

Fully customizable BIM model of edilon)(sedra Corkelast® EBS

In order to inform our customers and partners about how to integrate edilon)(sedra BIM models (Revit models) into a project's BIM model, our Application Engineering department has produced a series of short videos.

One of the videos demonstrates a fully customizable BIM model of our Corkelast® EBS (Embedded Block System). Click on the image on the right to start this video. The video includes different configurations and Levels of Development (LOD). The BIM model consists of different railing families which can be hosted in any surface. Moreover, it includes a number of parameters according to their LOD and our System information sheets.

We hope this video gives you further insights into how BIM can be applied and are looking forward to your feedback! Please contact Jonás Recio Sánchez: J.Recio@edilonsedra.com



Click on the image to start the video

New tram bridge projects in Germany and Austria

After the successful installation of 1,03 km of Corkelast® ERS (Embedded Rail System) on the Hardbrücke tram bridge in Zurich, edilon)(sedra has begun preparations for the supply and installation of Corkelast® ERS for two new tram bridge projects, one in Germany and one in Austria.

In April 2018, edilon)(sedra will supply and install 700 m of Corkelast® ERS on the new Kienlesberg tram bridge in Ulm, Germany. edilon)(sedra's Munich office will supply engineering and planning services, steel troughs, Corkelast® ERS and quality control documentation. Additionally, edilon)(sedra's Wiesbaden office will deliver 2,1 km² of Trackelast® stray current protection mats. At the end of January 2018, edilon)(sedra was awarded the contract for the design, planning, delivery, and quality control of Corkelast® ERS tracks on the new Traunbrücke tram bridge in Gmunden, Austria.



Recently completed Corkelast® ERS tracks on the Hardbrücke in Zurich



[watch the Hardbrücke project video on YouTube](#)

Bridge Railtrack Competence Centre for the edilon)(sedra Group

In November 2017 edilon)(sedra decided to set up a Bridge Railtrack Competence Centre for the entire edilon)(sedra Group at its location in Munich, Germany. The centre is intended to grow into a central start-up centre for national and international bridge construction projects – know-how, experience and information will be consolidated centrally for employees, interested parties and partners.

Overview of services:

- Project development for infrastructure companies (tram and national railways)
- Verification of rail stress and relative displacement
- Integrated bridge dilatation joints for mixed traffic (road/rail)
- Solutions for drainage systems, rail and track connectors and earthing
- Grid blasting of the rail and steel trough surfaces
- Quality construction-accompanying surveillance by a certified supervisor

Our Corkelast® ERS (Embedded Rail System) has been installed on bridges for around 50 years, all over the world.

Sample projects:

- **Hardbrücke in Zurich, Switzerland**
Installation of tram track on an existing main-road bridge in the city centre of Zurich.
- **Konrad-Adenauer bridge (steel structure) in Mannheim, Germany**
Installation of LK1 rail profile to ensure ultra-low height demanded by the operator.
- **Danube bridge of the ÖBB in Tulln, Austria**
- **Dusseldorf Südbrücke across the Rhine, Germany**
- **New bridge projects for the public transport operators in Bern and Zurich (Switzerland) as well as in Gmunden am Traunsee (Germany) are currently underway**

We are currently developing standardised solutions jointly with our customer, Deutsche Bahn AG to facilitate faster construction and shorter possession times with pre-fabricated superstructure components. The integrated rails in the bridge superstructure impress with a low height and optimal noise reduction. A significant advantage is also that the rails can be replaced whenever if required without intervention at the track – this leads to favourable LCC (Life Cycle Costs).



Hardbrücke in Zurich, Switzerland



Konrad-Adenauer bridge in Mannheim, Germany



Ried bridge of the DB on the Tutzing-Kochel route, Germany

Meet us on INFRARAIL London: Stand B15!

edilon)(sedra will be present at the exhibition INFRARAIL in the Excel, London, which will take place from 1 to 3 May 2018.

We aim to highlight our company developments and technical innovations in the UK market. An interesting case we will highlight is our recently installed Corkelast® LCS (Level Crossing System) in Ruislip depot, for London Underground.

Corkelast® LCS-350 has recently been certified and approved by London Underground for use anywhere within London Underground's network. To mark this important achievement and share the opportunities of our state-of-the-art embedded rail systems our team accordingly invites you on our stand B15. Looking forward to welcome you to our stand!



