

Belgian steel in 2018

Annual report



Word from our Chairman

2018 will probably go down as the year in which the United States decided to introduce a tax on steel imports. The consequences of this decision, known as *"US Section 232, national security tariffs on steel imports"*, filled the front pages of international news for weeks.

After two one-month postponements, the Trump administration finally decided to introduce a 25% tariff on European steel from 1 June 2018. The most significant consequence of this decision was the risk of the EU market being flooded with steel that could no longer be sold on the US market. Urgent steps were needed to avoid a further increase in non-European steel imports to the EU. From July 2018, the European Commission introduced a system of provisional safeguard measures for a maximum period of 200 days.

Unfortunately, these provisional measures were not enough to solve the problem, partly due to the insertion of a *"shipping clause"*, among other things. In 2018, imports of non-European steel reached a new absolute record of almost 30 million(*) tonnes. For some product categories, the market share of non-EU steel exceeded 20%.

At the beginning of February 2019, the European Commission developed a system of definitive safeguard measures. We at the Belgian steel industry welcome such a system. Another positive development is that, for most steel products, import quotas are set on a country-by-country basis. The different modalities and the detailed development of those quotas will determine whether or not this system will be effective.

Thus, developing countries representing, until mid-2018, less than 3% of imports of a steel product are exempt. A concrete example is Indonesia, a country that remained below the 3% threshold until mid-2018 but increased its exports significantly from the second half of 2018 onwards. This expansive export, which clearly exceeds the 3% threshold, is to the detriment of Belgian producers. It is therefore recommended that the list of developing countries to which the measures apply or not be continuously monitored and adapted.

The quota system also provides for an immediate increase of 5% in quantities, effective from February 2019. A second 5% increase is already planned for July 2019, just 5 months later. A general increase of 10% in such a short period of time is in no way in line with the annual expansion of demand in the steel market. The Belgian steel industry recommends that this increase be adapted and brought into line with the real evolution of demand, estimated at an average of 1%.

Another increasingly important theme in 2018 is climate. Under the ETS system, the cost of CO₂ emissions has increased to more than €20 per tonne of CO₂. This makes it extremely difficult, even for the most efficient companies, to remain competitive with non-European steel companies that are not affected by such a cost. Consequently, the Belgian steel industry continues to argue for the introduction of a CO₂ Border Adjustment Tax, with a view to restoring a level playing field, amongst other things also for CO₂ emissions. This is not only necessary for the preservation of industry in Belgium, but should also ensure a business model that provides the necessary resources for investments related to the reduction of CO₂ emissions.

Today, the Belgian steel industry already leads the way in terms of efficiency in many areas. The year-on-year increase

in the total quantity of steel produced at Belgian sites, despite growing international competition, is proof of this. In addition, thanks to revolutionary breakthrough technologies, a more CO₂-neutral steel production is now possible. However, the scale and impact of this transition is so drastic that it will only be possible with the help of a proper economic, legal and logistical framework.

As a material, steel meets the growing demands for a more sustainable society. Green electricity production, lighter vehicles and building renovations are becoming feasible through the use of various types of recently developed steel. With a reuse and recycling rate of nearly 100%, the material fits perfectly into a circular economy.

That is why we advocate strengthening the Belgian steel industry. The key element is the preservation of a level playing field. The requirements and costs imposed within the EU and in Belgium for health and safety, climate, energy and subsidies should also be applied to steel imported from countries outside the EU. This would create a framework that would allow for fair trade and sustainable solutions, both for our industry and for society.

Finally, 2018 was also marked by the launch of certain social reforms. However, these were not sufficiently developed or implemented. Nevertheless, adjustments and modernisation of the labour market are essential to the retention of highly skilled workers and our high labour productivity in Belgium. The commitment of all employees, combined with their productivity, is both an asset and a necessity in order to safeguard Belgium's position in the globalised world of steel.

