The **Sankt Florian** club are working on a large permanent layout, based on their long closed local prototype but with additional scenes. *Photographs by club members.*

Florianerbahn

A trip to Sankt Florian in Upper Austria

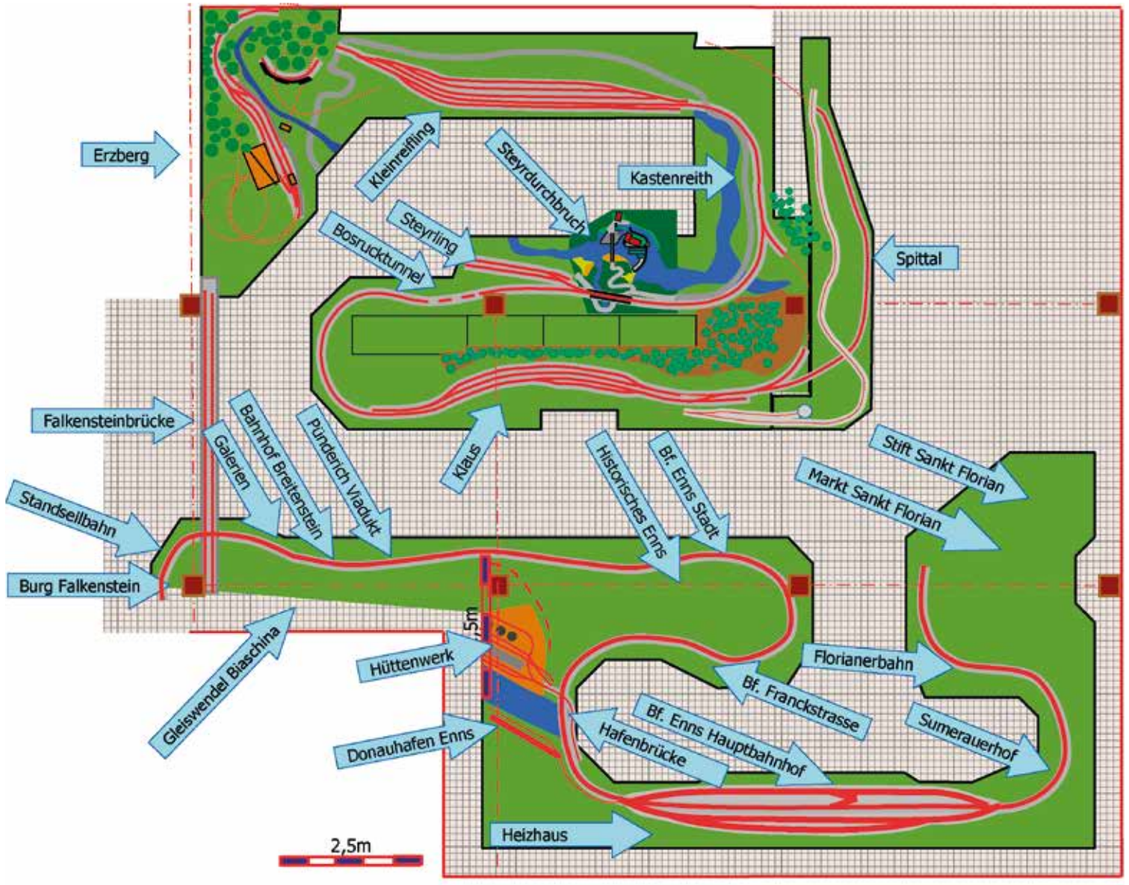
In 1974, the market town of St.Florian lost its rail connection when the Florianerbahn was closed. This changed in 2002 with the founding of the St.Florian model railway club, and trains (albeit miniature ones) have been running again in St.Florian since 2004.

