

THE INDUSTRY THAT MAKES SUPPLY CHAINS WORK®

# Introducing The Material Handling Industry



Material handling powers your in-store and e-commerce shopping experience – enabling you to order and quickly receive products how and when you need them.



is the ONLY industry that touches every product as it moves through the global supply chain to the consumer.

The world's most successful firms use material handling solutions to gain a competitive edge by improving their speed, efficiency and customer experience while maximizing growth and profits.



### **Economic Impact of Material Handling**



\$173.2 bn GDP contribution to the US economy in 2018.



**1.6 million jobs**Supported in the
US labor market in 2018.



\$39.3 bn
Fiscal contribution in 2018.

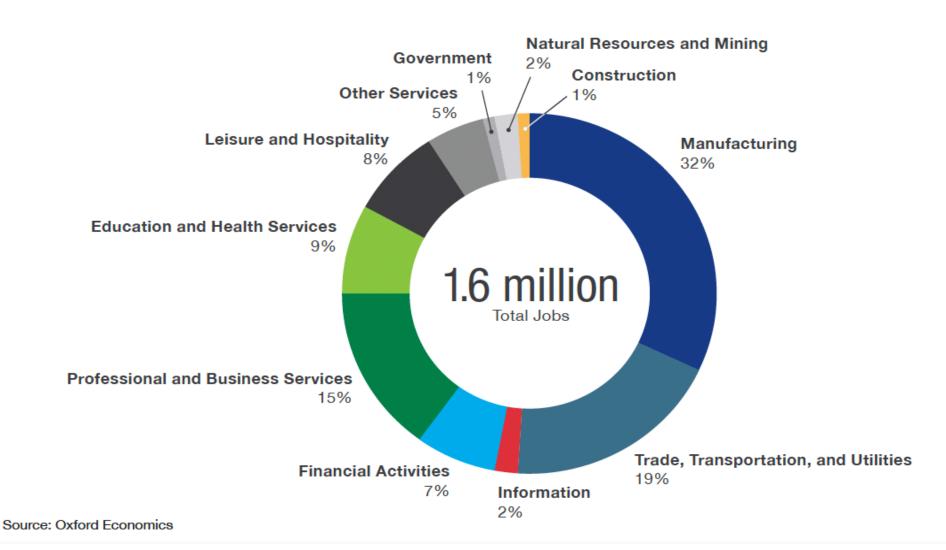


multiplier
This means that for every job created by the material handling industry, an additional 2.9 jobs are added elsewhere to the US economy.

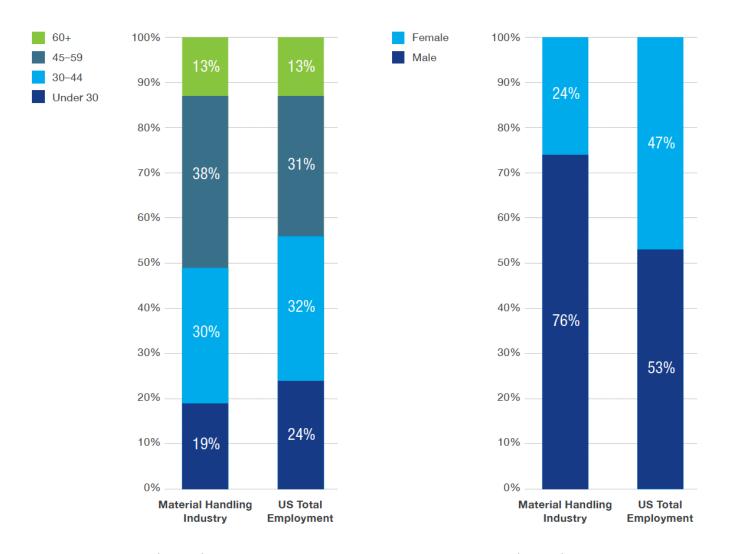
3.9 jobs

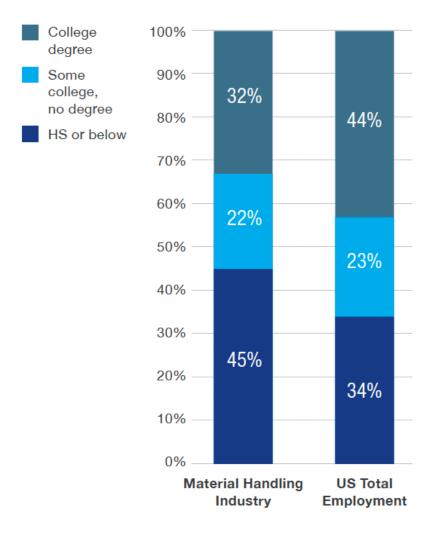
- In the United States alone, material handling is a \$173.2 billion industry supporting nearly 1.6 billion jobs.
- Despite its size, material handling remains largely unknown as an industry because its work is done behind the scenes of the greater supply chain.

