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.