If you drive on the A1 Westautobahn from Vienna to Linz, the two striking towers of the Abbey Basilica of St.Florian appear just before Linz, to the left of the motorway. The church is well-known among architecture and art lovers as it is considered one of the best-preserved Baroque churches in central Europe. The original hand-carved wooden pews from the Baroque period still stand in the nave. The church and parts of the abbey were extensively renovated for the millennium. Since then, the frescoes created by Bartolomeo Altomonte have once again been restored to their full splendour. The altar was designed by Albrecht Altdorfer in the 16th century. A roof modelled on a Turkish war tent towers over the large marble hall, built after the Turkish wars, which is now mostly used for festive events. The library, which contains 140,000 volumes, is one of the most important collections of historic books in Austria, and Anton Bruckner played and composed on the world-famous Bruckner organ during his years in St.Florian.

But the monastery has something worth seeing for more than just fans of the baroque. For over twenty years a group of railway modellers has been working tirelessly to make a dream come true. In the Stiftsmeierhof – as the large estates of the monastery are called – in the centre of St.Florian, in the immediate vicinity of the basilica, one of the most impressive layouts in Austria is being built in an area of over 300m². The models are mainly real scenes from south-eastern Upper Austria and neighbouring Styria.

Above
A long iron ore train rounds the end of the peninsula at the entrance to the layout area approaching Klaus station.

Right
The entrance to the layout, spanned by the massive Falkenstein bridge.



All beginnings are difficult

As with almost every railway club, the start was difficult. After long discussions and negotiations with the monastery, which is thankfully very committed to the club, an old unrenovated attic more than 350 years old in the monastery's Meierhof was leased in 2004. In that summer, the adaptation work began rather hesitantly with the cleaning of the large space. The necessary construction measures were co-ordinated with the Federal Monuments Office and implemented with great care and caution. For example, the windows are a joint development of the modellers, the Monuments Office and the former Wick window company from Linz. The original material was used as far as possible during the adaptation work. The original brick floor was cleaned stone by stone, an thermal insulation was installed with respect to the original fabric. The more than 350-year-old staircase was repaired and is being used again as an entrance. The solid oak attic supports and beams were cleaned and left visible. They contribute significantly to the overall impression of the rooms.

Above
Enns Hauptbahnhof.

Where original material was not available, it was professionally supplemented with similar commercially available building materials.

The result is undoubtedly an exemplary successful 'gentle revitalisation' that allows a meaningful use for a listed building.

Railway history

The historic rooms are by no means the only historic connection that the modellers find in their hobby. St.Florian has railway history. From 1913 to 1974, the town was the terminus of a narrow gauge electric interurban tram, the Ebelsberg – St.Florian AG, affectionately called *Flocki* by the locals. It was planned in the early 20th century to connect the cities of Linz and Steyr and, like the Linz tramway, was built to 900mm gauge, which is rare in central Europe. Due to the outbreak of the First World War and the subsequent economic changes in the former crown lands of the monarchy, the line between St.Florian and Steyr, as well as the often discussed extension to the western main line, was never built. The market town of St.Florian remained a provisional terminus for sixty years.

Below
Enns old town on the hill above the line.

