

Training Catalog

Summary of Training Opportunities

Release 1-2012



Simple  friendly
Kawasaki Robot

Index

Index.....	Page 1
General Information.....	Page 2
Summary of Training Courses.....	Page 5
<i>Start-up</i>	Page 6
<i>Operation Training</i>	Page 7
<i>Basic Training Programming</i>	Page 8
<i>Advanced Training Programming</i>	Page 9
<i>Simulation Training PC-ROSET / K-ROSET</i>	Page 10
<i>Mechanical Maintenance</i>	Page 11
<i>Electrical Maintenance</i>	Page 12
<i>Special Training Course</i>	Page 13
Directions Office Neuss.....	Page 14
List of Hotels in Neuss.....	Page 15
Price List.....	Page 16
Registration Form.....	Page 17
Contact.....	Page 18

General Information

This catalog includes some information about different training courses which we offer at Kawasaki Robotics.

The training contents are including a lot of application fields of using Kawasaki robots. We provide customized or application oriented training courses.

Training locations

The training courses will be held at our office in Neuss (Directions - page 14).

We also provide training courses at customer side. Please contact us in this case.

Training date

If you need information about the actual training dates, please call us on +49(0)2131-3426-151 or ask your responsible sales person.

Training time

Monday to Thursday 9.00 am to 4.00 pm

Friday 9.00 am to 3.00 pm

(Lunch time 12.00 pm to 1.00 pm)

Costs

Please refer to the price list on page 16.

Number of participants

The maximum number of participants for trainings at our office and also for trainings at customer side is four.

Certificate of attendance

After a training course the participant will get a certificate of attendance.

Training at customer side:

For training courses at customer side it is necessary to have training room for the theoretical part and an operational robot system.

The customer is responsible for damages which can happen during the training. A loss of production could be the consequences. If the robot system is damaged the training course will continue theoretical only. Kawasaki Robotics GmbH is not liable for damages, loss of production, repairs or the necessity to replicate a training course.

Documentation:

All documents will be hand out during the training course. The documents and also the software which is used during the training are copyrighted. The documents are including the latest information up to that day when it was printed.

Registration/Cancelation:

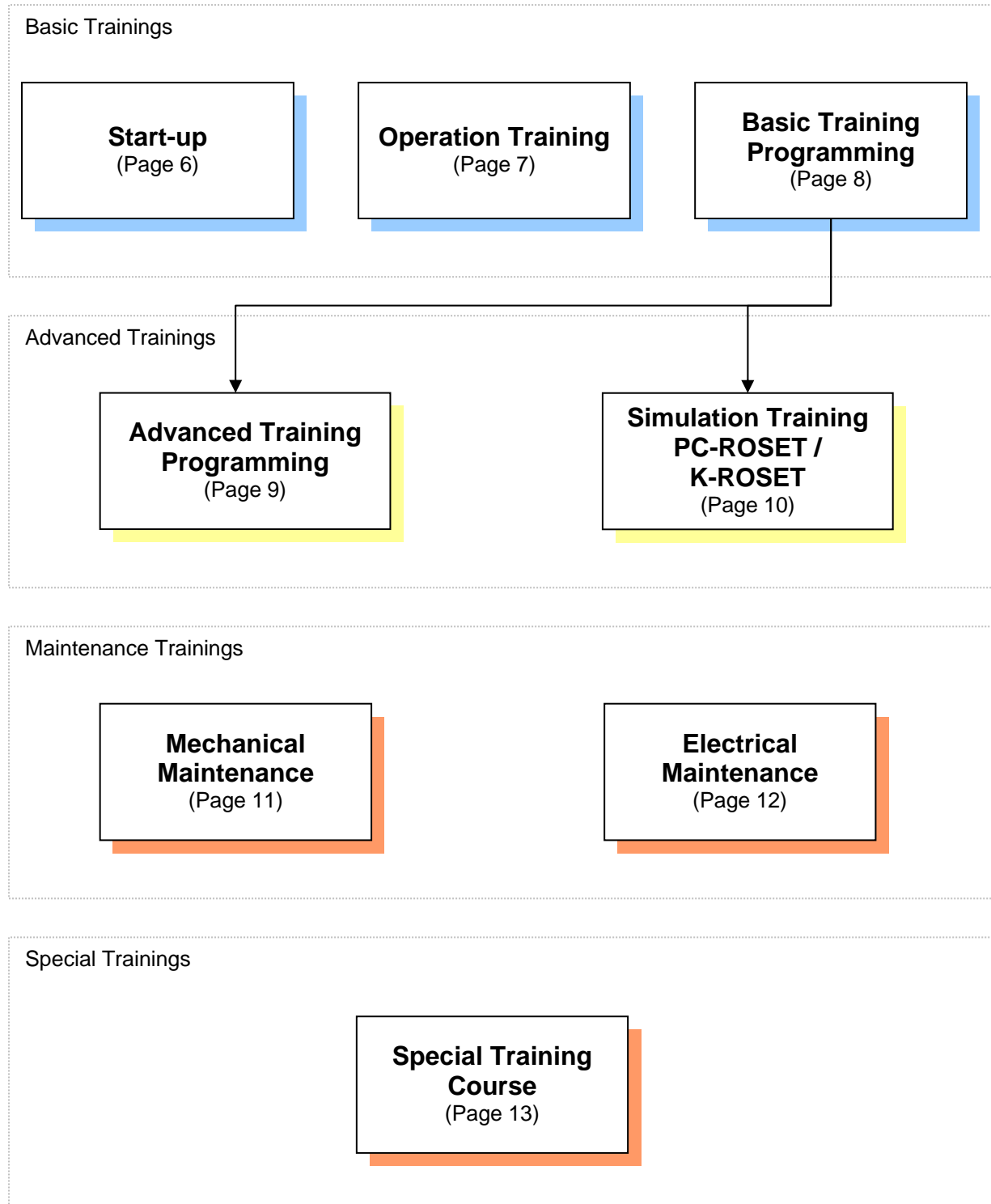
Please register the attendants with their name to Kawasaki Robotics GmbH (called KAWASAKI in the following text) till 5 working days before the training will start. Please use the registration form on page 17. In the following you will receive a written confirmation.

