



INSTITUT KIRILO SAVIĆ

WHO WE ARE:

Kirilo Savic Institute was founded in 1945. Initially, it conducted research and development studies for the needs of railway traffic. However, since 1961 it has been operating as an autonomous scientific-research organisation for the elaboration of studies and development programmes in the area of traffic as well as other branches of the economy. The Institute is organised in seven work organisations:

- Railway Institute;
- Traffic Institute;
- Institute of Road Traffic and Safety;
- Institute for Automation (Hydraulics, Electronics, Pneumatics, Control and Audiotechnics);
- Institute for Techno-Economic Studies and New Projects in the Economy (ISTER);
- Institute for Research, Construction, Consulting and Ergonomics;

The institute collaborates with Railways of Serbia-RS, Directorate for Railways, Faculty of Mechanical Engineering, Kraljevo-FMEK, Faculty of Mechanical Engineering, Belgrade, Faculty of Mechanical Engineering, Niš, Faculty of Transport and Traffic Engineering, Beograd-FTTE, Faculty of Technical Sciences in Novi Sad.

COLLABORATION INTERESTS:

The basic activity of the institute is in the area of railway engineering, thermal engineering, energetics and development of new products, programmes and technologies in production engineering. Its collaboration interests are in the following fields:

- Measuring and controlling instruments for the railway;
- Elaboration of studies, project analyses and investment programmes for production restructuring, development of new facilities and long-term development of companies and the accompanying railway industry;
- Homologation and exploitation testing of rolling stock, mechanisms and parts according to the regulations of the International Union of Railways (UIC), ISO-9000 and Serbian Railways;
- Testing for permits for the need of railways and accompanying industry;
- Interoperability of conventional rail systems;
- Scientific research projects of strategic, developmental and innovative importance in the area of railway engineering;
- Development of new parts and mechanisms of the rolling stock brake system of railway transport;
- Development of new mechanisms and systems in the area of signal safety engineering of railway transport;
- Vibration and noise;

AREAS FOR R&D COLLABORATION:

The institute's principal fields of endeavour include:

- Scientific-research work and development in the fields of mechanical engineering, electrical engineering, electronics and communication techniques, chemical technology, metallurgy, organisation, exploitation and technology of traffic, traffic junctions, stations, warehouses, reloading facilities, design, manufacture and maintenance of technical means for the needs of railway and road traffic;
- Research and development in the fields of traffic and transport, safety techniques for road traffic, study and design of signalisation for roads and towns and elaboration of preliminary estimates and specifications for road traffic structures (car facilities, garages, service and repair stations);
- Studies and development of freight and passenger traffic terminals, integral transport and industrial transport;
- Studies, research, development, design and testing in the field of construction for the needs of traffic and other branches of the economy;
- Testing, certification, quality and quantity control of equipment and materials, safety at work, ergonomics, protection and promotion of the environment;

WHAT MAKES US A GOOD PARTNER?

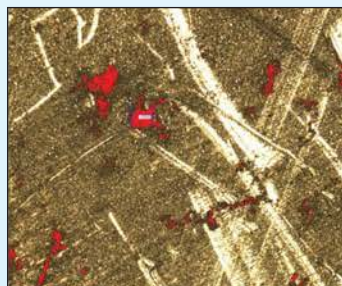
The experts working at Kirilo Savic Institute have rich experience and knowledge, thus allowing the institute to maintain broad cooperation with a number of kindred institutes in Europe. This cooperation is maintained through joint work on research projects, exchange of documentation and research findings, joint organisation of consultations, seminars and other events.

PROJECTS:

- Dynamic testing of the mutual effects of passenger vehicles while moving over switch points S49 and UIC 60 on main railroads and main station gauges of the railways ZTO Beograd in order to determine the transport safety of passengers and goods.
- Dynamic testing of safety against derailment while a train is moving over transitory switch points S49 at the Lapovo passenger station.
- Verification of the braking inserts of F266 type disc brake, produced by FIAZ Prokuplje according to UIC 541-3 and ORE B 126 RP12.
- Verification of DDLK 610/110 type brake disk, produced by the foundry Livnica-Kikinda in compliance with the programme DB 842702 for 200 km/h.
- Verification of the P10 type braking inserts produced by the foundry Livnica-Pozega, in compliance with UIC 542 and UIC 832.



- Testing and verification of the driving group and brakes of the reconstructed diesel engine train of 712/716/712 series for the railways of Macedonia.
- Locomotive simulator project for the testing of electro-pneumatic (EP) brake and brake for emergency cases with delayed effect in passenger vehicles type Z1 for 200 km/h in compliance with UIC 541-5.
- Testing of the effect of EP brake and brake for emergency cases with delayed effect in passenger vehicles type Z1 in compliance with UIC 541-5.
- Analysis of causes for the turning of the ring on the vehicle type X owned by JPZ railways of Montenegro.
- Testing of the strength of the brakes on the train carriage for the transport of cars from the DDM series, produced by the rolling stock company Gosa for the railways of Greece.
- Technical overhauling documentation for regular repairs of electric motor train of 412-416 series.
- Production, testing and verification of spare parts and brake units of the system ERLIKON in the factory Prva petoletka – Kocna tehnika Trstenik.
- Designing of specialised workshops for brake equipment repair: KO1 ZOVS Velika Plana, KO1s Zelvoz Smederevo, KO1z Sinvoz Zrenjanin, KO1n Vagonka Nis, KO1m 15. april Makis, KO3 Inter-Mehanika Smederevo.
- Testing of maneuvering locomotives of CFL-350 DV-R type, produced by SCHÖMA and owned by petroleum industry NIS (Rafinerija nafte Novi Sad).
- Verification of the testing of the rolling stock, owned by railways JZTP Belgrade with the aim to provide transport on the railroad of the 0.76m gauge "Sarganska osmica" (the Shargan Eight).
- Testing of the brake strength of the carriages for the transport of cars of MDDm series, produced by the rolling stock company Gosa for the Iranian railways, Raja Passenger Trains Co.
- Testing of freight cars in cooperation with the Faculty for Mechanical Engineering in Belgrade. Prototype of the type Habis car, produced by EMEF Portugal for the railways of Bosnia and Herzegovina.
- Testing of the carriage prototype of Shimms series, produced by Bratstvo from Subotica.



OTHER INFORMATION:

Name of the organisation: Institute "Kirilo Savić"

Organisation type: R&D

Name of the research department: Department of Railways

Number of researchers: 15

Working languages: 10

Webpage: www.iks.rs

Contact person: dr Petrović Predrag

Position: Principal Research Fellow

E-mail: mpm@eunet.rs

Tel: 00381 11 3976 026,

Fax: 00381 11 2460 963