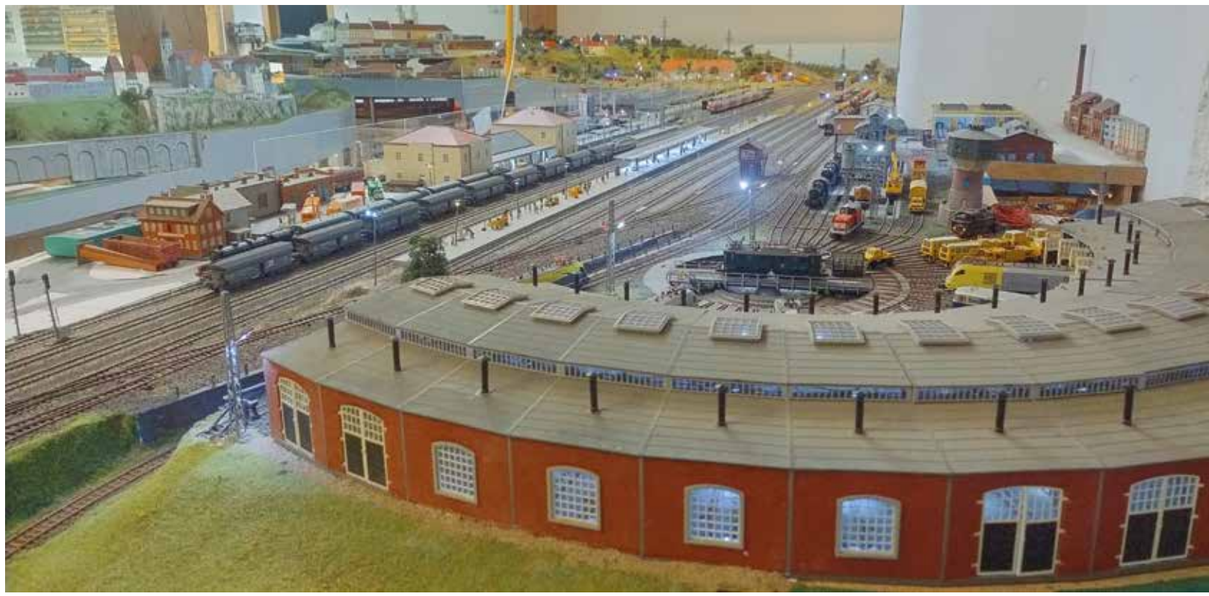
With the construction of the Traun bridge between Kleinmünchen and Ebelsberg in the early 1970s, the Florianerbahn, which was operated by Stern & Hafferl at the time, lost its connection to the Linz tram network. Shortly afterwards, regular operation on the 9km long route ended. Since then, there have been several unsuccessful attempts to revitalise the railway. To date, however, no viable concept has been found. Only a modest museum operation secured the existence of the route until a few years ago. With the loss of the operating licence, this use of the railway facilities also came to a halt and the railway sank into a deep sleep. In the meantime, the rails have been removed and cyclists have been able to use the old railway line for a few years now. Since there is no apparent desire for it, it will probably remain a pipe dream that the *Flocki* might be extensively revitalised, like the Lambach – Gmunden local line a few years ago. In a few years, the matter will be forgotten and the memory will have completely faded.

Big plans at the model railway club

Things are completely different at Stiftsmeierhof. The large attic naturally offers almost unlimited space for model railway dreams. Construction work on the model railway system is well advanced. Around 2,000m of track in three different gauges has now been installed. The enthusiasts stick to specific models that are appropriate for the scenes.

Above
The approach to Enns station over the harbour bridge

Below
Enns loco depot and station. The monastery is visible in the far distance.



Above
Klaus station.

From Erzberg to Sankt Florian – a journey through the layout

An important feature of the layout are the many small stations from south-eastern Upper Austria and the long distances between them – just like the real thing. The landscape is mainly based on themes from the Ennstal in Upper Austrian, the Steyr-Kremstal, and of course around the Florianerlandl (as the area around Sankt Florian was called in the 19th century). A wealth of historic buildings and industrial facilities in the region are reproduced on the layout.

Below
Kleinreifling station.

We start the journey by train at Erzberg, which is already in Styria, the most south-eastern point of our journey. Here, as in the original, there is still a narrow gauge line (modelled in HOf) that serves the underground mining.

A large track spiral under the Erzberg leads down a steep gradient directly to Kleinreifling on the Enns.

The track layout is based on an original plan from the 1970s. At that time, Kleinreifling was still a busy station. From here, passenger trains went to Amstetten, Linz, and south to Styria, not to mention the iron ore trains. In the steam era, these required two locomotives. So up until the early 1970s you could experience double traction of ÖBB classes 152 (2-10-0) and 86 (2-8-2T). Today, Cargoserv Taurus locos pull heavy ore trains through the valley almost effortlessly.

With the electrification of the line and later with the introduction of push-pull trains, the station lost a lot of its importance.

Today it is used as an overnight accommodation for S-Bahn trains from Linz, which turn round here to take commuters to Linz early in the morning. The station buildings were built as replicas of the originals from 1.5mm thick styrene sheet. This type of construction is very suitable for corresponding models to achieve excellent results with inexpensive tools.

