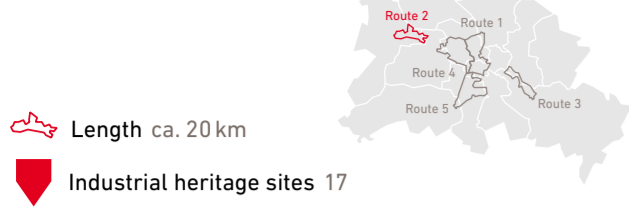


INFORMATION



- Length ca. 20 km
- Industrial heritage sites 17
- Duration day trip, ca. 5 hours (2 hours cycling time)
- Starting/end point "Spandau" station
- Public transportation: S-Bahn S3, S9 "Spandau" station; U-Bahn U7 "Rathaus Spandau" station; RB/RE RB 10, 13, 14 / RE 2, 4, 6 "Spandau" station
- Jungfernheide Beach: www.strandbad-jungfernheide.de

Route mostly bike lanes, quiet side streets, and waterfront paths. There are lengthier cycling sections without tour stops that traverse a diverse urban landscape.

Digital route planner: Komoot
 GPX Track and additional information (German only): www.industriekultur.berlin

Please send comments and suggestions about this bike route to: kontakt@industriekultur.berlin

IMPRESSUM

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 12459 Berlin
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 www.industriekultur.berlin/en

Concept by the bzi Bike Route Team: Axel von Blomberg, Antje Boshold (coordinator), Evelyn Hoppe, Nico Kupfer, Evelyn Sutter
Design: Ann Katrin Siedenburger
Translation: Patrick Baker
 October 2021



Industrial Heritage in Berlin
BIKE ROUTES

Route 2
MANUFACTURING AND MUNITIONS

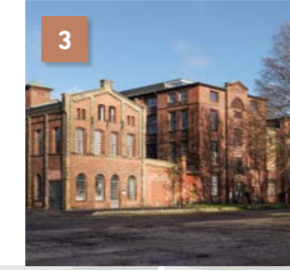
Cannon Foundry Workshop
Symbol of Prussian Military Industry
 Obermeierweg 18
 13597 Berlin



Garrison Washhouse
From Steam Laundry to Brewery
 Neuedorfer Str. 1 | 13585 Berlin
 Brauhaus Spandau
 www.brauhaus-spandau.de
 Raymons | www.raymons.de
 Frieda-Arnheim-Promenade 7



Royal Fireworks Laboratory
Fireworks and Film Magic
 Eiswenderstraße 14-19
 13585 Berlin
 Stilbruch
 www.stilbruch-restaurant.de



Haselhorst Reich Research Housing Development
Hidden Gem of Modern Housing
 Historic apartment
 Burscheider Weg 21 | 13599 Berlin
 Architects: Fred Forbát, Otto Bartning, Paul Emmerich und Paul Mebes



"Belgienhalle"
Large-Scale Spoils of War
 Gartenfelder Straße 28
 13599 Berlin
 Architect: Hans Hertlein



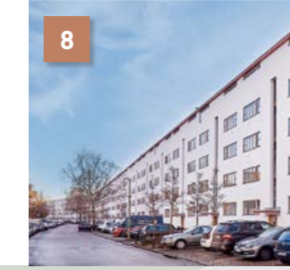
Siemensstadt Housing Development
Escape from the Urban Jungle
 Architect: Hans Hertlein



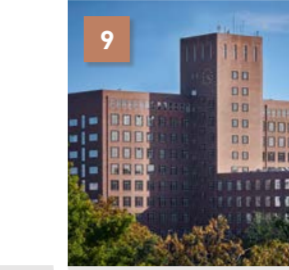
Jungfernheide Park
Former Parade Ground and Shooting Range
 Kulturbiergarten
 www.kulturbiergarten.de
 Sommergarten
 Jungfernheide Beach
 www.strandbad-jungfernheide.de



