



Confined Space Rescue



Confined Space Rescue

- When to Provide Rescue Services
- How to Classify Rescue Needs
- Types of Rescue Services
- Criteria for Selecting Outside Rescue Services
- Rescue Guidelines for Specific Projects and Types of Work



Confined Space Rescue

When to Provide Rescue Services

OSHA 1910.146 states when work is being performed in a Permit Required Confined Space (PRCS) provisions will be made for the safe rescue of entry personnel, by properly trained and qualified rescuers.

Particularly developing and implementing procedures for summoning rescue and emergency services, for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue. 1910.146(d)(9)



Confined Space Rescue

How to Classify Rescue Needs

Pre Job Planning (JSA/JHA) will identify the hazards within a Confined Space (CS) along with the appropriate rescue needs.

Depending on the conditions of CS, it will be defined as “low level” or “high level”, and the rescue plan will be developed according the conditions.



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How to Classify Rescue Needs

Examples for when a low level rescue plan is needed

- Working in clean and gas free tank that does not have the potential to develop a hazardous atmosphere
- Working in an isolated area where emergency rescues services are not readily available.
- Working on an above ground storage tank with an external floating roof that is 5' feet from the top of the tank.
- Entering onto an above ground storage tank with an internal floating roof while in hydro test for inspection (within 5' from top of tank)

A low level rescue plan would designate members of the crew to perform rescue services should the need arise and providing the crew is properly trained in performing Confined Space rescue.



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How to Classify Rescue Needs

Examples for when a “High Level” rescue plan is needed

- Working on an above ground storage tank with an internal floating roof while the tank is in service
- Entering a tank that is not completely cleaned to perform repairs
- Working in a tank that the atmosphere may become hazardous due to the surrounding environment.
- Working on an above ground storage tank with an external floating roof while in service and not within 5' from top of tank

A high level rescue plan would require the use of a full standby rescue team or (1) Emergency Rescue Technician aided by crew members that were not performing duties as entry personnel



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Types of Rescue Services

- In-House Rescue Team: Train employees to meet the requirements established in OSHA's 1920.146 standard to provide rescue
- Host Employers Rescue Team: Some clients will provide rescue service with a trained and qualified Emergency Response Team. This is discussed and planned prior to entry
- Outside Rescue Services: There may be a necessity to use an outside/3rd party rescue team. This is generally accomplished in one of two ways.
 - Local fire department can be contacted to see if they meet the requirements established in OSHA's 1920.146 standard, and will provide rescue services when called.
 - Contract a 3rd Party Emergency Rescue Provider to be on site during the entry in to the PRCS.



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Criteria for Selecting Outside Rescue Services

- **Training Requirements:** Rescue team must be trained in providing rescue in confined space (CS). Rescue team members must be knowledgeable and familiar with the type of CS which they are working.
- **Response Time:** If an outside rescue service such as a local fire department is designated for rescue, they must have the ability to respond in a timely manner (generally ≤ 15 minutes). In addition, adequate response time will depend on the specific hazards.
- **Availability:** If an outside service is selected, they must be available at **ALL** times during the entry of the confined space. For example, if a fire department could not respond because they are on another call, they will not be considered.