We leave the station after a short stop and continue towards Kastenreith. Kastenreith is one of the smallest junction stations in the world. Only one point, a tiny station building, and a few signals make up the entire railway infrastructure.

Until the early 20th century, wood was transported on the Enns in the form of rafts to the Danube and then on to Vienna. In the days of rafting, the warehouses and rest

Above
The west end of Enns yard. The train will disappear under Sankt Florian to run via the large spiral to the storage sidings.

stops for the raftsmen were called *Kasten*. However, the construction of the hydro-electric power stations on the Enns from 1930 onwards sealed the end of the timber traffic.

On the layout the famous Kastenreith box-like warehouse is a scale model, like the original in the immediate vicinity of the station but on the wrong bank of the Enns. This allows visitors a better view of the much more attractive river side of the building.

The rest of the route does not quite correspond to the original. In the model it crosses the valley several times around the Steyrdurchbruch power station. This is an Art Nouveau industrial structure built at the beginning of the 20th century by Maurice Balzarek, one of the Viennese Art Nouveau group. It could be reproduced on the layout almost to scale. The original is one of the oldest continuously operating hydro-electric power stations in the world; it has been supplying electricity almost continuously since 1908 and has been a listed building for many years.

In the model, there are generators with rotating armature shafts and the lights come on at night.

Below
Steyrdurchbruch hydro-electric power station.

In the Steyerling lime works, which belongs to Vöest-Alpine AG, the lime required for steel production is extracted and transported in block trains to the blast furnaces in Linz.

We pass the lime works and go through the Bosruck tunnel in a wide 180° curve directly to Klaus.

At Klaus station, the trains usually have to wait for the oncoming train on the single track line. The station building in Klaus a.d. Phyrnbahn was built following the original ÖBB plans, with individual parts cast in plaster.

The track plan of the station is based on the situation around 1970. At that time, Klaus was still the terminus of the now-defunct 760mm gauge Steyrtalbahn making a connection to Spittal. The track layout was supplemented by what was a very impressive depot for a narrow gauge railway.

The region chosen as the subject of the layout does not only offer interesting buildings. Although the mountains in Upper Austria are well under 3,000m high, the landscape and vegetation can certainly match the main alpine regions. This is mostly because the valleys of the Enns, Krems, and Steyr are deeply cut here and are rarely more than 500m above sea level. This means that the mountains are quite high by Austrian standards measured from the valley floor.

An extensive forest spreads out above the northern exit of Klaus station. In the model, this ignites every hour into a proper forest fire, which is then extinguished by the fire brigade and the army using a functioning helicopter. The modellers have done an excellent job here. Over the years, well over 4,000 fir trees and countless deciduous trees have been planted and a stately forest has developed. At some point, we stopped counting the trees!

Like the narrow gauge, the main line from Klaus also finds its way to Spittal. From here, it goes directly into the hidden sidings under the scenery and back to the spiral under the Erzberg. In the four hidden yards there is space for around fifty 3m long trains.

While the single track branch line leads back to Erzberg station and the ore loading area, the double track line goes directly up to the Falkenstein Bridge. The bridge itself was created to connect the two sides of the space and create a dramatic entrance at the end of the layout. The original is located on the Tauern South Ramp in Carinthia and is one of the largest reinforced concrete arch bridges in the world. It was built during the doubling of the line in the early 1970s. The model measures around 4m long over a 3m wide passage at height of 2.2m.

The castle in sight of the railway that gives the bridge its name is from a kit which Kibri have produced for many years; it is almost a scale model.

The model of the bridge spans the entrance to the club room. This area is based on the Mölltal valley in Carinthia,

There is a hiking trail to the castle, but less fit visitors use the (3D-printed) funicular railway which is based on the Wurzeralmbahn from Spittal am Phyrn.

