

DAY 1

14 November, 2017

08:30 Registration & Breakfast



09:00 Session 1

• Introduction & Terminology

- Types of trailers/transporters
- Types of cranes

• Importance of Dimensions and Weights and Concept of Center of Gravity (CoG)

- What are forces and how can we control them
- What are newtons, kilograms and tons and where do we use them (mass vs weight)
- Forces acting on a body
- Composite forces
- Principle of equilibrium and moment
- Wind, water, acceleration, friction force

sample calculations (class room effort)

11:00 Coffee Break



11:15 Session 2

• Heavy Transport (Principle & Suspension)

- Principles
- How does a hydraulic axle work
- Self-propelled vs. pull type
- Pull force vs rolling resistance, how many trucks do I need and why
- Hydraulic Platform Transporter
- Capacity
- Why can a transporter carry so much, the principle of suspension groups
- How to determine how many axle you need
- How to maintain transporter level, the principle of self equalization
- Self equalization vs. self leveling
- Dolly/bolster loads
- When do dolly/bolster loads become a danger
- How to calculate saddle loads
- Suspension

13:00 Lunch



13:45 Session 3

• Heavy Transport Execution (stability)

- Pull force
- What is the critical transporter stability
- Hydraulic stability
- Structural stability
- Influence of suspension on stability
- Understanding the pressure gauges, what do they mean
- Suspension (3-points or 4-points and why not 1, 2 or 5-points)
- Steering (electronic, hydraulic or mechanical or a combination)
- Ground pressure (what can go wrong if you underestimate it)
- Securing the load, an eye opener

various case studies with sample calculations (class room effort)

15:30 Coffee Break



15:45 Session 4

• Heavy Transport Execution (cont.)

- Surveys
- Loading
- Transporting
- Unloading

16:45 Summary & Evaluation

End of Day 1