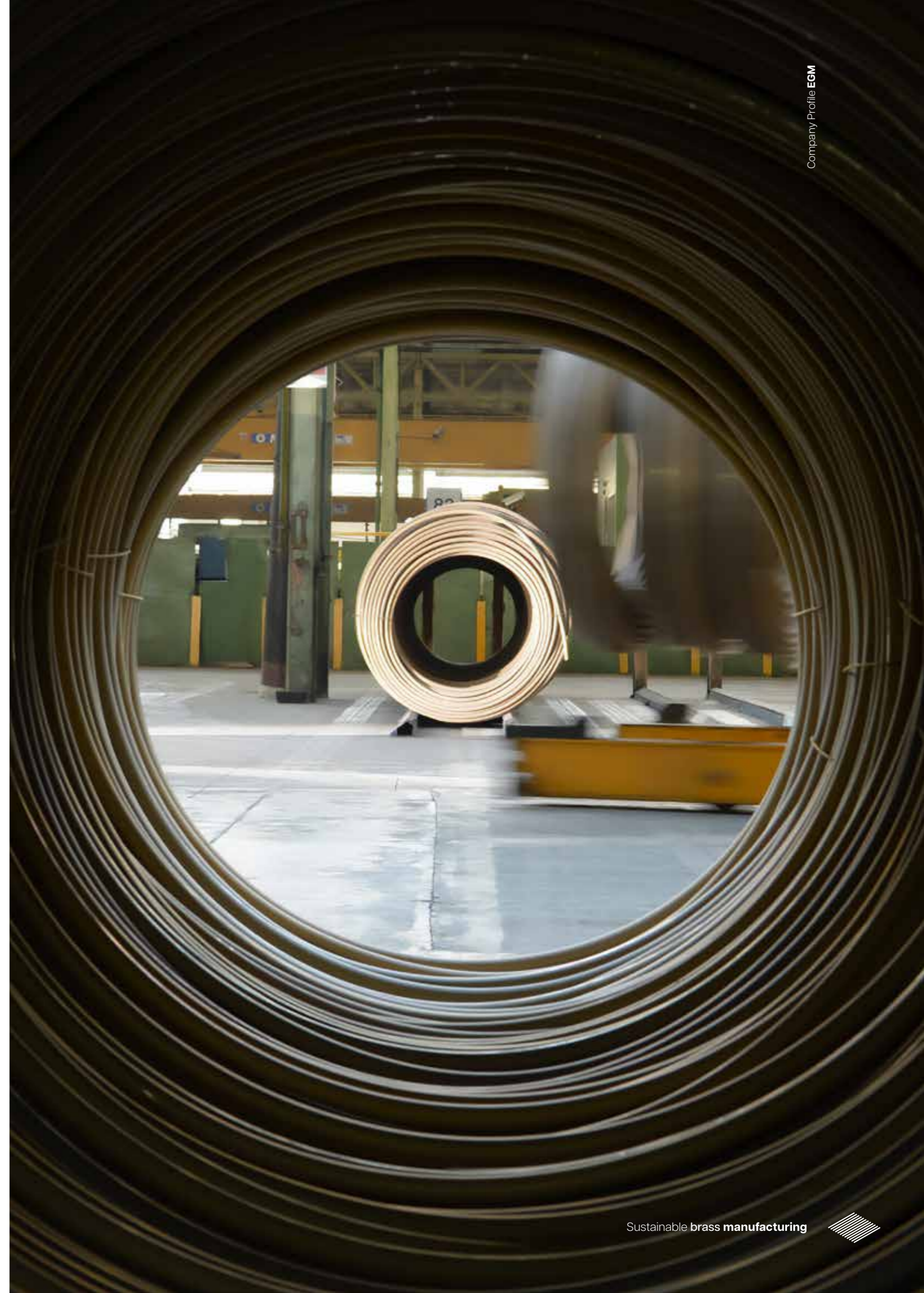
Certifications

We are committed
to continuous
improvement.



Quality, professionalism, and reliability are key for us. They're our starting point. Our innovative ideas and commitment towards a new approach to brass production are what really make a difference.

<p>Environmental system certification</p>  <p>ENVIRONMENTAL SYSTEM CERTIFICATION DNV ISO 14001</p>	<p>Quality system certification</p>  <p>QUALITY SYSTEM CERTIFICATION DNV ISO 9001</p>	<p>Certification of low-lead alloys</p>  <p>CLASSIFIED UL US COPPER ALLOY IN ACCORDANCE WITH NSF/ANSI 372 MH66992</p>
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Our commitment to sustainable brass production.





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