The descent from the bridge is currently being built, based on scenes from Austria and Switzerland. The track layout and the stone arch bridge on the top level are reminiscent of the spiral tunnels near Biaschina on the Gotthard south ramp in Switzerland, while Breitenstein station and the galleries can be clearly traced to the Semmering in Lower Austria.

The prototype for the long hillside viaduct, on the other hand, is on the Moselle near Pünderich in Germany. Here it is very clear that following a real example produces an incredible effect, even when themes from very different areas are combined.

Our journey continues to the area where the Enns flows into the Danube. The are has been settled for two thousand years and is an important industrial region in Austria.

We reach the northern end of the Enns. This flows into the Danube near the town of the same name. The railway makes a large arc around a replica of the historic town centre.

The famous town tower was built in the Renaissance, the spacious façades of the town houses date from the Baroque period and were simply built in front of the old houses, which makes them look much larger than they actually are. While the original tower was created from the remains of a demolished church, the model was designed in CAD and produced on a 3D printer.

Enns also has the oldest preserved town charter in Austria. The town itself is much older and its history goes back to Roman times. The legionary camp of Lauriacum was one of the largest Roman settlements on the Danube. The Roman town already existed in the second century. The Romans persecuted Christians mercilessly during this time. Florian, a high-ranking administrative official, converted to Christianity. He was sentenced to death and drowned in the Enns in May 304 with a millstone around his neck. Legend has it that his widow loaded his body onto an ox cart and transported it away. The oxen stopped at a grove near Buch and would not go any further, so Florian was buried there. According to legend, the church of St.Florian now stands on this spot. Buch became the market town of St.Florian.

Above
The north end of Klaus with the brewery and the narrow gauge shed.

Above
Beside the river at Kastenreith.

Below
Looking back to the entrance. Enns town station on the left, Klaus to the right across the aisle.

Above
A mountain farm, with a private cable way to deliver essential supplies.

But we continue our journey over the harbour bridge to Enns station. The original is just a few kilometres from Enns, near Mauthausen. It was opened in 1872 and spans the Danube with a length of 573m. The bridge has been restored several times. Only two spans are shown in the model and it was expanded for double track operation.

After the crossing, we reach the eastern end of Enns station. This is the main station on the layout. The track plan is a mixture of the current situation, elements from the 1980s and parts that were not present in the original. For example, the conversion to a high-speed line in the early 2000s was already taken into account in the model. While mainly local trains stop at the platforms, ICE, IC, and also historic express trains pass through the station at top speed.

The original Enns station, however, never had a loco shed. Modellers' licence, however, allows the station to be equipped with a large eighteen stall roundhouse with space for around forty locos. The coaling plant was built based on photos of an English-built Hunts coaling plant; similar examples were common in Austria and Bavaria.

Rolling stock

It will be clearly seen that modellers are very tolerant when it comes to the realistic use of rolling stock. Since the club has almost no stock of its own, you can see everything on the layout that the members like. So it can happen that an ICE – in reality they travel several times a day from Munich and Frankfurt to Vienna – can be seen passing a Bavarian Gt4/4 or a Prussian passenger train. As in real life today, however, the model is dominated by modern Taurus and Vectron electrics used by the ÖBB and many private operators.

As in the original, the model also has a connection to the Danube port in Enns. The port mainly handles coal for the steelworks which processes the ore from the Erzberg. In the original, one of the largest container terminals on the Danube can be found at the port of Enns. The models of the steelworks are adapted Walthers kits.

For travellers to Sankt Florian, there is the option of changing to the Florianerbahn at Enns station. The connection to the Austrian Western Railway was often planned in the original, but was never realised and the railway has completely disappeared except for a small museum in the historic depot in Sankt Florian. In contrast, our Florianerbahn has been extensively modernised and there are even expresses to Sankt Florian. Most of the vehicles come from Switzerland, but there is also an original Florianerbahn carriage still in operation.

The main line disappears into a tunnel after leaving Enns station and runs over a spiral to the hidden sidings located directly below Enns. Theoretically, up to forty trains of different lengths can be parked here.

