



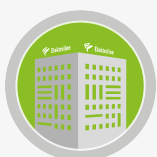
COMPANY PROFILE



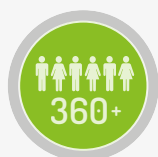
The company Elektroline was founded in 1991 as Ltd. company. Elektroline is engaged in area of production and deliveries for tram, trolley bus and railway infrastructure, and carries out also design and installations of these products.

Elektroline is dynamically growing company with annual turnover of **35 millions EUR**, the company employs more than **360 people**.

From 2018 Elektroline company is a member of COLAS RAIL group.



GLOBAL HEADQUARTER
PRAGUE, CZE



MORE THAN 360
EMPLOYEES



PRODUCTS SOLD & INSTALLED IN
45 COUNTRIES



ELEKTROLINE WAS FOUNDED IN
1991



APPROX. ANNUAL TURNOVER IS
35+ MILLIONS EUR



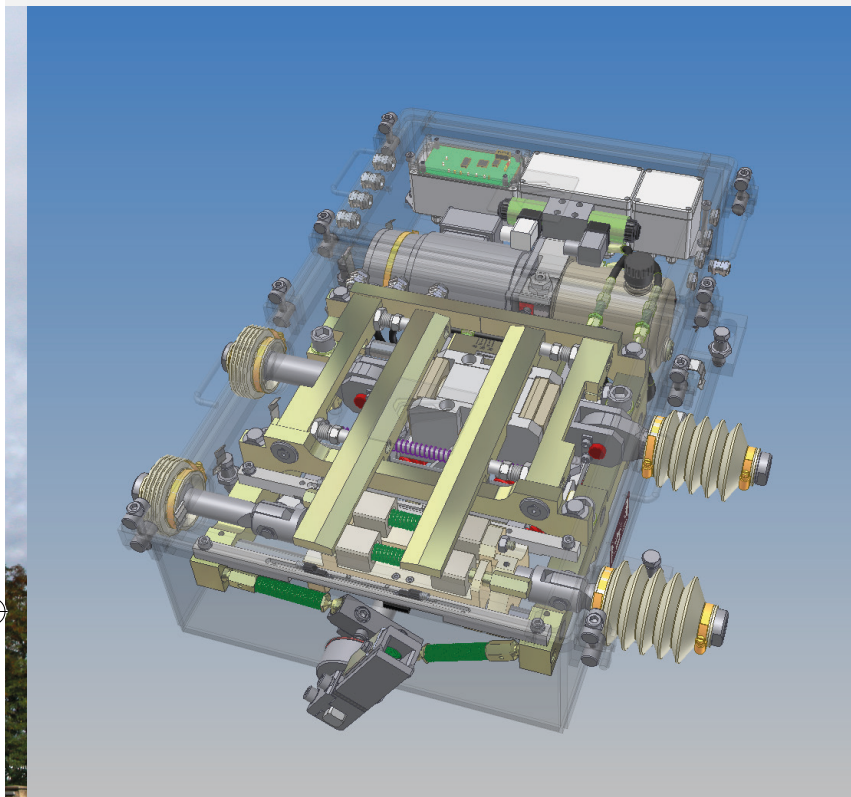
PRODUCTS SOLD & INSTALLED IN
260+ CITIES