Wim VAN GERVEN
Chairman



(*) Excluding semi-finished products

COVER (f.l.t.r.):

Steel wire in Thy-Marcinelle, photo Riva Group //

Steel production (VR study service), photo ArcelorMittal Ghent //

Steel production (NLMK La Louvière), photo NLMK //

Organic coated coils, photo ArcelorMittal Ghent //

Robot in the lab of Aperam Genk, photo Aperam //

Steel in automotive, photo David Cohen on Unsplash

Trade

Steel consumption and trade balance

In 2018, the overall positive economic situation in the EU led to a further increase in demand for steel to 163 Mt. However, this higher European steel consumption didn't necessarily translate into a larger market for the European and Belgian steel industries. Continuous imports of non-EU steel indeed neutralised the growth.

Moreover, a cooling down of economic growth at the end of 2018 was observed and the resurgence of market demand, triggered since 2013, remains particularly fragile.

The amount of imported steel* in 2018 – nearly 30 Mt – has almost doubled in five years. Turkey has become by far the EU's main source of imports, followed by Russia, South Korea, India and China. The remarkable rises of other countries such as Serbia, Taiwan and Vietnam are also worth noting.

Imports of stainless-steel products show a similar story. The rapid growth of stainless steel imports from Indonesia in the second half of 2018, is alarming.

EU steel exports continue to decline. The trade balance has deteriorated significantly and has recorded a deficit of around 9 Mt, the largest for several years.

Steel production in Belgium

The 2018 production figures for Belgian steel allow for the following analysis:

- The total production of crude steel rose to 7,980,000 tonnes. When divided into major steel categories, 77% is "low carbon steel" and 23% is "stainless or special-alloy steel".
- According to the manufacturing method, 68% is produced using blast furnaces and 32% using electric furnaces. Since the blast furnace industry also handles scrap metal, 45% of Belgian steel is estimated to be produced using scrap.
- Germany remains the largest market (28%), followed by Belgium (16%) and France (16%). Exports to outside the EU28 amount to $\pm 10\%$.

