

KUKA Ready2_educate_pro Customer Info

V 1.0

22.08.2017





KUKA ready2_educate

KUKA ready2_educate is a standard cell concept for basic robot education in schools, universities & vocational education facilities.

- Tailored to stand-alone operation
- Safe cell in accordance to national codes (CE compliant)
- Minimum preparation time & efforts for teacher/instructor
- Quick and easy to operate
- Educational applications available
- Modular design with available upgrades



KUKA ready2_educate_Product Portfolio

Ready2_educate_basic

Ready2_educate_pro



Ready2_educate_advanced

KUKA ready2_educate _Cell Concept

- Scalable solution with possible upgrades to minimize entry investment and enable experience level increase, step by step
- Solid Safety Cover with all side access to workspace, 2 sliding windows (counter balanced), 2 turning doors
- 2 application areas, grid drilling pattern enables quick changes and versatile furniture setups
- Safety in accordance with national standards, CE labeled
- Movable by manual forklift



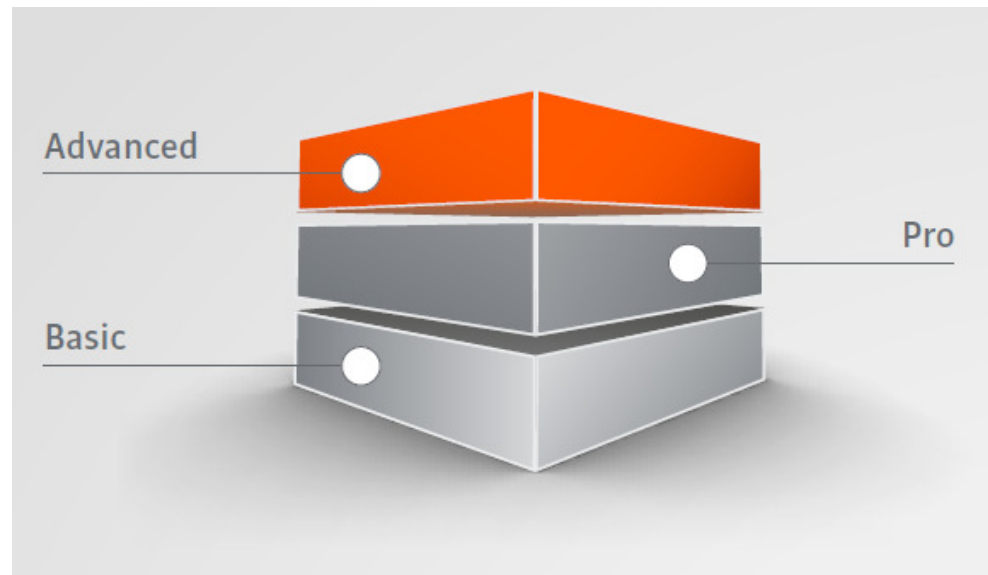
KUKA ready2_educate_Different Levels

„ready to automate“

- Ready2_educate_pro
- PLC & touch screen

„ready to run“

- Cart
- Gripper & Cubes



„ready to teach“

- Ready2_educate_basic
- Educational Application

* Upgrades possible

Ready2_educate_basic



Ready2_educate_pro

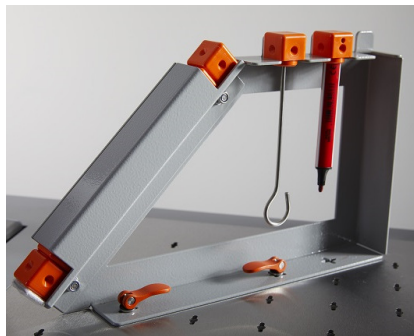
Ready2_educate_advanced

KUKA ready2_educate_pro

- Robot
 - KR 3, KR C4 compact , SmartPAD
 - KUKA System Software (KSS)
- Cell
 - Solid sheet metal cart, access from 4 sides, 2 sliding and 2 turning doors
 - Operator panel incl. 1x Ethernet, 1x USB, 2 input turning switches, 2 output signal lamps
 - KUKA USB Recovery Stick included
 - CE compliant
- Educational application included
- Options
 - KUKA SimPro, KUKA OfficeLite, KUKA RemoteSupportView, SmartPAD Protector,...



KUKA ready2_educate_Educational Application



Store

Sliding magazine for 9 cubes and integrated rack for 3 different tools



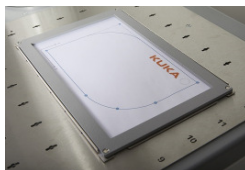
Gripper & Cubes

Gripper and cubes for pick-and-place training, which are the most used robot applications.



