

Creanex Oy

Solutions to your challenges



Creanex applies objective thinking and extensive experience in the development of mobile work machinery.

Whether it's the properties of the machine, skills of the operator, or working methods, there is always room for development.

Our core products and services

Product Development for the Industry



Creanex develops unique work machinery in cooperation with its customers. We can take on full responsibility for complete development concepts and study of product ideas.

Simulator Solutions for the Industry



Several global work machinery manufacturers have partnered with Creanex to design and implement simulator solutions for their machines.

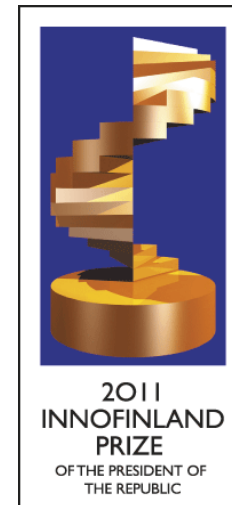
Training Environments for Schools



Creanex offers next generation work machine training solutions for schools in the fields of excavation and logistics. Studies show that productivity between drivers can vary 20-40% due to the differences in driving and work planning skills.

Creanex Oy (Ltd)/ Company Info

- Founded in 2003
- Employees 20
- Tampere, Finland



Development of product design tools



Virtual Environments, Timeline



→ Concepting & User experience → Development & Testing → Marketing & Training → Maintenance & Support

Possibility to test and get user experience of new product concepts

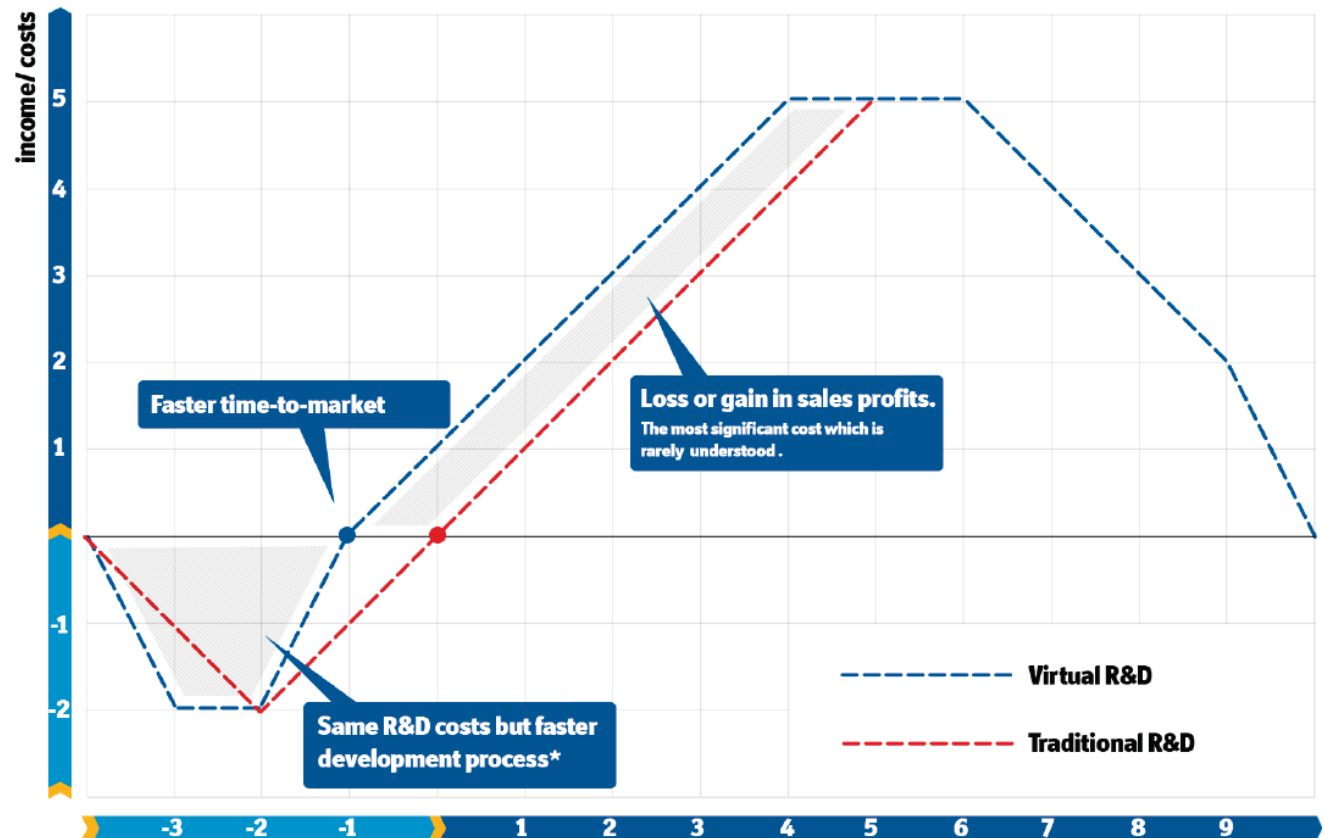
Shorter Time to market due to possibility to test and verify new solutions with virtual prototype

