

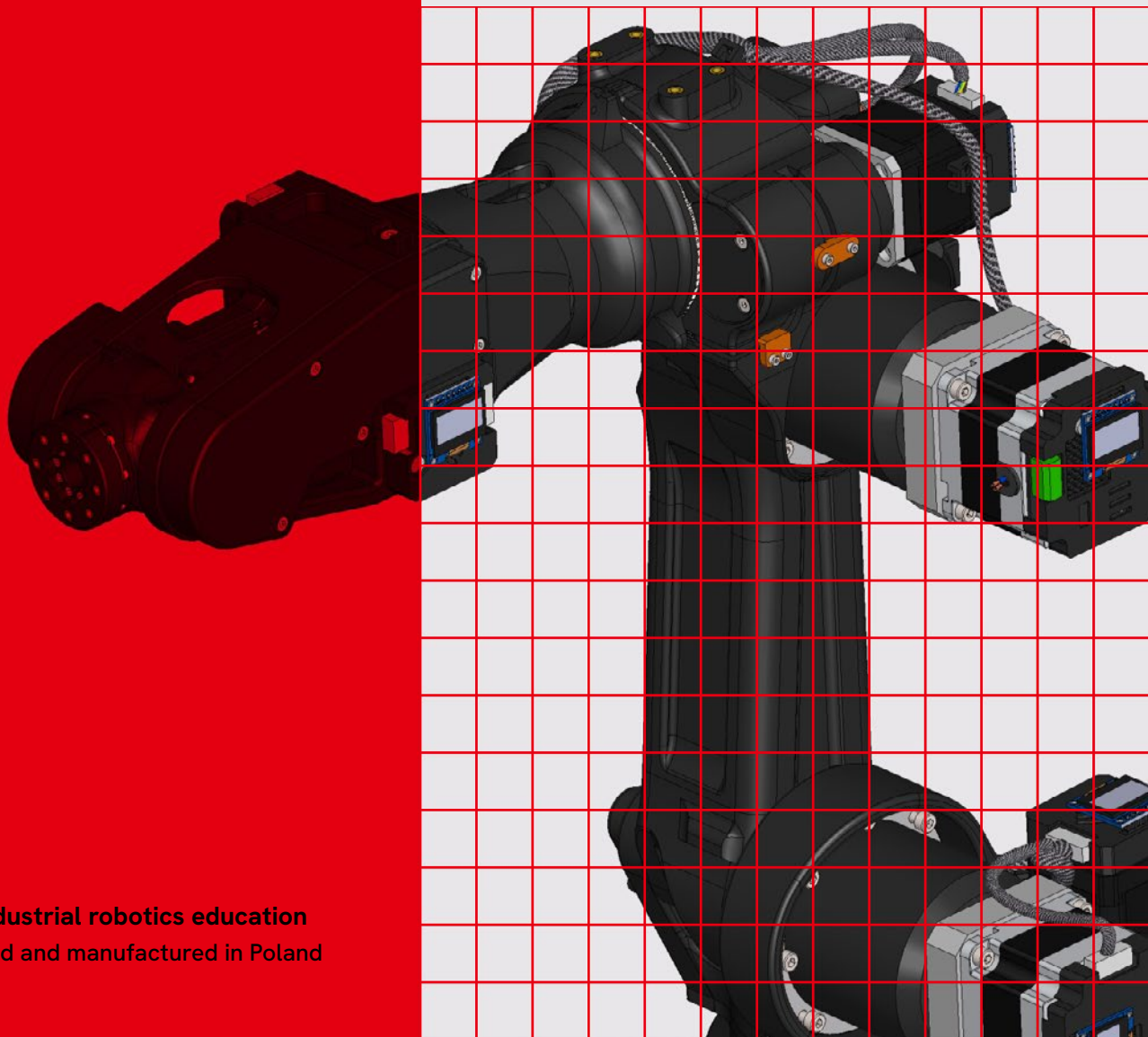
astorino

■ **Kawasaki**
Robotics

Educational robot created to learn and teach
industrial robots programming

How about...

making a revolution and teaching robotics in a completely new way?



