



# Everything under control



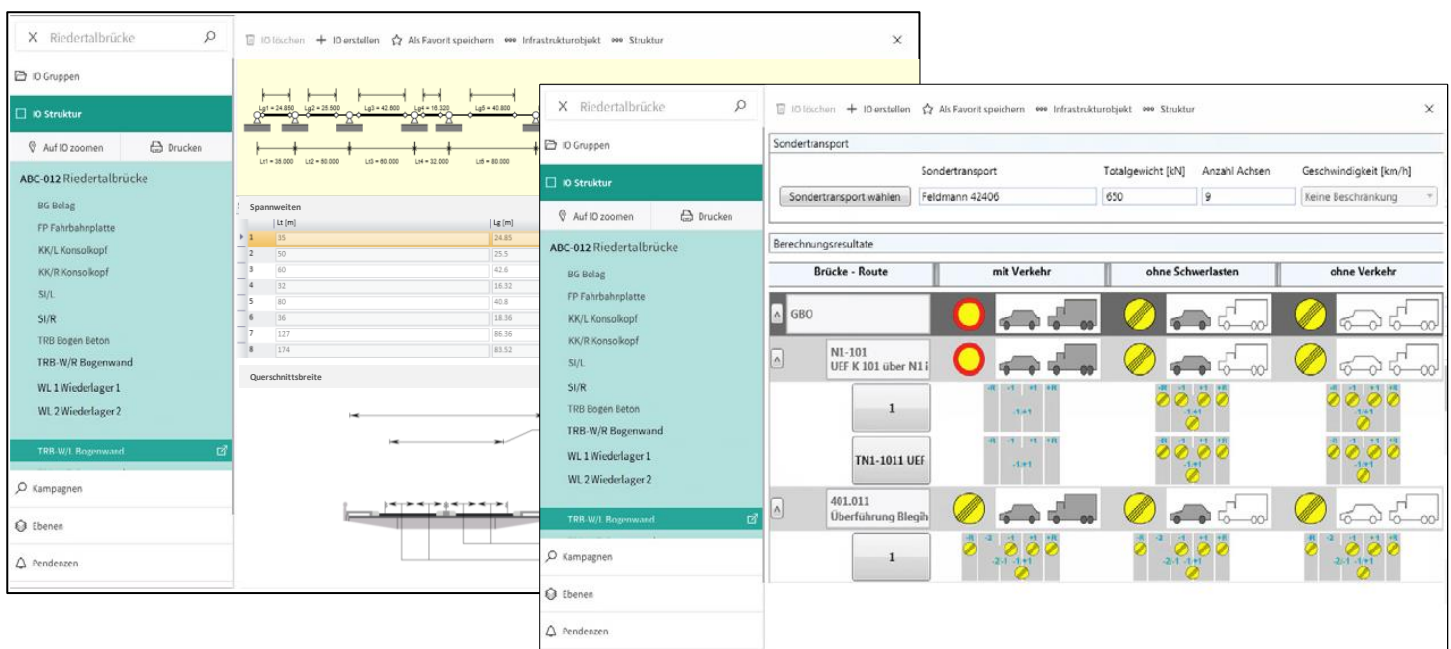
## Reliable and efficient evaluation of heavyweight vehicles

With infTruck you can efficiently evaluate bridges on your road network under any given heavyweight vehicle. You can verify the safety of individual bridges or of the ones on predefined routes.

To issue permits for special transports, the structural safety and serviceability of bridges on the requested route must be reliably assessed. With increasing demand for special transports along various routes using different vehicles, the manual processing of corresponding permit requests becomes very time-consuming. infTruck implements a pragmatic and reliable procedure by assessing a bridge's safety on a simplified structural system. This procedure is approved by SIA and adopted by FEDRO and several Swiss cantons. In this way, infTruck accelerates the evaluation process, which otherwise needs to be performed manually for each bridge and vehicle combination. infTruck assesses the structural safety of bridges under any vehicle by defining as well as storing axle load and wheelbase configurations. This can be done for individual bridges and entire routes at the touch of a button.

infTruck has three different modes, which mirror the organizational roles and responsibilities:

- **Structural system:** The data that defines the structural system is recorded once for each bridge by an authorized bridge engineer.
- **Special transports and routes:** The details of the special transport and the planned route are entered into infTruck either by a requestee or authorized agents and can be saved for later use. In this way, a database of heavyweight vehicles is gradually created.
- **Evaluation:** For each combination of bridges and vehicles, safety and serviceability is evaluated. The results are displayed both graphically and numerically.