Siemensstadt Settlement
UNESCO World Heritage Site
 Project manager: Berlin city planner Martin Wagner
 Architects: Walter Gropius, Hans Scharoun, Otto Bartning, Fred Forbát, Hugo Häring and Paul Henning



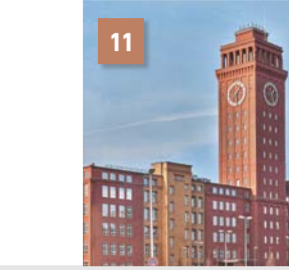
Wernerwerk High-Rise / Wernerwerk X
Symbol of the Electropolis
 Siemensdamm 50
 13629 Berlin



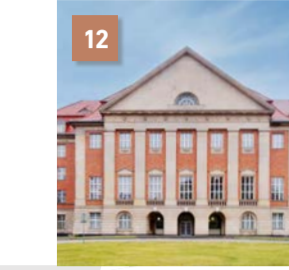
Wernerwerk Station
Station on the Siemensbahn
 Other Siemensbahn stations: Siemensstadt and Gartenfeld (terminus)



Wernerwerk II and Clock Tower
Symbol of Siemensstadt
 Wohlrabedamm 32 | 13629 Berlin
 Stammhaus
 www.restaurant-stammhaus.metro.rest



Siemens Headquarters
Nerve Center of a Global Company
 Nonnendammallee 101
 13629 Berlin
 www.siemens.com



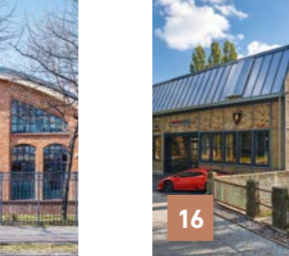
High-Rise Switchgear Plant
Europe's First High-Rise Factory
 Nonnendammallee 104
 13629 Berlin



OSRAM Glass Factory
Glass-Melting in Spandau
 Nonnendammallee 44
 13629 Berlin
 www.ams-osram.com



Rifle Factory / BMW Motorcycle Plant
Making Motorcycles for over 50 years
 Am Juliesturm 14-38
 13599 Berlin
 www.bmw-werk-berlin.de



Munitions Factory / MOTORWORLD Manufaktur Berlin
A Location with Automotive History
 Zitadellenweg 30-70 | 13599 Berlin
 www.motorworld.de/berlin
 Café Maitresse
 Zitadellen Wirtschaft zu Spandau
 www.zitadellen-wirtschaft.de



Spandau Citadel
Center of the Prussian Armaments Industry
 Am Juliesturm 64 | 13599 Berlin
 www.zitadelle-berlin.de



Spandau Citadel
Center of the Prussian Armaments Industry
 Am Juliesturm 64 | 13599 Berlin
 www.zitadelle-berlin.de

LEGEND

- Industrial heritage highlight www.industriekultur.berlin
- Industrial heritage point of interest
- Tourist information
- Food and drink at sites along the route
- Lookout point
- Bicycle shop
- Dangerous intersection
- Construction zone
- S-/U-Bahn station, train station (public transportation)
- Cycling permitted
- Bicycles must be pushed
- Old Siemensbahn line
- Siemensstadt² development area
- Information board
- Beach area



IMAGE CREDITS
 Cover image Thomas Kierok | 1 Cannon Foundry Workshop Andreas FranzXaver Süß, Archiv Stadtgeschichtliches Museum Spandau | 2 Garrison Washhouse visitSpandau/Foto: Claudia Schwaier | 3 Royal Fireworks Laboratory Andreas FranzXaver Süß | 4 Haselhorst Reich Research Housing Development Max Braun, Sabina Dobro/Gewobag | 5 "Belgienhalle" Christian Fessel/Mann mit Hut Touren | 6 Siemensstadt Housing Development Andreas FranzXaver Süß | 7 Jungfernheide Park Axel von Blomberg | 8 Siemensstadt Settlement Christian Fessel/Mann mit Hut Touren, Siemens Historical Institute | 9 Wernerwerk High-Rise/Wernerwerk X Christian Fessel/Mann mit Hut Touren, Siemens Historical Institute | 10 Wernerwerk Station Andreas FranzXaver Süß, Christian Fessel/Mann mit Hut Touren, Siemens Historical Institute | 11 Wernerwerk II and Clock Tower Christian Fessel/Mann mit Hut Touren | 12 Siemens Headquarters Andreas Muhs, Siemens Historical Institute, Andreas FranzXaver Süß | 13 High-Rise Switchgear Plant Siemens AG, Munich/Berlin | 14 OSRAM Glass Factory Andreas FranzXaver Süß | 15 Rifle Factory/BMW Motorcycle Plant Andreas FranzXaver Süß | 16 Munitions Factory/MOTORWORLD Manufaktur Berlin | 17 Spandau Citadel visitBerlin/Foto: Wolfgang Schloviak, Andreas FranzXaver Süß