But we take the Florianerbahn and make a quick trip to Sankt Florian, passing the Sumerauerhof, a classic large square farm typical of the region. The prototype is a listed building and part of the Upper Austrian Sumerauerhof open-air museum.

Shortly afterwards we pass the St.Florian bell foundry. The 'new Pummerin' was cast here shortly after the Second World War. The old bell of St.Stephen's Cathedral in Vienna – the most important church in Austria – fell into the bell tower and was completely destroyed in a fire during the conquest of Vienna by Russian troops in the last days of the war in April 1945. The new bell was cast from the remains of the old one and other destroyed bells. The first casting failed and the guests of honour had to be rescued, but the bell was quietly cast a second time. The casting scene can be seen in the model through the open roof. This small animation is controlled by an Arduino microprocessor installed under the roof. This technology is also used in some other animated scenes.

A little later we arrive at St.Florian station. This was also built based on the original. Our journey by train ends here and we can visit the historic town centre and the monastery. The historic depot was generously renovated for the hundredth anniversary of the Florianerbahn and is of course also present on layout. The track of the original railway had unfortunately been almost completely demolished in the meantime. But our 1:87 Florianerbahn is running, despite all adversities – and there are no plans to close it!

The layout is growing – plans for the future

While the real railway is talking about line closures and train cancellations, the layout of the St.Florian model railway club is constantly being expanded. With the commissioning of the spiral tunnels at Falkenstein Castle, the connection between the two legs of the system has also become a reality and in the near future there will be through trains from Kleinreifling to Enns. The twenty or so members of the club are fulfilling a long-held dream.

Technical data

We are repeatedly asked about the size of the layout, but for us, square metres, number of points, and length of track are not so important. We have not documented every last centimetre of track and cable, so the question is not quite so easy to answer. The endless joy that the hobby gives us is much more important.

Nevertheless, we can give a hint. The whole clubhouse has a nominal floor area of 395m². This includes the workshop, side rooms, stores, and the room with the children's equipment, so that the space for the large layout is around 205m². The question of the track length is a little more difficult to answer. Based on the schematic track plans, we assume a track length of around 2,000m in the different gauges (HO standard gauge, HOe narrow gauge, HOe interurban tramway, and HOf industrial line). This includes 145 points and 235 feedback devices on the standard gauge. The amount of cabling is almost impossible to estimate.

The forest is estimated to be well over 7,000 trees and bushes.

Our trains essentially run on two connected circuits, but they are long circuits with several loops. A train on the large circuit without long stops takes more than twenty minutes to run from the hidden sidings and back.

Of course, other infrastructure is needed for a model railway club. Heating which makes it is possible to continue working on the layout in pleasant temperatures even in winter is done with gas. The boiler is about 75m from the connection point. Water and sewerage are connected to our landlord's systems. Electricity is from the regional supplier.

Electronic control

Three computers connected in a network are used to control the layout by DCC. At peak times, fifteen to twenty trains can be run at the same time, but that requires two dispatchers – and a lot of know-how at the control panel.

We have been using Rocrail as the control software for the main line for several years. The software has a very good range of functions even in the free version, and this can be expanded further for a small price.

The trains provide feedback using Loconet feedback devices.

Operation on the narrow gauge line from Klaus is carried out as much like the original as possible, using DCC handsets.

The Florianerbahn is operated manually in the same way.

Only the HOf mine railway is still analogue control.

Club life is a priority

Club members do not see themselves just as modellers. They also take on social responsibilities, whether it is a children's running day, a charity running day, a club outing, or taking part in the annual clean-up of the town, the model railway club is always at the forefront.

The club is open every Thursday evening from 6.00pm to 9.00pm. Operating sessions are every first club evening of the month and on public running days – May 4th (Floriani Day), all four Sundays in Advent Sundays, December 24th, and by personal arrangement.

More information can be found on the club's homepage: **www.mbc-st-florian.at**

Below
High in the hills is a church with an impressive tower.

Above
On the Erzberg with the Schlossbach girder bridge in the foreground.

Below
Near the base of the farm cable way is a level crossing and the local electricity supply transformer tower.