KILOMETERS OF OCL BUILT
1400+ KMS



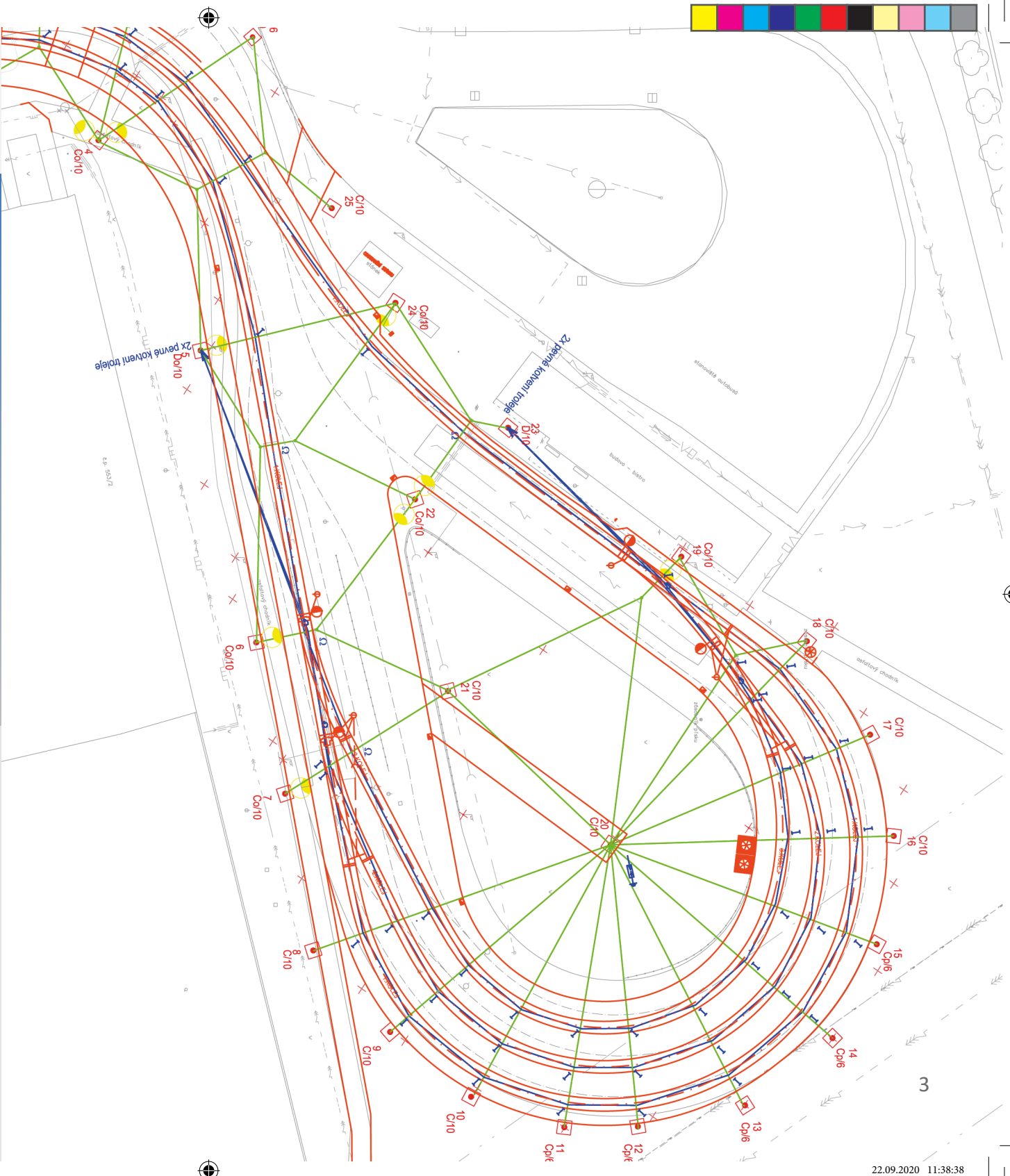
DESIGNING STUDIO



DESIGN

Elektroline disposes of own designing capacity serving both for proposing of single new armatures and for planning of constructions in their whole.

Our designers use for their work the most modern software products and procedures.



