



Heartland Science

Ohio's Legacy of Discovery & Innovation



Materials

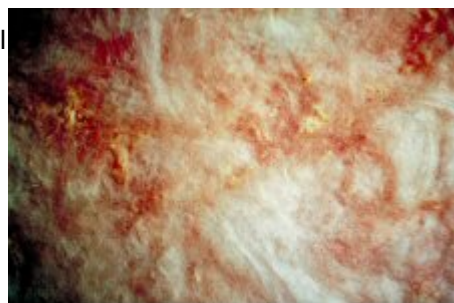
From Pottery to Plastics

Father of Fiberglas

In 1938, Games Slayter (1896-1964), a scientist with the Owens-Illinois glass company in Toledo, Ohio, invented a process for spinning molten glass into fine, thread-like fibers. At the time, Owens-Illinois was anxious to develop new products to increase sales, which had slowed during the Great Depression, and to use more of the company's glass-making capacity.



During his time at Owens-Illinois, Slayter noticed how small amounts of molten glass were stretched into glass fibers when the glass was pulled through openings in a melting furnace. From this, Slayter invented fiberglas, which was first manufactured by Owens-Corning, where Slayter was up for research. The material is said to have been originally called "glass wool."

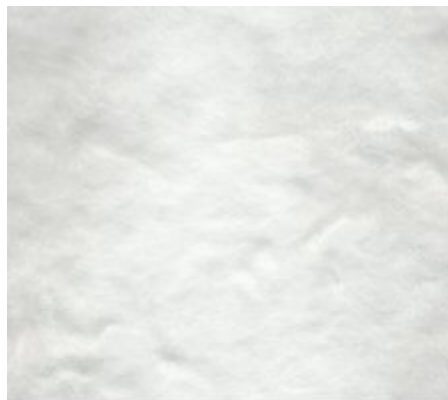


Often called "the Father of Fiberglas," Slayter secured over 100 patents that impacted industries ranging from agriculture to manufacturing to home construction.

Fiberglas Goes To War

In 1929, the U.S. Navy Bureau of Ships selected Owens-Corning insulation as the standard insulation for all horizontal and vertical spaces in all new warship construction. The war was an opportunity for Fiberglas to perform as an insulating material. In addition, it was a chance to showcase the capabilities of Fiberglas reinforcements and yarns. The war also inspired development of other Fiberglas products such as bonded mat, battery separators, staple wire insulation, and sewn-blanket and metal-mesh-blanket insulation.

One interesting application of Fiberglas was in the fabric used in parachute flares. On moonless nights, military aircraft dropped flares ahead of bombing runs to help crews identify the correct targets. The flares needed small parachutes to slow their descent. However, the traditional silk parachute material burned easily. Fiberglas fabric proved more effective because it was both fire-resistant and light-weight.



By the end of 1939, Owens Corning reported \$3.8 million in net sales and employed over 1,000 people. Since then, the company has grown to \$5 billion in sales and 20,000 employees.

What's New?

Owens-Corning has recently reinvented Fiberglas insulation at its research lab in Newark, OH. The new product - MIRAFLEX® Insulation - has exclusive, randomly twisted fibers that make the insulation cottony soft. It's virtually itch-free, so handling and installation are much easier than ever before. Compressed when packaged, it expands when installed, which makes transportation simpler too.

Did You Know?

- "Fiberglas," spelled with one "S," was first used as a trademark of Owens-Illinois in January, 1936, on all Owens-Illinois glass fiber products.

Find out more...

- [Owens Corning History](http://www.owenscorning.com/acquainted/about/history)
(www.owenscorning.com/acquainted/about/history)
- [Owens Corning: Profile of Slater](http://pressroom.owenscorning.com/fertile_minds.html)
(http://pressroom.owenscorning.com/fertile_minds.html)