SCHWEIZER
ELECTRONIC

SCHWEIZER
ELECTRONIC

Range of services offer tailored to your needs

From «ordering a system» to an «all-round care-free package».

Choose what best fits your needs.

Project management
From the very first concept right through to de-commissioning you can count on our project manager, experienced in the rail sector.
➤ project management in the planning, implementation and operation phases
➤ managing workshops
➤ coordinating third party companies, interfaces, authorities, etc.
➤ country-specific safety verification based on EN 50126

Planning/Design
We take care of the design and planning of LX projects according to local regulations.
➤ GASC/SASC
➤ system design
➤ authority approvals
➤ project management
➤ risk analysis

Implementation
Our experienced operators install the entire system on site.
➤ system engineering
➤ installations/dismantling
➤ cabling
➤ testing
➤ commissioning
➤ site acceptance SAT

Support
Our service team is available for the entire life cycle of the system.
➤ telephone-service 7/24h
➤ on call-service 7/24h
➤ spare parts service
➤ maintenance/servicing
➤ training programme

flex

Safety innovation
at level crossings

Contacts

Switzerland (Head Office)
Schweizer Electronic AG
Industriestrasse 3, CH-6260 Reiden
P +41 62 749 07 07
info@schweizer-electronic.com
www.schweizer-electronic.com

Germany
Schweizer Electronic Deutschland GmbH
c/o Brauereistrasse 2, DE-06556 Artern
P +49 3466 742 827 9
info.de@schweizer-electronic.com
www.schweizer-electronic.com

Austria
Schweizer Electronic GmbH
Rablstrasse 25, AT-4600 Wels
P +43 7666 209 55
info.at@schweizer-electronic.com
www.schweizer-electronic.com

Italy
Schweizer Electronic S.r.l.
Via Santa Croce1, IT-20122 Mailand
P +39 02 8942 6332
info.it@schweizer-electronic.com
www.schweizer-electronic.com

Spain
Schweizer Electronic Iberica SL
Zurbaran 10, ES-28010 Madrid
P +34 91 391 30 19
info.es@schweizer-electronic.com
www.schweizer-electronic.com

United Kingdom
Schweizer Electronic Limited
Peter House
Oxford Street, GB-Manchester M1 5AN
P +44 1827 28 9996
info.uk@schweizer-electronic.com
www.schweizer-electronic.co.uk

EN_Version 1.0 / 2015.06

safety on tracks

safety on tracks
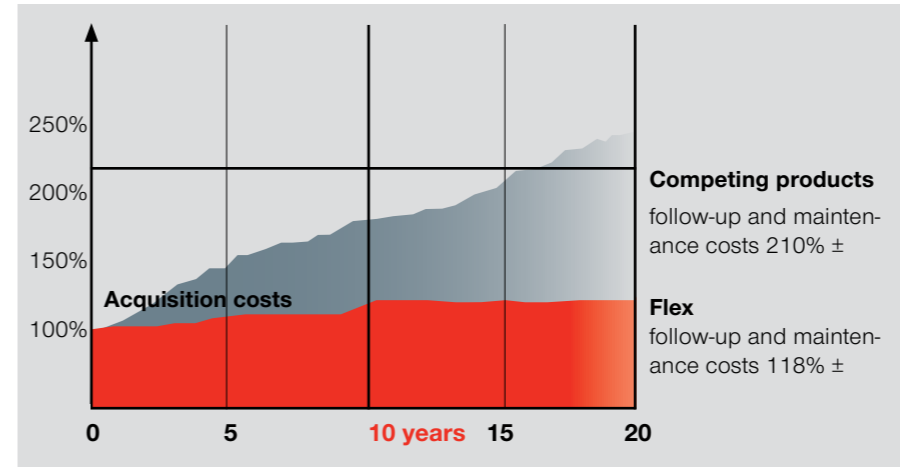
Flex product family

The Flex level crossing system is a unified platform, suitable for all forms of level crossing installations. The system is flexible for worldwide use, with virtually unlimited scalability in terms of size and functionality.

