

# How INTECHROS develops one of the world's top robots with KOMPAS-3D



*ROIN R-100 robot model created in KOMPAS-3D*

## Company Profile

INTECHROS is one of the world's top ten hydraulic robotics manufacturers. The ROIN engineering robots operate in hazardous, life-threatening conditions such as extremely high and low temperatures, radiation, or underground mines. They are used in railways, metallurgy, mining, nuclear, oil&gas, and construction sectors. The ROIN robots operate in hazardous environments, protecting personnel and significantly reducing labor costs.

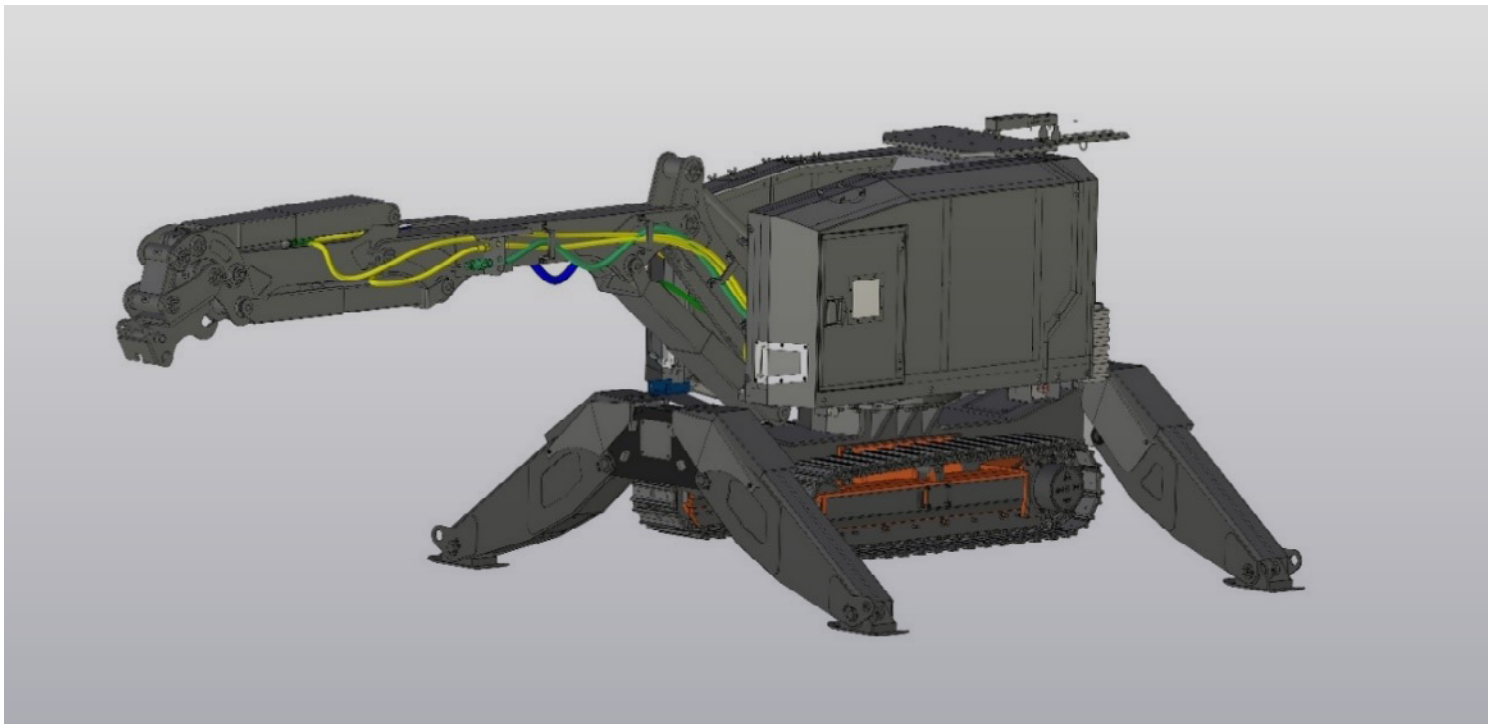
## Challenge

Since the development timeframe was very short (two to three months for a standard robot), the company needed a simple, easy-to-use product to enable its design and construction.

## Solution

INTECHROS designs these powerful machines using the software from ASCON. INTECHROS designers have been working with KOMPAS-3D for 10+ years. They commonly use the Pipelines addon as their projects include many hydraulic lines. All the drawings are also developed in KOMPAS-3D. Over more than a decade, the company has established the right approach to the CAD system.

**When choosing a PLM system,  
we readily considered ASCON solutions:  
Why change the vendor if everything works?**



ROIN R100 robot

## Results / Business Values

The R100 robot, designed in KOMPAS-3D, is the best solution for a wide range of applications. It is compact and can operate in confined spaces inaccessible to larger machinery. The R100 hydraulics is designed to power high-performance, precise rigs.

With KOMPAS-3D, INTECHROS develops complex robots in very short timeframes (2–3 months), which greatly reduces time to market and helps meet urgent orders. The company's long-term expertise and the integration of ASCON solutions into its business processes have created a strong technological foundation that supports its strategic ambition to become a global leader in hydraulic robotics.

# KOMPAS-3D

Intended for creating 3D-models for individual parts and assembly units containing both original and standardized structural elements. Supports modern design methods, such as top-down and bottom-up approach.

- Solid Modeling
- Surface Modeling
- Sheet Metal Modeling
- Object Modeling
- Parametric Modeling
- Animation
- PMI tags
- Built-in FEM, CFD, CAM

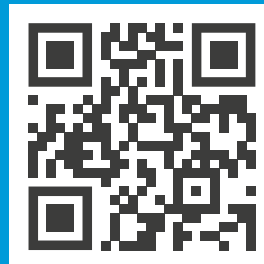
Learn more



Explore our resources



Free KOMPAS-3D  
Online Academy



Download the 30-day freetrial  
version of KOMPAS-3D

 CAD.Insights  
 [linkedin.com/company/ascongroup/](https://www.linkedin.com/company/ascongroup/)



Technical Support  
[ascon.net/support/](https://ascon.net/support/)