

## **Annex 10 Courses and hours of safety and health education & trainings specified for operators of dangerous machinery**

### **I. Courses and hours of safety and health education & trainings specified for operators of fixed cranes with hoisting capacity of above 3 tons and stacking cranes with hoisting capacity of above 1 ton (38 hours)**

1. Crane related regulations 2 hours
2. Types and functions of fixed cranes 3 hours
3. Structure and safety devices of fixed cranes 3 hours
4. Related knowledge of prime motor and electric 3 hours
5. Related mechanic knowledge of hoist and hanging 2 hours
6. Safety operation guidelines of hoist and hanging 4 hours
7. Accident prevention and treatment of hoist and hanging 3 hours
8. Self-inspection and inspection-point maintenance of fixed crane 2 hours
9. Practicum of crane operation, hanging operation and command 16 hours

Note 1: Skills practicum for ground operation, on-board operation and overhanging types of fixed crane shall use equivalent types of fixed cranes and conduct operations at skills practicum sites.

Note 2: The operation training shall be divided by groups, less than 15 persons a group, for practicum. It may be conducted by groups at the same time or by sequence.

### **II. Courses and hours of safety and health education & trainings specified for operators of mobile cranes with hoisting capacity of above 3 tons (38 hours)**

1. Crane related regulations 2 hours
2. Types and functions of mobile cranes 3 hours
3. Structure and safety devices of mobile cranes 3 hours
4. Related knowledge of internal combustion engine, hydraulic drive device and electricity 3 hours
5. Related mechanic knowledge of hoist and hanging 2 hours
6. Safety operation guidelines of hoist and hanging 4 hours
7. Accident prevention and treatment of hoist and hanging 3 hours
8. Self-inspection and inspection-point maintenance of mobile crane 2 hours
9. Practicum of crane operation, hanging operation and command 16 hours

Note 1: Skills practicum for fixed or flexible overhanging types of mobile crane shall use equivalent types of mobile cranes and conduct operation at skills practicum sites.

Note 2: The operation practicum shall be divided by groups, less than 15 persons per group. It may be conducted by groups at the same time or by sequence.

### **III. Courses and hours of safety and health education & trainings specified for operators of derrick cranes with hoisting capacity of above 3 tons (38 hours)**

1. Crane related regulations 2 hours
2. Types and functions of derrick cranes 3 hours
3. Structure and safety devices of derrick cranes 3 hours
4. Related knowledge of prime motor and electric 3 hours
5. Related mechanic knowledge of hoist and hanging 2 hours
6. Safety operation guidelines of hoist and hanging 4 hours
7. Accident prevention and treatment of hoist and hanging 3 hours
8. Self-inspection and inspection-point maintenance of derrick crane 2 hours
9. Practicum of crane operation, hanging operation and command 16 hours

Note: The operation practicum shall be divided by groups, less than 15 persons per group. It may be conducted by groups at the same time or by sequence.

### **IV. Courses and hours of safety and health education & trainings specified for operators of construction elevators with height of lead rail or elevating route over 20 meters (21 hours)**

1. Constructive elevator related regulations 1 hour
2. Types and functions of construction elevators 3 hours
3. Related knowledge of prime motor and electric 2 hours
4. Safety operation guidelines 3 hours
5. Accident prevention and treatment of construction elevators 2 hours
6. Self-inspection and inspection-point maintenance of construction elevators 2 hours
7. Construction elevator operation practicum 8 hours

Note: The operation practicum shall be divided by groups, less than 15 persons per group. It may be conducted by groups at the same time or by sequence.

**V. Courses and hours of safety and health education & trainings  
specified for operators of gondolas (26 hours)**

1. Hoisting cage relate regulations 2 hours
2. Types and functions of gondolas 3 hours
3. Structure and safety devices of gondolas 2 hours
4. Fixing methods and safety devices of gondolas 3 hours
5. Safety operation guidelines of gondolas 3 hours
6. Accident prevention and management of gondolas 3 hours
7. Self-inspection and inspection-point maintenance of gondolas 2 hour
8. Hoisting cage operation practicum 8 hours

Note: The operation practicum shall be divided by groups, less than 15 persons per group. It may be conducted by groups at the same time or by sequence.