Confined Space Rescue

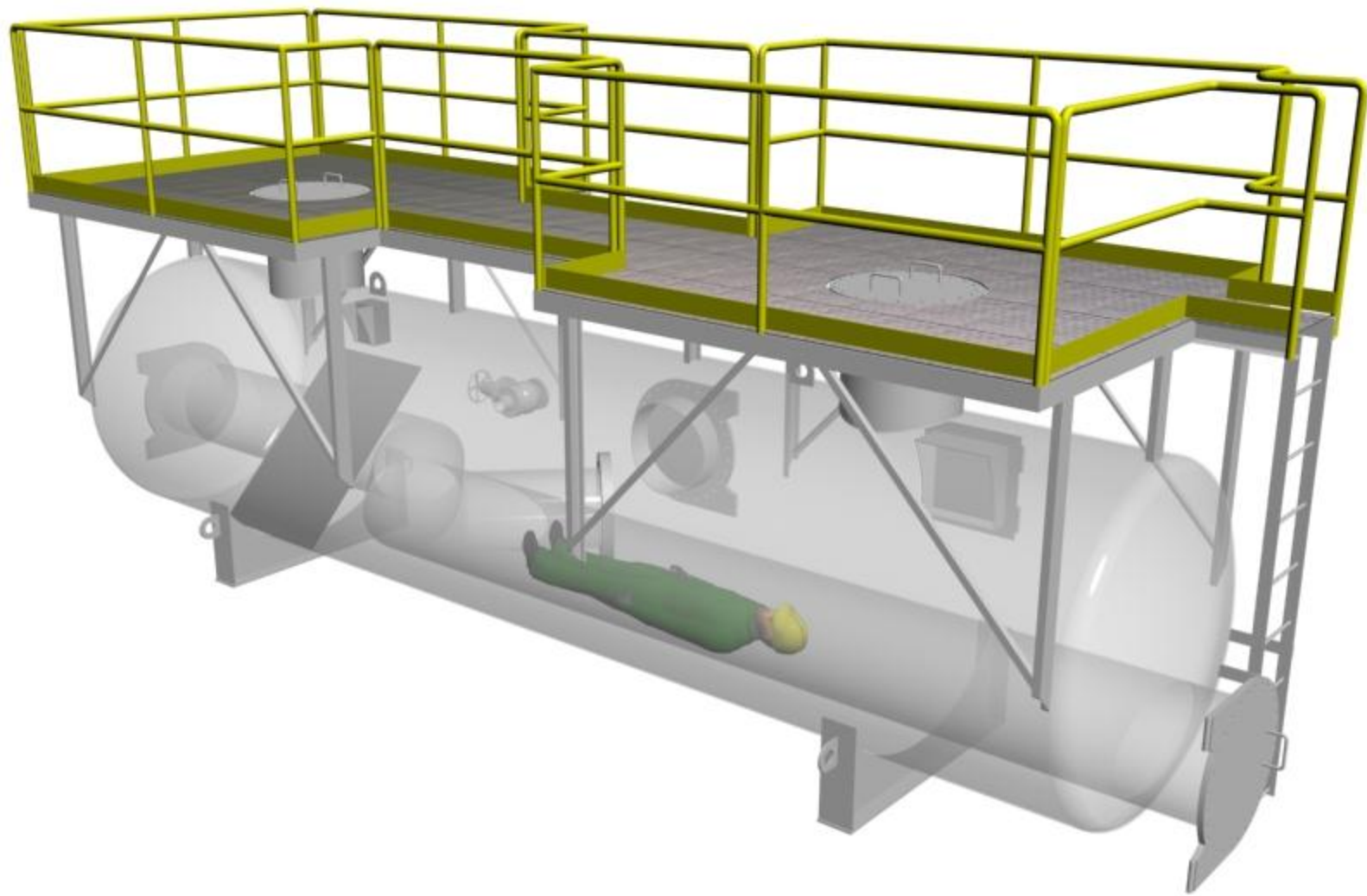
Rescue Guidelines for Specific Projects and Types of Work

