

Alabama's Iron and Steel Industry Builds America

Iron and Steel Manufacturing is Fundamentally Important to Alabama



Alabama's Iron and Steel industry contributes directly to 14,900 jobs and indirectly to 76,388 jobs.



Alabama iron and steel made America's industrialization possible and continues to support American infrastructure today.



The average yearly wage of men and women working in Alabama's Iron and Steel industry is \$99,328 compared to a national average Iron and Steel manufacturing wage of \$86,736.

Alabama's Iron and Steel Operations are Greener than you Think



Melt Sources

2,081 V
COze kg/ton*
Traditional

VS

COze kg/ton*

Electric Arc Furnace

More and more Alabama foundries are integrating electric arc furnaces into their operations. Electric arc furnaces produce significantly less CO₂ than traditional melt sources.

*CO2 emissions kg/ton of steel



Alabama iron and steel producers and their electric utility partners continue to advance clean manufacturing processes.



Between 95% and 100% of the metal used in the production of finished Iron and Steel products in Alabama comes from recycled scrap.

Keeping Alabama's Iron and Steel Industry Strong is Crucial to the State's Economic Health and Growth



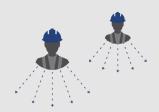
Iron and Steel manufacturing supports Alabama families by paying \$1.48 billion in direct wages and \$4.68 billion in indirect wages that are directly traceable to the support of Iron and Steel manufacturing.



\$10.28 billion

\$717 million in taxes

The total direct output of the Iron and Steel industry is \$10.28 billion which contributes \$717 million in state and local taxes.



The creation of 2 Iron and Steel jobs in Alabama creates 10 more throughout the supply chain.





The Iron and Steel Industry is Fundamentally Important to Alabama.

- It provides thousands of jobs across the state. Throughout the state of Alabama, the iron and steel industry directly employs 14,900 men and women and indirectly employs 76,388 through suppliers and sub-contractors.
- Alabama's iron and steel industry was integral to America's industrialization more than a century ago and remains vibrant today. In the late 19th century, Birmingham found itself at the center of American iron and steel manufacturing. The Jones Valley area was the ideal location to produce ferrous metal products because of its proximity to the raw materials required to create iron and steel. Nowhere else in the world could you find the necessary raw materials of iron ore, limestone, and coal so close together. This allowed iron and steel to be produced economically and efficiently and laid the groundwork for the booming iron and steel industry that Alabama has today. In fact, Birmingham's moniker, "The Magic City" originated because the city grew like magic from this fertile and rich mineral occurrence.
- The average yearly wage of men and women working in the Alabama iron and steel industry is 15% higher than the national iron and steel average. This wage figure includes salary and benefits, such as insurance, bonuses, and profit sharing. Alabama iron and steel manufacturers offer ample opportunities for internal career development and many offer tuition reimbursement programs. Many iron and steel producers have multiple generations of families whose lives have been changed for the better through employment and education within the industry. This is important because strong wages and a modest cost of living combine to lift families out of poverty and build wealth for generations to come. Manufacturing creates wealth, and Alabama families have benefitted from iron and steel manufacturing for 150 years now.

Alabama's Iron and Steel Industry is Greener than you Think.

Current standard technology and practices are much better than what was used in the past in the US, and what China and India currently utilize. Drive by any iron and steel producer in Alabama while they are in full production, and you will see clear and clean air. Most sites have no water discharge off-property, opting instead to recycle and re-use cooling and process water. Compare that to iron and steel production in India or China and you will be astonished at how clean and efficient Alabama's iron and steel industry operates. Many of Alabama's iron and steel producers are advancing to the next generation of efficiency and cleanliness by employing electric arc furnaces as the melt source, further reducing the release of any greenhouse gasses.

- Electric arc furnaces are much cleaner than traditional melt sources. Electric arc furnaces work by using carbon rods to create a high temperature electric arc inside the furnace which comes in direct contact with the source metal. This serves as a heat source and adds carbon to the iron scrap to create molten steel. Another strong benefit is that electric arc furnaces recycle their air sources and emissions, capturing the hot gas from the top of the furnace and recycling it to the bottom, retaining the heat energy within the process. This greatly increases efficiency and significantly reduces CO₂ emissions to about a quarter of other melting processes.
- · Alabama iron and steel producers and their electric utility partners continue to advance clean manufacturing processes.
- While Alabama's roots in iron and steel manufacturing come from the refinement of iron ore, today between 95% and 100% of the metal used in finished iron and steel products in Alabama comes from recycled scrap. Hundreds of thousands of tons of iron and steel are recycled in Alabama facilities each year, keeping America green and American landfills less full. Structural steel from teardowns, shredded automobiles, discarded appliances, even household metal products all combine to provide the raw material source for today's modern, clean, and efficient iron and steel industry.

