Interface

Hearing Customer Needs

Starkey partnered with Phillips-Medisize to decorate parts used in the Zon™ with BluWave™ SP series of hearing aids that blend cutting-edge technology and exquisite design.

A Leader In Evolving Technologies

Molded in a chemical-resistant nylon, the Zon™ parts in Phillips-Medisize's program required Plasma Surface Treatment prior to painting. Phillips-Medisize invested in its relationship with Starkey by researching, testing, and ultimately purchasing the Plasma Surface Treatment equipment. As a result, Phillips-Medisize met the Starkey timeline, gained a valued customer, and acquired the knowledge and tools required to alter the surface energy of, and thereby paint, the material.

Phillips Medisize

Partnerships Built on Innovation

Starkey Zon™ with BluWave™ SP

In the United States, in-the-ear (ITE) hearing aid devices have dominated the market for decades. At the same time, open-fit, behind-the-ear (BTE) devices have been equally popular throughout Europe. In recent years, demand for these BTE devices has increased among North Americans.

To meet this demand, Starkey created the Zon™ with BluWave™ SP series – the first hearing aid, ever, to blend cutting-edge technology and exquisite design. Starkey touts Zon™ as the only receiver-in-canal hearing solution in its class positioned to offer extraordinary beauty, ultimate comfort, and best-in-class performance. Its BluWave™ Signal Processing (SP) system allows Zon™ hearing aids to be made as small as possible, while optimizing performance in challenging listening situations – in a restaurant, driving a car, or listening to a child's voice.

In addition to its numerous functional assets, Zon™ features a curved, elegant shape, cool finish, and sophisticated color palette to complement and match hair and skin tones.

Starkey and Phillips-Medisize

Starkey dedicates innovative engineers, programmers, scientists, and researchers to further advances in hearing aid functionality. With its own state-of-the-art manufacturing facility, Starkey is an industry leader in hearing-instrument manufacturing.

While searching for a vendor to paint parts in their Zon™ series, Starkey selected Phillips-Medisize Corporation. Precision decorating, which Starkey required, is one of Phillips-Medisize's many capabilities.

According to Jim Grossmann, director of mechanical engineering at Starkey, "Our design goal was to bring the best technology with high-quality styling. While we have the capability to perform molding in house, Phillips-Medisize brought decorative painting and chrome plating capabilities to the table."

The Challenge

The nylon resin of choice for the Zon™ series features tremendous strength characteristics, as well as excellent chemical resistance. Paint, however, is a chemical. "Any material exhibiting chemical resistance, resists paint adhesion," explains Andre Oldberg, project engineer at Phillips-Medisize. Therefore, the initial focus of Phillips-Medisize's program with Starkey was trying to get paint to stick to their parts.

While Phillips-Medisize has vast experience painting polycarbonate resins, they hadn't painted Starkey's choice of chemical-resistant nylon in the past. "We tried to paint it, and no matter what type of paint we used, it continually flaked off," says Oldberg.

About Starkey

Founded in 1967, Starkey Laboratories, Inc. is a world leader in the design, development, and distribution of comprehensive hearing solutions. They believe in using superior hearing technology as a means to something even greater – creating meaningful connections between people and their worlds.

With 35 facilities in more than 24 countries around the globe, Minnesota-based Starkey is an industry leader in hearing instrument manufacturing. They create top-quality diagnostic equipment, hearing protection products, wireless technology, and unique hearing solutions for every environment.

The Solution

Ultimately, Phillips-Medisize and Starkey concluded that in order to paint the select material, its inherent surface energy needed to be changed. Phillips-Medisize enlisted the help of a California-based supplier that performed Plasma Surface Treatment.

"Once the Plasma Surface Treatment method proved itself, we invested in our partnership with Starkey by purchasing our own Plasma Surface Treatment equipment," says Oldberg. Housed in Phillips-Medisize's Medford, Wisconsin facility, the equipment enables Phillips-Medisize to perform all decorating-related tasks for the parts in their Starkey program.

A Continuing Partnership

"The Zon™ program was the first time Starkey required precision decorating on its product," says Grossmann. "Partnering with Phillips-Medisize enabled us to meet our design objectives and achieve a successful launch of the product, which has been very well received in the marketplace."

"While the Zon™ program has been a huge success, the most gratifying outcome for me is the relationship formed between Starkey and Phillips-Medisize," says Oldberg.

In addition to decorating parts for Starkey, Phillips-Medisize handles the company's extensive Zon™ replica program, which involves creating non-working hearing-aid models for product demonstration purposes.

"We've been happy with Phillips-Medisize's performance and our continuing partnership," says Grossmann.

Contact Phillips-Medisize: phillipsmedisize.com / (877) 508-0261