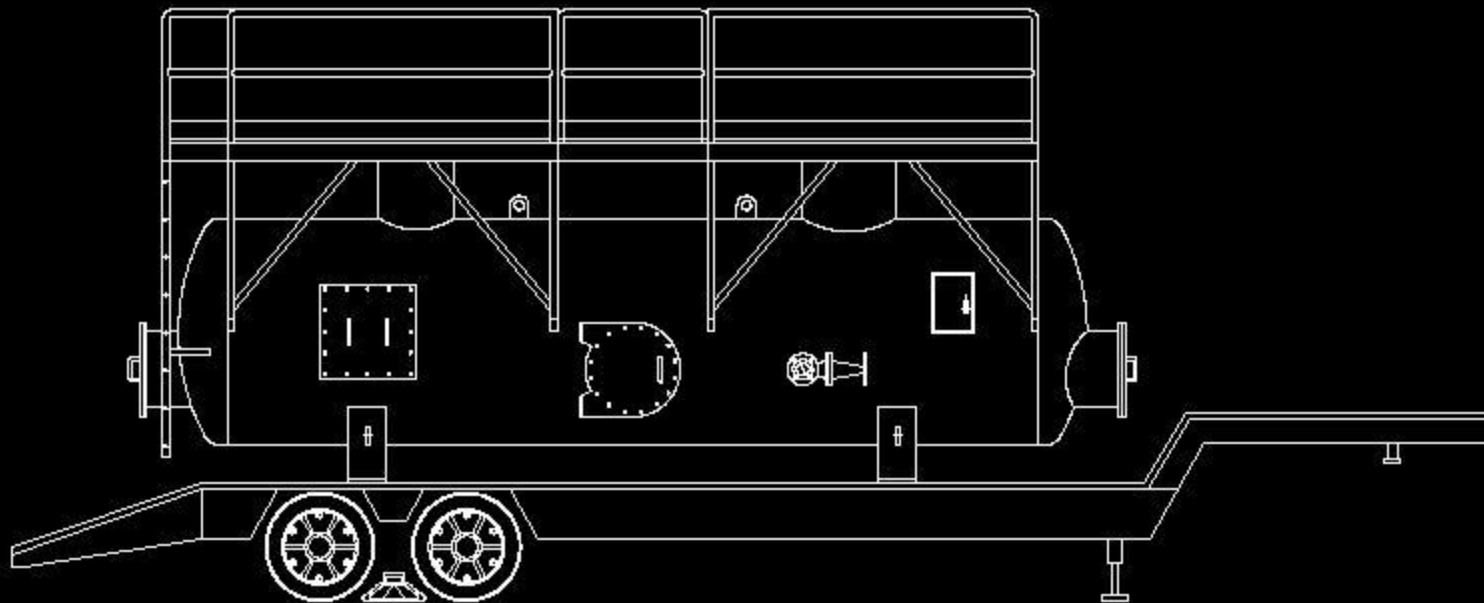
- Vertical Entry onto an Internal Floating Roof in an In-service Above Ground Storage Tank.
- Perform Risk Assessment for Type of Work During Entry
- Create a Rescue Plan
- Identify the Rescue Team and Assign Specific Duties (Team Leader, Medic Entrant, Rigger, & Attendant/holewatch)
- Complete the Rescue Preplan Checklist at the Jobsite
- Complete Record of Rescue