„Hot Wire“ Application

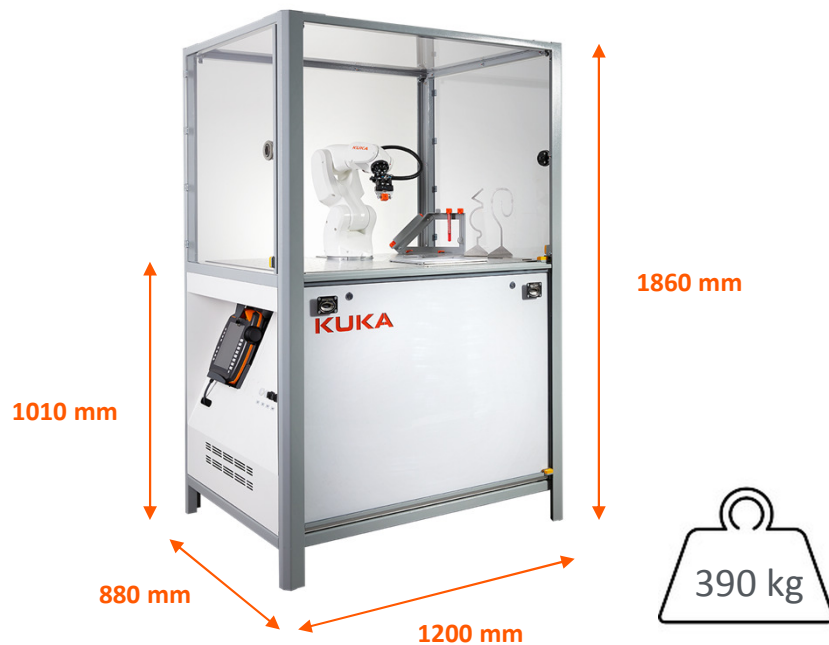
For training of high precise motion. Students have to guide the eyelet through the wire contour.



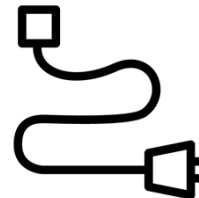
Pen & Paper

To train path motions similar to welding or gluing processes. The pen is spring-suspended to prevent damage to the application. The use of standard A4 paper has the advantage that the trainer can also create his own exercises and use them in the lectures or as practical exam.

KUKA ready2_educate_Technical Data



Power Supply*:



Rated supply voltage	200 V AC ... 240 V
Permissible tolerance of rated voltage	± 10%
Mains frequency	50 Hz ± 1 Hz / 60 Hz ± 1 Hz
Rated connected load	2 kVA
Thermal power dissipation	max. 400 W
Mains-side fusing	2x 16 A slow-blowing (1 (2)x phase; 1x neutral conductor (optional))

Air Supply*:



Compressed air	Oil-free; dry; filtered (max. particle size 0.01 mm) Operating pressure: min. 6 bar, max. 8 bar
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* to be provided by customer

KUKA ready2_educate_Instructor Qualification

For successful operation and training with KUKA ready2_educate cells it is recommended to qualify teachers to be experienced and confident.

This qualification can be chosen individual according to own knowledge and can be aquired at all official KUKA Colleges

Strongly recommended seminars to participate:

- **Robot Programming 1 KSS 8.x (KR C4)** at local KUKA College
- **Robot Programming 2 KSS 8.x (KR C4)** at local KUKA College

Additional seminars: <https://college.kuka.com/>

* Training seminars are not included in product package.



KUKA ready2_educate_Teaching Materials

- Special teaching materials tailored to **ready2_educate_pro** have been developed
- Comprising:
 - Students lecture script
 - Exercises
 - Trainerguide
- Are not included in product package! Have to be requested via KUKA Homepage
- Only available for schools, universities & in-company vocational education



Teaching Materials _Course Structure

Education Level 1 (15 lectures, 10 exercises)

focuses on basic robot operation and is therefore suitable as introduction into robotics and for students in academic high school or vocational colleges as part of professional education.

Education Level 2 (15 lectures, 10 exercises)

is about complex robot programming in KRL. It qualifies for the use in technician schools or higher professional education.

Education Level 3 (20 lectures)

completes the education package with the required engineering knowledge. It is meant to be used in engineering schools and universities.



*all lecture and exercise units are tailored to 45 minutes lessons units

KUKA ready2_educate_Teaching Materials_Availability & Supply

- The ready2_educate specific teaching materials are tailored to and available for schools, universities & company internal apprentice education
- This package is not part of the robot delivery. It has to be requested via https://www.kuka.com/en-de/products/robot-systems/ready2_use/ready2_educate_mobile_training_cell/
- Please consider: This request needs information about customer contact data as well as KUKA Order Confirmation data (OC Number, robot serial number,...). Please keep necessary documents ready!



„Education is
experience –
Anything else is just
information“

(Robert E. Lee)

