Top 17 Sheet Metal Worker Interview Questions & Answers

1) Explain what are the duties of structural Iron and Steelworker?

- Build steel and or iron girders, columns and other construction based structures
- Make, weld and bolt down steel bars to reinforce concrete
- Connect steel columns, beams, and girders
- Reinforce concrete with welded wire fabrics
- Position steel or iron structures with connecting bars and spud wrenches
- Check the alignment using plumb bobs, levels, and laser equipment
- Fasten bars together with wire
- Drill holes into steel for bolts
- According to assembly instructions number the steel structures
- Hoist steel into the framework
- Inspecting material and equipment's

2) List out the equipment's that Iron and Steelworker use?

Equipment's that iron and steel worker use are

- Reinforcing bars
- Lumber
- Cranes
- Derricks
- Rivet tools
- Large concrete buckets

3) List out the skills required during the work?

Skill required during the work includes

- Monitoring the project work

- Coordination with fellow workers
- Operation and control
- Decision Making
- Time management
- Physical strength
- Active listening and learning
- Handling and solving the complex problem
- Critical thinking

4) What is the physical strength does a structural iron and steel worker requires?

Physical strength that a steel and iron worker requires

- Static strength
- Manual Dexterity
- Multi-limb coordination in any position
- Head and arm steadiness
- Far and Near vision
- Trunk strength
- Maintaining stability and posture at heights

5) How workers hoist the steel bar in its position?

- First they attach iron or steel bar with cables of derricks or crane
- One worker will guide the crane or derrick operator with hand signals to move to its position, while another worker will hold the rope attached to the bar to stop it from swinging
- Slowly the crane will move structure to its position and once placed workers will check for alignment with the help of plumb bobs
- Once the alignment is done, they weld or bolt the bar permanently

6) Explain what challenges does steel and iron worker has to face while working on plant?

While working on plant, there are many things they are exposed to

- Loud noise during welding or bolting process
- Very hot or cold weather
- Contaminants
- Hazardous equipment that may lead to injuries
- Open electric circuits, wires and boards
- Risk of falling from height
- Dim or bright lights

7) Explain what is girts?

The vertical or horizontal framework to which sash, siding or another finished material is attached is referred as girts.

8) Explain what is blue print reading?

Blueprint reading is like a structural map that covers the steel structure. It is a detail drawing of steel structure, and it carries a label or piece mark to differentiate one steel bar or structure from others. Each piece or segment of steel structure has a single blueprint with detailed information before it become the part of the whole. It carries information even small as hole sizes, dimension, etc.

9) Mention what are the technology used in structural engineering?

- Inventory tracking and management software
- Cost estimating software
- Computer aided design CAD software
- Accounting software

10) What is meant by Anchorage?

The term anchorage is used to fasten a joist or joist girder to a concrete, masonry or steel support by either welding or bolting.

11) What are the health and safety equipment does structural iron and steel worker has to wear?

Personal protective equipment includes

- **Hearing protection:** Reaming, hammering, loading and unloading material all produces unbearable noise. Hearing protection is a must in such condition
- **Eye protection:** Wear transparent glasses it helps to protect eyes while drilling, burning, grinding and welding process
- **Head protection:** A helmet is a must for iron and steel worker, as they are at continuous risk of getting injury by heavy equipment
- **Skin protection:** It protects their skin from burns, U.V radiation from the sun, welding radiation, full-length pants and leather faced gloves
- **Foot protection:** Worker must wear certified grade boots. The should have a slip resistant and shock resistant soles to prevent an accident
- **Hand Protection:** Use gloves based on site conditions as temperature, shock resistant, prevent cut and bruises and easy to perform work with it

Apart from this, worker must use safety devices like safety belts, scaffolding and nets to reduce risks.

12) While doing welding work what is the risk factor?

Welding process releases poisonous gas or dust, when welding is done on steel structure coated with lead containing paints.

13) What are the side effects of lead poisoning?

Symptoms of lead poisoning includes

- Loss of appetite
- Nausea
- Vomiting
- Stomach cramps
- Constipation
- Insomnia

14) What care has to be taken while operating power tools?

While, operating power tools following thing has to be taken care

- Maintain and inspect power tools on a regular basis
- Discard defective tools
- To avoid accident tool must be provided with “dead man” trigger or power off switch
- Use only those tools that are certified
- Avoid using any rotatory screw with a protruding set screw that can catch current
- Do not keep any tool hanging or swaying out of your pocket exposed to electric wire or tool
- Do not rely on wire, rods or other makeshift material, right tool should be used to do the job

15) Mention on what three factors does rigging process depends on?

Rigging process depends on three factors

- Capacity of the hoisting device
- Working loads of ropes and hardware
- Weight of the load to be lifted

16) Mention what all things must be inspect for sling used in iron and steel structure?

- Severe damage to wires
- Broken wires
- Look for heat damage
- Look for wear and tear due to bad weather
- Deformed, crushed or worn end attachments
- Illegible or missing sling identifications
- Kinking or crushing of ropes

17) What is the precaution that connectors should take to prevent an accident?

Connectors connect the steel structures with each other. To prevent an accident connector must do following things immediately

- Keep your eyes of arriving steel structure without distracting anywhere else and guide it to its correct location
- To match up holes always use a wrench or a drift pin, never use your fingers, many have lost their finger doing this
- The beam must be bolted, so that it will not rotate, before being cut loose.