POINT MACHINES



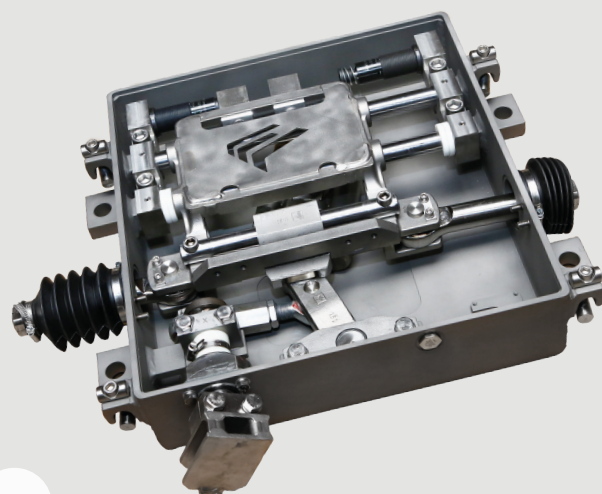
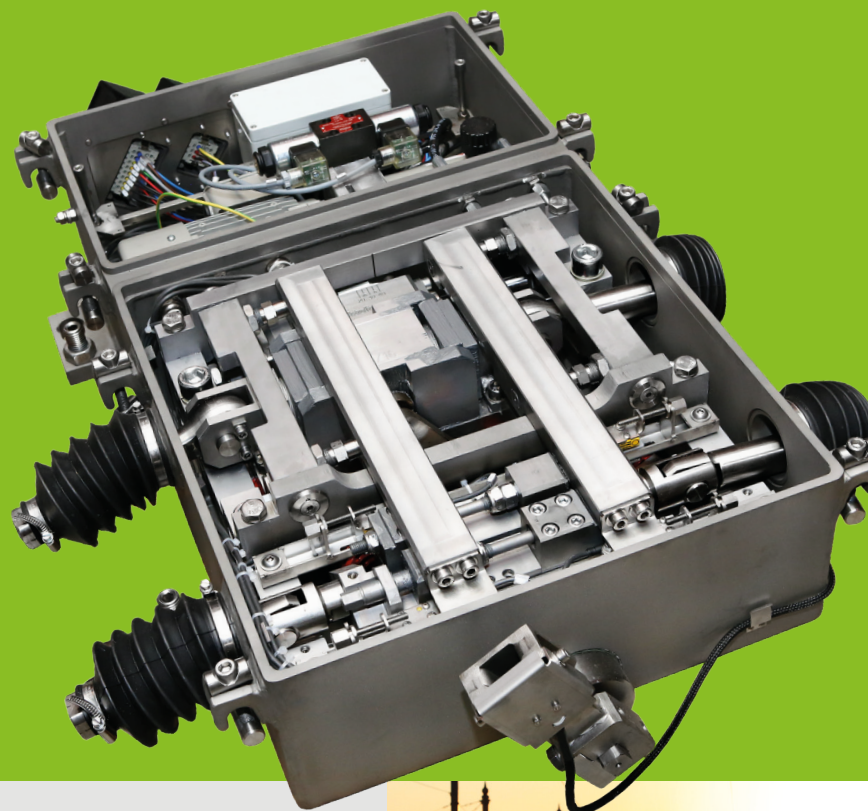
POINT MACHINES

(UP TO SIL 3 SAFETY LEVEL)

Elektroline point machines are excellent choice for safe and reliable operation of tramway switch points.

The point machines are assessed for up to SIL 3 safety level and are equipped with permanently checked mechanical locking mechanism.

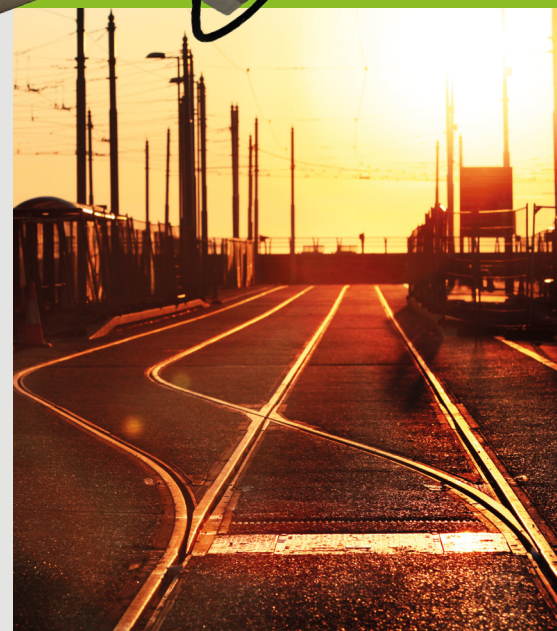
Completely watertight casing with extra protection against water makes the point machine practically maintenance-free.



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MECHANICAL POINT MACHINES

Mechanical point machine is a state-of-art point machine for locations where no motorized operation of a switch point is required and where no passenger-carrying-trams travel in the facing direction.



TRAM & TBUS SIGNALING SYSTEMS



TRAM DEPOT CONTROL SYSTEMS

Intelligent automation systems for tram and trolleybus depots, markedly speeding-up and organizing depot operations and enabling automation of the vehicles parking process. Depot information systems are custom-made for every client.