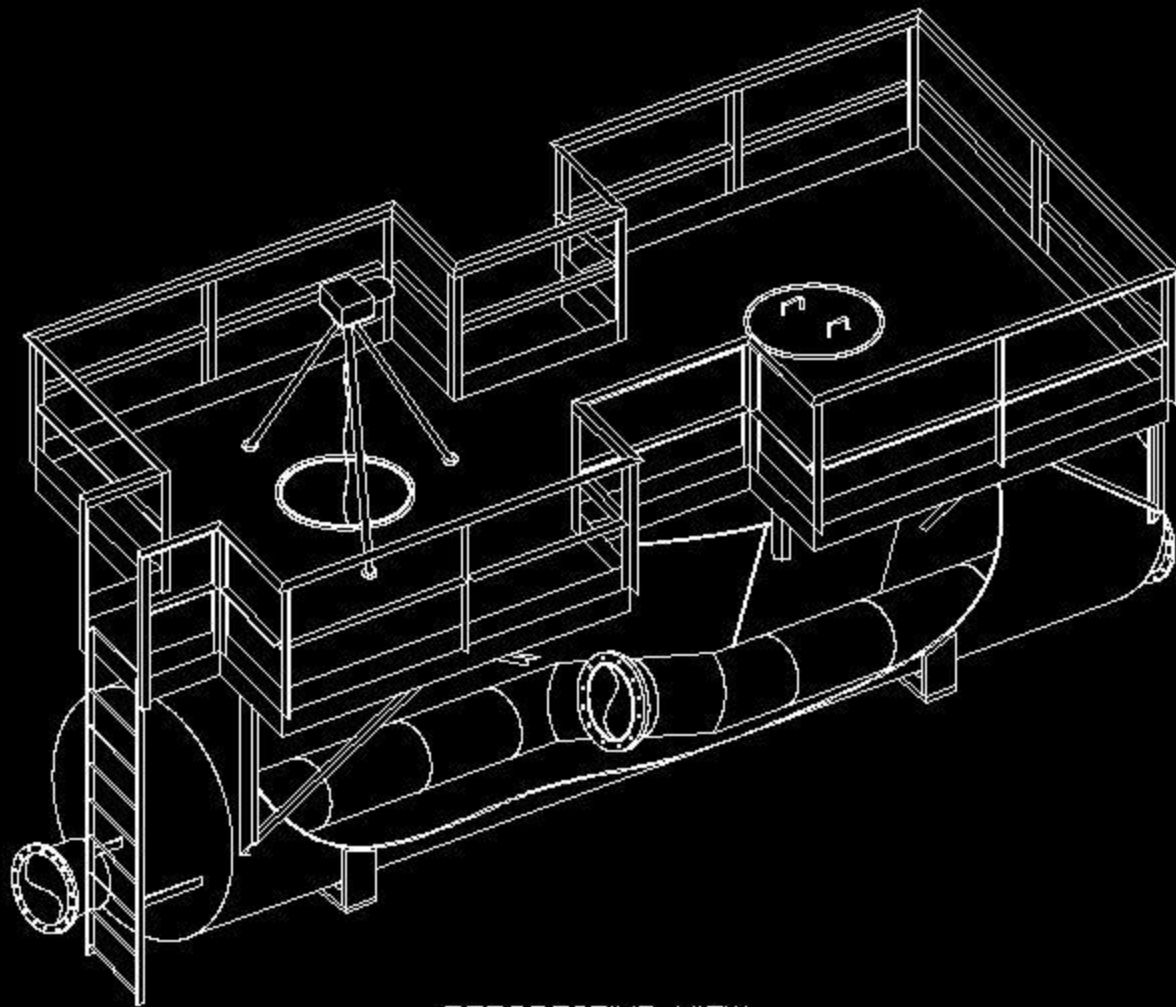
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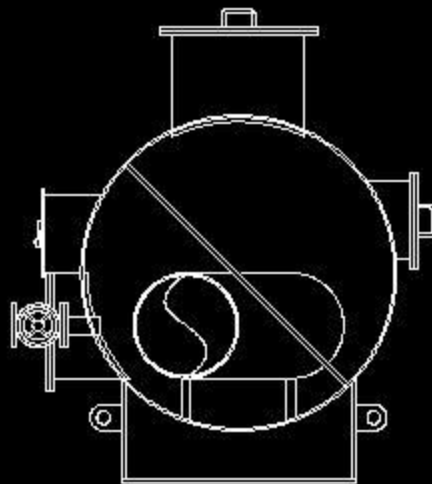




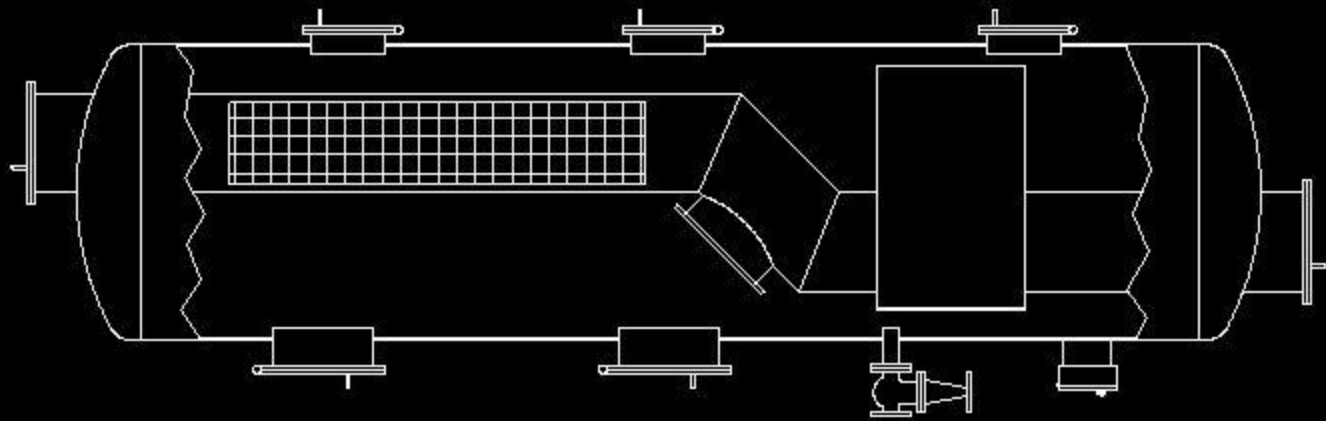
SIDE VIEW
(SIMULATOR ON LOW-BOY TRAILER)



