Steely facts in the land of the red earth

The Minett-Tour, Regional route in South Luxembourg ■ Frieder Bluhm

The bright red iron ore that is omnipresent in the landscape in the south of Luxembourg gave the region its name: de Minett, the Land of Red Earth. The iron-rich rock contributed significantly to the economic rise of the Grand Duchy in the mid-19th century and the nation's rapidly growing prosperity at the beginning of the 20th century. As a centre of industry, the region, which like all of Luxembourg spent the Second World War under German rule, was a decisive factor in the reconstruction not only of its own country. Rather, with its companies cooperating across borders, it played an important role in European integration. In 1951, Luxembourg was one of the founding states of the European Coal and Steel Community (ECSC), along with France, Belgium, the Netherlands, Italy and the Federal Republic of Germany. At times, the coal and steel industry employed almost 16 percent of the workforce in the Grand Duchy.

Since the steel crisis in the 1970s, a successful structural change has taken place that has increased the prosperity of its inhabitants. Numerous testimonies to the past shaped by iron and steel have nevertheless been preserved and today represent an attraction for tourists – each in its own right and even more so in context. The Minett Tour, an industrial-cultural route linking five sites so far and nine in the future, takes visitors on an entertaining journey through the history of the Luxembourg steel industry with a different thematic focus at each site. Folk festivals, music and art festivals, concerts and exhibitions, dance and theatre productions show the relics of heavy industry, most of which are listed, in a completely different light, but the Minett Tour never loses sight of the context of their creation and their significance for industrial history.

Geography and geology played into the grain valley's cards

The Fond-de-Gras industrial and railway park is located in the idyllic valley of the Korn (Chiers) in the southwest of Luxembourg. Of all things, you might think: an industrial park at a station robbed of its function in the middle of greenery? But Korntal was not always as quiet as it is today. 100 years ago the area was full of industry: iron ore mines, opencast mines, blast furnaces. The reason is the geographical location. The area in the border triangle of Luxembourg, Belgium and France is part of the Lorraine-Luxembourg ore basin, which with its 100,000 hectares was one of the most important of all known iron ore deposits on earth

But to turn the idyllic landscape into a hotspot of heavy industry, another impulse was needed. In this case, it was the construction of a railway line from Pétange over the Fond-de-Gras to the French border. The railway line, completed in 1879, made it possible to exploit the deposits and gave Korntal an industrial heyday around 1900 that lasted until 1940. Until the 1950s, when the last ore mine closed, the Fond-

de-Gras railway station served as a loading station, where the iron ore extracted from the mines was loaded from the narrow-gauge mine railways onto the standard-gauge railways and transported to the blast furnaces in the surrounding area.

Visitors can reach the Fond-de-Gras industrial and railway park from Pétange in a steam train from 1900, the "Train 1900". There you will come across a rolling mill where small rails for pit railways as well as U- and L-sections were rolled from 1913 to 1989, a colossal, two-cylinder steam engine, and even a complete, formerly steam-powered electricity plant. An engine shed with historic locomotives and wagons will delight not only railway enthusiasts. Workers' houses including a quaint miners' tavern and an old grocer's shop tell of the living conditions of the miners of that time. You can also get to know their working world by boarding the narrow-gauge railway "Minièresbunn". After a ride through the underground labyrinth of the neighbouring Doihl mine, you arrive in the working-class town of Lasauvage, where you stroll through streets that have hardly changed in almost 100 years.

Esch-sur-Alzette, the second largest city in the Grand Duchy of Luxembourg and European Capital of Culture in 2022, proves that it is possible to win the future without losing sight of the past. Until 1825, Esch, located 17 kilometres from Luxembourg City, was an insignificant small town. This changed when iron ore was found in the surrounding area. Fifty years later, Esch-sur-Alzette was the centre of Luxembourg's burgeoning iron industry, as it was located in the middle of the Minette Basin, which stretched as far as Nancy and from which the Korntal also benefited. There was also a railway line connecting Esch with Luxembourg and Metz. In 1870, the minette was cooking here in six blast furnaces – in four furnaces at the Metzeschmelz site and in two at the Brasseurschmelz.

