K CUSTOM

ECOSYSTEM INTEGRATOR
AND VENDOR OF XR & AI TECHNOLOGIES

We create and implement simulators, virtual reality systems and integrated digital solutions for various sectors of the economy

ABOUT CUSTOM GROUP OF COMPANIES

The Custom Group of Companies is an association of engineering and manufacturing companies and software developers engaged in system integration of process automation solutions, digital solutions, simulators and virtual reality systems for use in various sectors of the economy.

ABC Company is a member of the Custom Group of Companies and has been working in the field of high technology since 2015.

- **45 international patents** in VR and AR
- Based on the company's developments, **more than 100k devices** have been sold worldwide
- **Cooperation with global technology leaders**

Field of activity and competencies:

- We develop training complexes using VR/AR
- We develop solutions for automating business and technological processes using AI/CV/ML
- We develop and integrate software: mobile applications and web services

ADVANTAGES OF IMPLEMENTING AN ECOSYSTEM OF DIGITAL SERVICES

Probability of human error is reduced by **90%**

The number of defects is reduced by **up to 100%** due to automated visual quality control

Execution of standard operations is accelerated by **20-70%**

Efficiency and employee satisfaction from the work performed are increased by **20-30%**

Employee training time is reduced by **40%**

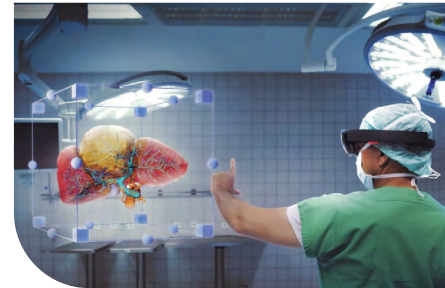Cost of training is reduced by up to **90%**

Level of training material assimilation is increased by **75%**

OUR SOLUTIONS FOR VARIOUS FIELDS

Industry
- Simulation of work scenarios on dangerous equipment
- Learning new production processes

Medicine
- Simulation of complex operational processes for medical staff training
- AR-assistant for cardio surgery

Education
- Virtual lessons
- Interactive booths on various subjects
- Educational quests

Development
- Virtual 3D tours around facilities under construction
- Safety training during construction
- CAD/BIM integration

USE CASES: TRAINING COMPLEXES AND ASSISTING SYSTEMS

HSE
21 off-the-shelf VR scenarios on occupational and industrial safety

Drilling and elimination of hazards
A set of VR and computer simulators for drilling; for recognition and liquidation of gas, oil and water inflows
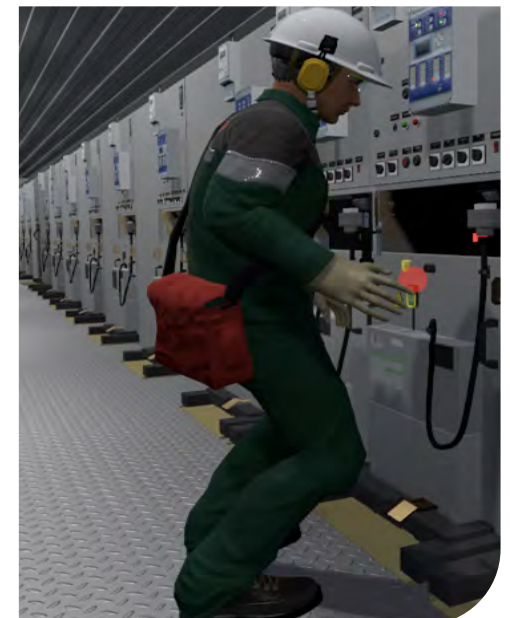
Railway transport
VR trainings for train attendants and train electricians

Oil&Gas and petrochemical industry
Operator simulators with technological processes simulation

