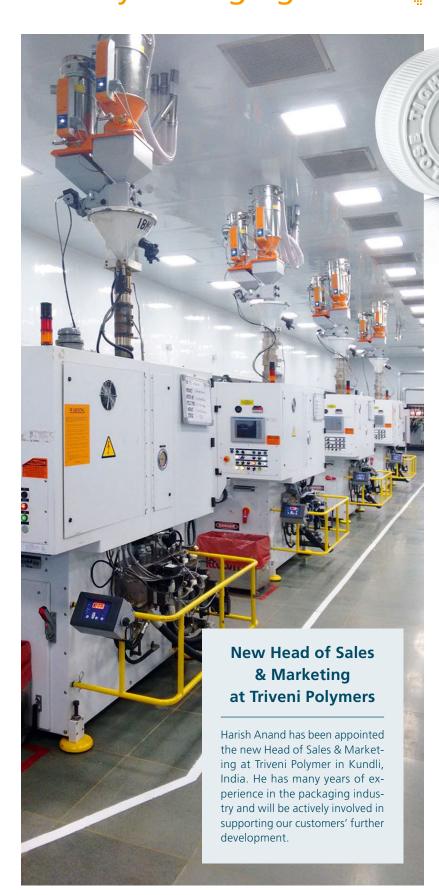
UPDATE Primary Packaging India

GERRESHEIMER

Customer Newsletter
June 2018



Partnership to produce preferred CR closures for the U.S. market

For many years VBC has been our partner in producing CR (child-resistant) closures with liners for our bottles. VBC is the leading manufacturer of CR closures for the pharmaceutical industry in the U.S. and has been for more than four decades.

The partnership was brought to the next level in 2015, with the patent-protected designs of the excellent VBC closures now being produced at our facility in Kundli.

Currently we have full scale-capacity for 33 mm and 38 mm CR closures and are further expanding to include 28 mm closures in response to market needs. As part of our production process, the caps are assembled, lined, cleaned, and visually inspected.



High-quality glass primary packaging for the whole world

Gerresheimer owns two plants at its Kosamba site in India that produce pharmaceutical packaging whose quality conforms to the most stringent international standards: Neutral Glass and the new Gerresheimer Pharmaceutical Packaging Mumbai factory. Neutral Glass manufactures moulded glass products for the pharmaceutical industry. The plant will soon receive a new high-performance furnace for making type I glass. Gerresheimer's recently constructed plant manufactures vials and ampoules using tubular glass.

ISO 15378 certification for the new plant in Kosamba

"Our new plant in Kosamba produces ampoules and vials made from borosilicate glass to the same high standards as apply in Europe or the Americas. All of our production and inspection



OUR MOULDED GLASS PLANT

- Founded in 1989
- Serum bottles, intravenous bottles, injection bottles, pharmaceutical jars, nail polish bottles
- Clear and amber glass
- Type I borosilicate glass und type III glass
- 4 furnaces
- ISO 9001
- DMF Type III
- Other moulded glass production sites in Europe and the Americas for risk mitigation

processes are standardized and certified world-wide," says Saibal Sengupta, Director Sales, who is always on hand to advise customers looking for a suitable solution for their drug.

The new plant is certified in accordance with the following standards: ISO 9001:2015, US DMF Type III, and Health Canada (DMF). Recently it was also awarded the ISO 15378 certification. ISO 15378 applies to primary packaging that comes into direct contact with medication. Suppliers of primary packaging for pharmaceutical products benefit from the fact that the standard incorporates all the relevant GMP requirements and facilitates compliance with international, European, and national law.

Rebuilding the furnace for type I glass at Neutral Glass

"Constructing a new furnace for type I glass will significantly enhance our quality," says Sachin Sule, Head of Sales & Marketing for Moulded Glass. In India Gerresheimer manufactures clear and amber glass infusion and injection bottles from type I borosilicate glass. The company also produces type III glass containers for a large number of medications. The production line at this factory is certified in accordance with DMF (Drug Master File) type III requirements.

OUR TUBULAR GLASS PLANT

- Founded in 2016
- Vials made from borosilicate glass type I and glass type II
- Ampoules made from borosilicate glass type I
- Clear and amber glass
- Expansion coefficient 33 & 51
- Sizes from 2 to 30 ml
- Crimp neck, screw neck, printed and aluminium sulfate treated
- ISO 9001-2015
- DMF Type III
- US, EP, JP compliant
- Proprietary visual inspection systems:
 Gx® RHOC for dimensional gauging and
 Gx® G3 for cosmetic inspection
- Other tubular glass production sites in Europe and the Americas for risk mitigation

Increased interest in products produced in India on the very quality-sensitive Japanese market

The Japanese market is probably the toughest market in the world for producers of pharmaceutical packaging as customers' quality requirements are extremely high.

In cooperation with its local partner Namicos, Triveni has begun to promote and sell its products in this demanding market.

"Being able to promote and sell our products in Japan once again highlights our commitment to quality and the ultimate quality and thorough documentation of our products," says Subodh Gupta, Managing Director.

Start-up production of our Indian containers in the U.S.

Our successful Triveni plastic containers, equipped with the tried-and-tested induction sealing liner to serve as TE-protection, will now also be produced in the U.S. to the same high level of quality as in Kundli, India. The products will be produced in clean-room production, which is unusual for manufacturing of solid packaging in the U.S. Gerresheimer has started producing the Triveni containers at its plant in Berlin, Ohio, and is currently able to supply 30, 50, 60, 75, and 100 ml containers. "These containers are in high demand in the U.S. market and, with our expertise and standard of operation, we expect production to be a great success," says Niels Düring, Global Executive Vice President Plastic Packaging.



Standard database with product specifications for all standard products