Thomas process brought the turnaround for Escher Industrie

The Escher iron industry was not yet a steel industry in the 1870s. This was prevented by the high phosphorus content of the minette. The Thomas process developed in 1878, which made it possible to convert phosphorus-containing pig iron into phosphorus-free steel, brought about the turning point - but not until 1886, when the technique was also used in Esch. Now steel could be boiled in large quantities. As steel production grew, so did the number of employees. Within a short time, the population quadrupled. As a result, workers' housing estates sprang up, with the steelworks companies emulating the model of the garden city known in England. Others took as their model the workers' dwellings with outhouses, toilet blocks and gardens that were typical in the Ruhr region, or created residential buildings grouped around green spaces,

3,000 people were employed at the **Belval iron-works** in Esch-sur-Alzette alone. The industrial com-



European Route of Industrial Heritage

















Co-funded by the European Union











plex was built between 1909 and 1912 and, with its six blast furnaces, was one of the most modern ironworks in Europe. The associated rolling mills produced frameworks, rails, profiled metals and iron wires – for decades, until the steel crisis in the mid-1970s heralded the beginning of the end. Although the old blast furnaces were replaced by modern blast furnaces A, B and C between 1965 and 1979, the end of the steelmaking industry was at best delayed, but not averted. The closure of blast furnace B in 1997 marked the end of the last active blast furnace in Luxembourg.

20 years later, a completely new district, the Quartier Belval, was built on the industrial wasteland of the former steelworks on an area of about 120 hectares. When the demolition work began in 1998, care was taken to preserve some of the industrial heritage and to integrate it into the urban development concept. They are intended to build a bridge between the past and the future. Blast furnaces A and B were placed under protection in 2000; blast furnace C had already been dismantled in 1997 and sold to a Chinese steel company. On the site of the former blast furnace terrace, the Cité des Sciences was created – a colourful mix of university quarter, services, shopping facilities, scientific and educational institutions as well as sports, cultural and leisure facilities.

Overview of former industrial wasteland from a height of 40 metres

Blast furnace A can be climbed by visitors today. From the blast furnace platform, 40 metres above the ground, there is a breathtaking view of the site and the wider surroundings. A tour provides information on panels about the blast furnace and the former pig iron production. The permanent exhibition "Beval & More" in the Massenoire visitor centre presents information about the economic and urban development of the region, the history of the iron and steel industry and the urban development on the industrial wasteland of Belval.

As part of the Capital of Culture Year Esch 2022, another site of industrial culture is opening: the Fer**ro Forum**. It was founded at the end of 2019 on the site of the former Esch-Schifflingen steelworks. Where steel was once produced, a centre of education and creativity is to be created. In the old central workshop, the first stations illustrate the technologies and developments around the topic of metal from the Celts to new 3D metal printers. Among other things, there is a small foundry, a forge, a metalworking shop and a five-metre-high, functioning miniature blast furnace. At the same time, the Ferro Forum does not want to be a museum, but a living place of exchange, accessible to designers, engineers, artists, researchers, historians and the young public. Currently, a ten-metre-long miniature candy factory, a project by artist Trixi Weis, simulates the stages of steel production using caramel – from the blast furnace to the ladle and converter, where colour and flavour are added, to the rolling mill.

Last but not least, the Ferro Forum wants the people who worked in the steel industry at the time to have their say. The diversity of personal stories is to be brought to the fore. In many cases it will be migration biographies that need to be told. Large numbers of people flocked to Luxembourg from France and Germany, and not least from Italy, which was economically depressed at the time, to work in the steelworks. Guest workers became fellow citizens who brought their families, but also traditions and customs, with

them to their new home. In this way, the Grand Duchy became a melting pot of cultures during the boom times of the iron smelting industry – and has remained so to this day.