(*)Excluding semi-finished products

Steel production in Belgium

Fig.1a - Steel production in Belgium (ton) ■ 2018 ■ 2017 ■ 2016

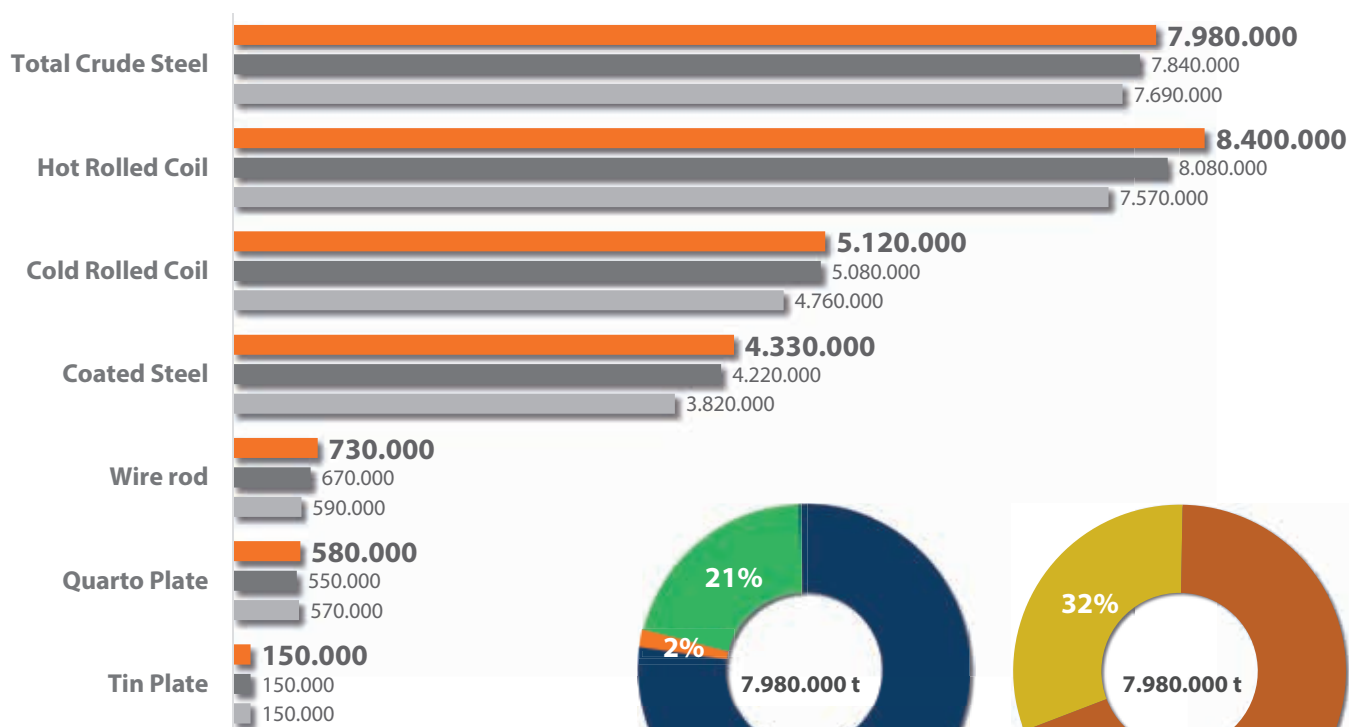


