DELRIN® CASE STUDY

**Delrin® – for surgical devices**

# Delrin® reduces risk of failure in surgical devices

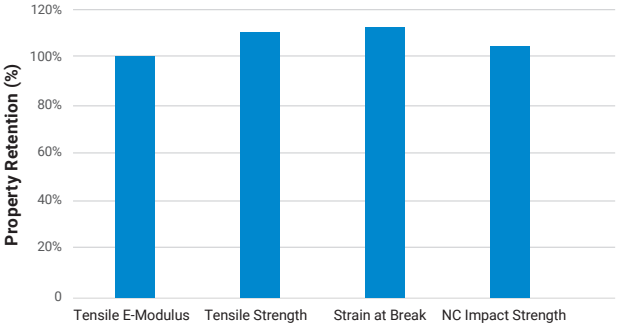
A leading surgical equipment producer replaced PC/ABS with Delrin® to enhance the strength and impact toughness of handle components.



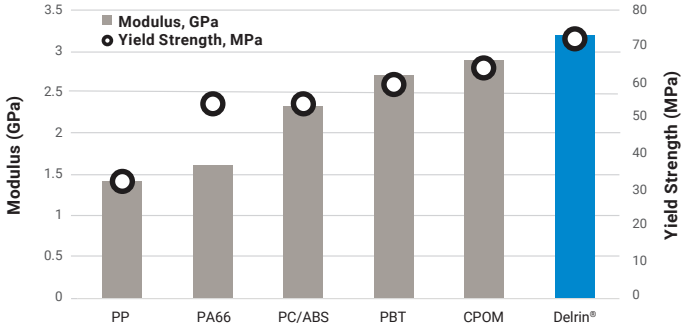
## What did the customer gain from Delrin®

- Resistance to 75% alcohol disinfectant, ensuring no environmental stress cracking.
- Enhanced impact toughness to pass 1m device drop testing from four angles.
- High strength to withstand long-term loading without need of glass reinforcement.
- Exact dimensions for superior fit and function of parts.
- Excellent fatigue resistance to endure >10,000 reciprocating cycles.
- Good property retention following high-temperature steam sterilization.
- Cost-effective and easy to process versus other alternatives, such as PPSU.

**Property retention of Delrin® SC631 after 25 cycles of steam sterilization**




**The stiffest and strongest unreinforced engineering polymer**




Superior mechanical performance provides the rigidity and load-bearing capability required for reusable surgical instrument handles, while Delrin® SC631 retains key mechanical properties after repeated steam sterilization, ensuring consistent performance across the device lifetime.

**Delrin – Engineering the Future, Together**

To learn more, contact your Delrin representative or visit **Delrin.com**.

Delrin® is an industry-leading premium industrial polymer business. Grounded in strong innovation, Delrin is a category creator with a longstanding reputation for quality, reliability, supply and product performance. The iconic Delrin brand, coupled with proprietary technology and deep application expertise, make us a leader in the high-end engineering polymer market. Delrin has exciting growth prospects from exposure to automation, actuation, healthcare, mobility and consumer applications.

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