Engineering Career Path
Joy Global

A World-Class Company Serving the Mining Industry

Joy Global is a worldwide leader in high-productivity mining solutions. Through its market-leading P&H and Joy brands, Joy Global manufactures, markets and services original equipment and related service parts for surface and underground mining of coal, copper, iron ore, oil sands, gold and other mineral resources. The underground mining group focuses on the engineering of products and systems related to room and pillar, longwall, entry development, conveying and hard rock mining. The surface mining group concentrates its efforts on the production of electric and hybrid mining shovels, rotary blasthole drills, walking draglines and wheel loaders for surface and open-pit operations.

Joy Global is solving mining's toughest challenges through world-class products and direct service. We have over 150 locations worldwide including warehouses and service centers in all key mining regions that provide 24/7 support to our customers, so they can safely increase production and lower operating costs.

Joy Global Believes in Social Responsibility

Joy Global acknowledges that we have a genuine social responsibility to our people and the communities where we live and work. Our commitment to local communities is demonstrated by our investment in measurable programs that address the communities’ immediate needs and build a foundation for the future.

Drive to Zero Harm

Our highest priority at Joy Global is safety. For the past several years, our injury incident rate has been lower than world-class norms. Several of our locations had zero incident rates with no recordable incidents. Our goal is to drive to zero harm at all locations worldwide.

Joy Global is an Employer of Choice

Joy Global employs approximately 16,000 people in 15 countries. We support professional development opportunities for every employee. We have a very low turnover rate, and many of our employees stay with the company for decades. We foster a workplace culture in which the rights, needs and unique contributions of each employee are respected.

Benefiting Together

At Joy Global, our benefits set us apart from the competition, providing employees with personal and financial security so they can focus on personal development and future career opportunities.

By joining the Joy Global team, you’ll have the opportunity to choose from a wide variety of benefits and coverage levels to meet your needs and the needs of your family which may include:

- Medical, dental, vision and life insurance
- Retirement savings plan
- Paid vacation
- Employee bonus program
- Employee stock purchase plan
- Educational reimbursement
- Adoption/infertility benefit
- Much more

Interested?

Whatever your career goals, Joy Global is big and diverse enough for you to realize your potential, yet small enough for you to make an impact. We are the team to be on. We are a world-class company serving the mining industry.

We accept information from candidates regarding our employment opportunities solely through our website and welcome you to apply. Current positions throughout our organization can be found at: http://careers.joyglobal.com.
Rewards & Recognition

You receive a competitive compensation package that attracts and retains talented associates who help fulfill Joy Global’s goal: a healthy, productive and engaged workforce. The responsibility to pay fairly and provide security for families is taken seriously. The rewards and recognition you receive go beyond the basics. We value a total workplace experience that rewards performance and fosters job satisfaction in ways that demonstrate Joy Global’s superiority to other engineering-centric companies. Engineers are rewarded for doing well in areas that are crucial to success, such as safety, innovation and efficiency. Bonus opportunities reward outstanding performance with competitive pay. High performers are further recognized with accelerated development and advancement opportunities.

Your total work experience is grounded in a corporate culture that encourages individual accomplishments within a team environment. You’re challenged by meaningful work that matches your interests, and you’re supported by resources that enable you to thrive. You work with leading-edge technologies in a safe workplace environment under the direction of engaged leadership and diverse associates operating in teams. You also benefit from professional training and learning experiences that enable you to advance your knowledge, overcome challenges and develop your professional skills.

At Joy Global, you will be surrounded by the best and brightest. We are dedicated to helping you acquire greater knowledge and new skills. You’ll benefit from unique opportunities to exercise your abilities—and to learn. Through training programs that expand your horizons. Through hands-on experience—facing and overcoming challenges of scale and complexity that engineers at other companies rarely encounter, much less conquer.