After Product launch, the VE tools can be applied for marketing and Training (operator, and service)

The new product updates can use the set-up for quality assurance (SW) and product support.

The benefit of using Concepting and VE tools in Product Development

R&D costs and sales of the new product



*) In most cases using virtual environment lowers the costs of the R&D process

R&D Simulators



HIL-testing environment

Testing simulators tools have an important role in modern machine control system development and testing.

As the control system architecture is ready, a simulator will be designed to serve as development and testing platform.

The control system development and testing can proceed with full speed although there is no prototype machine available.



Examples of control system R&D + Testing environments



Ponsse differentiates from competition with Intelligent automation

The role of automation plays an increasing role in forest machine development. Automation is an important tool for differentiation, but it also creates new demands for system testing.

Although machine tests still have an important role, the testing need is so significant, that also other modern tools are required. Ponsse is actively using Creanex testing simulators as a part of R&D and testing process.



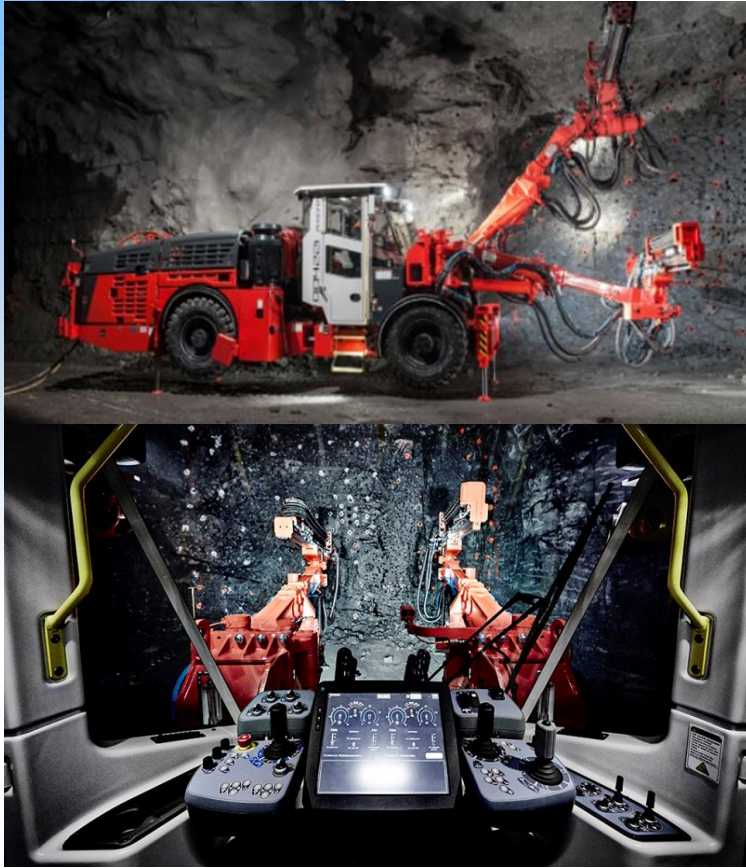
"The use of simulators makes our R&D and testing process fast and agile, as we are able to trap most of the "bugs" already during office tests, when the price of correction is still resonable.

The number of machine models and options - as well the variety of test cases is so large, that it would not be possible to cover all without simulator tests. Automation of test cases has already now improved the coverage and repeatability. Further development of test automation will be the future opportunity."

Tomi Piirainen, R&D HW/SW Test Team Leader, Ponsse



Case Sandvik



Sandvik DD422i Mining Jumbo

Machine intelligence and safety are the top features from mining equipment.

Machine data are an increasingly important part of mining operations.

Machines can receive tasks and planning information from mine resource planning systems.