Fig.1b ■ Carbon steel
■ Stainless steel
■ Other alloy steels

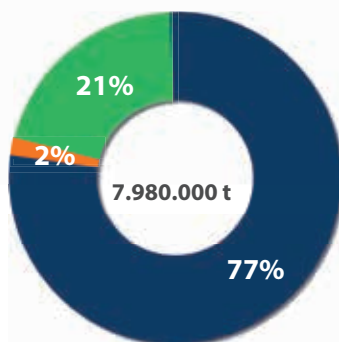
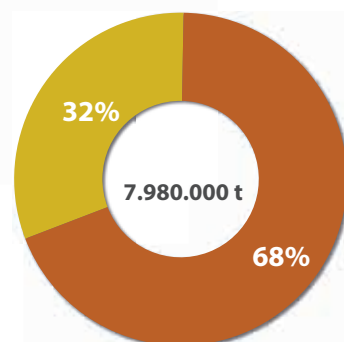
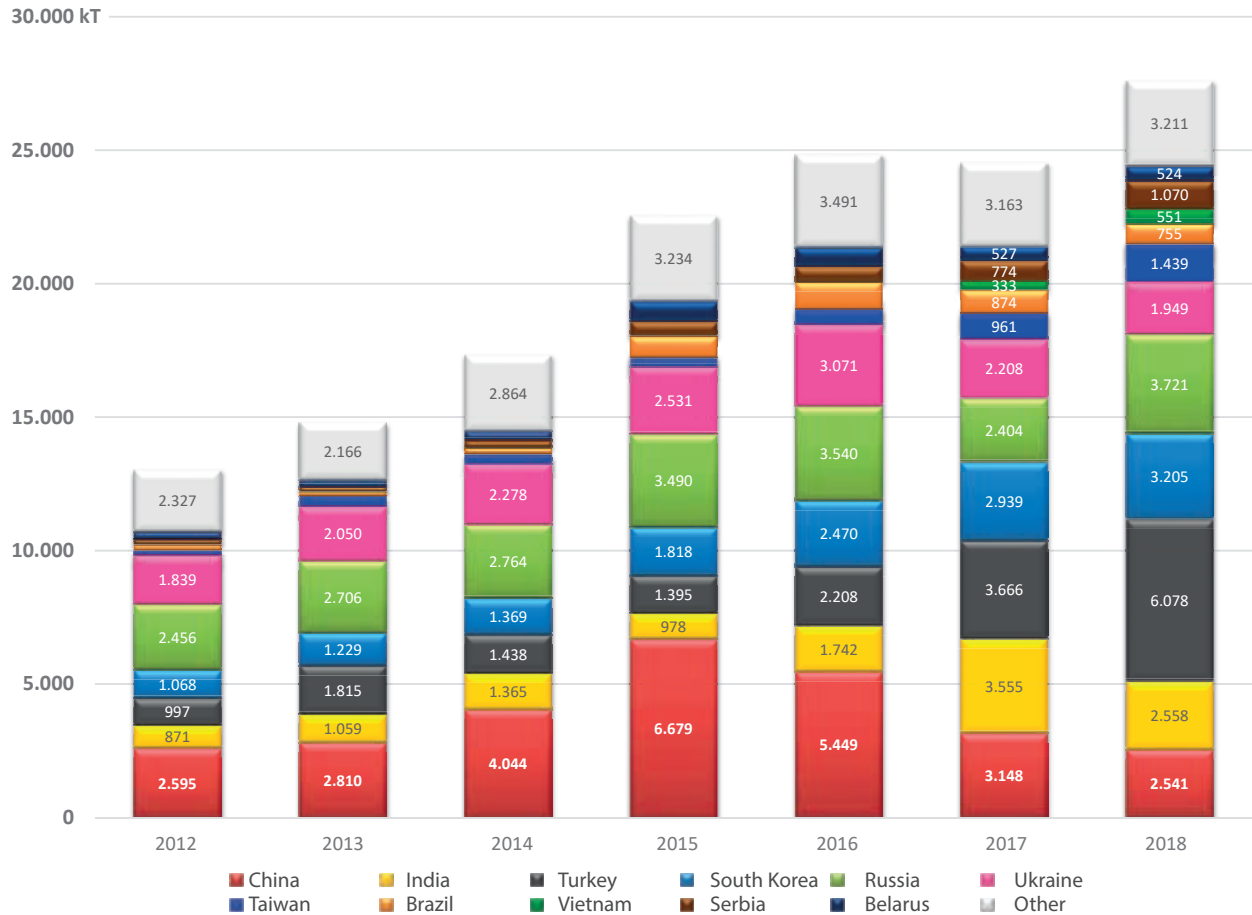