It’s the path Joy Global engineers follow to ever-increasing responsibilities that breed industry-respected experts in a broad range of engineering disciplines including:

• Design Engineering
• Electrical Engineering and Electronics
• Test Engineering
• Engineering Physics
• Mechanical Engineering
• Software Engineering
• Advanced Automation
• Systems & Controls
• Hydraulics Engineering
• Reliability Engineering

Joy Global equipment operates in environments where matching muscle and mass with cutting-edge technologies is critical. It’s why our engineers excel at real, highly customized engineering. Pushing the limits of gear-train power density. Harnessing the application of materials and manufacturing processes. Programming the subtleties of automated control systems.

Customers rely on the technical expertise of Joy Global employees as much as the inherent product quality. Engineers focused on rock-solid reliability and easy maintainability devote their efforts to mining equipment that minimizes unscheduled downtime. Service engineers ensure these sophisticated machines stay up and running at peak productivity. Teams of engineers utilize leading technologies and common sense to install and commission these assets. Training customers. Maximizing performance. Providing maintenance tailored to each customer’s operation. Solving problems. Adding value by staying close to customers and their products.

Engineering Career Path

You play a strong role in shaping your career path—either technical or managerial. Your individual interests, skills and training will help frame your best path to success. It’s quite typical for an individual’s career path to be adjusted based on personal interests, goals, experience, performance, business needs and/or new or changing opportunities. Planning and preparing for advancement can make the difference between holding a job and forging a career.

Movement in your career path can be upward or lateral and can cross functions and locations. Opportunities for advancement typically arise based on business needs, demonstrated abilities and behavior, and your overall performance. Through performance reviews and a personalized development process, you’ll have the opportunity to help shape your career and best route to personal growth and fulfillment. The following image illustrates career path options for engineers at Joy Global.

Growth Opportunities

A number of opportunities are available for personal growth and development.

• Cross functional rotations
• Tuition reimbursement
• Sponsorship of continuing education
• Field opportunities on minesite
• Recognition of patents & intellectual property

Career Progression Considerations

• Movement in your career path can be upward or lateral and can cross functions and locations
• Opportunities are based on business need and demonstrated ability (i.e., “competency”), behaviors & overall performance
• This document is a guideline to help you create a strategy for your personal career development
## Career Progression

### Managerial Path

<table>
<thead>
<tr>
<th>Education &amp; Experience</th>
<th>Responsibilities &amp; Characteristics</th>
<th>Staff / Supervision / Guidance</th>
<th>Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director Engineering</td>
<td>Bachelor's degree required, Master's or MBA preferred, professional certification beneficial, appropriate experience</td>
<td>Lead execution of strategic plan for product development, formulate &amp; facilitate programs that assure project add value for customers, craft department vision &amp; practice leadership activities that complement vision. Periodic direction from performance leader (VP), will lead managers.</td>
<td>Business acumen, communications skills, influence, vision</td>
</tr>
<tr>
<td>Manager Engineering</td>
<td>Bachelor's degree required, Master's or MBA preferred, professional certification beneficial, appropriate experience</td>
<td>Plan, develop &amp; direct major engineering projects; plan &amp; organize operation of functional engineering group or full department, full technical responsibility for product line(s). Periodic direction from performance leader (Managers/Directors), leads principal/ project lead engineers, may lead managers.</td>
<td>Ability to drive and manage change, business acumen, communications skills</td>
</tr>
<tr>
<td>Program Manager</td>
<td>Bachelor's degree required, Master's or MBA preferred, professional certification beneficial, appropriate experience</td>
<td>Plan, develop &amp; direct major engineering projects; plan, organize &amp; supervise daily operation of Engineering department. Accountable for schedule, budget &amp; quality of all program elements. Coordinate needs of cross-functional customers (purchasing, sub-contract, planning, mfg, product support, service, etc). Ensure a smooth transition of program from an NPD program to a commercial program. Periodic direction from performance leader (Managers/Directors), leads principal/project/lead engineers, may lead managers.</td>
<td>Ability to drive and manage change, business acumen, communications skills</td>
</tr>
<tr>
<td>Product/Project Lead Engineer</td>
<td>Bachelor's degree required, Master's or MBA preferred, professional certification beneficial, appropriate experience</td>
<td>Responsible for the technical execution of a product line. Ensure technical specifications are achieved with the functional specifications throughout the project. Manage technical risk for the life of the project. Periodic direction from performance leader (Managers/Directors), will lead engineers.</td>
<td>Management style, development of others, ability to drive and manage change, communications skills</td>
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### Foundational Career Path

