

Customer
CZ LOKO a.s.

New Driver's Cabin
according to UIC Standards /Project 2009/



Introduction of the Customer:

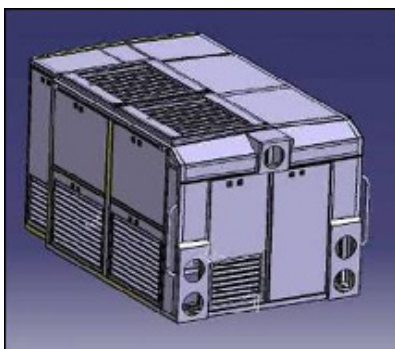
Českomoravská komerční společnost, a.s. (ČMKS) was established in 1995 and was renamed to CZ LOKO, a.s. in 2007.

The main business line of CZ LOKO is to repair, upgrade and refurbish railway traction vehicles. It has been steadily reviving the tradition of locomotive manufacture in the Czech Republic.

<http://www.czloko.cz>

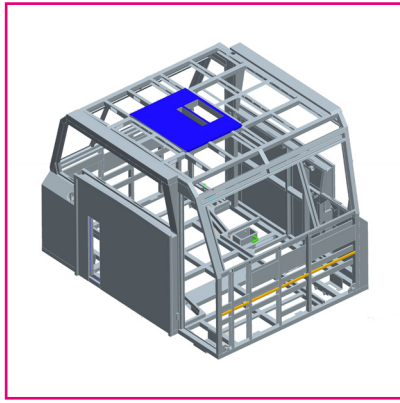
Project description:

CZ LOKO is going to develop a unified locomotive cabin for their potential customers. They want to offer locomotives with such cabin all over Europe. **The cabin has to be developed and certified according to UIC standards** and the result can be quite a new conception and technical solution of the cabin.



Task for Inter-Informatics:

According to customer requirements we had to evaluate and comment on the feasibility study, to prepare and calculate the kinematic outline calculations, and to design a unified driver's cabin for five classes of diesel shunting locomotives.



Inter-Informatics' solution:

1. **Evaluation and comments on the feasibility study**

It covered especially a proposal of a new ground plan of the cabin and optimization of heating and ventilation systems. Farther we had to perform an optimization of lighting system, to review the conception and construction of the engine driver's desk and to change windshield system of the new cabin. Majority of our comments and recommendation were later included in the concept of the new cabin design.

2. **Outline calculation according to UIC 505-1**

We prepared a kinematic outline calculation for each locomotive and a 3D model for each outline according to UIC 505-1 standards. The result of the outline calculation was an optimization proposal for the dimensions of newly developed cabin for shunting locomotives.

3. **New EU Cabin – detail design**

First we had to implement all TSI and UIC requirements to the concept design of the new cabin and subsequently we designed 3D models of the new cabin and 2D drawings including a Bill of materials.

At the same time our specialists provided support in the area of cabin interior especially ceiling panels with material selection and communication with panel producers.

All our data, including approval process, were delivered to our customer's PDM system.

The project was executed in 2009 and was done in a 3D system Pro Engineer – Wildfire3 and in the customer's PDM system Pro/INTRALINK. About 1500 hours were spent on the execution of the project.

„Thanks to deep range of our knowledge in the area of railway vehicles and know-how sharing we managed to solve comprehensive solution of the customer requirements. This project meant for me obtaining of further experiences, which I will use during the work on next similar tasks.“

Petr Horák,
Project Manager

Benefit for the customer:

- » Inter-Informatics prepared a **very comprehensive solution for the customer**; from comments of the feasibility study and development of frame cabin and interior to support during the new cabin prototype production.
- » The whole project was done in **really short time frame** - about 3 months.
- » Our solution gave our customer a **bigger chance to succeed in potential future tenders** and have an advantage over competitors.



info@inter-informatics.com / <http://www.inter-informatics.com>

TC Inter-Informatics a.s. / Kolčavka 75/3 / P.O.BOX 5 / 190 00 Praha 9 / Česká republika / Tel.: +420 266 799 411

Inter-Informatics GmbH / Bodenseestraße 235 / D-81243 München / Deutschland / Tel.: +49 89 893 560 9-0

TC Inter-Informatics spol. s r.o. / Legionárská 160 / 911 04 Trenčín / Slovenská republika / Tel.: +421 323 213 211