Leonhardt finds tungsten molding solution

By David Vink
Plastics News Correspondent

Hochdorf, Germany-based Leonhardt e.K. is using a compound made from up to 95 percent tungsten metal powder and a polyetheretherketone (PEEK) binder for metal injection molding (MIM) of collimator lenses.


Leonhardt

These have precise 0.1- to 0.15-millimeter-thin walls and 460 conical openings and are used to guide beams and also shield computer tomography equipment against X-rays.

The company tried using selective laser sintering to make the prototypes. Although those prototypes had the required precise dimensions, surface roughness was too high and could not be overcome by electrochemical polishing sintered parts.

So it was decided to injection mold the parts, using filigree mold inserts, to achieve the necessary finished surface. Company owner Wolfgang Leonhardt said the PEEK binder was essential to provide the abrasive metal powder with the required high degree of flowability to make it at all possible to injection mold.

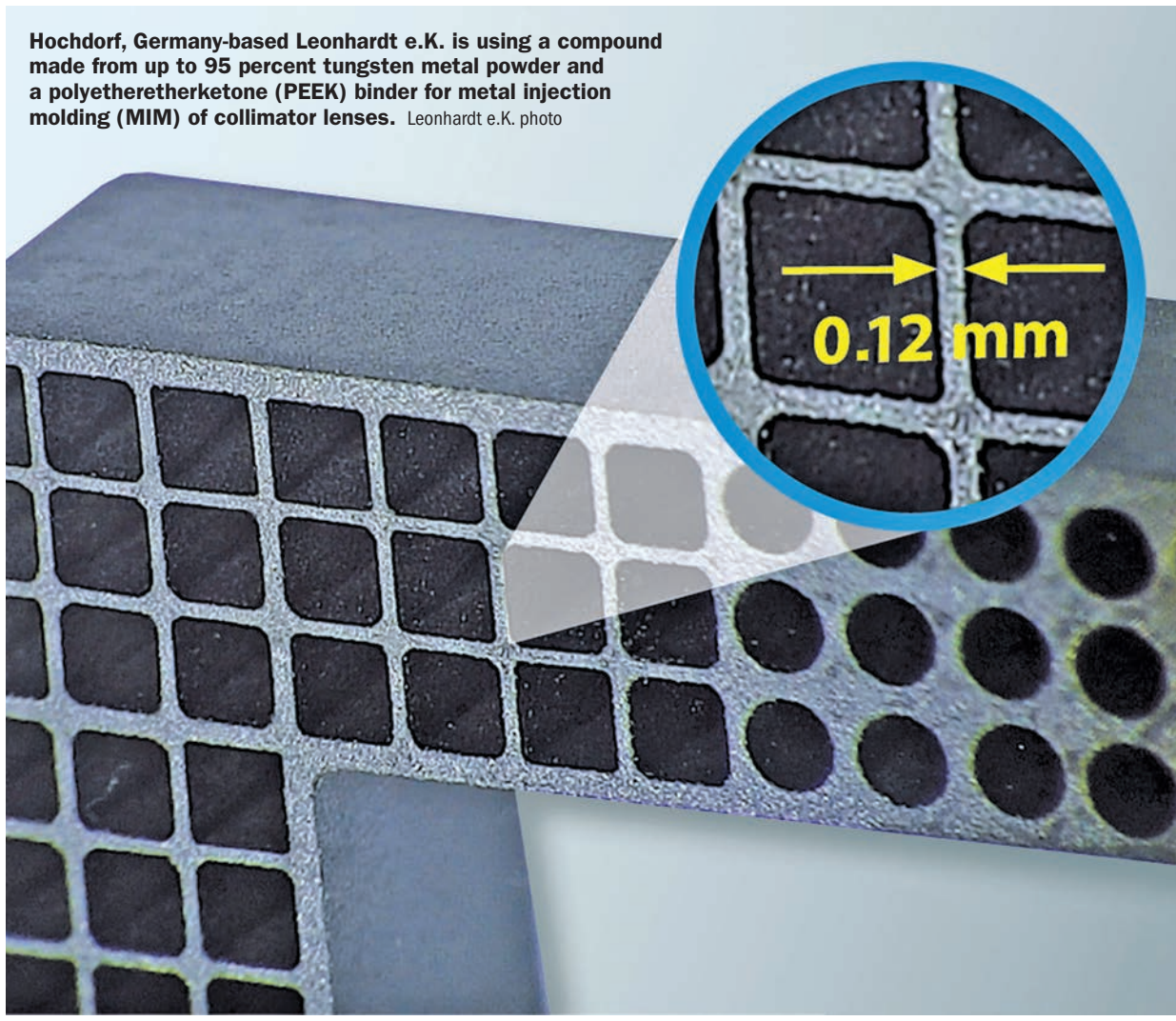
Leonhardt said his company is presently the only one with capability of processing tungsten metal powder in this way.

While the collimator project is presently on hold, the company's experience with tungsten/PEEK molding has benefited a project at Stuttgart University. That project addresses challenges of molding and bonding together of different ceramic materials via injection molding to join structural, high-temperature-resistant and conductive parts. Such components are required in high-frequency surgery.

Obtaining high bond strength between materials is one issue. Another is to apply mold tool construction features and appropriate additives to condition the materials in such a way that they shrink synchronously under the heat while the delicate components are sintered.

