

TOWER CRANE Course Catalog - 2019

China – Zhangjiagang

YES, WE CARE!

1/2019



Contacts

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Training Center Objectives

Location

- The APAC training facilities offer extensive hands-on training labs. These labs have been designed to equip technicians with the necessary skills and technical knowledge in crane safety, erection, operation and troubleshooting. Our facilities are located strategically to provide ease access to our factories and machines.
- * On-site trainings can also be arranged with our Flying Doctor/Trainer

Our Certifications

 Manitowoc certification will be provided upon successful completion of courses.

Our Global Offer

 Crane Operation, Crane Technology, Crane Diagnostics, Crane Erection, Crane Maintenance, Crane Safety, or any other specific course according to your needs.

Training Equipment

- Hoisting mechanisms: PC winch, RCS winch, LVF winch
- Trolley mechanisms: D3V, DVF
- Slewing mechanisms: RCV, RVF
- Smart View Cabin, Hydraulic system

Find Us on Our Website: www.manitowoccranes.com



Training Center Objectives

Registration:

You will find enclosed "Registration Purchase Order" form which must be completed and returned to the training centers for confirmation. Trainees must be over 18 years old.

MANITOWOC will not be held liable for accidents and/or illnesses that might occur during the training courses. We therefore request that you cover your trainees against any kind of risks and provide them with the necessary insurance certificates and forms.



Training Arrangements

Cost:

Refer to training schedule. Please note that the cost of training excludes hotel accommodation, meals, and transportation.

Trainee's Journey:

Please inform the training centers of the trainee's travel arrangements.

Clothing:

All our training programs involve numerous practical exercises outside. Please inform the trainees that they should therefore bring suitable shoes and working clothes. We will lend safety glasses and helmets to the trainees. For the practical training: working clothes, gloves, and steel-capped shoes are required.

Cancellation:

In case of cancellation, please inform the training center immediately in order to avoid extra charges.



Course Summary

Course Name	Page	Location
Tower Crane		
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E MAINTENANCE & SAFETY

Aim/Course Goals:

- This course is for tower crane daily maintenance and regular inspection
- Tower crane safety

Program:

- Regular inspection and maintenance
- Safety in erection/repair/operation

Training Methods:

- Hands-on on simulator/crane
- Use of specific documents
- Lectures with audio-visual support

Materials and Classrooms Used:

- Training room
- Technical documents
- Crane simulators and showroom mechanisms

Validation of Knowledge:

- Final test at the end of the training course
- * On-site trainings can also be arranged with our Flying Doctor/Trainer

Prerequisites None

Duration

2 Days

Capacity Min 4 Trainees; Max 8 Dates: Upon request

Cost: Excluding Tax

APAC excluding China: USD400 China: RMB1000

E POTAIN 1

Aim/Course Goals:

Commissioning and setting of Potain's crane

Program:

- Presentation of Potain's tower cranes range
- Load curve of tower crane
- Study of the definition and function of the electrical components
- Electrical supply of the crane
- Adjustments of the safety devices
- Description and location
- Working principle
- Adjustment procedure: Limit switch, moment cutout, MSWL, specific safety devices
- Study and adjustment of brake and weather-vanning
- Adjustment of system Dialog VISU II

- Lectures and practical exercises (measurements, adjustments, and inspections)
- Trouble-shooting, practical exercises





E POTAIN 1

Materials and Classrooms Used:

- Training room
- Technical documents
- Crane simulators and electrical boards

Validation of Knowledge:

- Daily tasks and final test at the end of the training course
- Presentation of certificate

Dates:

- **2** 04.03 08.03
- **₽** 17.06 21.06
- **2** 14.10 18.10

Cost: Excluding Tax

- APAC excluding China: USD1200
- China: RMB3000
- Special price for big groups and internal staff
- * On-site trainings can also be arranged with our Flying Doctor/Trainer

Prerequisites Basic electrical knowledge

Duration 5 Days





E POTAIN 2

Aim/Course Goals:

Introduction to electrical repairs on tower cranes

Program:

- Technology, operation, and symbol of the electric components
- Methods of measurement of the electric quantities
- Study of the electrical diagram of a 3-speed winch and realization of the sequential diagram of operation
- Realization practices wiring of the studied equipment
- Methods of diagnosis of problems
- Exercise in trouble-shooting
- Introduction to frequency converter
- Introduction to remote control system
- Putting into service and adjustment of frequency converter

- Lectures and practical exercises (measurements, adjustments, and inspections)
- Trouble-shooting and practical exercises



E POTAIN 2

Materials and Classrooms Used:

- Training room
- Technical documents
- Crane simulators

Validation of knowledge:

- Pre-test
- Final test at the end of the training course
- Presentation of certification

Dates:

- **2** 11.03 15.03
- ₽ 24.06 28.06
- **2** 21.10 25.10

Cost: Excluding Tax

- APAC excluding China: USD1200
- China: RMB3000
- Special price for big groups and internal staff
- On-site trainings can also be arranged with our Flying Doctor/Trainer



Prerequisites E POTAIN 1

Duration

5 Days



E POTAIN GME NO V3 - CUSTOMIZED FOR MC/MCR/MCT

Aim/Course Goals:

- This course has been developed for advanced technicians with field experience after E Potain 2
- Have an advanced knowledge on the MC/MCR/MCT cranes with mechanisms controlled by frequency converters
- Enable technicians to troubleshoot crane failures and to do adjustment on the mechanisms

