Guinness

The birth of the widget

Traditionally, Guinness is a draught beer, poured slowly from taps in pubs with a technique that produces a creamy foam sitting on top of the dark brown ale beneath. It has been loyally enjoyed since 1759—so imagine the frustration of Guinness executives as they watched other brewers making fortunes from canned beer, while theirs was only available in pubs, or bottles that delivered a vastly inferior version. Guinness could not follow suit because, poured from a regular can or bottle, Guinness failed to get that magical foamy surface—so to sell it in a can would be like selling a cappuccino without the froth.

Guinness is less fizzy than regular lager-style beers because it contains less carbon dioxide; instead, it contains a shot of nitrogen, which produces tinier bubbles, resulting in a creamier, thicker froth. The nice head is formed in pubs because it is poured slowly from a specially designed tap, which agitates the nitrogen as it passes into the glass. Pouring it from a regular can or bottle does not agitate the gas sufficiently.

How to get the same effect from a can? It took Guinness five years to come up with the answer, during which time it tried virtually any method it could think of, including pouring beer through nylon stockings, and through a spout lined with sandpaper.

The answer was a device costing only a few cents to produce: a plastic "widget" created by two Guinness researchers, Alan Forage and William Byrne, which liberated Guinness from pubs and into cans around the world. Forage and Byrne's patented solution, also called a "smoothifier," was a little hollow plastic cylinder with a tiny

hole in it, which was placed at the bottom of the can. When the can was then filled with beer and pressurized, beer was forced though the tiny hole and into the widget. Opening the can, though, instantly returned the beer to atmospheric pressure—apart from the beer stuck inside the widget, which then spurted out through the hole and into the main body of the can so forcefully it injected millions of nitrogen and carbon dioxide bubbles into the rest of the beer. That produced an effect Guinness called "the surge," and formed the trademark creamy head once the beer was poured into a glass.

Guinness launched the new cans nationally in Britain in 1989, selling 49 million in the first year and making it Britain's sixth most popular take-home beer brand by 1991. After three years on the market the product had sold 200 million units and become a best-seller in numerous overseas markets including the United States.

Subsequent improvements to the widget resulted in today's free-floating version, a plastic ball not unlike a Ping-Pong ball with a tiny hole in the side, which can be heard rattling about inside the can. The company now makes around 338 million can widgets a year, and another 78 million bottle widgets.

For the brand's next trick, Diageo, which now owns Guinness, is attempting to crack the Japanese bar market with a gizmo called the Surger. Japanese bars often don't have enough room to install the usual equipment required to pour draft Guinness. So now they can pour the beer from a regular tap, then place it on a bar-top device that uses ultrasound to stir up the bubbles in a pint of Guinness and create the much-desired creamy head before the customer's very eyes. So far, Diageo has installed Surgers in 6,000 outlets, claiming a threefold increase in the amount of beer sold as a result, and is now considering "surging" into other markets.

REFERENCES

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