If you have to cancel the training till 5 working days before the training will start it's free of charge otherwise we will invoice 10% of the training costs to you. If KAWASAKI cancels the training it's not possible to claim anything.

Liability:

KAWASAKI takes no responsibility for objects which are lost or stolen at the training area. KAWASAKI also takes no responsibility for any losses which happen when the customer use the knowledge which he got during the training course.

Summary of Training Courses



Start-up

The target of this training course is that the attendant can install and connect the robot system including mechanical and electrical parts.

- Target group:
- People with Electrical or Mechanical Skill
 - Electrical Technicians
- Qualifications
- Technical Knowledge
 - Elementary English
- Contents:
- Safety Instructions
 - Mounting of Robot Arm
 - Electrical Connection of the System
 - Functional Check of the Robot System without Peripherals
- Period:
- 1 Day

Operation Training

The target of this training course is that the attendant can operate the robot system safely.

- Target group:
- System Operators
 - Executive Producers
- Qualifications
- Technical Knowledge
 - Elementary English
- Contents:
- Safety Instructions
 - Summary of the Robot System
 - Start-up the Robot System and Shutdown
 - Safety Operation of the Robot System
 - Troubleshooting (Basic)
- Period:
- 2 Days

Basic Training Programming

The target of this training course is that the attendant can operate the robot system safely. The attendant also can do troubleshooting and create simple programs in Block and AS-Language.

- Target group:
- System Integrators
 - Developers
 - Programmers
- Qualifications
- Technical Knowledge
 - Elementary English
 - PC Knowledge
- Contents:
- Safety Instructions
 - Summary of the Robot System
 - Start-up the Robot System and Shutdown
 - Safety Operation of the Robot System
 - Block Programming
 - AS-Language Programming (Basic)
 - Troubleshooting (Basic)
- Period:
- 5 Days

Advanced Training Programming

The target of this training course is that the attendant can create complex AS programs, background tasks and also an individual interface panel.

- Target group:
- System Integrators
 - Developers
 - Programmers
- Qualifications
- Technical Knowledge
 - Elementary English
 - PC Knowledge
 - Participation of the Training Course “Basic Training Programming”
- Contents:
- Safety Instructions
 - Summary of the Robot System
 - Start-up the Robot System and Shutdown
 - Safety Operation of the Robot System
 - AS-Language Programming
 - Background Tasks
 - Create an Individual Interface Panel
- Period:
- 3 Days

Simulation Training PC-ROSET / K-ROSET

The target of this training course is that the attendant can create own robot simulations with the PC software “PC-ROSET / K-ROSET”.