Fig.1c ■ Via blast furnace
■ Via electric furnace

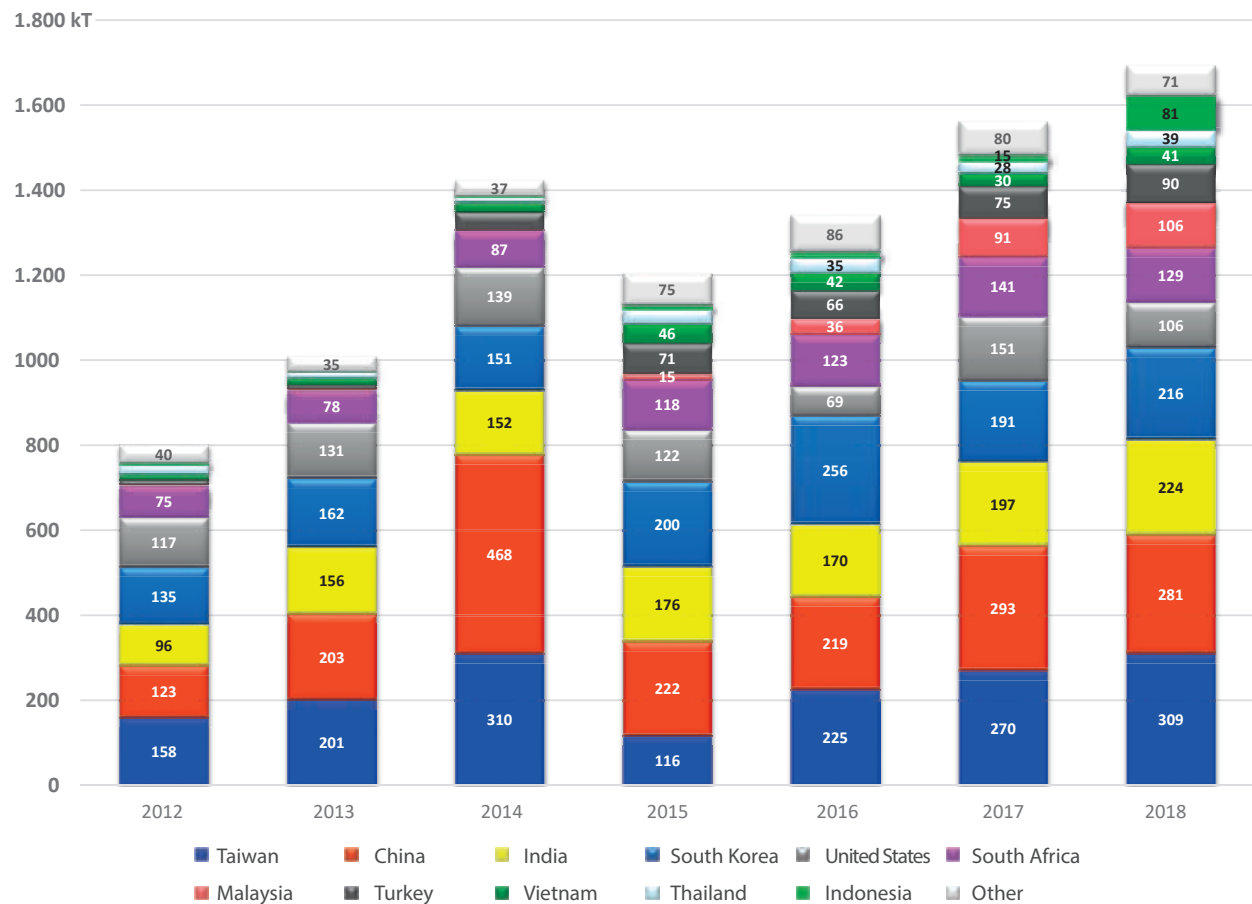


Steel import in EU28

Carbon steel*



Stainless steel*



(*) Excluding semi-finished products

Social affairs

With work on social reforms still incomplete, 2018 ends with an air of unfinished business.

On the legislative side and concerning the 'social policy' issues, we must conclude that, once again, numerous themes did not produce the expected outcome.

An emblematic example of this is the pension issue. Our current regime needs to be reformed in order to cope with our demographic evolution and the ratio of people in work and those out of work.

The Belgian government decided, like other European countries, to introduce several important reforms in this area, including raising the retirement age.

The government also decided to implement criteria for the recognition of 'arduous work', both for the public sector and the private sector. In the private sector, it proved impossible to reach an agreement between employers' organisations and trade unions concerning the introduction of a regime of arduous work, despite the government's appointment of a duo of experienced mediators. Pension reform and – more generally – a global discussion on the end-of-career planning schemes did not take place.

On the other hand, the government implemented a 'voluntary free pension' scheme for workers allowing them to freely allocate, under certain conditions and within certain financial limits, part of their net salary to the pension organisation of their choice.

On behalf of its companies, the Belgian Steel Federation strongly criticised this project because of the disproportionate burdens it generates for employers and, more fundamentally, for flying in the face of the stated objective of generalising the second pillar of pensions.

On a sectoral level, efforts to harmonise the sectoral 'workers/employees' framework have begun. Several technical meetings took place with, as yet, no agreement between social partners on the purpose of their work.

In addition, as part of the socio-political discussions on the needs of companies with regards to 'hard-to-fill jobs', the Belgian Steel Federation has drawn up a survey of the sector's most sought-after positions. Unsurprisingly, the positions are the following: electromechanical technicians, automation experts, technicians and maintenance engineers, engineers and other technical functions.