Route 2

MANUFACTURING AND MUNITIONS



MANUFACTURING AND MUNITIONS BIKE ROUTE

With the opening of a rifle factory in 1722, Spandau began developing into the center of the Prussian armaments industry. Little by little, the Prussian government moved its munitions productions from the capital of Berlin to Spandau. The fortifications of its Citadel provided good protection for the secret production of military technology. Over the centuries, Spandau developed into an army center and fortress city. By the end of the 18th century, nearly half the population had ties to the military.

In the early 20th century, massive new industrial companies sprang up. Businesses migrated from Berlin's center to the city's outskirts and beyond. Siemens moved from downtown Berlin to what was then the independent city of Spandau, which only became part of Greater Berlin in 1920. A new neighborhood grew up around the factories: Siemensstadt. It featured modern housing developments and recreational offerings. Just as AEG commissioned buildings from Peter Behrens, Siemens had its own company architects. First, Karl Janisch designed industrial and residential buildings. His successor Hans Hertlein created two architectural styles: a cozy design for residential and recreational structures, and the sober, functional style that became the face of Siemens's industrial buildings. From 1915 to 1951, Hertlein's architecture shaped the industrial metropolis of Berlin.

INDUSTRIAL HERITAGE IN BERLIN BIKE ROUTES

Berlin is a gigantic open-air museum of industrial heritage. Our five bike routes invite you to discover a new side of the city. Each route traces a different chapter of the city's history:

- Route 1: Bright Lights and Cold Beer
- Route 2: Manufacturing and Munitions
- Route 3: Water and Power
- Route 4: Innovation and Elegance
- Route 5: Railroads and Runways

The routes are each 20–25 km long. There is a lot to see, so plan a whole day for them. All the routes traverse diverse urban environments and stick to relaxing waterfront paths, quiet side streets, and official bike lanes. If you feel like taking a break, there are many restaurants and cafés with a special industrial flair.

 **Route 2 Manufacturing and Munitions**
Digital route planner: [Komoot](#)

GPX Track and additional information (German only):
www.industriekultur.berlin

INDUSTRIAL HERITAGE IN BERLIN HIGHLIGHTS

Our 18 highlights are representative of Berlin's industrial development. They testify to the city's exceptional rise as an "electropolis," to hard times and many fresh starts. Beginning with the Industrial Revolution in Prussia, they illustrate Berlin's transformation into the most modern metropolis on the Continent. Traces of the First and Second World Wars can still be seen in many places. Some of the sites also bear witness to changes entailed by the building and fall of the Berlin Wall. The highlights include museums, historical locations, and even actively operating businesses. Some are open every day, others only by appointment.

www.industriekultur.berlin/en/

The network of Berlin's industrial heritage highlights is part of the European Route of Industrial Heritage. www.erih.net



1 Cannon Foundry Workshop | 1874

Symbol of Prussian Military Industry

Buildings associated with the Royal Cannon Foundry began appearing in the shadow of the Citadel in 1854. Two are still standing: the workshop, built in 1874 in the style of Schinkel, and a hall dating to 1915. It initially focused on bronze cannon, but later gun barrels of all calibers were bored there. In the wake of German demilitarization after WWI, bed frames, agricultural machines, and cars were produced there. During the Weimar Republic, secret preparations for military production took place that then benefited the Nazi regime. During the Cold War, the facility was used for grain storage for the Senate Reserve, a stockpile of resources created in case the city was blockaded again. After standing empty for decades, an office park with a waterfront café and a dock are now planned.

