

Ironworkers

SOC: 47-2171 • Career Profile Report

■ Key Facts

<div>\$61,940</div> <div>Median Salary</div>	<div>85,100</div> <div>Employment</div>	<div>+4.0%</div> <div>Growth Rate</div>
--	---	---

■ Requirements & Salary Range

Education: High school diploma

■ Automation Risk Assessment

Medium Risk - 35.0% probability of being automated in the next 10-20 years.
This job has some routine elements but still requires human judgment and interaction.

■ Work-Life Balance

5.1/10 - Fair work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	9.4/10	Investigative	5.8/10
Artistic	4.0/10	Social	5.0/10
Enterprising	5.0/10	Conventional	6.0/10

■ Top Skills Required

Ability to work at heights, Balance, Critical thinking, Depth perception, Hand-eye coordination, Physical stamina, Physical strength

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Ironworkers are skilled construction tradespeople who install and reinforce **structural steel and iron components used in buildings, bridges, and infrastructure projects**. Their work forms the structural skeleton of large-scale construction, ensuring strength, stability, and safety in everything from skyscrapers to highways. This physically demanding role combines technical precision with teamwork at significant heights.

This career is well suited for individuals who enjoy hands-on construction work, physical challenges, and contributing to major infrastructure projects.

What Do Ironworkers Do?

Ironworkers assemble, install, and secure metal frameworks and reinforcing systems on construction sites.

Common responsibilities include:

- Installing structural steel beams, columns, and girders
- Positioning and securing reinforcing steel (rebar) for concrete
- Using cranes and rigging equipment to place materials
- Welding, bolting, or riveting steel components
- Reading blueprints and structural drawings
- Aligning and leveling structures according to specifications
- Following strict safety protocols while working at heights

Types of Ironworking Specialties

Ironworkers often specialize in particular construction areas:

- Structural Ironworkers: Build steel frameworks for buildings and bridges.
- Reinforcing Ironworkers (Rebar Workers): Install steel bars and mesh in concrete forms.
- Ornamental Ironworkers: Install stairs, railings, and decorative metal elements.
- Rigging Specialists: Handle lifting and positioning of heavy steel components.
- Welding Ironworkers: Perform specialized welding tasks on-site.

Skills and Abilities Needed

Ironworkers combine strength, balance, and technical skill.

Core Professional Skills

Personal Qualities That Matter

Education and Training Pathway

Most ironworkers learn through structured trade training:

- High School Diploma or Equivalent: Typical minimum requirement
- Apprenticeship Programs: Multi-year paid training with classroom and on-the-job learning
- On-the-Job Training: Skill development under experienced ironworkers
- Safety and Welding Certifications: Required for specific tasks or sites
- Continued Skill Development: Learning new methods and equipment

Where Do Ironworkers Work?

Ironworkers work on major construction and infrastructure projects:

- Commercial and High-Rise Construction Sites
- Bridge and Highway Projects
- Industrial and Power Plant Facilities

- Steel Erection and Reinforcement Companies
- Manufacturing and Fabrication Facilities

Work is primarily outdoors and may involve travel between job sites.

How Much Do Ironworkers Earn?

Earnings vary by specialization, experience, and region:

- Apprentice Ironworkers: Earn wages while training
- Journeyman Ironworkers: Typically earn strong trade wages
- Specialized or Union Ironworkers: Often earn higher pay with benefits

Compensation frequently includes overtime and union benefits.

Is This Career Difficult?

Ironworking is physically demanding and safety-critical. Workers must lift heavy materials, maintain balance at heights, and perform precise tasks in changing weather conditions. The challenge lies in sustaining strength, focus, and strict safety discipline on complex job sites.

Who Should Consider Becoming an Ironworker?

This career may be a strong fit if you:

- Enjoy physically challenging, hands-on work
- Are comfortable working at heights
- Value teamwork and construction craftsmanship
- Are safety-conscious and disciplined
- Want a skilled trade with strong demand

How to Prepare Early

- Build physical strength and endurance
- Learn basic math, measurement, and blueprint reading
- Practice safe tool use and construction fundamentals
- Explore trade schools or ironworker apprenticeships
- Gain experience through construction or laborer roles

Ironworkers build the frameworks that shape skylines and infrastructure, transforming steel into strength through skill, teamwork, and precision—forming the backbone of modern construction and engineering projects.