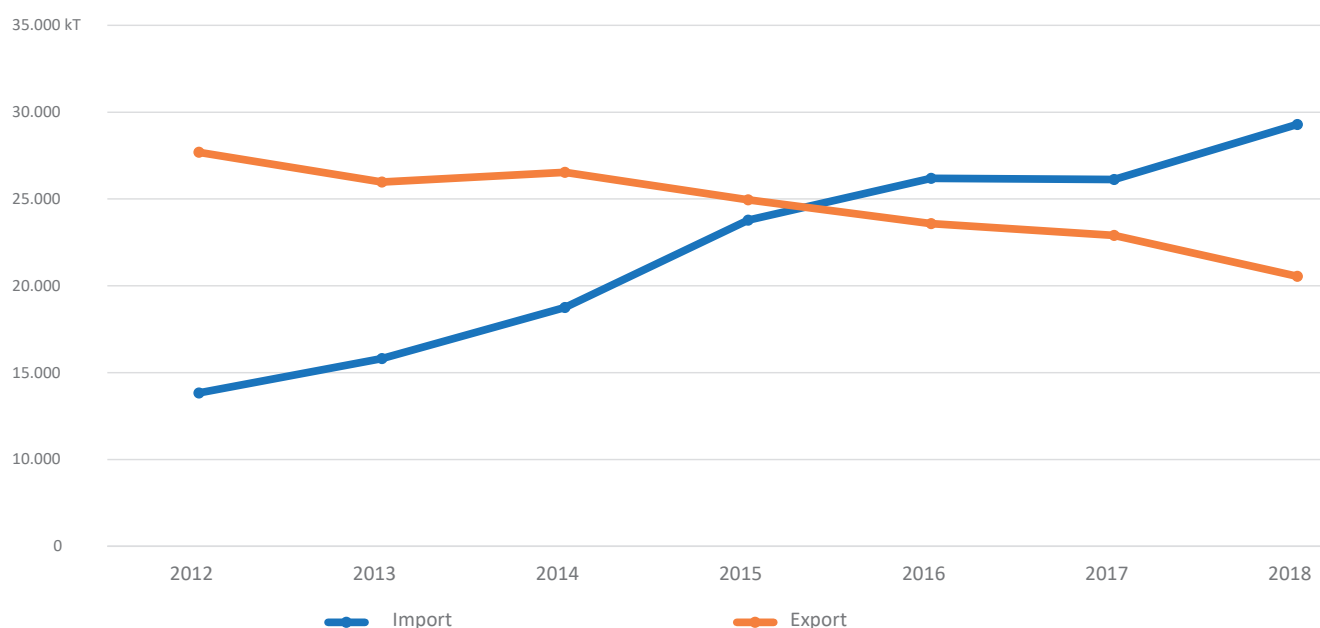
On the issue of health and safety, the Belgian Steel Federation has assisted companies with a banning order, enacted by the Social Law Inspectors and the SEVESO-Directorate of the Belgian Federal Public Service Department for Employment, in relation to the workers standing on the footboards of a moving wagon.

This ban was heavily contested, based on technical and legal elements. After several months of contact with the aforementioned inspection services, the Belgian Steel Federation secured meetings with the various administrative bodies involved and railroad transport participants.

Employment:

	2016	2017	2018
Blue collar workers	6.910	6.895	6.982
White collar workers + Managers	3.678	3.774	3.900

Balance of trade* for steel in EU28



(*) Excluding semi-finished products

Climate and energy

Climate policy

The Belgian Steel Federation is fully committed to the steel industry's move towards lowering carbon emissions. In 2018, the federation collaborated with the Advisory Committee to carry out the *"Towards a Flemish industrial low-carbon transition framework"* study, which was published by the Flemish Environment Department.

As for the European policy on combating global warming, 2018 saw the drafting of the necessary legal texts for the implementation of the ETS directive and the further preparation of phase IV of the ETS.

The Belgian Steel Federation regrets that the adopted ETS post-2020 mechanism offers insufficient protection against the risk of carbon leakage for the Belgian steel companies, which are among the top 10% of the most efficient installations in the world. Moreover, the cost of the CO₂ quota increased significantly in 2018 reaching a price exceeding €20/TCO₂.

