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Stump the Grump

Did you know that the hole in a soda can pop-tab is meant to be used as a straw holder?



Bauxite to Beer

Aluminum has been unknowingly used for thousands of years. Aluminum comes from bauxite. It takes about four tons of bauxite to produce two tons of alumina, a powdery white oxide of aluminum, (Alcoa). The Persians used bauxite rich with alumina to create sturdy pottery. The Egyptians and Babylonians used it in cosmetics, fabrics, and medicines. However it wasn't until 1808, when Sir Humphry Davy proved the existence of aluminum and gave it its name. Over the next 60 years different processes to extract alumina (aluminum) from bauxite were discovered, decreasing the cost of aluminum from \$545/pound to \$17/pound, the same cost as silver. Accounting for inflation, today that would be about \$14,000/pound down to \$500/pound! Royals and wealthy families were the only ones who could afford to make silverware, crowns, and other goods from this material.

This semi-precious metal piqued the attention of a

gentleman by the name of Charles Martin Hall. He studied this material at length and in 1886 created an economic way to extract alumina from bauxite. By 1893 Hall's discovery drove the price per pound of aluminum down to 74 cents (about \$18 by today's standards).

Soon tea pots, auto parts, electric wires, cables, and utensils were all made from aluminum. In 1907 Hall changed the name of his company from the Pittsburgh Reduction Company to the Aluminum Company of America or Alcoa for short. Today Alcoa is the leader in manufacturing of aluminum products.



The aluminum can, however, was created in the late 1920's early 1930's to hold beer. The first aluminum can was actually a bi-metal can, meaning these cans had a steel top and

bottom and the middle was made of aluminum. These cans required a 'church key' to open them as the original beverage containers didn't have a pop top or pull tab. It's said that the inventor of the pull tab, Ermal Cleon Frape, "found himself without a church key while on a family picnic. He resorted to piercing his beer can on the fender of his car, and in the process lost much of the can's contents (Aluminum Association)."



Church Keys / Can Openers

It wasn't until Prohibition that cans held other liquids besides beer. The aluminum can that we use today, was introduced by Coors for the first time in 1959. At this time Coors was offering the first incentive to recycle these cans; one cent for every can brought back to the brewery (the Aluminum Association).

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Recycling Aluminum

According to Alcoa, the aluminum can is infinitely recyclable. This means it can be used, recycled, and turned back into a new can endlessly. In fact, an aluminum beverage container can be recycled and back on the store shelf as a new container in as little as 60 days!

Because it takes so much bauxite to produce a small amount of aluminum, recycling is a very important part of its life cycle. It takes 95% less energy to make a can from recycled aluminum, than from raw materials. In fact, recycling one aluminum can saves enough energy to power a TV for 3 hours! The Aluminum Association states that cans on average contain 70% recycled content.

Unfortunately, a 2013 study done by the Aluminum Association, CMI, and ISRI, found that \$815 million worth of aluminum cans were not recycled in the United States. Instead these aluminum cans ended up in landfills where they will never break down. This is due to the lack the oxygen needed to for items to decompose, which holds true for all materials that go to a landfill.

On the bright side, though, the Aluminum Association does report that 113,000 cans are recycled every minute! Another interesting fact is that aluminum cans are the number one recycled household generated material. Here in Dunn County many residents sell or donate aluminum cans.

As a result, fewer cans come in for recycling at the Transfer Station or Area Collection Stations, so Dunn County Solid Waste only recycles a couple of tons each year.



Dunn County Solid Waste Division

Lastly, did you know that cat food and sardine cans are made from aluminum? Recycle these with your aluminum cans for a little extra cash or to increase your households recycling rate.

Cheers!

Cycle of a Can



A Trashy Beginning



Aluminum cans had a lot of advantages for brewers at the time. They were cheaper to manufacture and were lighter than glass. They protected the beer from light, could be filled at much higher rates of speed, and traveled well with minimum breakage. Better yet, beer cans were a no deposit, throwaway container while glass bottles were still being refilled.

As the aluminum can became the preferred retail container, glass manufacturers countered with a cheaper and lighter bottle that could be cost effective as a no-return item,

especially when the expense of transporting and washing a returnable was factored in. There was also some not-so-subtle propaganda put forth that promoted glass over aluminum as a quality and flavor issue. Premium beer always came in bottles, as did imports. Bar patrons seemed to prefer bottles as well. Used extensively, glass (to a certain degree) came to represent “higher quality” over aluminum.

An unintended consequence of the “no deposit, no return,” can versus bottle era was an exponential increase in roadside litter. When someone complained about litter, it was always the beer can that was

mentioned. The perception was the “loutish can consumer” drank while driving and threw the empty out of the car (or pickup truck) window, not the “more responsible and sophisticated bottle consumer.” There were plenty of bottles in the ditch, too, but cans were considered the culprit.

Read the full article at: <http://www.anchorbrewing.com/blog/beyond-the-bottle-craft-beer-in-cans/>



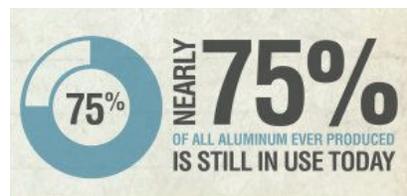
Kruegers, the first canned beer.

Al the Can

Meet Al, the Aluminum Can. He was created by the Can Manufactures Institute to educate and encourage the general public to recycle their aluminum cans. I'd say they've been pretty successful, he has over 90,000 Facebook friends!



Al would like you to know:



“The wilderness is no place for a can. Don't forget to recycle!”