## FATcomp®

## the easy-to-use tool for fatigue design computations

Andreas Kuoppa, Jan Kuoppa and Professor Jan-Olof Sperle are the three persons who have develop Toleap Consulting ABs software for fatigue design, FATcomp®. Andreas Kuoppa is the programmer and has created all the Java-, HTML- and CSS code for the program. Jan Kuoppa has worked with all the background material and the homepage <a href="https://www.fatcomputation.com">www.fatcomputation.com</a>. Professor Jan-Olof Sperle has mentored the work and tested the software.



Picture 1: An early version (the alphaversion 0.1.0) of FATcomp® demonstrated at the High-Tech Steel Conference in Falun, Sep. 04, 2017. <a href="http://www.htsc.se">http://www.htsc.se</a>

- It is already a lot of programming manhours behind FATcomp, says Andreas Kuoppa. I think FATcomp is a useful tool now and I am satisfied with the result. It has a nice database of e.g. welded joints and all the necessary features to make the fatigue design criteria evaluation.

$$\omega_{eff} \cdot \Delta \sigma_{max} \cdot \gamma_f \leq \frac{FAT \cdot \varphi_t \cdot \varphi_m \cdot \varphi_e}{\gamma_m \cdot \sqrt[m]{s_m}}$$

Picture 2: The formula for the fatigue design criteria

- I like the hands-on approach that FATcomp has, says Jan-Olof Sperle. Especially the very efficient comparison between slightly different design solutions and assumptions is very valuable when making fatigue assessments. I also see FATcomp as a good tool for students to learn how to deal with fatigue loaded structures.

Toleap Consulting AB mission is to reduce the number of fatigue failures and increase the durability of fatigue loaded structures! FATcomp is a tool for engineers working with fatigue design.

- FATcomp follows the European standard EC3, says Jan Kuoppa. The large database and the customers own results, shown in the calculation sheet, are some of the useful engineering features.

FATcomp® can be run on Mac OS X and on Windows. It is soon available for purchase on <a href="http://fatcomputation.com/buy.html">http://fatcomputation.com/buy.html</a>.

In addition to the software Toleap Consulting offers a training program for design of fatigue loaded structures, further info on <a href="https://www.toleap.se/en">www.toleap.se/en</a>.

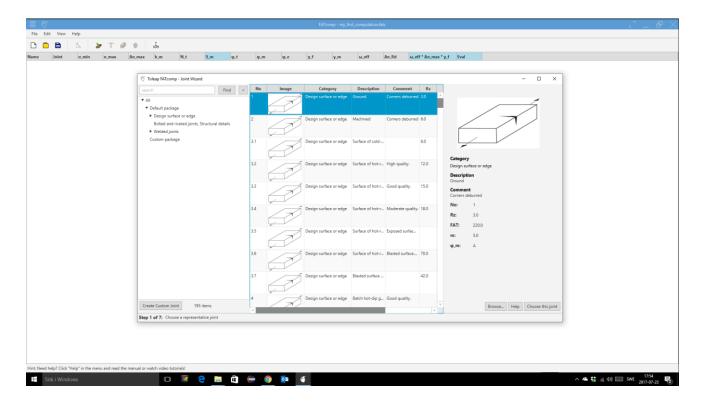
- Even if it is Andreas Kuoppa, Jan Kuoppa and Jan-Olof Sperle who are the persons behind FATcomp all our Dream team members can give you additional information of the software, our trainings and services, says Roger Lidgren, representing Toleap Consulting in Americas.



Picture 3: Toleap Consulting ABs Dream Team Lennart Ringsjö, Juan-Carlos Rivera, Karl-Erik Olsson, Börje Sundell, Roger Lidgren, Jose Otero, Andreas Kuoppa, Jan Kuoppa and Jan-Olof Sperle.



Picture 5: FATcomp SN-curve



Picture 4: FATcomp® Joint Wizard

# in good spirit

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### **Training Programs**

- Steel Pro Basics
- Design in Steel
- Fatigue/FATcomp®
- The Customer Offer, technical and commercial
- Consultative Sales
- Presentation Technique and Communication Tools
- Customized Training Platforms and Programs

#### **Services**

- Market Development and Research
- Design and Material Selection
- Production Processes
- Technical Documentation
- Training Concepts and Platforms Development
- IT, Webpages and Programming
- Fatigue Design and Computation

#### **Tools**

- FATComp a design tool for fatigue loaded structures (still under development) www.fatcomputation.com
- ManufacturingGuide.com (still under development) The "betaversion" is available on www.manufacturingguide.com.

Read a lot more of our offer on our websites:

English: <a href="www.toleap.se/en">www.toleap.se/en</a>
Swedish: <a href="www.toleap.se">www.toleap.se</a>