Railway station was first step on foreign soil for Italian immigrants

The **Documentation Centre for Human Migration** (CDMH) in Dudelange, which is run by a non-profit association, has dedicated itself to the task of presenting immigration to Luxembourg and the Greater Region in the past and present. It acts as a link between archives, libraries, museums, associations, research and the general public. The CDMH has been located in the Gare-Usines railway station, which borders the "Italian Quarter", since 1996. The workers' quarter was built at the end of the 19th century next to the Düdelingen ironworks. The many Italian immigrants who came to earn a living in the mines and ironworks first set foot on Luxembourg soil here. Most of them were seasonal workers who came in spring and travelled back to their families in winter.

The Gare-Usines station, which is still served to-day, was built in 1897 together with the railway line to supply the new ironworks with coke and ore. After it closed, most Italians left the place. Since the 1970s, Portuguese-speaking immigrants moved here in large numbers, following a recruitment agreement between Luxembourg and Portugal. Today, against the background of a globalised migration movement, the neighbourhood's population is characterised by great diversity. There are regular guided tours of this district with its monuments and architectural features, organised by the CDMH, which also promotes partnerships with the residents. In this sense, the association runs a "museum without walls".

The MUAR – Musée vun der Aarbecht (Museum of Work) in neighbouring Tetingen also sees itself as a museum without walls. The project, initiated as part of the European Capital of Culture Esch 2022, is based in the Schungfabrik, a former shoe factory, whose former factory rooms are used as the "Musée Ferrum" for a permanent exhibition focusing on "Local History" and "Industry and People". Muar, the acronym of the country's first museum of work, means "tomorrow" in Luxembourgish, because that is what it is all about: exploring topics from the world of work from the perspectives of past, present and future and making them tangible. With this goal in mind, the MUAR organises seminars, conferences, concerts, workshops and exhibitions.

Exhibition extends beyond the museum into the city and surrounding area

The MUAR is currently presenting the exhibition "Working Class Heroes", which highlights the socio-political work of three local personalities: Jean-Pierre Bausch (1891–1935), Léon Weirich (1878–1942) and Jean Schortgen (1880–1918), three politicians who were committed to improving the living conditions of mine workers and their families. The exhibition extends beyond the museum site into the town and into the area of the municipality of Kayl/Tetingen. Visitors are sent on an impressive journey through time to learn about different aspects of a miner's everyday life. An everyday life that, despite all the hardships, also allowed hope for a better future.

Lifting a car with one hand, playing table football with a robot, melting steel in seconds or taking part in a scientific cooking workshop – all this is possible at the Luxembourg Science Center in Differdingen. Here, things are done in a playful way, and what otherwise often comes across as abstract subject matter, causes astonishment and enthusiasm here. Visitors can make their own discoveries and experiments at up to 100 interactive stations. The great hope is that young people will be inspired by this and become interested in scientific and technological professions, because the growing shortage of skilled workers is threatening economic development. The Science Centre is housed at the site of two industrial monuments of national rank: the "Groussgasmaschinn", the largest combustion engine in the world, and the Gasmaschinenhaus from 1905. They represent the technical development of the country in the first half of the 20th century.

Post-mining landscape offers habitat for different animal species

The former mining area Kazebierg (Katzenberg) in Ellergronn, located south of Esch-sur-Alzette, which was used for iron ore mining a few decades ago, has now been transformed into a nature reserve with a variety of habitats for different animal species. The Ellergronn Visitor Centre sharpens the eye for the special features of this post-mining landscape reclaimed by nature.