3 Royal Fireworks Laboratory | 1870–1918

Fireworks and Film Magic

Fireworks for entertainment played only a minor role. Incendiary, explosive, and signal rockets for the military were developed, tested, and produced here. It all began in 1817 with a laboratory for incendiary rockets at the Spandau Citadel. When it grew too small, the laboratory moved to Eiswerder Island. As a remote location surrounded by water, it was ideal for producing explosives under the utmost secrecy. The Fireworks Laboratory achieved rapid breakthroughs, contributing decisively to the Prussian army's potency. The remaining factory buildings were built between 1870 and 1918. From the end of WWI to the end of the Cold War they were used for storage, in part for the Berlin Senate Reserve. Some of the historic buildings are currently being converted to apartments. Others contain workshops and the offices of the German Stunt Association.

4 Haselhorst Reich Research Housing Development | 1930–1935

Hidden Gem of Modern Housing

"First the kitchen, then the facade!," demanded Marie-Elisabeth Lüders, an assemblywoman during the Weimar Republic. She initiated the building of this housing development by the "Reich Research Society for Economic Efficiency in Building and Housing." The society's aim was to build affordable apartments with functional floor plans, and also to research efficient construction methods and inexpensive raw materials. The result was the largest state-sponsored housing development of the Weimar Republic, designed by Fred Forbát, Otto Bartning, Paul Mebes, and Paul Emmerich. The inexpensive construction was a success: 37% of the tenants were manual laborers, 42% were office workers. The Reich Research Society was dissolved in 1931 for political reasons, but the Gewobag property company was able to continue working on the housing development until 1935.

TIP

Visit a historic apartment at the Haselhorst Development [Burscheider Weg 21 | 13599 Berlin](#). The historic apartment is furnished in the style of the 1930s. www.gewobag.de/soziales-engagement/stadtteilinfos/spandau/haselhorst/museumswohnung/

2 Garrison Washhouse | 1880

From Steam Laundry to Brewery

The Prussian soldiers who lived in Spandau around 1880 had to be supplied with clothing and food. In addition to the army laundry (with its own boiler house and water tower), the garrison bakery and the army commissariat were also located on the base. Brauhaus Spandau has been serving its own beer here since 1994.

5 "Belgienhalle" | 1918

Large-Scale Spoils of War

There was an acute iron shortage during WWI. To help companies of significance to the war effort, industrial buildings in occupied territories were dismantled and rebuilt in Germany. For the Siemens-Schuckert Works, architect Hans Hertlein chose an iron-frame hall in the northern French city of Valenciennes, near the Belgian border. The relocated building, deceptively named *Belgienhalle*, or "Belgium Hall," became a metal shop at the Siemens Cable Factory on Gartenfeld Island. Its location on the Hohenzollern Canal made it accessible to barges. Workers took the *Siemensbahn*, or "Siemens Railway," to Gartenfeld Station. The hall was expanded in 1928/29. Electric, communications, and high-frequency cables were produced there until 2002. Then it was used as a storage facility and briefly as the location for the Bread & Butter tradeshow, 3,700 apartments and a recreational waterfront are planned for the island, which will be closed to traffic. The landmarked hall will be home to commercial, social, and cultural enterprises.

Forced Labor

Infinite Injustice

Forced labor was an omnipresent mass phenomenon during WWI. The Nazis abducted men, women, and children from all over Europe and made them work for the German war effort. Siemens also benefited. From 1940 to 1945, it had several barracks for forced laborers in Spandau. In total, there were ca. 3,000 such camps for various companies in Berlin. Only one, in Schöne-weide, is preserved almost in its entirety. Its historic barracks now house the Nazi Forced Labor Documentation Center [Site 7 on Route 3], which informs visitors about the darkest side of Berlin's industrial heritage.

