edilon)(sedra SDS
(Sound Damping System)

Always a step ahead in rail systems!
Railway transportation is an indispensable part of modern society, which has to meet environmental regulations for noise and vibrations. Not only can edilon|sedra provide resilient rail track solutions to meet noise and vibration limits, the products and systems are designed for durability and sustainability.

edilon|sedra SDS (Sound Damping System) fits perfectly into these requirements. edilon|sedra SDS is a cost effective, electrical insulating, vibration attenuation (dBv) and airborne noise (dBA) reducing solution for light rail and in particular tramway applications.

The versatile system is easy and quick to install and offers two installation methods: the Top Down method and the Bottom Up method. For the Top Down method, edilon|sedra provides the specially designed SDS-M (Sound Damping System – Modular) variant, including Track Alignment Portals (TAP).

### ADVANTAGES
- Good vibration & noise damping features (dBv, dBA)
- Good electrical insulation properties (DIN 50122-2)
- 100% recyclability
- Corrosion protection
- Absorption of track deformations caused by horizontal and vertical forces
- Diversity of variations (various designs)
- Wide spectrum of application (in-street track, grass track, switches, depots, level crossings, crane rails)
- Fully tested and proven to the latest technical standard (DIN 45673-8)
- Rapid and economical installation
- Easy handling
- On-site and off-site isolation of the rails feasible
- Durability / long lasting
- Urban aspects (grass tracks)
- Reduction of airborne noise up to 5 dBA in turf tracks
- Creation of favourable micro climate at turf tracks
- Cost effectiveness
edilon)(sedra SDS is designed for light rail to be used for optimum integration in various application fields such as in-street running track, turf track, depots, switches and crossings, level crossings, crane rails.

edilon)(sedra SDS can be adapted to different elasticity’s and can also, for special track applications and demands, be factory-prepared to fit rectangular or round shape gauge bars and rail anchors, for example the edilon)(sedra ISO rail anchoring system. If necessary edilon)(sedra SDS can be part of level crossings and sharp curved track areas.

edilon)(sedra SDS has been extensively tested and proven, including the rail joint sealant material (DIN 45673-8, PK2) in case of an embedded in-street track. The system provides maximum vertical track deflection under operational track conditions.

**APPLICATION AREAS**

- Grass track, not accessible track areas
- Paved track areas, cobble stones or imprint concrete for pedestrians and bicycles
- Paved-in track with concrete top surface or with asphalt top surface (for bus lanes and in-street use)
- Depots
- Switches and junctions
edilon)(sedra SDS is available for a wide range of grooved rails, vignol rails, special rails and different types of track designs. The system can be supplied for application up to the underside of the rail head, to allow the use of rail joint sealant, or for application up to the top of the rail.

edilon)(sedra SDS designs are available for track building on concrete sub base, rigid asphalt sub base, concrete plinth, direct-fixation fastenings, steel base plates and concrete sleepers as continuous and/or discontinuous track systems in-street, and/or on bridges, viaducts and tunnels.

edilon)(sedra SDS offers the possibility of using various types of resilient materials to isolate the rail foot (pre-manufactured, self-clamping, rail foot profiles or various type of resilient rail undercast material (PU, Bitumen), to match the acoustic requirements of the project best possible.
edilon)(sedra SDS in-street system, using prefabricated resilient foot profiles

edilon)(sedra SDS in-street system, using resilient bottom casting PU-based material

edilon)(sedra SDS turf track system

edilon)(sedra SDS in-street system, baseplate supported embedded in ballast track
edilon)(sedra has available all necessary test equipment, state-of-the-art, to provide extensive in-house QA control procedures. edilon)(sedra is a DIN ISO 9001 certified enterprise.

edilon)(sedra offers a full track service package (one-stop shopping), design, supply, installation and appropriate warranty / liability conditions.

edilon)(sedra is also offering comprehensive services such as:

- Engineering
- Consultancy
- Vibration attenuation & insertion loss (dB) prognosis acoustic studies
- Implementation / installation
- Installation training
- On-site supervision
- On-site inspection
- Professional project management
- High degree of logistic service
edilon)(sedra SDS Production capabilities

Various international production facilities are available to provide high production output. edilon)(sedra is well experienced to handle large medium term contracts of e.g. ≥ 40 km single track per order and even more in parallel within reasonable time to meet the given individual projects delivery schedules on time.
edilon)(sedra SDS testing and approvals

All edilon)(sedra SDS components as well as the completed edilon)(sedra SDS systems have been extensively tested at various and numerous test laboratories and technical universities, e.g. TU Munich, TU Louvain, TU Berlin, TU Dresden, TU Prag, TAW Wuppertal and others against the latest technical standards such as DIN 50122-2, DIN 45673-8, etc. edilon)(sedra is an DIN ISO 9001 certified enterprise.
edilon)(sedra SDS can easily and quickly be installed. No special (heavy duty) equipment is required. The system has been designed for the traditional (Bottom Up) installation method as well as for Top Down installation method to speed up installation works. All necessary installation accessories e.g. tie-bars, tie-bar isolation profiles, rail anchors, rail joint sealant material and many others can be supplied by edilon)(sedra as a full size package (one-stop shopping).

edilon)(sedra track experts are available to assist in custom-made solutions at any time. Detailed installation instruction manuals, training plans and on-site training can be provided by edilon)(sedra as well, to ensure correct installation and consequently highest track quality.
edilon)(sedra SDS installation tools

edilon)(sedra SDS has been designed for easy, rapid and economical installation and does not require any special heavy duty machinery for the installation. However, edilon)(sedra is offering upon request specially designed light-weight (pneumatic, hydraulic, electric) driven tools/machinery to ease and to speed up the installation works.

edilon)(sedra filler block cutting machine   edilon)(sedra rail joint milling device

Rail joint Sedrafer heater to operate bituminous based rail joint sealant material
SDS References

edilon)(sedra SDS has been successfully proven, many times even under harsh climate conditions, since decades all around the world with some thousands of kilometers of track in service with a none-failure track record to date.

edilon)(sedra SDS is successfully installed and applied all over western Europe, all over eastern Europe, in MENA (region Middle East and Africa) and many other countries.
Patent for production of railway material out of recycled material

25 years anniversary

Inventors of recycled rubber filler blocks for light rail tracks

1990 - 2015