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# Joy Global Inc.

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## Introduction

Joy Global Inc. stands as a testament to the spirit of American industrial innovation, resilience, and adaptation. For well over a century, the company—rooted in the industrial heart of Milwaukee and shaped by visionaries like Alonzo Pawling, Henry Harnischfeger, and Joseph Joy—has played a defining role in the advancement of mining technologies and services. Its products, carrying the storied "P&H" and "Joy" brands, became synonymous with efficiency, safety, and reliability for mining operations around the world. From its humble beginnings as a machine and pattern shop in the late 19th century to its rise as a global leader and eventual integration into Komatsu, the Joy Global narrative mirrors the evolution of American industry itself.

The company's trajectory is marked by relentless innovation and an acute understanding of the needs of its customers. Over the decades, Joy Global not only responded to changes in mining practices but also set the pace for technological advancement within the sector. From continuous miners and longwall systems for underground mining, to giant electric shovels and draglines for surface operations, the company's engineering milestones substantially improved productivity and working conditions in mines globally.

However, Joy Global's journey was not without its share of adversity. Economic downturns, slumps in the commodities market, and rapid fluctuations in global demand continually challenged the company to rethink its strategies. The story of Joy Global is rich with episodes of resilience—navigating bankruptcies, undergoing mergers and acquisitions, and always finding pathways for renewal and transformation. Its willingness to evolve, adopt new technologies, and invest in workforce development enabled it to endure where others faltered.

By the early 21st century, Joy Global had emerged from restructuring as a formidable force in the mining equipment industry, strategically expanding its reach through bold acquisitions and a focus on lifecycle solutions. Yet, the volatility of international markets and mounting competitive pressures would ultimately shape its destiny. The acquisition by Komatsu in 2017 marked a new era, not as an end but as the continuation of Joy Global's legacy within a larger global framework, ensuring that its expertise, culture, and technological leadership would inform the future of mining worldwide.

This book tells the story of Joy Global Inc.—its origins, its growth, the challenges it faced and the transformations it embraced. Drawing on its impact, both locally in Wisconsin and globally across mining regions, we explore how this company not only built machines but also wove itself into the communities and economies where it

operated. We chronicle the pivotal moments and people behind its evolution, as well as the strategic decisions that positioned it within one of the world's largest mining equipment conglomerates.

Through the history and perspective provided in these chapters, readers will gain insight into the factors that drove Joy Global's extraordinary journey. From invention and entrepreneurship to resilience and reinvention, the story of Joy Global Inc. is, above all, the story of an American company: bold, ambitious, and always looking forward.

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## **CHAPTER ONE: The Dawn of American Industry and the Need for Innovation**

The latter half of the 19th century in America was a period of explosive growth and transformation, a veritable crucible of invention and enterprise. From the ashes of the Civil War, the nation surged forward, fueled by vast natural resources and an insatiable appetite for progress. It was an era when industry began to reshape landscapes and lives, driven by pioneering spirits who saw opportunity where others saw only raw earth and challenging conditions. This period laid the groundwork for companies like Joy Global, born from the urgent need for more efficient and powerful tools to extract the wealth hidden beneath the surface of a rapidly industrializing nation.

Milwaukee, Wisconsin, where a significant part of Joy Global's story began, was a bustling hub of this burgeoning industrial might. Positioned strategically at the confluence of three rivers flowing into Lake Michigan, the city was a natural magnet for manufacturing. By the 1870s and 1880s, Milwaukee was already making a name for itself, producing everything from steam engines to agricultural machinery. The city's history of skilled craft shops provided a fertile ground for the larger manufacturing companies that would soon dominate the area. The demand for metal-bending industries attracted tens of thousands of immigrants, adding to Milwaukee's diverse and growing workforce.

Across the industrial landscape, the mining industry was undergoing its own quiet revolution. For centuries, mining had been a backbreaking, perilous endeavor, relying on the sheer muscle of individual laborers and rudimentary tools like picks, shovels, and hand-held augers. Miners would often work lying on their sides in cramped, wet tunnels, enduring conditions that were both physically taxing and incredibly dangerous. The use of black powder and later dynamite helped to break up rock, but the process of loading and hauling the extracted material remained largely manual. This was an industry ripe for disruption, a call to innovation that would be answered by a new breed of inventors and entrepreneurs.

The burgeoning demand for raw materials—especially coal, which powered the factories and heated the homes of a rapidly urbanizing America—highlighted the limitations of existing mining methods. Coal production, though increasing, was still constrained by the slow, arduous process of manual extraction. Steel production, too, was on a dramatic upward curve, necessitating greater quantities of iron ore and coal. The inefficiency of traditional techniques meant that mines could not keep pace with the nation's soaring industrial needs. The stage was set for mechanization, for

machines that could do the work of dozens, or even hundreds, of men, faster and more safely.

It was into this environment of industrial ferment and pressing need that two distinct but ultimately conjoined paths emerged, leading to the eventual formation of Joy Global Inc. One path originated in Milwaukee with the formation of a modest machine and pattern shop. The other began in the coalfields with the keen observations and inventive mind of a young man determined to find a "better way" to extract minerals from the earth. These separate ventures, each driven by a desire to solve the industrial challenges of their time, would eventually converge to create a company that would revolutionize the mining world.

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