How is slag created?

Step 1
Steel slag is created in the smelting process. It is a by-product of the steel-making process. The process separates out steel from its impurities. The impurities are what we know as steel slag! Although an impurity, steel slag is now a preferred product and a valuable construction material.

Step 2
During this process, slag occurs as a molten liquid melt. The recycled metal is heated to over 2750 degrees Fahrenheit creating a molten liquid melt! Nothing we want to touch right away!

Step 3
This melt is a complex mix of silicate and metal oxides. Silicate is a salt that contains both silicon and oxygen while metal oxides are chemical compounds formed between metals.

Step 4
Once it is cooled and solidified, the slag takes various shapes and sizes. Depending on its final use, slag may take many different forms. Steel slag can be left uncrushed, blended with other natural rocks and sands or crushed!

Step 5
Slag is ready to be used! Before the 20th Century, slag was most commonly used as the support bed for railroad tracks. Currently, millions of tons of slag are produced and used annually in the United States.