Level crossing solution for London Underground – Ruislip Depot



edilon)(sedra was contracted to deliver a level crossing solution on a fast-tracked schedule in Ruislip Depot in London, UK. edilon)(sedra and London Underground, worked from the night of Friday the 16th to the morning of Monday the 19th of February, to meet the 60-hour track possession timeframe.

The edilon)(sedra Corkelast® LCS-350 Level Crossing System that was installed in the Ruislip Depot, has been certified by London Underground for use anywhere within London Underground's network. edilon)(sedra's Level Crossing Systems have a service life of 30+ years and a proven minimal Costs of Ownership. These virtually maintenance free systems provide excellent electrical insulation of the track and continuous elastic rail support.



Installation of Corkelast® LCS-350 in the Ruislip Depot, for London Underground



[Click to start the time lapse video of this project](#)

A future-proofed rail system for Bucharest's Metro Line 5

The city of Bucharest in Romania faces substantial daily costs and effort in maintaining its existing metro lines. Cost and maintenance considerations were the driving factors for the operator Metrorex S.A. to choose a new and durable track fastening system for the new Metro Line 5: edilon)(sedra Corkelast® EBS (Embedded Block System).

In total, 15 km of Corkelast® EBS track, including 10 metro stations and a depot, is currently being installed in Bucharest.

In order to comply with the latest European standards, the decision was taken to apply the edilon)(sedra Corkelast® EBS, in medium stiffness. In areas sensitive to critical frequency vibrations, such as the Romanian National Opera, edilon)(sedra Trackelast® STM (Slab Track Mats) are utilised. All materials have been thoroughly tested by leading international universities and test institutes.



Installation of edilon)(sedra Corkelast® EBS and Trackelast® STM, for Bucharest Metro Line 5



Robotized production of the Corkelast® EBS blocks and trays



Recent project highlighted: Kaohsiung LRT Stage 2 (Taiwan)

**Customer:**

CHAN CHUN CONSTRUCTION CO., Kaohsiung, Taiwan

Order size:

57.324 m rail plus 21 off turnouts / crossovers (R50), plus 8 off turnouts (R25)

Project realization:

November 2019

System supplied:

edilon(sedra SDS-M

Technical features edilon(sedra SDS-M (Sound Damping System - Modular):

- Proven continuous resilient rail support system according to EN 13481-5
- Fully encapsulation of the rails
- High amount of vibration attenuation (dBv)
- High amount of electrical insulation (DIN 50122-2)
- Designed for tuned track resonant frequency (+/- 25 Hz.)
- Designed for top-down installation method, easy and rapid installation
- No use of mechanical rail fixations or steel tie-bars

Innovative RetroFit block system for metro lines

For the track rehabilitation on metro lines a new type of edilon(sedra block system has been developed: Corkelast® EBS RF (Embedded Block System RetroFit).

Having only very short night-time windows to undertake rail maintenance work, means it is imperative for transport companies/investors, to find not only a fast but a cost effective solution for this vital renewal work. The Corkelast® EBS RF system, which consist of a newly developed polymer composite tray, provides significant time and cost savings, as the concrete base of a tunnel or station track does not need to be demolished and no primer has to be applied.

The new RetroFit block system opens a door to a large global market for track rehabilitation.



Example of a track rehabilitation with Corkelast® EBS RF installed in between daily operations

Arken Combi terminal Gothenburg officially opened

On Wednesday the 7th of February 2018, the Arken Combi Terminal at the Port of Gothenburg was officially opened by Lena Erixon, Director General of the Swedish Transport Administration.

For track 903 of the new terminal, main contractor NCC awarded edilon(sedra the assignment to realize 615 m of Corkelast® HSTS (Heavy rail Slab Track System). The newly installed Corkelast® HSTS track is a combination of prefabricated concrete slabs, type 'New Arken' and the edilon(sedra Corkelast® ERS (Embedded Rail System). This state-of-the-art track allows heavy reach stackers (110 t front axle loads) to reach the 3rd track in a safe, efficient and durable way.

Also, four edilon(sedra level crossings of 18 m each (type Corkelast® LCS) were installed. This system is applied for heavy mixed traffic situations and is very suitable for industry track in container terminals, large industrial sites, seaports and track connection areas.



Official opening of the Arken Combi Terminal