Revolution in industrial robotics education
Invented, designed and manufactured in Poland



Kawasaki Robotics ASTORINO allows robotics to be taught at universities at a level previously unattainable. We change the availability ratio from 15 students per 1 robot, to 2-3 students per 1 robot.

– **Marek Niewiadomski**

Inventor and constructor of Kawasaki Robotics ASTORINO robots



Students get the opportunity to learn robotics in a practical and safe way towards real applications in industry. By investing in this solution, the university is raising the quality of industrial robotics teaching and thus its prestige.

– **Andrzej Garbacki**

Robotics Department Director, ASTOR



As an Automation and Robotics student, I must admit that Kawasaki Robotics ASTORINO is a great initiative that was much needed. Each student can touch and program such a robot!

– **Michał Styś**

Graduate of Automation and Robotics at AGH University of Science and Technology (Krakow, Poland)

Which option do you choose?



VS.



→ Low purchase cost

→ Safe

→ Does not teach solutions used in industry

→ Does not prepare students for work in production plants / engineering companies

→ High purchase cost

→ Requires additional safety

→ Teaches solutions used in industry

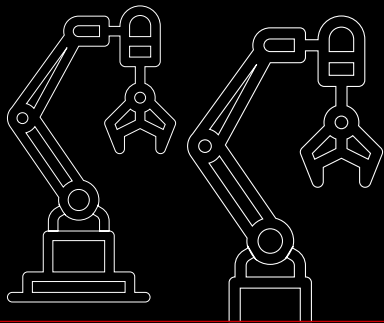
→ Prepares students for work in production plants / engineering companies

Become the university of the 21st century.

Be the catalyst for a revolution in industrial robotics education.

Create a lab that is:

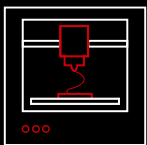
1. modernly equipped and each student has his/her own robot,
2. cost-effective,
3. safe and user-friendly.



and in addition...

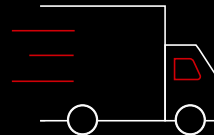
- has relatively low purchase costs
- does not require additional safety systems
- teaches solutions used in industry
- prepares students for work in production plants / engineering companies

Technical data



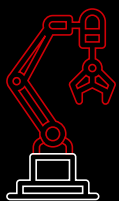
3D printing – 99.5%*

The exception is the mechanical part [e.g. servo systems].



Delivery time – 6 weeks

Durable packaging will ensure that the package safely reaches its destination



Compatible with Kawasaki Robotics industrial robots

The same robot programming language



Simple to operate and repair

Quickly replenish your inventory with parts printed on a 3D printer

Technical data

→ Gears with backlash of < 5 arcmin

→ Repeatability +/-0.5 mm

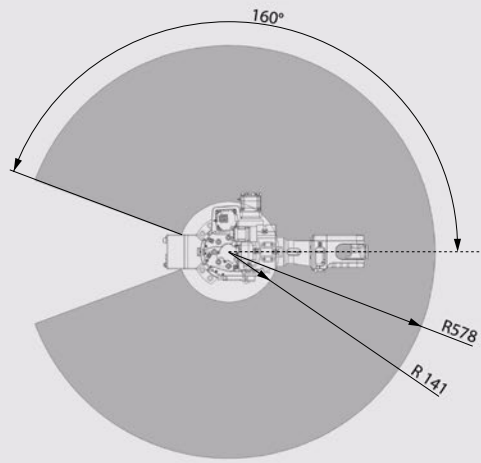
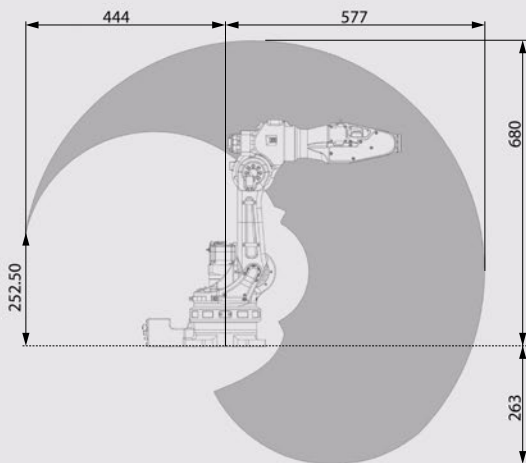
→ PET-G filament

