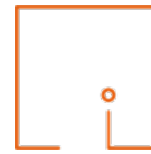




Erasmus+



CRANE  
4.0

A DIGITAL TRAINERS TOOLBOX TO HELP CRANE OPERATORS  
UPDATE THEIR SKILLS FOR INDUSTRY 4.0 ENVIRONMENTS

## INCOMING Learning outcomes

An initial check – where do you stand?



CONFINDUSTRIA  
Veneto SIAV S.p.A.



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Dear participants,

for each statement below, please tick the level of your knowledge/ skills/ attitudes & behaviours: **Level 1, for example, means no experience at all, 5 means very extensive experiences.**

**To be completed by participants before attending the course.**

Name of the participant:						
Requirements in key areas of skills development	Level of knowledge, skills, attitudes & behaviours, experience or understanding (as appropriate)					
<b>Module 1: Safety/Tools and Equipment</b>	No experience at all	Little experience	Moderate experiences	Several experiences	Very extensive experience	
Risks that originate in the work carried out with mobile cranes as well as the preventive measures and safety systems to be adopted.	1	2	3	4	5	
The legislation on health and safety at work and the regulations concerning lifting equipment.	1	2	3	4	5	
Procedures established for starting and stopping the crane corresponding to the beginning and end of the working day.	1	2	3	4	5	
Manoeuvre signalling codes.	1	2	3	4	5	
Limits of use of the lifting equipment.	1	2	3	4	5	
Checking of the state of the ground and proximity dangers. Installing truck crane stabilisers. Placing safety notices and cordoning off the working area.	1	2	3	4	5	
Emergency response procedures.	1	2	3	4	5	
<b>Module 2: Rigging</b>	No experience at all	Little experience	Moderate experiences	Several experiences	Very extensive experience	
Plan and prepare for rigging operations.	1	2	3	4	5	
Verify problems and equipment faults and demonstrate appropriate response procedures.	1	2	3	4	5	
Efficiently and safely perform advanced rigging operations.	1	2	3	4	5	

<b>Module 3: Load Charts and Load Weight Calculations</b>	No experience at all	Little experience	Moderate experiences	Several experiences	Very extensive experience
Means and devices of securing loads.	1	2	3	4	5
Calculate load estimates, and the best environments for handling loads.	1	2	3	4	5
Understand the best practices in safety of handling of loads, the importance of hand-eye coordination, and avoidance of hazards.	1	2	3	4	5
<b>Module 4: Pre-operational Checks, Inspections and Maintenance</b>	No experience at all	Little experience	Moderate experiences	Several experiences	Very extensive experience
Understanding the types of technical checks.	1	2	3	4	5
Understand the specific terminology for the safe use of cranes.	1	2	3	4	5
Knowledge of the components of cranes that undergo periodic technical inspections.	1	2	3	4	5
Knowledge of the additional checks, depending on the complexity of the crane and the operating regime and the environmental conditions in which it operates.	1	2	3	4	5
Understanding the main components of the hydraulic systems of the crane.	1	2	3	4	5
<b>Module 5: Mobile Crane Set-up</b>	No experience at all	Little experience	Moderate experiences	Several experiences	Very extensive experience
Be confident with gravity, balance and leverage main functioning in lifting actions.	1	2	3	4	5
Be aware of ground conditions.	1	2	3	4	5
Understand the main features of the boom and how to assemble and disassemble.	1	2	3	4	5
Be aware of the transport regulation in order to comply with national legislation and not to damage roads and the mobile crane.	1	2	3	4	5
Recognising the main risks when planning a job and be able to classify them.	1	2	3	4	5
Recognise which types of lift require the support and supervision of specialised personnel as “critical lifts”.	1	2	3	4	5
Recognise the risks involved in setting up the right worksite and soil conditions.	1	2	3	4	5
<b>Module 6: Mobile Crane Operations</b>	No experience at all	Little experience	Moderate experiences	Several experiences	Very extensive experience

Carry out all operations and load transport with self-propelled mobile cranes safely.	1	2	3	4	5
Risks involved in the handling of this equipment.	1	2	3	4	5
Knowledge of the strategies, procedures and techniques necessary to develop good driving, crane positioning and assembly and disassembly of jibs with technical and safety guarantees.	1	2	3	4	5
Signals made by the Signaller or Rigger during the handling of the load.	1	2	3	4	5
Know how the load is calculated and what the load limits are.	1	2	3	4	5
Knowledge of the elements that make up the machine, its components and how to carry out the inspections and checks necessary for the execution of work with a mobile crane in full safety conditions.	1	2	3	4	5