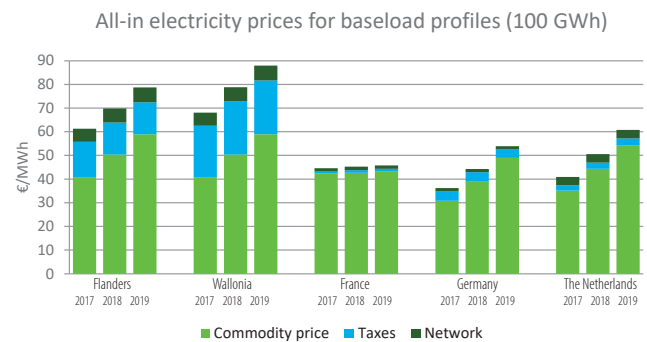
We would like to see Belgium supporting a strong European industrial and commercial strategy. One that would include measures that allow the Belgian steel industry to cope with global competition on an equal footing with international steel actors and enable it to invest to lower carbon emissions transition in internationally competitive conditions.

Energy policy

In 2018, electricity costs remained a major issue for the Belgian steel industry. The new 2019 Deloitte study, commissioned by FEBELIEC, indicated that electricity costs in Belgium were considerably higher for sectors like the steel industry than in neighbouring countries. The study points out that the competitive handicap for electricity prices reached 34% for a baseload consumption profile of 100 GWh in Wallonia.

In 2018, the Belgian Steel Federation therefore continued to advocate for the implementation of an energy standard at a Belgian level.

The Belgian Steel Federation welcomes the creation of a compensation system for indirect carbon leakage costs in Wallonia, Flanders and the neighbouring countries. This compensation helps to limit the loss of competitiveness of companies, especially steel companies, when compared to international companies that are not subject to the European emission trading system.



Industeel Belgium

Industeel Belgium is focusing on energy efficiency and reducing its CO₂ emissions!

In steel mills, the pits used to hold ladles undergoing horizontal reheating consume large volumes of natural gas, accounting for 24% of total consumption.

Industeel Belgium has replaced the horizontal reheating pits with mobile reheating pits.

This replacement led to a 55% reduction of the annual natural gas consumption.



Aperam Châtelet

Stainless steel made from scrap metal, including cans consumed on the site: an example of a circular economy!

Aperam Châtelet has introduced selective sorting specifically for cans. The company aims to recover all cans consumed on their site in order to reuse them as raw materials for manufacturing stainless steel produced in their facilities.

This process of harvesting cans fits perfectly into a circular economy approach. Approximately 16,000 cans were recovered in 2018.





Centre for Research in Metallurgy

www.crmgroup.be

With its highly skilled staff (262 employees end 2018) and its unique pilot installations, CRM provides technological R&D innovation in the field of metal and steel production processes, product development and a wide range of metal application using a holistic product-process-application approach.

CRM has a proven track record in developing new process solutions for the steel industry aiming at ensuring the competitiveness of the steel sector while embracing the climate, environmental and societal challenges as well as the trend towards further digitalisation. Key aspects for the fast and successful industrialisation of the innovative technologies are the up-scaling capabilities and the demonstration in semi-industrial conditions in CRM's pilot lines.

This can for example be illustrated by the sinter pilot installation which, in combination with the mathematical modelling, allows to test various solutions (like waste gas recirculation, alternative heat inputs, ...) for the reduction of solid fuel consumption and thus drastic reduction of CO₂ emission at the sinter plant (Photo 1).

Another example concerns the up-scaling of a solution developed to substitute the harmful CrVI-plating of work rolls for cold rolling thanks to a specially developed electro-plating module implemented in the CASTL pilot line for the electro-plating of pilot-size rolling mill rolls (Photo 2).

In-line with the digitalisation concept, a smart work roll evaluation tool has been developed on tablet (Photo 3).