→ 600 MHz CPU

→ JT4 and JT6mm through axles

→ 8 I/O 3.3 V module

Robot arm parameters	axis	range	speed [°/s]
	JT1	-158.5÷158.5	40
	JT2	-90.0÷127.0	40
	JT3	0.0÷179.5	56
	JT4	-240.0÷240.0	120
	JT5	-120.0÷120.0	127.5
	JT6	-360.0÷360.0	195
Payload		0.5 kg	



Operating area

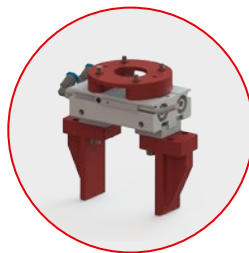


Basic features

- Robot with 6 degrees of freedom
- Robot design based on 3D printing
 - PET-G filament
- Programming in AS-Language
- Stepper motors operating in closed loop control,
- Zeroing of axes required after switching off the power supply: no brakes on the axes (brakes as an option)
- STL files supplied with the robot for self-repair/ printing of damaged parts



Expand your robot and create a robot kit



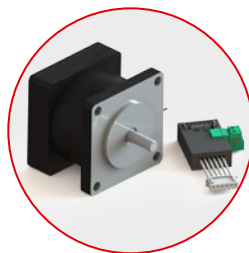
Gripper



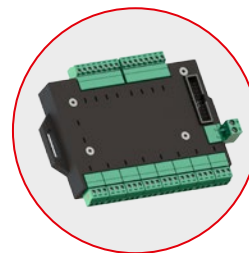
Vision system



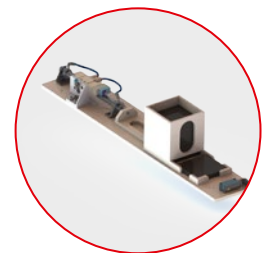
Linear track



Brakes



I/O module



Cube feeder

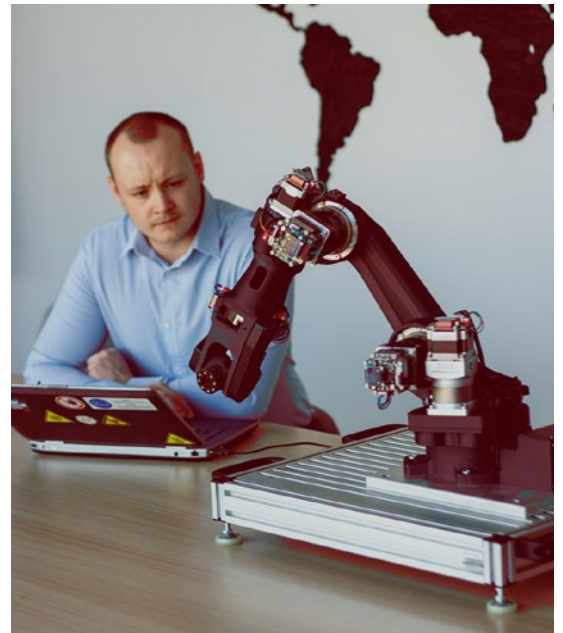
Where did the idea for creating Kawasaki Robotics ASTORINO come from?



*I couldn't find such a robot, so I've invented one...
to ensure that learning is inspiring, great fun and a
pathway to the profession of the future.*

Marek Niewiadomski

**Inventor and constructor of
Kawasaki Robotics ASTORINO**



**Want to learn more about the history of
Kawasaki Robotics ASTORINO?**

Visit www.kawasakirobotics.de/kr-astorino and find out more

Ask about the offer

Kawasaki Robotics Central and Eastern Europe HUB


3, Feliksa Wrobela St.,
30-798 Krakow, Poland

+48 12 306 73 40

ceehub@kawasakirobotics.pl

www.kawasakirobotics.pl

Feel free to contact us!

astorino  **Kawasaki**
Robotics

Kawasaki Robotics GmbH
Im Taubental 32 • 41468 Neuss
www.kawasakirobotics.de/astorino

© All rights reserved Kawasaki Robotics GmbH
Invented, designed and manufactured in Poland.