Leonhardt said the multicomponent molded ceramic parts in medical equipment "not only combine the properties of the individual components, but are also easy to disinfect, due to high heat, acid and abrasion resistance."

Using its three Arburg injection molding machines, Leonhardt has also started work in Hochdorf with molding tungsten/PEEK compound into fuel cell membrane plates.



Hochdorf, Germany-based Leonhardt e.K. is using a compound made from up to 95 percent tungsten metal powder and a polyetheretherketone (PEEK) binder for metal injection molding (MIM) of collimator lenses. Leonhardt e.K. photo

Vanacker named LyondellBasell CEO

By Frank Esposito
Plastics News Staff

Plastics and chemicals veteran Peter Vanacker will become CEO of materials giant LyondellBasell Industries this year.

Vanacker currently serves as president and CEO of Neste, a renewable energy firm based in Helsinki. He previously served as CEO of chemicals firm CABB Group and plastic films maker Treofan Group. Vanacker's additional experience includes a stint at Bayer AG — now Covestro — where his roles included leading the firm's global polyurethanes business.

At Houston-based LyondellBasell, Vanacker will replace Bob Patel as CEO by June, officials said in a Dec. 13 news release. Executive Vice President Kenneth Lane will serve as interim CEO during the transition period.

"Peter's outstanding leadership and industry experience made him the board's choice in an exceptional field of candidates who were considered as part of the comprehensive search process," Chairman Jacques Aigrain said in the release.


Vanacker

He added that the board "is confident that [Vanacker's] success in delivering value to shareholders, along with his strategic and forward-thinking mindset, will serve the company well as we continue to drive growth and advance our climate and circularity goals."

Vanacker said in the release that he's "thrilled to join LyondellBasell at such an exciting time for the company."

"I have long admired [LyondellBasell] as an industry leader in technology, product innovation and, more recently, circularity. Pulling from my own experiences, I will strive to build on the company's momentum and work to continue offering great value to shareholders while advancing the company's sustainability goals."

Patel retired from LyondellBasell on Dec. 31 but will join chemicals firm W.R. Grace & Co. as CEO in January. Patel joined LyondellBasell in 2010 and has served as CEO since 2015. Prior to that, he had spent 20 years with Chevron Phillips Chemical Co. and its predecessor businesses.

LyondellBasell ranks as a global leader in production of polyethylene and polypropylene resins and as North America's largest plastics compounder. The firm has operations in more than 100 countries and posted sales of $27.7 billion in 2020.

Obituary: Machinery executive Thomas McKevitt

Plastics News Report

Oak Lawn, Ill. — Thomas McKevitt, vice president at Shibaura Machine Co. America, died on Dec. 12. He was 60.

McKevitt had been with Shibaura since 2002, including stints as general manager of the injection molding division and as a national sales manager. In his most recent position, he led strategy, business development and operations for the injection molding division.


McKevitt

"Tom will be fondly remembered for his intellect and finding joy in learning new things, while teaching others around him," the Elk Grove Village, Ill.-based company said in a news release. "He was hardworking, always engaged with colleagues and had a penchant for providing a listening ear to customers. The leadership and commitment he provided our organization was invaluable and impacted both employees and customers alike."

McKevitt was a graduate of Marist High School and Western Illinois University. He is survived by his wife, Joanne, and three children. Services were held Dec. 17.

In lieu of flowers, memorial donations may be made to support the Northwestern University Feinberg School of Medicine GI Cancer Research & Education Fund, c/o Northwestern University Development & Alumni Relations, 420 E. Superior St., Rubloff 9th Floor, Chicago, IL 60611 or feinberg.northwestern.edu/giving.

ProAmpac buys flexible packaging, label maker Prairie State

By Frank Esposito
Plastics News Staff

Packaging leader ProAmpac put another gift under its Christmas tree, acquiring Prairie State Group for an undisclosed price.

The deal is the eighth of the year for Cincinnati-based ProAmpac. Prairie State Group is a maker of flexible packaging and labels based in Franklin Park, Ill.

In a Dec. 20 news release, ProAmpac officials said that the acquisition "strengthens [the firm's] flexible and sustainable packaging offerings for the food and pet food markets and expands its labeling capabilities."

Products made by PSG include wrappers, pouches, compostable film, roll stock and pressure-sensitive labels. PSG's founders and management team will remain with the business post-transaction.

"As we continue our growth and expansion strategy, PSG's world-class manufacturing capabilities, strong market position and commitment to product quality will enhance our offering to customers around the world," ProAmpac founder and CEO Greg Tucker said in the release.

PSG President Graham Redding added that PSG's expertise in labeling, pouching and compostable products "is a great fit with ProAmpac's offering of sustainability-focused packaging solutions."

The PSG deal is ProAmpac's first since November, when it acquired Irish packaging suppliers Fispak Ltd. of Dublin and Irish Flexible Packaging of Wicklow. Both of those firms had been owned by IFP Investments Ltd.

ProAmpac has grown to nearly 50 locations around the world and 5,800 employees since Pritzker Private Capital of Chicago acquired the firm in 2016. Management and other co-investors also have a stake in the firm.

ProAmpac ranked ninth among North American film and sheet makers in the most recent *Plastics News* industry ranking, with annual sales estimated at just over $1 billion.