AR assistants
Software to help assemblers assemble electrical cabinets, interactive instructions for working with the equipment
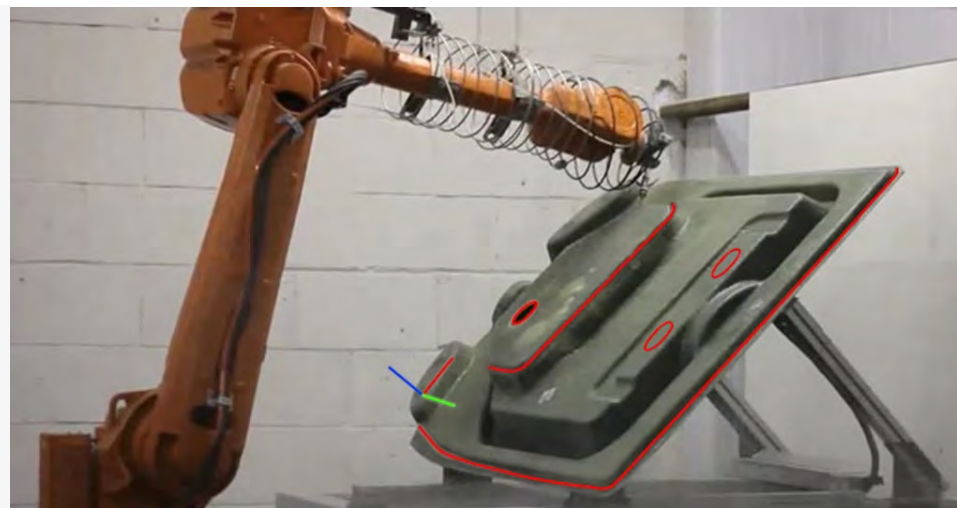
USE CASES: AUTOMATION OF THE PRODUCTION PROCESSES

The electronic eye
Computer vision for robotic complexes
- automatic determination of the position and orientation of the processed part in the working area of the robotic complex, including bulky parts of complex shape (welding, material spraying)

Video Analytics
using computer vision
- flaw detection of strand bundles

- flaw detection of product labeling

- calculation of the volume of products produced

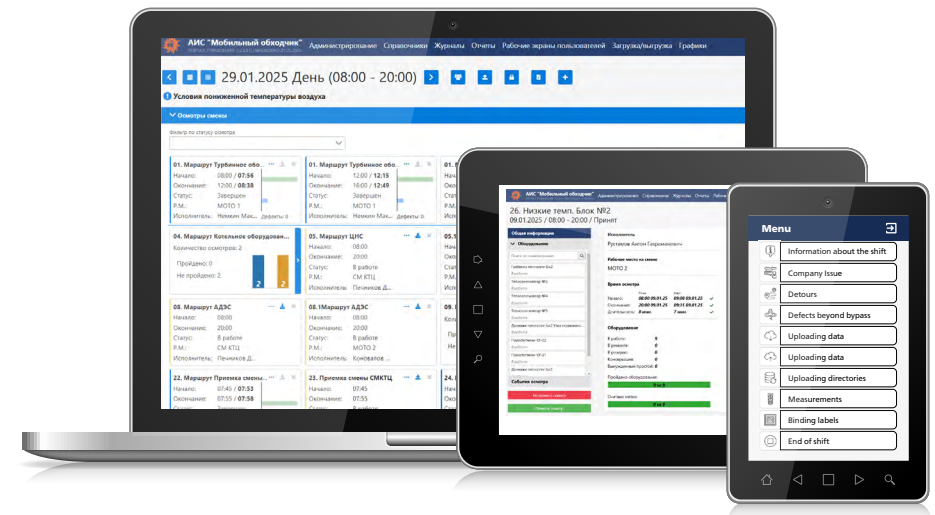- assessment of the volume of bulk materials

- and more

USE CASES: AUTOMATION AND DIGITALIZATION OF BUSINESS PROCESSES

Mobile Lineman

A mobile application and web portal for automating business processes for recording the results of rounds, inspections and monitoring the condition of equipment and fixing identified defects directly at the work site

- Standardization of business processes for conducting rounds, inspections, and equipment condition monitoring, based on equipment data and unified master data

- Getting reports online

- Creation of a single source of reliable, consistent and verified information related to the processes of conducting rounds, inspections and equipment condition monitoring, and evaluating their results

- Transfer of received and accumulated information to top-level IT systems

- Control of movement and activity of personnel, accounting of useful working hours

Benefits:

- Effective work planning

- Performance monitoring

- Analytics and statistics

OTHER COMPANY PROJECTS

We are working on creating a virtual reality software and hardware system designed for corporate and school education

Consists of:
- A virtual reality device (the ability to work offline and with a PC)
- A store for corporate and educational VR applications
- A library of content with training and exam modes, and the use of AI for personalized learning

System benefits:
- Use in the offline enterprise network
- Administrator, teacher, and student modes
- Compatibility with Linux-based systems
- Large set of off-the-shelf solutions with the possibility of modification to meet the enterprise needs

CUSTOM

Alexander Tyunyatkin

MENA Business Development Director
Custom Group of Companies

e-mail: tyunyatkin@custom-eng.ru

+7 916 235 37 99
+90 536 492 23 94