The verified data we collected asserted that Alabama's iron and steel industry recycles enough material every year to build 38 Eiffel Towers (each standing at 100 stories tall). This data point accounts for approximately 20% of the iron and steel manufacturers. Unreported production data would multiply that number, significantly.

Keeping Alabama's Iron and Steel Industry Strong is Crucial to Alabama's Economic Health and Growth.

- The iron and steel industry creates over \$6 billion per year in wages for Alabama. Direct jobs include processing of materials, mill services, iron and steel making, the making of steel mill products, and distribution. Indirect jobs include product and service suppliers to the iron and steel industry.
- Alabama's iron and steel industry creates \$717 million per year in local and state tax revenue. This tax revenue funds Alabama's infrastructure and programs.
- · Every 2 iron and steel jobs in Alabama creates 10 more jobs throughout the supply chain.

Alabama's iron and steel roots, going back 150 years, were based on the need to construct railroads, skyscrapers, bridges, and in the production of cast iron pipe which advanced public health through clean water across the nation and around the world. Today, that remains constant, and we also produce thousands of automobiles each day and other products necessary for America's high standard of living.



Alabama Iron and Steel. It's What America is Built On.











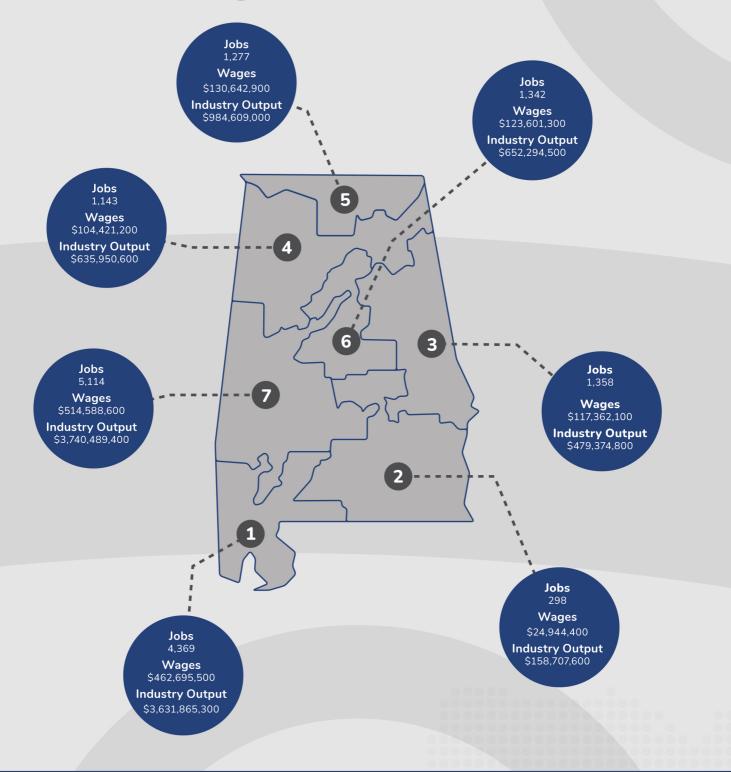








Industry Metrics by Congressional District



Sources:

American Iron and Steel Institute: The Economic Impact of The American Iron and Steel Industry:
Alabama. 2018. Published 2020

 $\label{lem:u.s.bureau} U.S.\ Bureau\ of\ Labor\ Statistics, "About\ the\ PRIMARY\ Metal\ Manufacturing\ Subsector.", 2021, www.bls.gov/iag/tgs/iag331.htm.$

 $\label{eq:decomposition} Data~USA,~Deloitte,~Datawheel,~"Iron~\&~Steel~Mills~\&~Steel~Product~Manufacturing.",~2021,~datausa.io/profile/naics/iron-steel-mills-steel-product-manufacturing.$

 $EVRAZ, Brian Kristofic, 2016, \\ http://d3n8a8pro7vhmx.cloudfront.net/erinweir/mailings/195/attachments/original/Cleaner_Steel_November_2016.pdf$