TIPS

There are two information boards on the topic on [Paulsternstraße](#). Nazi Forced Labor Documentation Center www.ns-zwangsarbeit.de/en/

6 Siemensstadt Housing Development | 1921–1930

Escape from the Urban Jungle

The housing shortage after WWI was massive. In order to provide its workers with a place to live, Siemens founded its own property company. This and all subsequent Siemens housing developments were built as an escape from the dreariness of the tenements. Company architect Hans Hertlein built apartments and townhouses for white-collar workers. For the standards of the time they were pure luxury, with a bathroom in every apartment. Heating, lighting, and ventilation were also state of the art. Hertlein was influenced by the garden city movement and Reform architecture, as can also be seen in his design of the open spaces. Of note: the development's streets and squares are named after engineers, inventors, and physicists whose work paved the way for Siemens's success.

7 Jungfernhöhe Park | 1926

Former Parade Ground and Shooting Range

The park opened in 1926 and was named after the nuns of the old Spandau convent. 100 years earlier, the area was used militarily: as a parade ground, shooting range, and starting in 1896 as the location of the first airship battalion. After WWI, military aviation was forbidden, and the hangars were torn down. The park's construction was financed as part of an emergency employment program. This program led to public parks and recreation areas being opened all over Berlin for the city's growing population. Jungfernhöhe Park included athletic fields, playgrounds, a youth camp, a water tower, a beach area, and an open-air theater. The latter site is now home to the Kulturbiertgarten.

8 Siemensstadt Settlement | 1929–1934

UNESCO World Heritage Site

A decade before WWI, Berlin city planner Martin Wagner commissioned six architects with six distinctive styles to realize their vision of modernist urban planning: Gropius, Scharoun, Bartning, Forbát, Häring, and Henning. Four of these architects belonged to the innovative *Ring* association; hence the nickname Ring Settlement. The tiny apartments were intended for Siemens workers with low incomes. Light, fresh air, and sunshine were the credo by which the Settlement was built. The most famous buildings are Bartning's monotonous *Langer Jammer* (Long Misery) and Scharoun's *Panzerkreuzer* (Armored Cruiser). Information boards around the Settlement provide details about the buildings and their architects.

9 Wernerwerk High-Rise / Wernerwerk X | 1930

Symbol of the Electropolis

Siemens was constantly expanding and building new buildings. To prevent confusion, in the 1920s Siemens began naming and numbering them as *Wernerwerke* (Werner's Factories), after company founder Werner von Siemens. The architect of Wernerwerk X was Hans Hertlein. His sober, functional steel-frame buildings set a new standard and were the face of the distinctive Siemens style. This high-rise building once contained the Siemens & Halske offices, a library, and, on the tenth floor, a lecture hall. To highlight the importance of this cutting-edge building and the revolutionary potential of electricity, on special occasions all of the windows were illuminated. The building is now home to several companies, and the tenth floor is a conference center.

10 Wernerwerk Station | 1929

Station on the Siemensbahn

Despite the new housing developments, only a small portion of the company's 55,000 employees lived in Siemensstadt in 1927. Many had to rely on public transportation. To help them get to work quickly, the *Siemensbahn* (Siemens Railway) was built. It crossed the industrial sections of Siemensstadt on viaducts. After only two years of construction, electric trains were running every five minutes. Service stopped in 1980, while Berlin was a divided city. After lying dormant for 40 years, the railway is now being reactivated. In 2029, marking its 100-year anniversary, the historic train line will once again be in service. This will also make the Siemensstadt² development more accessible.

