



# *The Bessemer Process*

BY NIKKI



***Who invented it?***  
***What was it?***  
***Why?***

- The Bessemer Process was first invented by Sir Henry Bessemer in the early 1850's
- It was a way to efficiently melt metals in less time and cut off laborers
- It was created since metals were needed to build such as, other inventions, buildings and railroads.

# *Problems and Consequences*

During the process of melting iron there were two main set-back that caused major problems for the inventors

Phosphorus: Caused sticking of light-gage (thickness) sheets when used to attach steel. It also increases cracking in welds which is very important when building railroad tracks which benefited the forming of the Industrial revolution.

Sulfur: Lowers the ductility (Measure products ability to crack under pressure). It also causes the metals to have a higher chance to get destroyed easier in the future

Together they lower the toughness of the steel and causes it to be really brittle.

## ***Solutions then and now***

Then: The biggest change that was made back around 1877 was the lining on the inside. The reason why it was change was since the fireclay lining the originally used couldn't take away the phosphorus and the sulfur which were damaging the metals.

Now: The changes that have happened now were addition of flux hoppers, gas flues and coking coal

## *Future views*

When I think about how it would look in the future, I think of a more efficient way to melt more metal at one time. It would have a pipeline of burners, 5 burners each pipe and have gas flues that bring the gases released from melting and convert it into fuels so that the gases won't just go into the atmosphere and pollute the air. By that I mean since there are ways to convert greenhouse gases into useable fuels it should be a way to power melting metals.

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