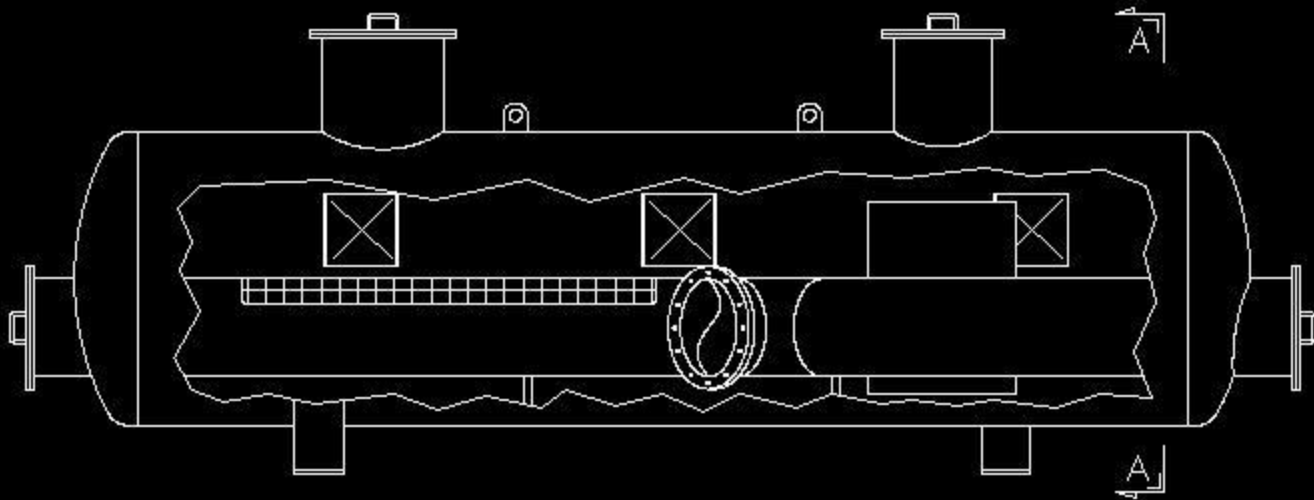
PERSPECTIVE VIEW
(CUT-AWAY)