Automatic train control:
➤ 0-8 from potential-free contact (e.g. INDUSI, Signum, LEU)
➤ 0-8 supplied with 500mA (e.g. ZSI/ ZST90)

flex *led*

Track-side signals / signal repeater:
➤ 0-8 regular track-side signals (white/yellow)
➤ 0-8 various track-side signal types for light railways

flex *led*

Road-side LX signals:
➤ 0-16 alternating flashers/wig-wag
➤ 0-16 two chamber lamps
➤ 0-16 flashing lights
➤ customized solutions

Traffic signals:
➤ 0-8 alternating flashers
➤ 0-8 two chamber lamps
➤ 0-8 flashing lights

Acoustics:
➤ 0-4 loud speakers

Manual controls:
➤ 0-4 regular manual strike-in switch ET
➤ 0-4 strike-in bypass switch UT
➤ 0-4 auxiliary manual strike-in HET

Strike-in positions:
➤ 0-4 Frauscher RSR123
➤ 0-4 Frauscher RSR180
➤ 0-4 external strike-in information

Strike-out positions:
➤ 0-4 Frauscher RSR123 (also possible as axle counters)
➤ 0-4 Frauscher RSR180 (also possible as axle counters)
➤ 0-4 external strike-out information

7200 m
1500 m
1500 m
1500 m
6500 m
1000 m
20 000 m
1000 m

flex *control*

flex *barr*
flex *drive*

Barrier drive machines:
➤ 0-12 Flex Drive with/without alterative safety closing function
➤ 0-12 customized drives with/ without alterative safety closing function (e.g. PMZ)

flex *life*

Control cabinet:
➤ 0/1 outdoor cabinet all-weather proof
➤ 0/1 customized installation

UPS:
➤ 0/1 Internal 24VDC UPS
➤ 0/1 Internal 230/400VAC/UPS
➤ 0/1 power supply from external UPS

Manual operation/diagnostics:
➤ operating mode selector MODE
➤ reset button GST
➤ 0/1 shunting switch RS
➤ diagnostics/remote access alarm modem

Interlocking interface:
➤ 0/1 eStw station barrier (train station barrier)
➤ 0/1 eStw track section barrier
➤ 0/1 rStw

Variable interface:
➤ 0-16 digital signal

flex *life*

flex *ray*

LX obstacle detection system:
➤ >0-4 different danger zones

LX occupation monitoring:
➤ 0-8 inductive loops

Your advantages at a glance

Would you like to keep follow-up and maintenance costs as low as possible when investing in a new product? Do you want to invest in a product without running the risk that replacement parts are no longer available or the products are not subsequently expandable? By purchasing our equipment you do not face any of these risks!

Life Cycle Costs (LCC)

250%			
200%			**Competing products** follow-up and mainten-ance costs 210% ±
150%			
100%	Acquisition costs		**Flex** follow-up and mainten-ance costs 118% ±
0	5	10 years 15	20

The essentials in a nutshell

➤ uniform, flexible and freely scalable system platform
➤ just one Flex System for all conceiv-able types of level crossing
➤ freedom from obsolescence thanks to standardized industry components
➤ maintenance only every 10 years - low Life Cycle Costs (LCC)
➤ no preventive replacement of compo-nents

Technical Data	
Available special functions	- on-demand function - fail-safe strike-in (no need for track-side signalling) - management of subsequent trains (tram operation) - auto-HET automatic auxiliary strike-in - 8 freely configurable inputs/outputs
Interfaces	- interlocking - traffic control system - transmission and processing of external strike-in/strike-out criteria - transmission/processing of external interlocking criteria
Safety integrity level	- existing approvals to SIL3 - possible approvals to SIL4
Operating voltage	- 1x 230VAC 50Hz - 3x 400VAC 50Hz - further voltages available on request
Mechanical pro-tection class	- control cabinet Flex Control IP55 - peripheral equipment IP65
Environment	- temperature range: -25 ... +50°C - humidity: 15 ... 100% r.F.

Approvals
– Designed according to certified processes in compliance with CENELEC EN 50126, EN 50128 and EN 50129
– Certified by TÜV Süd Rail GmbH
– Type approval by the Swiss Federal Office of Transport (FOT)
– Type Approval by the German Federal Railway Authority (EBA)
– Various approvals in many countries