In the middle of it all, at first glance as if untouched by time, lies the Katzenberg mine. Its history began in 1881 and ended in 1967 with its closure, leaving the site to decay. But before the mine, last known as the Cockerill Mine, was lost beyond repair, a group of former miners got together and enthusiastically set about restoring the derelict buildings to preserve this gem of industrial history for future generations. A small museum displays pit lamps and tools, including a considerable collection of drilling equipment. Numerous historical photographs give an impression of the miners' arduous work. In the course of their work, they also came across fossils from time to time, some of which are on display. You can also visit the former wash-house and a blacksmith's shop. Some mining vehicles are on display in the museum's outdoor area.

Not far from the Ellergronn Nature Reserve, in Rumelange at the southernmost point of Luxembourg, the National Iron Ore Mining Museum, an ERIH Anchor Point, recalls work in Luxembourg's ore mines. The design of the museum, founded in 1973, was in the hands of former miners. For 140 years, from 1824 to 1964, iron ore was mined in Rumelange around the Roches Rouges, the Red Rock. The mining museum site includes three mines: Kirchberg – in operation from 1880 to 1930 and thus the oldest of the three, Langengrund – opened in 1900 and active until the 1970s – and Walert, which produced ore from 1898 to 1963. It was popularly called the "mousetrap", which tells us something about the working conditions: 70 to 90 miners toiled in twelve-hour shifts in wetness and darkness without safety precautions and without social benefits.

More than half a kilometre deep into the mine by mine train

What the men once laboriously hauled out of the mine now rests, surrounded by trolleys with and without rock, on rails or exposed on stone pillars in the locomotive shed of the Walert mine, which has been converted into an exhibition room. Photos of the miners at work and all kinds of equipment used to hammer the iron ore out of the mine complete the collection. Then it gets exciting. Put on your helmet, take a seat in the mine train, and you're off on a 20-minute ride 580 metres into the mine. Directly on site in the Kirchberg chamber 90 metres underground, former miners explain how work was done here at a constant temperature of ten degrees year in, year out. In the vicinity of the Walert mine, two circular routes lead to iron ore and limestone, which – quarried in quarries – was used as an aggregate in the blast furnace.

If you are in urgent need of refreshment after exploring the underground facilities, the museum restaurant "Maschinneschapp" in the machine workshop anno 1908 is just the right place. A hearty "miner's pan" with a cold beer to go with it? In that case, it is not unlikely that you will be served a "Bofferding" or "Battin" product from the "Brasserie Nationale" in Niederkerschen. Luxembourg's largest brewery with a market share of around 60 percent was created in 1975 from the merger of Brasserie Funck-Bricher from Luxembourg City, founded in 1764, and Brasserie Bofferding from Bascharage (Niederkerschen), founded in 1842, which acquired the Battin brewery from Esch-sur-Alzette in 2004, whose beer has since been brewed at the Bofferding site according to the original recipe.

The great thing is: you can visit the brewery and learn about the different stages of beer production under expert guidance – from the correct dosage of the ingredients water, malt, hops and yeast to the maturing of the young beer in flotation tanks over several weeks to the labelling of the bottles and barrels. In a brewing studio you can also brew your own beer or learn how to tap properly. A tasting rounds off the visit in the most enjoyable way.



Co-funded by

the European Union









Photos: Page 1.1,2 Niederkorn. Fond-de-Gras. Industrial and railway park; 3,4 Esch-sur-Alzette. Belval blast furnace; 5, P. 2.1 Esch-sur-Alzette. Ferro Forum (Photo: site); 2 Dudelange. Documentation Centre for Human Migration; 3 Tétange. MUAR – Musée vun der Aarbecht (Gemeng Käl); 4,5 Differdange. Luxembourg Science Center (site); P. 3.1,2 Esch-sur-Alzette. Museum of Cockerill-Mine; 3 Rumelange. National Iron Ore Mining Museum; 4,5 Bascharage. Brasserie Nationale (site)

ERIH website www.erih.net/l-want-to-go-there!

(Regional Route: Luxemburg | Minett Tour)

www.minetttour.lu

Photos: unless otherwise stated Office Régional du Tourisme Sud (Pulsa Picture – ORT