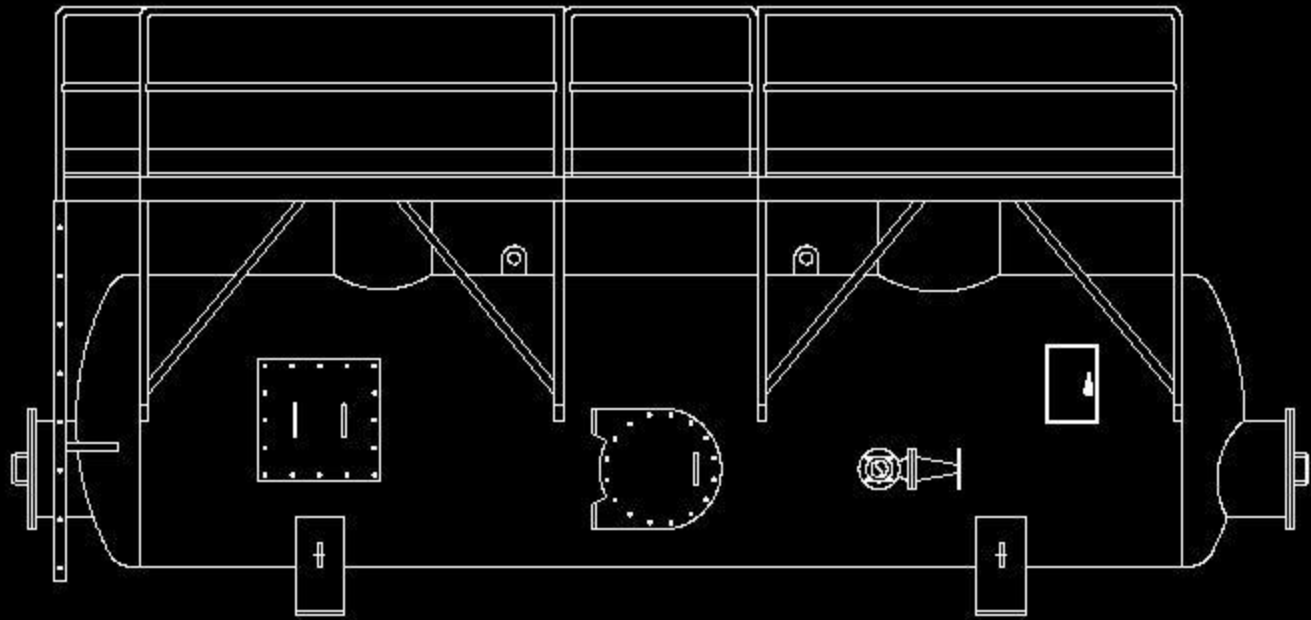
SECTION A-A



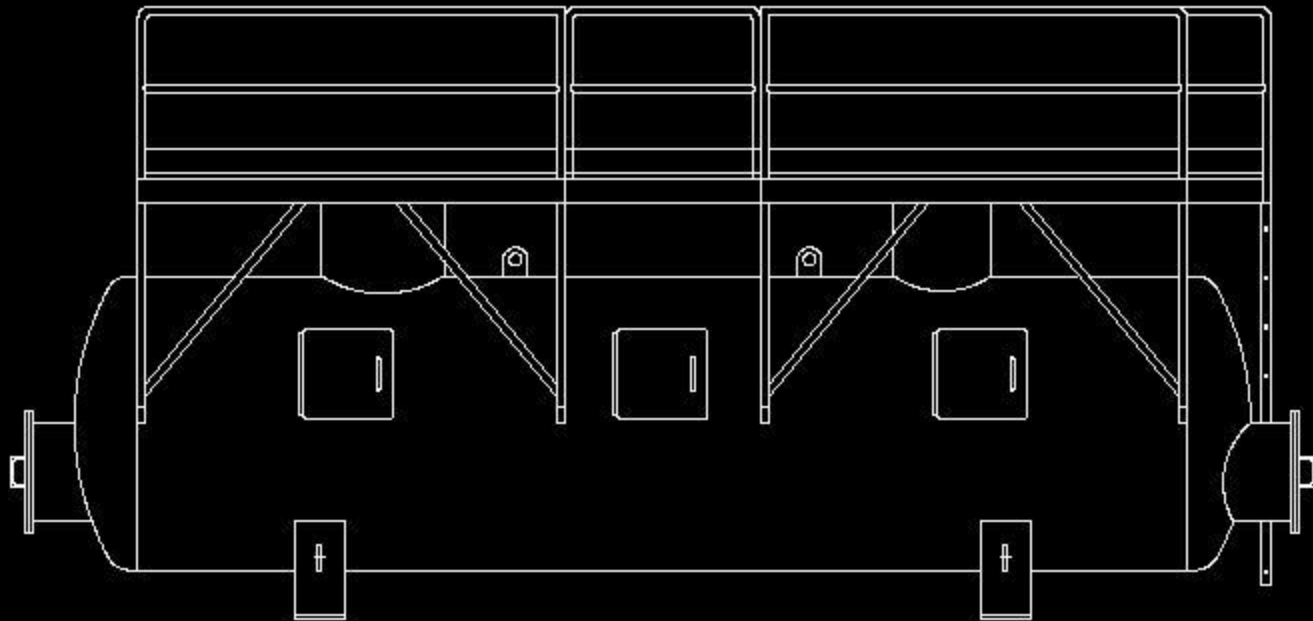
TOP VIEW
(CUT-AWAY)



SIDE VIEW
(CUT-AWAY)



SIDE VIEW



SIDE VIEW
(VIEW-PORTS)



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Thank You