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<td>Senior Engineer</td>
<td>Bachelor's degree required, Master's and/or professional certification beneficial, appropriate experience</td>
<td>Uses breadth of experience to evaluate system level design to meet equipment performance goals. Self directed, regular guidance from performance leader (Manager), may lead engineers.</td>
<td>Communicating direction, management style, development of others.</td>
</tr>
<tr>
<td>Engineer III</td>
<td>Bachelor's degree required, 5-10 years experience</td>
<td>Uses breadth of experience to evaluate merits &amp; understand impact of design, recommends solutions, leads design reviews and projects. Regular supervision from performance leader, may lead engineers.</td>
<td>Prioritization setting, communicating direction</td>
</tr>
<tr>
<td>Engineer II</td>
<td>Bachelor's degree required, 2-4 years experience</td>
<td>Develops conceptual designs, contributes value in design reviews. Daily supervision from performance leader, may lead designers/drafters.</td>
<td>Drive for results, customer focus, critical thinking, self development, teamwork/relationships.</td>
</tr>
<tr>
<td>Engineer I</td>
<td>Bachelor's degree required, entry level to 3 years experience</td>
<td>Applies engineering principles to designed engineering. Daily supervision from performance leader.</td>
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### Technical Specialist Path

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<tr>
<td>Technical Specialist I</td>
<td>Associate's Degree in Mechanical or Electrical Design Technology, 0-2 years experience</td>
<td>Create and update models, drawings, and assemblies using computer aided design, conduct periodic design reviews, adherence to specifications. Daily supervision from performance leader.</td>
<td>Drive for results, customer focus, critical thinking, self development, teamwork/relationships.</td>
</tr>
<tr>
<td>Technical Specialist II</td>
<td>Associate's Degree in Mechanical or Electrical Design Technology, 2-10 years experience</td>
<td>Capable of developing conceptual designs, contribute value in design reviews. Daily supervision from performance leader.</td>
<td>Drive for results, customer focus, critical thinking, self development, teamwork/relationships.</td>
</tr>
<tr>
<td>Technical Specialist III</td>
<td>Associate's Degree in Mechanical or Electrical Design Technology, 5 years to career</td>
<td>Communicate and coordinate with cross-functional departments, capable of performing some engineering calculations. Regular supervision from performance leader, may lead other Technical Specialists.</td>
<td>Prioritization setting, communicating direction</td>
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<td>Engineering Fellow</td>
<td>Bachelor's degree, Master's or MBA preferred, professional certification, and/or P&amp;ID beneficial, appropriate experience</td>
<td>Provides technical vision to strategic decisions by providing leadership, strategic oversight, technical vision &amp; forward thinking. Responsible for long term product vision. Provides technical and project management support &amp; consulting on major and cross-departmental projects or initiatives.</td>
<td>Self-directed, periodic guidance from performance leader (Manager/Director), may lead other engineers.</td>
</tr>
<tr>
<td>Senior Principal Engineer</td>
<td>Bachelor's degree required, Master's or MBA preferred, professional certification, and/or P&amp;ID beneficial, appropriate experience</td>
<td>Sets standards for knowledge base of a particular engineering discipline, accountable for complete programs. Self-directed, periodic guidance from performance leader (Manager/Director), may lead other engineers.</td>
<td>Ability to drive and manage change, business acumen, communications skills</td>
</tr>
<tr>
<td>Chief Engineer</td>
<td>Bachelor's degree required, Master's or MBA preferred, professional certification beneficial, appropriate experience</td>
<td>Responsible for the product line. Integrates matrix resources to align with the overall project plan. Authority for design decisions and direction for product line. Self-directed, periodic guidance from performance leader (Manager/Director), may lead other engineers.</td>
<td>Ability to drive and manage change, business acumen, communications skills</td>
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Joy Global worldwide locations