

Sergei Korablev

Senior Structural Steel Detailer | Tekla Structures | AS/NZS | Tekla Open API (C#)

Belgrade, Serbia · Remote contractor, available for Australian business hours · No visa or relocation required

+381 63 174 1729 · SergeiKorablevJob@gmail.com · [linkedin.com/in/sergeikorablev](https://www.linkedin.com/in/sergeikorablev) · [Portfolio](#)

Summary

Senior structural steel detailer with 10+ years in Tekla Structures, delivering fabrication-ready models, shop and erection drawings for industrial and commercial projects in Australia, New Zealand and Russia. Working remotely for an Australian client since 2021, detailing to AS/NZS standards.

Runs projects end to end: model setup, custom components and connections, model checking, numbering, GA, assembly and single-part drawings, reports and NC/DXF outputs. Builds Tekla Open API and IDEA StatiCa automation tools in C#/.NET. Has led detailing teams and trained junior detailers on live projects.

Core Skills

- Tekla Structures (advanced): modelling, custom components and connections, drawing templates, numbering, reports
- Structural steel detailing to AS/NZS; also AISC, EN and GOST
- Shop, assembly, single-part and erection drawings; NC/DXF/CNC outputs
- Model checking, clash checking, RFIs and design clarifications
- Tekla Open API, C#/.NET, WinForms: plugins and automation tools
- Team leadership, project scheduling and mentoring junior detailers

Key Projects

- **Shelters, Australia and New Zealand:** detailing and drawings for ~200 steel shelters.
- **Container-type shelters, Australia:** 72 roof framing drawing variations.
- **Gas-chemical complex, Russia (freelance):** detailed drawings for 6 pipe racks, ~1,150 t of steel over two years.

- **IDEA StatiCa connection design automation (C#/ .NET 8):** desktop app for a structural engineering bureau that automates steel connection design checks in IDEA StatiCa through its REST API. It replaced manual work in the IDEA GUI: engineers set up a parametric template once, and the app runs the checks and produces the PDF calculation reports.
 - Simple Mode: interactive single-connection workflow (edit parameters and loads, run the check, review results, export a PDF).
 - Advanced Mode: batch processing from Excel. For each case the app applies the parameters, generates every load sign combination (forces given directly or as a % of member capacity), runs the check against user-defined limits including buckling, and sorts the PDFs into pass / over-limit / fail folders with a colour-coded summary.
- **Training:** trained a group of 6 detailers in Tekla Structures on live projects.

Experience

FUTUR Engineering — Senior Structural Steel Detailer (Tekla)

May 2021 – Present · Australia (remote)

- Detail industrial and commercial steel projects for Australia and New Zealand to AS/NZS, from model setup to issue for fabrication.
- Produced drawings for ~200 steel shelters and 72 roof framing variations for container-type shelters.
- Model industrial structures (pipe racks, steel frames) with custom connections and complex assemblies.
- Configure drawing settings, templates, numbering and reports to client standards.
- Coordinate RFIs and resolve missing or conflicting design information.
- Develop Tekla Open API tools in C# for connections and automated framing, improving speed and drawing consistency.

TopEngineer — Senior Steel Detailer / Project Lead

Mar 2024 – Oct 2024 · Belgrade, Serbia (contract, concurrent with FUTUR)

- Led steel detailing projects in Tekla Structures from model setup to final drawing issue.
- Organised 3D modelling, shop and erection drawing delivery; managed schedules, resources and deadlines.
- Implemented Tekla plugins and custom components to reduce detailing time.

Polymetrica LLC — Team Lead of Steel Designers

Mar 2020 – May 2021 · Moscow, Russia

- Managed detailing projects and the 3D modelling schedule for building structures.
- Answered and resolved technical queries (TQs); compiled reports and drawing packages.
- Prepared cost and labour estimates for new projects; managed model sharing.

Lenmontage — Tekla Detailer (Structural Steel Detailing Engineer)

Jun 2011 – Mar 2020 · Saint Petersburg, Russia

- Reviewed specifications, drawings and scope of work.
- Produced models, connections, shop drawings and reports in Tekla Structures.
- Worked with engineers and project managers to resolve design and detailing issues.

Automation & Software

- **Tekla Open API (C#/.NET, WinForms):** plugins for connections and automated framework generation; custom components; drawing and report templates.
- **IDEA StatiCa API:** batch connection design checks and automatic PDF calculation reports.
- **AI-assisted workflows:** pet projects connecting AI tools to Tekla Structures through an MCP server.
- **Software:** Tekla Structures (advanced), AutoCAD (intermediate), IDEA StatiCa (intermediate).

Education

- **Professional retraining, Industrial and Civil Buildings Design** — Saint Petersburg State University of Architecture and Civil Engineering, 2012–2013
- **Bachelor's degree, Production Management** — Saint Petersburg State Technological University of Plant Polymers, 2009–2011
- **Bachelor's degree, Mechanical Engineering (Mechanics of Automated Production)** — Saint Petersburg State Technological University of Plant Polymers, 2004–2009