Photo 1: Sinter pilot



Photo 2: Pilot rolls electro-plated with a new developed coating to substitute CrVI-plating



Photo 3: Smart work roll evaluation tool

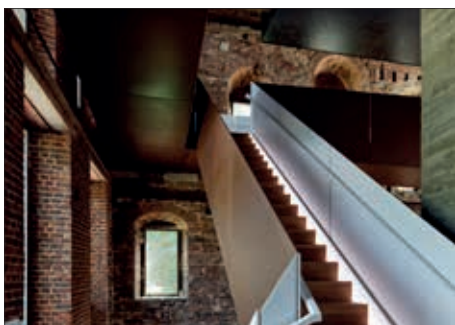


Steel promotion, information - Infosteel

www.infosteel.be

As the information and promotion centre for the steel construction sector, Infosteel's work revolves around two cornerstones: on the one hand promotion and providing information to clients and architects, on the other hand information for the steel construction sector itself. The two cornerstones together must lead to

steel applications in the construction sector being raised to a higher level, both in terms of volume and quality. For 20 years, the Steel Construction Competition has been testimony to this. The 2018 edition showed 117 projects in 6 categories. More about the contest at www.infosteel.be/images/magazine/info-steel-55/



Villers Abbey, Villers-la-Ville, Binario architectes, photo François Lichtlé



Renovation of a house, ORG PERMANENT MODERNITY, photo Filip Dujardin



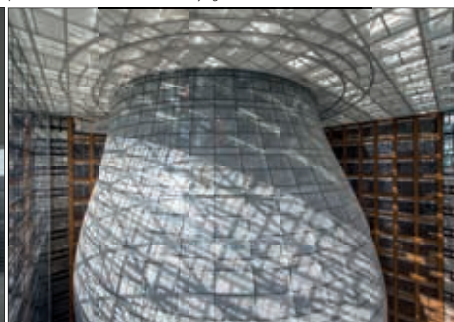
Saint-Martin church in Ferrières, Bureau Greisch, photo Jean-Luc Deru (Photo-Daylight)



Wood storage in weathering steel, Studio Koppers, photo Bart Roos (Identiteam)



'Parkbrug', Antwerp, Ney & Partners, photo Jo Van den Borre (Infosteel)



Europa building, Philippe SAMYN and PARTNERS, architects & engineers Lead & Design Partner, with Studio Valle Progettazioni architects, photo Marie-Françoise Plissart



Belgian Steel Federation

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GSV is the professional organization representing the Belgian steel industry

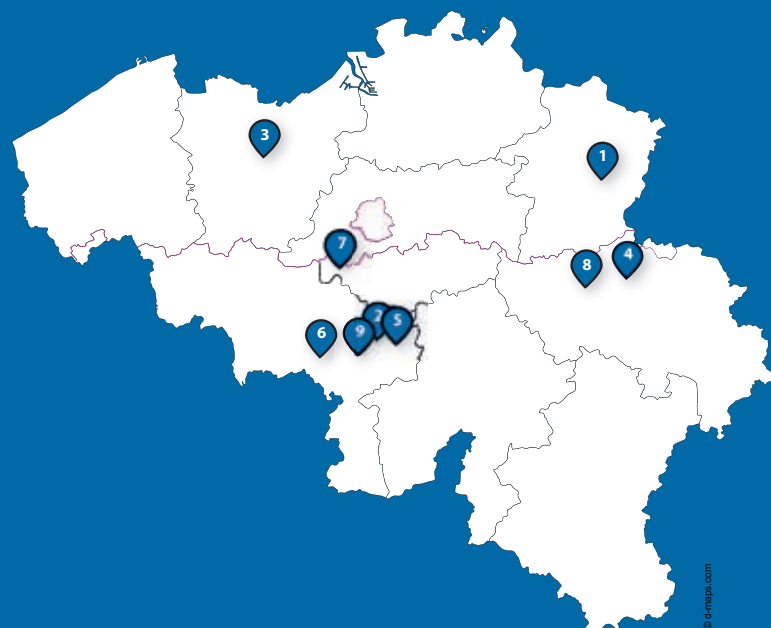
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5. Industeel Belgium - www.industeel.info



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7. NLMK Clabecq - www.eu.nlmk.com



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