Siemensstadt² | 2030

Berlin's District of the Future

Back when Siemensstadt was founded over 100 years ago, the company invested not only in new factory and office space but also in residential buildings, transportation services, and cultural and social infrastructure. Now, in association with the city of Berlin and the district of Spandau, Siemens is taking a similar approach to developing a landmarked industrial location. The resulting smart city quarter will combine research and development and state-of-the-art technology with working and living spaces. Siemensstadt² represents the Berlin of tomorrow. www.siemensstadt.siemens.com

14 OSRAM Glass Factory | 1927

Glass-Melting in Spandau

Fire, sand, and quartz. At this glassworks with eight kilns, glass tubes have been made for the manufacture of various lamps ever since 1927 – seven days a week, 365 days a year. Before WWI, light bulb production was a growth sector of the electrical industry. The incandescent lamp was first manufactured in 1905. In 1906, the German Gas Light Company registered the OSRAM trademark. The name is a portmanteau created from *osmium* and *wolfram* (another name for tungsten), two materials used in making filaments. From 1978 to 2013, OSRAM was a wholly owned subsidiary of Siemens. In 2020 it merged with arms to become OSRAM. It combines innovations in sensing and light technology.

West Power Plant | 1931/1949

An Airlifted Power Plant

Hertlein built the West Power Plant (1931), the second power plant on the Spree, as a counterpart to the Klingenberg Power Station (1927) [Site 15 on Route 3]. Klingenberg provided electricity to the eastern part of the city, and West to the western part. Together they were intended to secure Berlin's energy supply for many years to come. After WWI, the Soviet military dismantled vital parts of the largely undamaged West Power Plant. Badly needed reconstruction of the plant began in April 1948 but was hindered by the Berlin Blockade, which began in June of that year. Large components and materials were flown in on 580 flights as part of the Berlin Airlift. This spectacular escapade highlighted the futility of the blockade, contributing to its end in May 1949. Half a year later, Berlin Mayor Ernst Reuter opened the power plant that would later be named for him.

Reuter West CHP Plant | 1989

Energy Independence for West Berlin

In the 1980s plans were laid to make West Berlin more energy independent. A new power plant was constructed and went into operation in 1989, shortly before the Wall fell. Fired by hard coal, it provides electricity and heat via the combined heat and power (CHP) principle.

15 Rifle Factory | 1914–1937

BMW Motorcycle Plant | 1939

Making Motorcycles for over 50 Years

In the early 20th century, this gigantic munitions factory was central to the Prussian armaments industry. Production was top secret. Even now, hardly anything is known about it. Much more transparent are the fifty years in which BMW has been making motorcycles in the historic location. BMW bought the facility from Siemens & Halske in 1939, using it to build aircraft engines during WWI. For a brief period after the war, tools like sickles, scythes, and knives were made there. In 1949 BMW started manufacturing motorcycle parts, and in 1969 the first motorcycle totally built in Berlin rolled off the line. Today, 2,200 workers produce up to 800 motorcycles each day for the global market. A finished motorcycle rolls off the line about every 62 seconds.

16 Munitions Factory | before 1897

MOTORWORLD Manufaktur Berlin | 2019

A Location with Automotive History

A few buildings remain of what was once a munitions factory, yet another part of the Prussian armaments industry. In the 1920s, the facility was repurposed for automobiles. From 1928 to 1940 it produced rear-wheel-drive cars for the DKW company. Later, it also turned out chassis for front-wheel-drive models. In the 1960s, after Auto Union was taken over by Volkswagen, the car factory closed. Where transmissions were once built, super sports cars and classic cars have been on display since 2019. MOTORWORLD carried out a historic restoration of the old hardening shop with the saw-tooth roof. There will also be new buildings for showrooms, workshops, and retail space devoted to the automotive world. A container hotel is also planned, as are event locations and a beer garden.

17 Spandau Citadel | 1559–1583

Center of the Prussian Armaments Industry

A cannon foundry, factories for rifles, munitions, and gunpowder, and a fireworks laboratory – all these still bear witness to how the fortress city of Spandau began developing into the center of the Prussian armaments industry in the 18th century. The Citadel played an important military and representative function. The Citadel's armory is now home to museums devoted to Spandau's cultural, civic, industrial, and military history. The courtyard provides space for music festivals, theater, and Renaissance fairs.