

KlecherTube™ Technology

Airless • Recyclable • Effortless Squeeze

Next-Generation Flexible Tube Packaging for Extruded, Laminated & Molded Tubes (Single & Dual Chamber)

Protected by 11 U.S. Patents with Additional U.S. & International Patents Pending

KlecherTube™ Technology:

- ❖ KlecherTube™ is a patented airless tube technology that transforms conventional packaging into a high-performance, user-friendly dispensing system. Compatible with standard tubes and closures, it serves a wide range of industries including cosmetics, personal care, pharmaceuticals, food, and industrial products.
- ❖ It provides a superior, effortless squeezing experience while delivering precise control of product dispensing.
- ❖ The technology uniquely enables accurate dosing from single tubes and precise proportioning from dual chamber tubes - without syringes, pistons, or complex mechanisms.
- ❖ By eliminating air re-entry, KlecherTube™ prevents oxidation and preserves product freshness from first to last use.
- ❖ KlecherTube™ integrates seamlessly into existing manufacturing processes with minimal cost impact, offering a scalable, sustainable, and high-value packaging solution.

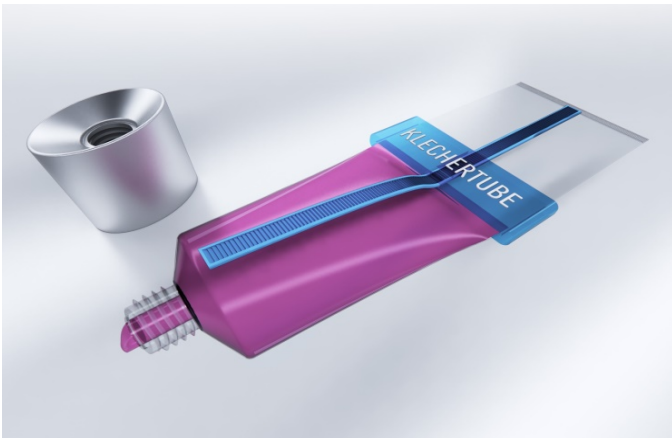
High-Viscosity Dispensing Advantage

- ❖ KlecherTube™ technology enables dispensing of high-viscosity and high-density formulations.
- ❖ Unlike tube pump systems, which are limited to low-viscosity products due to flow resistance and clogging, KlecherTube™ ensures consistent and controlled dispensing regardless of formulation viscosity and density.
- ❖ Expands application range for cosmetic, pharmaceutical, and industrial products.

Where Sustainability Meets Innovation: KlecherTube™

- ❖ *Makes Recyclable Tubes Truly Usable.* Unlocks effortless squeezing for rigid, eco-friendly materials like HDPE and PP - eliminating the trade-off between sustainability and usability.
- ❖ *Boosts Real-World Recycling Adoption.* Encourages greater use of recyclable tubes by improving consumer experience and functionality.
- ❖ *High Impact. Low Cost. Scalable.* A practical solution that integrates easily into existing production processes while supporting global sustainability targets.

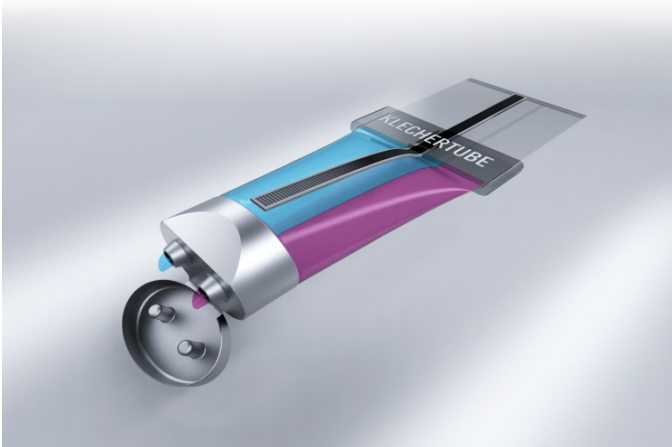
**KlecherTube™ Is Not Just A Slight Improvement Of The Flexible Squeezable Tube
– It Is An Absolute Game Changer With Great Competitive Advantages!**



KlecherTube

Features a pusher and a grooved strip (track) permanently integrated onto the tube surface, enabling smooth, one-way ratcheting movement. As the pusher advances, a built-in tooth locks into the grooves, preventing any backflow and ensuring consistent product dispensing.

KlecherTube can be customized to fit tubes of any shape and size.



Dual Chamber Tube

KlecherTube™ technology enables precise and consistent co-dispensing of formulations from dual or multi-chamber tubes. Even when formulations have different viscosities and densities, the system ensures accurate proportioning, delivering predictable and repeatable dosing with every use.



Molded Tube

Molded tube technology is an ideal fit for KlecherTube, with the grooved track formed directly during tube fabrication - eliminating any secondary operations. The cost remains comparable to standard molded tubes, while In-Mold Label (IML) technology can be seamlessly integrated into the manufacturing process.



Track & Pusher

Track:

- is welded to the tube after artwork is done.
- its color can communicate with tube art work.

Pusher:

- can be customized in design and color to match tube sizes and artwork.
- creates new and distinctive branding opportunities.
- can be reusable or disposable.

Track and pusher are produced from recyclable materials and can be efficiently manufactured using injection molding.