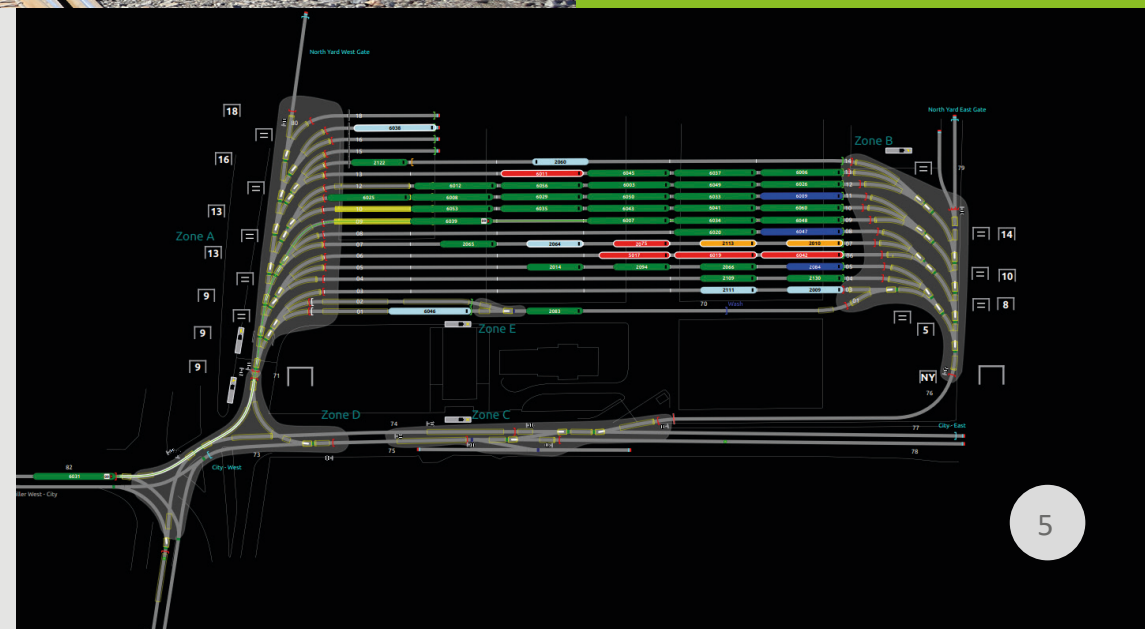
AUTOMATIC SWITCH CONTROL SYSTEM TSC

TSC system for automatic operation of tramway switch point enables fully automatic operation of switch points within your tramway network. It also enables automatic heating of the switches, including possibility of automatic control.

TRAM-TO-WAYSIDE COMMUNICATION SYSTEM VETRA

Elektroline tram-to-wayside communication system VETRA is modern sophisticated system for local transmission of data between trams and wayside systems.

It uses 2,4 GHz bidirectional radio communication between antenna installed on a tram and antenna installed in the ground in track. The 2,4 GHz frequency ensures very high communication speed and therefore enables using the system for tram speed up to 100 km/h. All transferred data are encrypted.





TRAMWAY OVERHEAD CONTACT LINE & TECHNOLOGIES



GRP CANTILEVERS

A preferable solution for tracks with cantilevers is the use of insulated cantilevers made of GRP (glass fiber reinforced plastic).



CATENARY SYSTEM

Catenary system is usually used on the tracks where higher operating speed of vehicles (over 80 km/h) is required.

ADDITIONAL WIRE SYSTEM (DELTA SYSTEM)

The overhead contact line with suspension of DELTA type in combination with temperature compensation represents a modern type of overhead contact system. This type of contact line satisfies high requirements imposed on the tram operation.



SECTION INSULATORS

A special construction of our section insulators allows a silent and fast passage of the vehicle's pantograph. They are designed in such a way to safely and fast interrupt the electric arc which can appear while vehicle pantograph run over the insulator.



SIMPLE WIRE SYSTEM

The type of overhead contact line gets chosen also with regards to the aesthetical point of view. For city centres we prefer simple system suspended by means of DELTA suspension or simple wire system. This option offers an aesthetical and silent solution with considerable elasticity of OCL.



