



Job Description for Estimator

1. JOB SUMMARY

The Structural Steel & Hydromechanical Estimator is responsible for preparing accurate, timely, and competitive cost estimates for complex industrial and infrastructure projects. This role requires dual expertise: the ability to quantify structural steel requirements (buildings, bridges, industrial frameworks) and technical proficiency to estimate hydromechanical equipment (water control gates, penstocks, valves, and mechanical lifting systems). The ideal candidate will bridge the gap between engineering specifications and financial feasibility to ensure project profitability and technical compliance.

2. **Reports to:** Director of Estimating and Project Management

3. Key Responsibilities

4. **Bid Management:** Analyze RFPs, blueprints, and specifications to determine the scope of work and prepare comprehensive bid packages.
5. **Material Take-offs:** Perform detailed quantity take-offs for structural steel (tonnage, coatings, connections) and hydromechanical components.
6. **Vendor Coordination:** Solicit and evaluate quotes from subcontractors and material suppliers (e.g., steel mills, specialty casting shops, hydraulic component manufacturers).
7. **Labor & Equipment Analysis:** Estimate the man-hours required for shop fabrication and field installation, accounting for specialized welding or mechanical assembly.
8. **Risk Assessment:** Identify potential technical or logistical risks in the design that could impact the budget or schedule.
9. **Value Engineering:** Propose alternative materials or fabrication methods to reduce costs without compromising structural integrity or hydromechanical function.

CORE REQUIREMENTS

1. Educational & Professional Experience

10. 1.1. Bachelor's degree in civil engineering, Mechanical Engineering, Construction Management, or a related technical field.
11. 1.2. Minimum of 5–7 years of experience specifically in estimating structural steel or heavy mechanical/hydromechanical projects.
12. 1.3. Proven track record of successfully bidding on public works, industrial infrastructure, or hydroelectric/water treatment projects.
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Technical Expertise

- 2.1. Mastery of structural steel standards (e.g., AISC, AWS) and a deep understanding of fabrication processes (cutting, welding, blasting, painting).
- 2.2. Functional knowledge of hydromechanical systems, including seals, bearings, hydraulic power units (HPUs), and precision-machined components.
- 2.3. Ability to interpret complex 2D drawings and 3D models (BIM/Tekla) to identify hidden project requirements.

Software Proficiency

- 3.1. Advanced proficiency in estimating software (e.g., Bluebeam, Tekla PowerFab etc.)
- 3.2. Expert-level skills in Microsoft Excel for complex data modeling and cost breakdowns.
- 3.3. Experience with project scheduling software (e.g., Primavera P6 or Microsoft Project) to align estimates with timelines.

Estimating & Financial Skills

- 4.1. Demonstrated ability to build "bottom-up" estimates, including raw materials, shop labor, field labor, freight, and equipment rentals.
- 4.2. Understanding of market volatility in steel pricing and the ability to include escalation clauses or hedging strategies in bids.
- 4.3. High attention to detail with a focus on mathematical accuracy and document control.

Communication & Professionalism

- 5.1. Strong negotiation skills for interacting with vendors and ensuring competitive material pricing.
- 5.2. Ability to present bid reviews to executive leadership, clearly explaining the logic behind cost projections and margins.
- 5.3. A collaborative mindset for working alongside Project Managers during the "hand-off" phase post-award.

PHYSICAL DEMANDS & WORK ENVIRONMENT

- Primarily an office-based role but requires the ability to conduct occasional site visits or fabrication shop walk-throughs.
- Must be able to navigate construction sites, which may include walking on uneven terrain.