Program:

- Study of the mechanisms controlled by frequency converters
- Adjustment of brake and weather-vanning for RVF
- Master electrical diagrams
- Exercise of troubleshooting on the mechanisms
- Adjustment of Dialog VISU II (LCD indicator)
- Enhancement of troubleshooting skills
- Study of field problem cases

- Lectures and practical exercises (measurements, adjustments, and inspections)
- Trouble-shooting and practical exercises



E POTAIN GME NO V3 - CUSTOMIZED FOR MC/MCR/MCT

Materials and Classrooms Used:

- Training room
- Technical documents
- Crane simulators

Validation of Knowledge:

- Pre-test
- Final test at the end of the training course
- Presentation of certification

Dates:

- **1**8.03 22.03
- **2** 01.07 05.07
- ✔ 04.11 08.11

Cost: Excluding Tax

- APAC excluding China: USD1200
- China: RMB3000
- Special price for big groups and internal staff
- * On-site trainings can also be arranged with our Flying Doctor/Trainer

Prerequisites E POTAIN 1 and E POTAIN 2

Duration 5 Days



POTAIN

TOWER CRANE ERECTION & TELESCOPING

Aim/Course Goals:

- Have a good knowledge of erection and first commissioning of MC, MCT, and MCR series cranes
- Understand crane functions
- Study safety work in erection

Program:

- Tower Crane Range, Identification, Technical Specifications
 - $_{\circ}\,$ Efforts operating the crane reactions to the supports

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- ° Crane introduction, crane range, identification
- Technical data specifications
- Tower Crane Safety
 - ° Crane safety
 - $_{\circ}$ Basic sling
 - PPE
 - Tower crane safety device
- Erection Procedures
 - 。 Erection planning
 - Prepare and check before crane erection
 - Crane erection
 - Adjustment of safety devices
- Principle of Telescopic Cage
 - Basic hydraulic
 - Preparation before telescoping
 - Raising
 - Hands-on telescopic cage

- Lectures and practical exercises
- Telescoping exercises
- Use of specific documents



TOWER CRANE ERECTION & TELESCOPING

Materials and Classrooms Used:

- Training room
- Specific documents
- Crane mechanisms
- Customer's crane

Validation of Knowledge:

- Final test at the end of the training course
- Presentation of certificate

Dates:

Upon request

Cost: Excluding Tax

- APAC excluding China: USD1200
- China: RMB3000
- * On-site trainings can also be arranged with our Flying Doctor/Trainer

Prerequisites

Trainees must be declared fit to work in great heights

Duration

5 Days





MCH HYDRAULIC LUFFING

Aim/Course Goals:

- Have a good knowledge of erection and first commissioning of MCH Crane
- Understand the principles of the hydraulic system

Program:

- Basic hydraulic function
- MCH hydraulic unit
- Maintenance of hydraulic
- Hydraulic safety operation
- Trouble shooting

- Lectures and practical exercises
- Use of specific documents

MCH HYDRAULIC LUFFING

Materials and Classrooms Used:

- Training room
- Specific documents
- Hydraulic bench

Validation of Knowledge:

- Final test at the end of the training course
- Presentation of certificate

Dates:

Upon request

Cost: Excluding Tax

- APAC excluding China: USD1200
- China: RMB3000
- * On-site trainings can also be arranged with our Flying Doctor/Trainer

Prerequisites

The trainees must be declared fit to work at great heights

Duration

5 Days





CONVERTER

Aim/Course Goals:

- Proper diagnosis of ABB and KEB converter failures
- Basic troubleshooting

Program:

- Converter function
- Error diagnosis
- Trouble shooting

- · Lectures and practical exercises
- Use of specific documents









CONVERTER

Materials and Classrooms Used:

- Training room
- Specific documents
- Converter Test Benches

Validation of Knowledge:

- Final test at the end of the training course
- Presentation of certificate

Dates:

Upon request

Cost: Excluding Tax

- APAC excluding China: USD2000
- China: RMB5000
- * On-site trainings can also be arranged with our Flying Doctor/Trainer



Prerequisites

The trainees must have completed at least Potain 3 **Duration** 5 Days



REGISTRATION PURCHASE ORDER

71 JINTANG ROAD, ZHANGJIAGANG, JIANGSU, CHINA 215618				
PURCHASE	ORDER - TRA	INING REGISTRATION		
P.O.Ref:	Date:			
COMPANY				
Company Name:				
Address:				
Phone:	F	mail:		
Billing Address:	L			
TRAINING				
Title of training course:		Date	9:	
Location: Fee:				
PARTICIPANT				
Given Name:	F	irst Name:		
Email:	Р	hone:		
Educational Qualification	:			
Designation: Experience: Month / Ye				
TRAVEL INFORMATION				
		Transfer - Training o	entre	
Hotel reservation require		required: Yes / No		
Flight details:	Arrival:			
Transfor Airport require	Departure:			
Transfer - Airport require REMARKS	a: res / No			
		_		
PREVIOUS KNOWLEDG				
SIGNATURE :			COMPANY SEAL	
DATE:			JEAL	
I/we hereby the undersigned, declare that I/we have read & understood the terms and conditions				



Regional Headquarters

Americas

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Tower Crane Center of Excellence Training Center

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