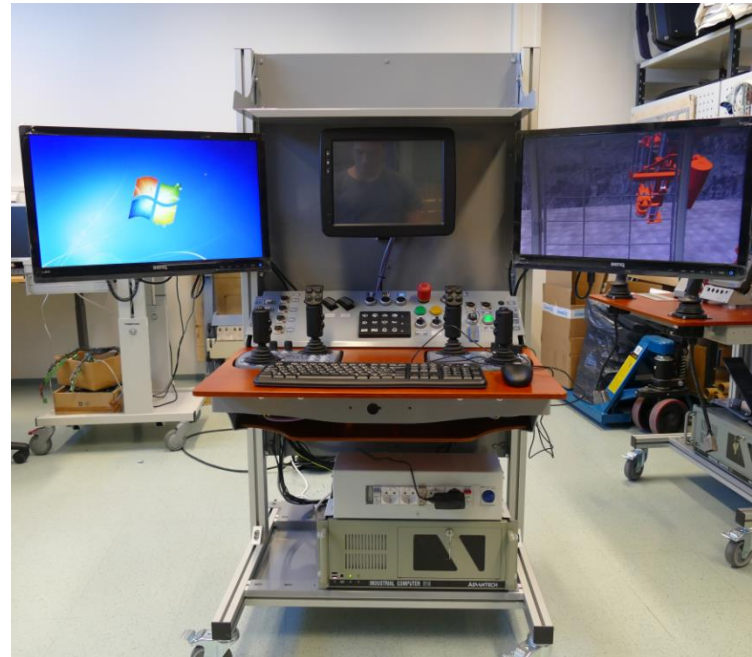
Performance data to develop their planning system.

Sandvik is actively using Creanex simulators for testing all of those key features of machines

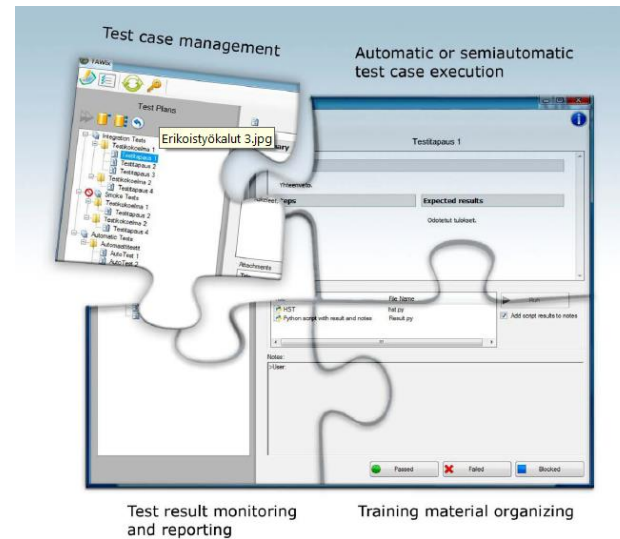
Case Sandvik

”Fully and partly autonomous machines are the trend of the future. As we go in this direction, the need of testing will not decrease. Testing will get more complicated as we need to test machines and fleet management automation systems at the same time. Simulators will be an excellent tool as we need to test such large set-ups”

Petri Hakomäki, Engineering Manager, Testing Control System & Automation at Sandvik.



The Tools for Product Development and Testing



By testing the control system it's made sure of the device's functionality in different situations.

Automation of the testing and saving the test cases:

- reduce manual work
- give time to do demanding tests
- Create a comprehensive test library as a part of the business' quality system

Training Simulators



A simulator is a smart solution for training



Training simulators are cost effective solutions for organising training for end users and maintenance. Additionally, it is a great tool for marketing future models

Customer branded simulators

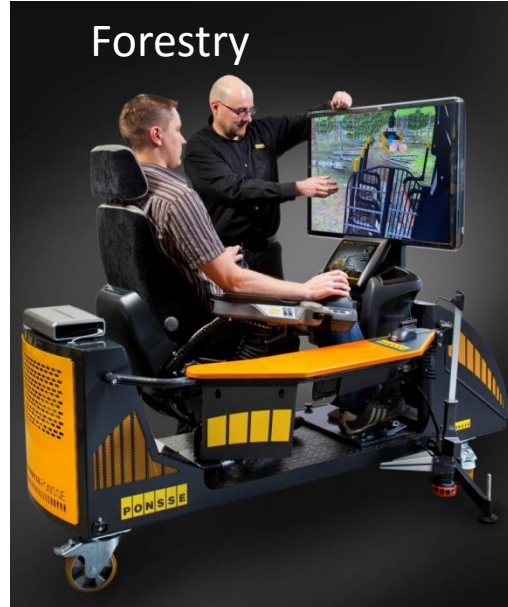


Customer branded simulators are made to ensure that simulator is clearly identified as a product of certain machine brand and manufacturer.

