Foundry Overhead Crane

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Overhead Crane for Foundry: Heavy-Duty Solution for High-Temperature Industrial Lifting

Foundry operations demand rugged, reliable lifting equipment that can withstand extreme conditions—high temperatures, heavy loads, abrasive dust, and corrosive materials. Our overhead crane for foundry is engineered specifically to meet these challenges, delivering safe, efficient, and consistent performance for casting processes, from raw material handling to finished product transport. As a specialized heavy-duty lifting solution, it integrates advanced technology and durable components to optimize productivity while minimizing downtime in foundry environments.

Core Features of Foundry Overhead Crane

- **High-Temperature Resistance**: Constructed with heat-resistant materials and thermal insulation, the crane operates stably in temperatures up to 600°C, suitable for molten metal handling and near-furnace operations.
- **Heavy-Duty Load Capacity**: Ranging from 5t to 200t, it handles large castings, ingots, and machinery with precision, supporting high-load cycles in continuous foundry production.
- **Dust & Corrosion Protection**: Sealed electrical components, dust-proof mechanical parts, and anti-corrosive coatings resist foundry dust, molten splashes, and chemical erosion, extending service life.
- **Precision Control System**: Equipped with variable frequency drives (VFD) and anti-sway technology, ensuring smooth lifting, lowering, and positioning—critical for safe molten metal transfer and delicate casting handling.
- **Safety Compliance**: Meets ISO, CE, and OSHA standards, featuring overload protection, emergency stop, limit switches, and heat detectors to mitigate risks in hazardous foundry settings.

Technical Parameters of Overhead Crane for Foundry

Parameter	Specification Range

Load Capacity	5t – 200t
Span Length	10m – 35m
Lifting Height	8m – 30m
Working Temperature	-20°C – 600°C
Lifting Speed	0.5m/min – 10m/min (adjustable via VFD)
Travel Speed	10m/min – 40m/min
Control Mode	Pendant control, remote control, or cabin control
Power Supply	380V/400V, 3-phase, 50/60Hz (customizable)
Protection Class	IP54 – IP65 (electrical components)

Key Advantages for Foundry Applications

1. Adaptability to Foundry-Specific Challenges

Foundries face unique harsh conditions, and our overhead crane is designed to thrive in them. The heat-resistant structure prevents component deformation under high temperatures, while dust-proof design avoids mechanical jamming from foundry sand and metal particles. It handles corrosive substances like molten slag and chemical additives without performance degradation.

2. Enhanced Productivity & Efficiency

The crane’ s high load capacity and fast, precise operation streamline critical foundry processes. It accelerates raw material (scrap metal, alloys) feeding into furnaces, enables smooth molten metal transfer to molds, and simplifies finished casting handling. Reduced lifting cycle times and minimal downtime boost overall production throughput.

3. Improved Safety for Personnel & Equipment

Safety is paramount in foundries, and our overhead crane integrates multiple protective features. Overload protection prevents structural damage, anti-sway technology avoids molten metal spills, and emergency stop functions ensure immediate shutdown in emergencies. This reduces accident risks and protects workers, equipment, and valuable castings.

4. Cost-Effective & Low Maintenance

Durable materials and sealed components minimize wear and tear, reducing maintenance frequency and costs. The energy-efficient VFD system lowers power consumption, while the crane’ s long service life delivers a high return on investment. Customizable configurations

also allow alignment with specific foundry layouts and production needs, avoiding unnecessary expenses.

FAQ (Frequently Asked Questions)

Q1: Can the overhead crane for foundry handle molten metal directly?

A1: Yes, it is designed with heat-resistant materials and thermal insulation, enabling safe direct handling of molten metal (e.g., steel, aluminum) in temperatures up to 600°C.

Q2: How often does the foundry overhead crane require maintenance?

A2: Routine inspection is recommended monthly, with comprehensive maintenance every 6–12 months—adjustable based on usage frequency and harshness of the foundry environment.

Q3: Can the crane be customized to fit my foundry’ s specific span or height?

A3: Absolutely. We offer fully customizable span lengths (10m–35m), lifting heights (8m–30m), and load capacities (5t–200t) to match your facility’ s layout and production needs.

Q4: Does the crane comply with international safety standards for foundries?

A4: Yes, it meets global standards including ISO, CE, and OSHA, with built-in safety features to ensure compliance in hazardous foundry operations.

Q5: What control options are available for the foundry overhead crane?

A5: You can choose pendant control (for short-distance operation), remote control (for flexibility), or cabin control (for precise long-term operation), based on your workflow.

Q6: How long does installation take, and will it disrupt my foundry’ s production?

A6: Installation typically takes 1–2 weeks, and we offer off-peak scheduling and modular assembly to minimize production downtime.