



Preventive track-maintenance

The Software Architecture

The IRISSYS® software system is based on a generic database management system, which is able to store an almost infinite amount of data structures relating to all types of data objects.

Use Standards - set Standards

The primary objective of the Erdmann-Softwaregesellschaft mbH is to deliver the best solutions for their customers. Therefore IRISSYS® products bring workable solutions using market standards instead of re-developments. According to this philosophy IRISSYS® incorporates market leading software solutions into its system environment. LabVIEW, the standard software for digital signal processing, offers best practice and value to generate complex mathematical and statistical functions. The prognosis ability of IRISSYS® is "powered" by embedding the state-of-the-art software NeuroSolutions, one of the market leaders in respect of neuronal network models. The integration of Autodesk Map particularly the ability to process GIS-files directly offers an easy way to implement existing plans and drawings like station plans into IRISSYS®. Combining these drawings with the IRISSYS® functionality creates a customised user interface. It supports the customers business processes.

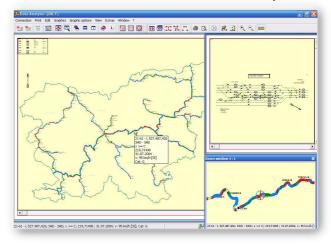
The Data Views

The following illustrations give a short overview of the important features and views of IRISSYS®. Generally all views and reports can be configured according to the users needs.

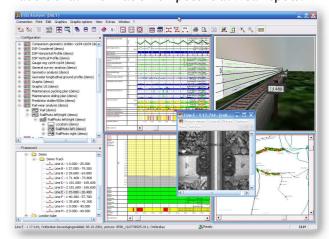
The Track

IRISSYS[®] is easy to use by "drag and drop". The user chooses one of the defined data views or data channels and drags it into the workplace window. The same functionality is used to select the relevant object (a region, single track, switch...). The corresponding information is computed in real-time then.

The quality index of a track, displayed alongside the tracks on a map, always gives a good overview about the condition of a region. An easy "drill-down" of errors is achieved with the "drag and drop" of selected data types from one view into another one with a more detailed analysis.



Pictures taken during track inspections are displayed at the correct position and provide additional information on potential weak spots.





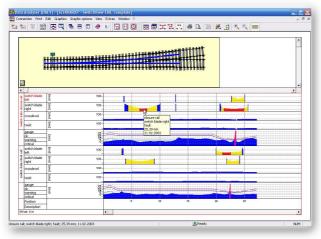
The Implementation



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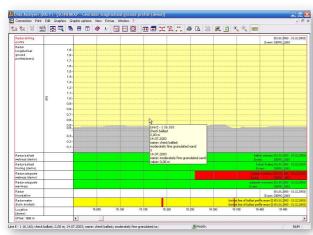
The Switch

According to the track data all information relevant for the assessment of the switch condition is stored in IRISSYS®. The graphical user interface enables an easy approach to condition assessment details. Quality indices and single errors are positioned alongside a model of the switch. Furthermore, it is possible to display the plain measurement data.



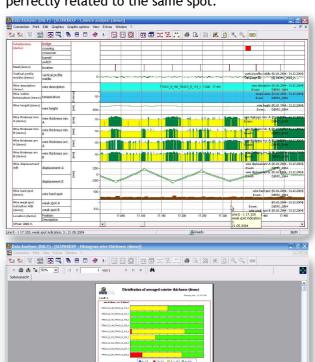
The Subsoil

Data gathered by ground penetration radar (GPR) can be stored as original picture and/or evaluated result. If this data is combined with track geometry data, the dependencies will become obvious even without further analysis.



The Catenary

The catenary views delivered by **IRIS**SYS[®] enable insights into correlations with other inspection data. As an example on this information level it is possible to compare the catenary geometry, the wire thickness and the track geometry - all perfectly related to the same spot.



Further information

Are you interested in further information regarding IRISSYS® products? Don't hesitate to contact us under one of the following addresses:

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