SECTION INSULATORS

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TENSIONING MECHANISM

Weights for the compensation of thermal expansion of conductors can be concealed inside the poles. A modern solution together with HEB type poles enables a simultaneous anchoring of the contact wire and messenger wire on one pole.



TROLLEY BUS OVERHEAD CONTACT LINE & TECHNOLOGIES



UNIQUE IN THE WORLD: TBUS DEPOT CONTROLLED BY VETRA SYSTEM

In 2014 we realized the system of fully-automatic transit of vehicles within TBUS depot in the city of Pilsen – it means: at a time when any vehicle enters the depot, whole its itinerary (switches) to the final destination is set automatically. With this unique depot system the movement of the vehicles within depot is faster, safer and better organized as well as more friendly for the operating staff and of course for the drivers.

VETRA SYSTEM

Switches are automatically set by VETRA system. Driver is only informed about actual status of the switch.

2.4 GHz VETRA system is a reliable data transmission system developed for high vehicle's operation speed.

The destination code is set by board computer. Using this code the vehicle pass automatically through all switches until its parking position within depot.

Data sent by the vehicle are detected by the control unit. Whole process of switch setting runs fully automatically.





ELECTRICAL SWITCHES

The latest design of our electrical switches is light and airy and it makes the switches less noticeable overhead.

RELIABILITY

Our over 20 years experience with production of switches makes them highly reliable.

ROUND ABOUT SOLUTION

For roundabout solution is suitable use of double switch point controlled by VETRA system with fully automatic operation.



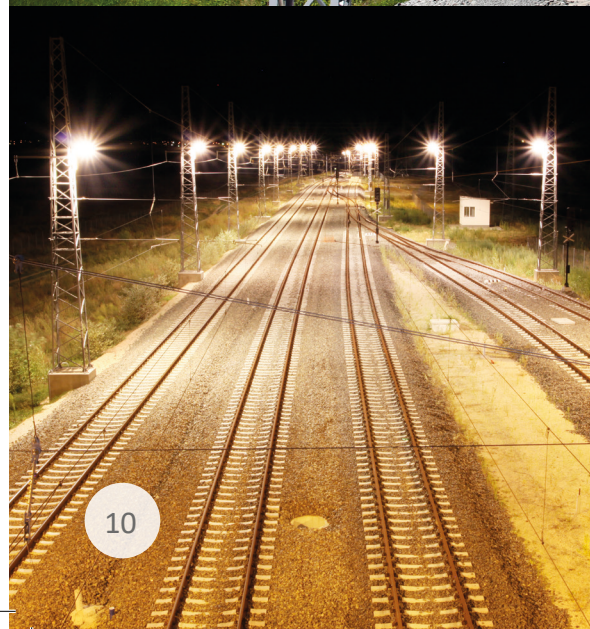


RAILWAY OVERHEAD CONTACT LINE & TECHNOLOGIES



ARCAS-EL OVERHEAD CONTACT SYSTEM FOR RAILWAYS

We provide production and assembly of ARCAS-EL (in license of K+M sister company) the modern overhead contact line system suitable for light and heavy railways up to 25 kV for track speed up to 250 km/h.



DOOS – SYSTEM OF REMOTE CONTROL AND DIAGNOSTICS OF TECHNOLOGICAL DEVICES

Elektroline a.s. is producer of DOOS system, which is designed for local and remote control, regulation and diagnostics of outdoor and indoor lighting, rail switches electrical heating and also for control of low voltage switchboards.





SYSTEM OF REMOTE CONTROL OF SECTIONAL DISCONNECTORS

We are producer of electrical motor drives compatible with all standardly supplied sectional disconnectors, power supply disconnectors and earthing switches.

Our production of motor drives control boards includes other equipment such as power source transformer boards with insulation level drop detectors, touch-screen panel with visualization, communication separation unit and other.



ELECTRIC SWITCH HEATING SYSTEM - ESHS

Elektroline Inc. is producing complete technical solution for installation of fully automatic electric switch heating system. ESHS is used to remove snow and ice from the area of tongues and rods during adverse weather conditions.



ELEKTROLINE WORLDWIDE

OUR PRODUCTS HAVE BEEN INSTALLED IN 45 COUNTRIES AND OVER 260 CITIES



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