### **Material Handling Industry Jobs**

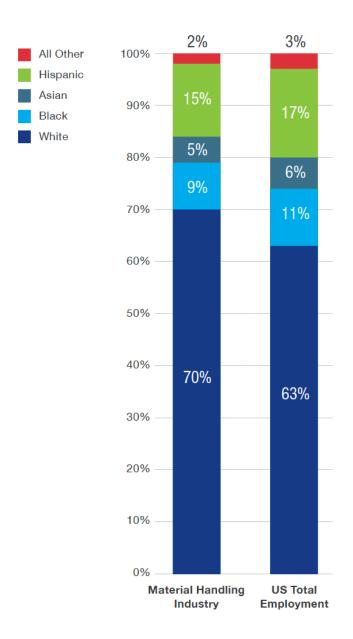


## **Material Handling Workforce Demographics**





Source: ACS, Oxford Economics tabulations



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### **How Material Handling Works**

Material handling uses a broad array of equipment, systems, services and expertise to move products through the supply chain such as:

automation, robotics, AI, information technology, automatic identification, lifting equipment, storage equipment, conveying equipment, facilities design and planning, ergonomic and safety equipment, sustainable energy and facility solutions.



#### **75 YEAR TIMELINE**

Malcom McLean invented the standard steel shipping container first implemented in 1956 at the port of New Jersey.

1950

#### 1952

US Patent no. 2612994 issued to Norman Woodland and Bernard Silver for Barcoding Systems.

#### 1954

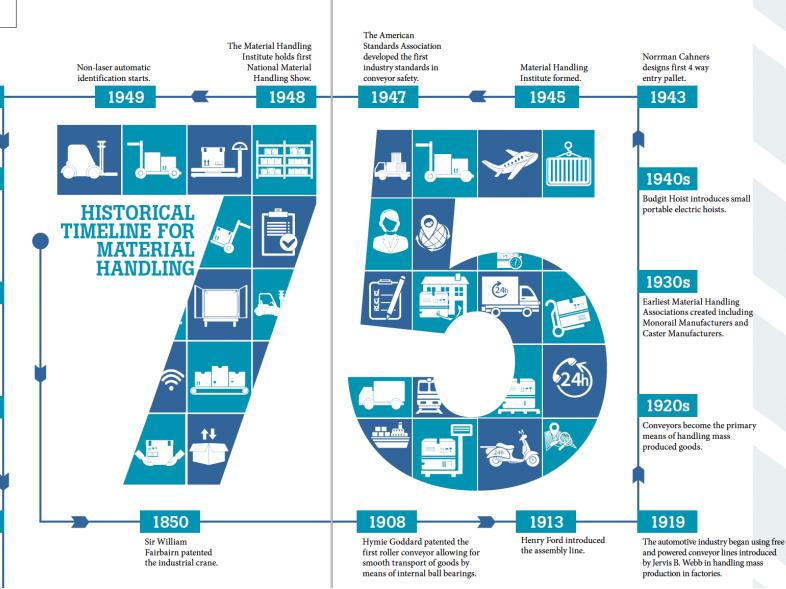
Mac Barrett designs first guided vehicle for a warehouse using a trolley for electrification.

#### 1960s

Programmable controller and mini-computers change the meaning of material handling.

#### 1974

The first implementation of the Universal Product Code (UPC) was in 1974 at a Marsh's supermarket in Troy, OH.



The Material Handling Education Foundation was founded with a challenge grant from Henry Harnischfeger.	Joh	The first cross docking system was introduced.  the Krafcik introduces the term "Lean Manufacturing" in this article "Triumph of the Lean oduction System" after studying "Toyota Production System."  1988	The Gartner the acronyn represent a la the ev	of the PC and Internet.  Group first employed  m ERP which came to  arger whole, reflecting  volution of application  eyond manufacturing.	The first North American Material Handling Show and Conference was held.  1992  Gerard Cachon and
	2013	Inaugural MODEX event held in Atlanta.		The first version of the Green-House Gas Protocol, carbon accounting tool for supply chain is released.	Marshall Fisher demonstrate continuous replenishment concept using a case study of Campbell Soup.  1997
2014	Material Handling Industry of America rebranded as MHI – The Industry That Makes Supply Chains Work.		Sensors drop in price, enabling them to be put into more devices and machinery – leads to the rise of Big Data.		The US Department of Labor gives classification to logistics jobs as "13-1081 Logisticians."  RFID was developed at the MIT Auto-ID Center.  Rise of mobile and digital technology.
Rise of omnichannel fulfillment. The U.S. Roadmap for Material Handling & Logistics is published. MHI publishes its first Annual Industry Report. MHI begins publication of MHI Solutions magazine.	IIoT vision emerges – Analytics, machine learning, augmented reality and virtual reality become standard.  IT and Operations collaborate to drive supply chain decisions. Changing skill sets driven by technology results in skilled workforce shortage.	IoT introduced into Annual Industry Report, drones used for cycle counting in warehouses. Automation seen as possible solution to workforce shortage.	AI & Blockchain introduced into Annual Industry Report.  Cybersecurity becomes more critical.  Blockchain seen as cybersecurity and transparency tool.	The rise of unified commerce.  MHI introduces Supply Chain Digital Consciousness Index (DCI) online assessment.	The U.S. Roadmap for Material Handling & Logistics 4.0: Transformation Age is published including special section on the impact of the COVID-19 pandemic on supply chains.

Thousands of career opportunities with competitive compensation and rewarding incentives are available in this exciting industry.

- Sales and Marketing
- Project Management
- Operations Management
- Systems Integration
- Customer Service
- Information Technology
- Facility Planning & Design
- Human Resources
- Finance







### **Material Handling Industry Informational Videos**

https://videos.mhi.org/handling-the-us-economy-the-economic-impact-of-the-material-handling-industry

https://videos.mhi.org/material-handling-as-a-career-path

https://videos.mhi.org/mhi-the-industry-that-makes-supply-chains-work

https://videos.mhi.org/looking-back-on-75-years-of-service