

Rigging and slinging course. Ref-NR34

Objective:

To teach all basic technics related to industrial rigging. To allow the student to understand all risks and methods of control involved with the activity. To introduce the basics of applied mathematics to load and angle calculations. To allow the student to have knowledge and hands on experience of most basics rigging equipment such as the one involved with hoisting and connecting hardware. To have a good knowledge of inspections on most rigging equipment.

Course content:

Theory (8hours)

- ✓ Introduction to rigging technics
 - Electric and manual hoists
 - Griphoists
 - Transverse loading
 - Safety factors, Working Load Limit (WLL) and Breaking Load Limit (WLL)
- ✓ Risk assessment and work zone
- ✓ Basic load calculations
- ✓ Adverse effect of angles (Sheaves and bridles)
- ✓ Introduction to rigging hardware and its limitations
 - Shackles
 - Turnbuckles
 - Chains
 - Hooks
 - Links
 - Sockets
 - Clips
- ✓ Equipment inspection
- ✓ Introduction to wire rope:
 - Identifying basic types of wire rope and their applications. Adverse twisting effect/controlling the load. Intro to D:d ratio.
- ✓ Lifting slings:
 - Field application
 - Understanding the various configurations and its limitation
- ✓ Ropes and knots
- ✓ Review of crane hand signals

Hands on (12hours)

- ✓ Inspection
- ✓ Knot tying class
- ✓ Applied usage of lifting slings
- ✓ Hoisting with 2, 3 and 4 legs bridles with load cell monitoring
- ✓ Load transfer with load cell monitoring
- ✓ Equalizing/finding the CG with compensation leg with load cell monitoring
- ✓ Spelter sockets (optional)
- ✓ Wire rope clips installation (optional)
- ✓ Hoisting with electric chain hoist using crane hand signals

Additional information:

Length: 20hours

Course layout:The course will occur in 2 and 172 day, starting with 8 hours of theory on the first day while the remaining will be dedicated to hands on experience. Each day will be made of 2 x 15 minutes break and a 30 minutes lunch or a 1-hour lunch. This can be defined with the contracting client prior to the start of the course.

Included:All hoisting and rigging equipment, course literature, course certification proving attendance to the course.

Not included in the price: All consumable used in the course by the students(ex: Spelter sockets, wire rope clips, wire rope, etc....). Those items will be charge to catalog pricing at final invoice

Wire rope training will occur using 6X19 wire rope with nominal diameter varying between 8mm and 12 mm. Let VRS Ltda know 4 week in advance if other type of wire rope might be required.

Requirements: The student will be required to show that he his medically able to perform all work duties required in a work at height environment according to the one of his employer. (ASO)

The student will be required to use appropriate clothing for this type of activities such as protective shoes and long pants. Shorts and open shoes will not be allowed!

Cost and payment terms: R\$1500. The payment will need to be effectuated 7 days prior to the course in order to confirm the participation. Cancellation within 7 days of the scheduled course will result in the loss of the full amount.