- Target group:
- System Integrators
 - Developers
 - Programmers
- Qualifications
- Technical Knowledge
 - Elementary English
 - PC Knowledge
 - Participation of the Training Course “Basic Training Programming”
- Contents:
- Installation and short Summary about the Software
 - How to move the Robot in Simulation Software
 - Create and Load Tool Data
 - Create Geometrical Objects
 - Import Objects
 - Create Robot Programs
 - Analyse Cycle Time
 - Obstacle Contour
- Period:
- 2 Days

Advice:

If you bring your own PC or Notebook for this training course it would be an advantage. If the training course is held at customer side it is necessary to bring your own PC or Notebook.

Mechanical Maintenance

The target of this training course is that the attendant can do a preventative mechanical maintenance on the robot system.

- Target group:
- Maintenance Staff
 - Service Staff
- Qualifications
- Technical Knowledge
 - Elementary English
 - Mechanical Knowledge
- Contents:
- Safety Instructions
 - Create Backup of the Robot System
 - Preventative Mechanical Maintenance of the Robot
 - Functional Check
- Period:
- 1 Day

Safety advice:

You have to wear protective clothes by working with the robot system. Bring your safety shoes to the training period and wear it, please!

Electrical Maintenance

The target of this training course is that the attendant can do troubleshooting on the robot system. The attendant can analyse and solve electrical interferences.

- Target group:
- Maintenance Staff
 - Service Staff
 - Electrical Technicians
 - People with Electrical Knowledge
- Qualifications
- Technical Knowledge
 - Elementary English
 - Electrical Knowledge
 - Electrical Education
- Contents:
- Safety Instructions
 - Summary of the Electrical Robot Parts
 - Configuration and Function of the Robot Controller
 - Summary of Circuit Diagram
 - Troubleshooting
- Period:
- 3 Days

Safety advice:

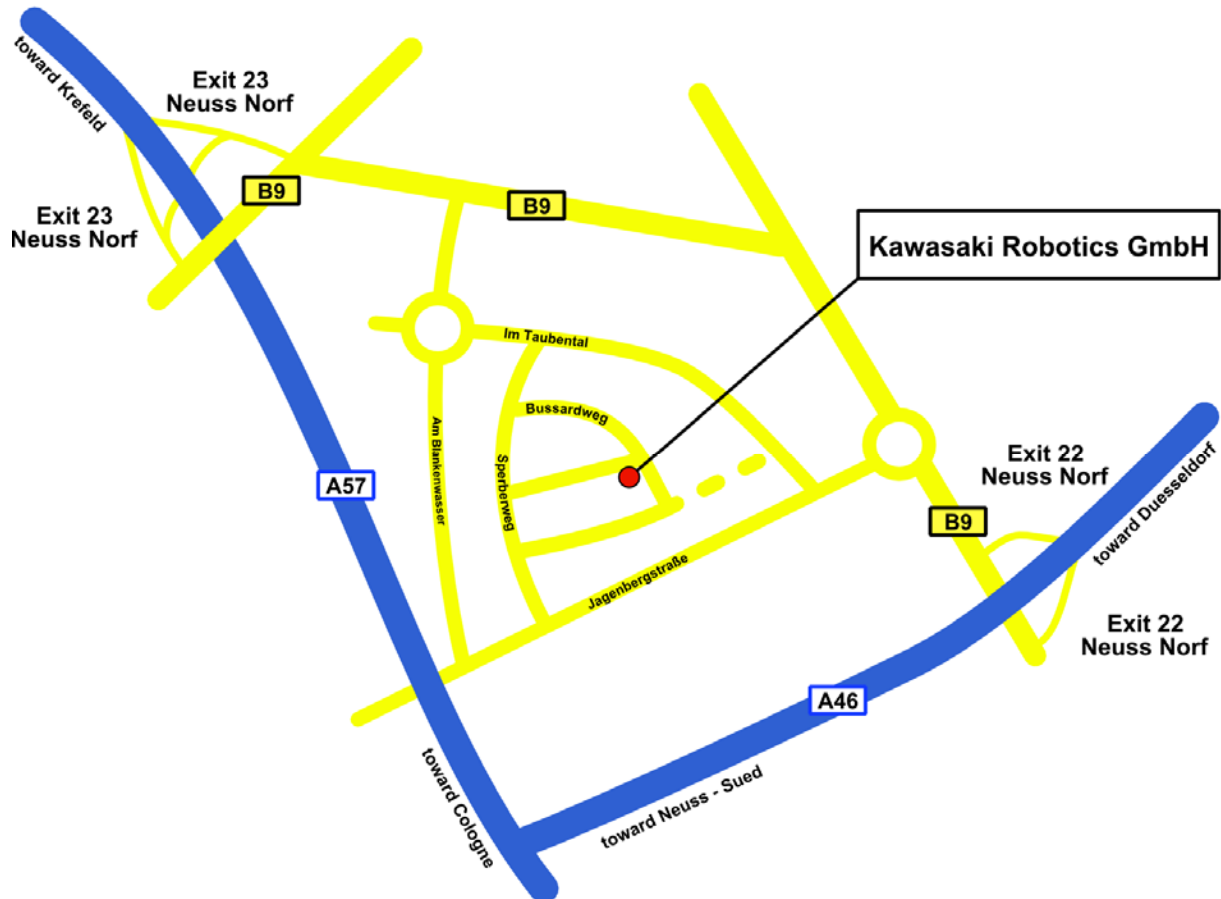
You have to wear protective clothes by working with the robot system. Bring your safety shoes to the training period and wear it, please!