Creanex can also take responsibility for manufacturing the simulators. We are currently manufacturing and maintaining the simulators for a number of machine manufacturers.

Simulator Solutions for the Industry

Forestry



Fire Resque



Mining



Creanex
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Your Challenges

Creanex Multi-machine simulator

A unique solution to use one simulator platform for training several different machines

Construction Simulators

Wheel Loader



Dumper



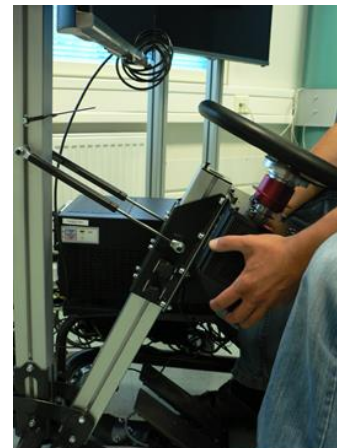
Excavator



Changeable machine controls



One simulator platform turns to many applications. The operator controls have one connection and every application can be operated with real machine controls.



Wheel Loader



Creanex
Solutions for your challenges



Creanex Wheel Loader

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Excavator



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Creanex Excavator

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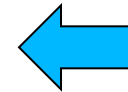
Trucking Simulators



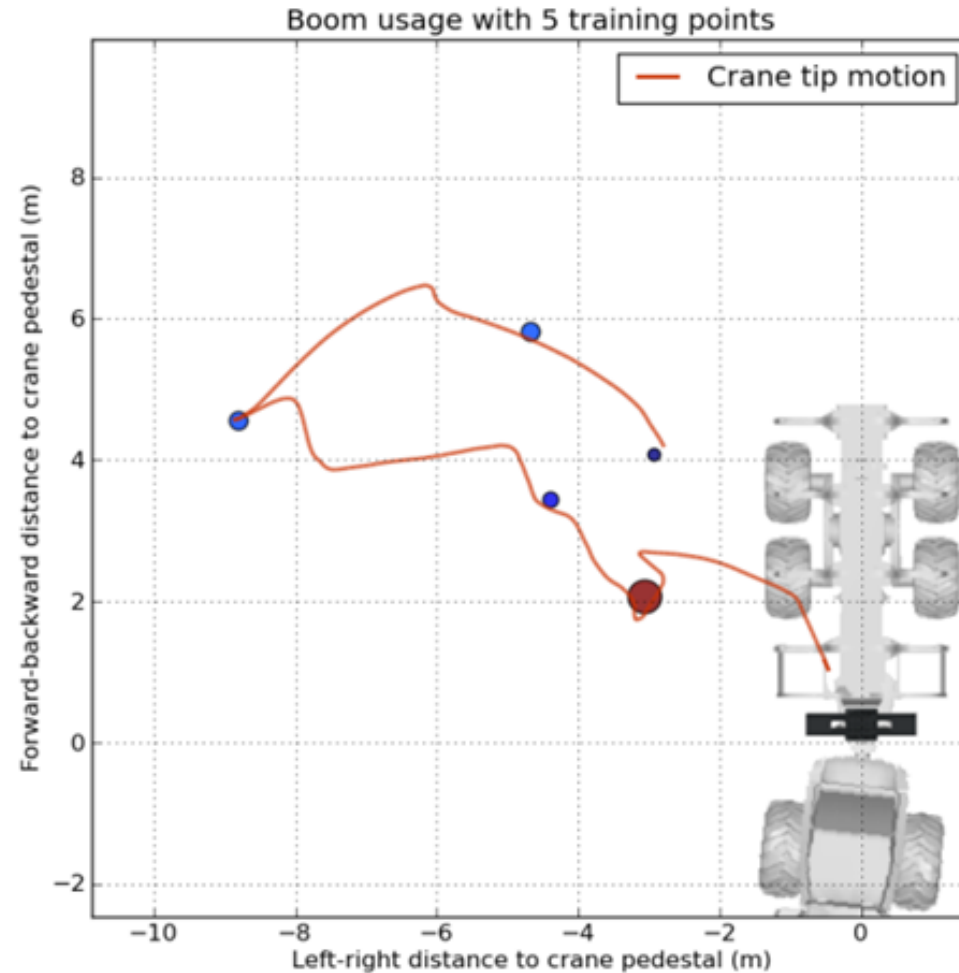
Log truck simulator



Truck & Trailer
(Giga Liner)



Versatile and Innovative feedback reporting



Creanex Oy

The Expert of Developing Mobile Work Machinery

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