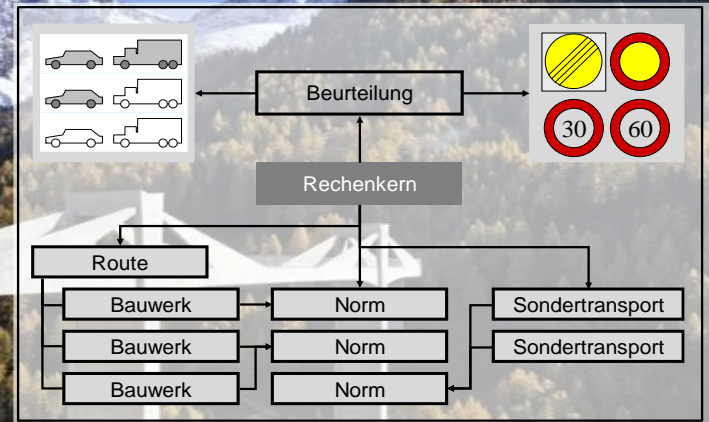
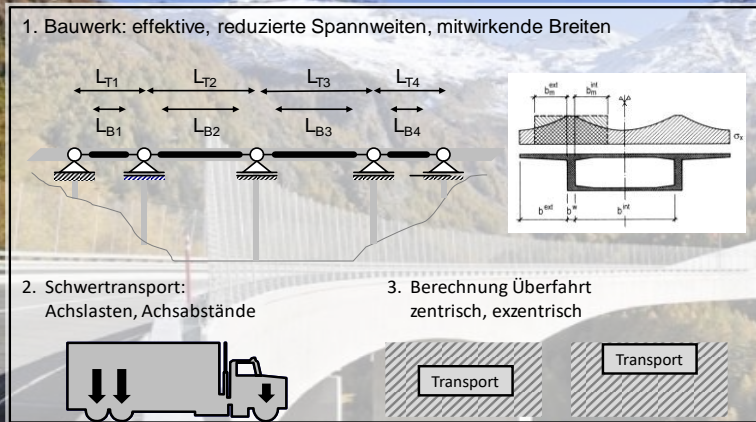
The screenshot displays the infTruck software interface, showing a bridge evaluation process. The main window is titled 'Riedertalbrücke' and displays a structural diagram of the bridge with various spans and axle load configurations. The interface includes a sidebar with a list of bridge components and a main panel showing the evaluation results for a specific transport scenario.

| Spannweiten | Lt [m] | Lg [m] |
|-------------|--------|--------|
| 1           | 35     | 24.85  |
| 2           | 50     | 25.5   |
| 3           | 60     | 42.6   |
| 4           | 92     | 36.32  |
| 5           | 80     | 40.8   |
| 6           | 36     | 38.36  |
| 7           | 127    | 86.36  |
| 8           | 174    | 83.52  |

The evaluation results table shows the following data:

| Brücke - Route             | mit Verkehr | ohne Schwerlasten | ohne Verkehr |
|----------------------------|-------------|-------------------|--------------|
| GBO                        | ⚠️          | ✅                 | ✅            |
| NI-101 UEF K 101 über NI   | ⚠️          | ✅                 | ✅            |
| 401.011 Überführung Bleigh | ⚠️          | ✅                 | ✅            |

## Evaluation methodology



## The strengths of infTruck

Reliable and efficient evaluation of special transports

- Reliable evaluation methodology** infTruck's evaluation methodology takes into account both bending moments and shear forces. It has been approved by SIA and applied by FEDRO and Swiss cantons.
  - Consideration of serviceability** infTruck evaluates both structural safety and serviceability.
  - Efficient assessment of entire routes** Bridges can be grouped into routes and checked simultaneously in one calculation step. Frequently used routes can be stored and easily reused.
  - Efficient assessment of any special transports** The evaluation methodology allows the evaluation of any axle load and wheelbase configuration. Frequently used special transports can also be defined as templates.
  - Any load standard can be applied** All Swiss traffic load models since the first federal regulation in 1892 are stored in infTruck. Load models defined in German and Austrian codes are also available. Other load models can be readily integrated.
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- Intuitive user interface** The modern and intuitive user interface allows efficient use.
  - Web application** infTruck is a web application i.e. it can be accessed directly via customary web browser without any prior installation.
  - Connect your database** You can easily link infTruck with your data from infKUBA or any other database.

## Technical Concept & Realization



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