Special Training Course

The contents of this training course can be optional functions like conveyor tracking, soft absorber etc. or customized projects. Please contact us that we can arrange and create a schedule.

- | | |
|----------------|--|
| Target group: | - As required |
| Qualifications | - Depends on the Contents of the Training Course |
| Contents: | - As Required |
| Period: | - 1 to 5 Days |

Directions Office Neuss



Address:

Kawasaki Robotics GmbH

Bussardweg 16

41468 Neuss

Phone: +49 (0) 21 31 / 34 26 - 0

Fax: +49 (0) 21 31 / 34 26 - 22



Kawasaki Robotics GmbH

Sperberweg 29, 41468 Neuss, Germany

Phone: +49 (0) 2131/3426-0

Fax: +49 (0) 2131/3426-22

E-Mail: training@kawasakirobot.de

URL: <http://www.kawasakirobot.de>

List of Hotels in Neuss

This is a list with some Hotels which are located nearby our office in Neuss.

Landhaus Hotel Neuss

Phone: +49 (0) 21 31 / 31 01 0

Huesenstraße 17, 41468 Neuss

Room price: Single room 94.50€ (if 3 days and more only 84.50€) including breakfast (4.50€ for breakfast will be shown separately)*

Please use the keyword “**Goldene Zeiten Kawasaki Robotics**” on your reservation to get this special company rate.

The distance between hotel and the office is about 3 kilometres.

Bastion Hotel Duesseldorf / Neuss

Phone: +49 (0) 21 31 / 93 00 04

Jagenbergstraße 2, 41468 Neuss

Room price: Single room 62.50€ + 11.50€ breakfast*

Please inform the hotel that you're a visitor of Kawasaki Robotics to get our special company rate.

The distance between hotel and the office is about 5-10 minutes to walk.

Hotel-Gasthof „Vater Rhein“

Phone: +49 (0) 21 33 / 7 19 30

Room price: Single room 60.00€ including breakfast (5.00€ for breakfast will be shown separately)*

The distance between hotel and the office is about 7 kilometres.

*Price may be different (during events like fairs...)

Price List

Training Name	Period	Costs per Attendant at Kawasaki*
Start-up	1	300.00 €
Operation Training	2	500.00 €
Basic Training Programming	5	1,000.00 €
Advanced Training Programming	3	700.00 €
Simulation Training PC-ROSET / K-ROSET	2	500.00 €
Mechanical Maintenance	1	300.00 €
Electrical Maintenance	3	700.00 €

*This costs are for scheduled trainings, plus VAT.

Trainings at Customer Side / Special Training Courses

The costs for the special training course and trainings at customer side will be calculated separately. Please contact us in this case.

Terms of Payment

Direct after invoice without cash discount.

Registration Form

Contact Data:

Company: _____

Street: _____

Zipcode, City : _____

Contact Person: _____

Phone: _____

Fax: _____

E-Mail: _____

Select the Training Course:

- Start-up
- Basic Training Programming
- Mechanical Maintenance
- Simulation Training PC-ROSET / K-ROSET
- Special Training Course
- Operation Training
- Advanced Training Programming
- Electrical Maintenance

Select the Date (Please contact Kawasaki for information about training dates):

KW: _____

List of Attendance:

Last Name	First Name	Department

Please send this form by fax or mail!

Contact

For all questions regarding training please contact the following person:

Kawasaki Robotics GmbH

Nils Gerwers

Training and Application Engineer

Engineering Department

Phone: +49(0)21 31 - 34 26 - 151

Fax: +49(0)21 31 - 34 26 – 22

E-Mail: training@kawasakirobot.de

Working hours:

Monday to Thursday 8.00 am to 05.00 pm

Friday 8.00 am to 03.00 pm