

# CASE STUDY

## COMPLEX MOLDING & ASSEMBLY



### THE APPLICATION

- Rechargeable wireless root canal handpiece with integrated irrigation and suction channel
- Environmentally friendly, reusable/recyclable component

### THE CHALLENGE

- Developing a single-use wireless surgical handpiece at an economic price point
- Multi-material component assembly with tight tolerances
- Complex supply chain management

### SAINT-GOBAIN SOLUTION

- Design for Manufacturability (DFM) at the component level to simplify the overall assembly to reduce cost
- Management of the supply change, sourcing components, and integrating the assembly

Saint-Gobain was able to support the customer, not only in molding, but in designing for manufacturability (DFM) across the full assembly. Our engineering team provided DFM input at the component level, helping optimize geometry, material selection, and interfaces across multiple parts.

By refining the design, we helped reduce complexity, control costs, and improve the overall robustness of the process and final device. We assumed responsibility for sourcing the multiple components and managing sub-assembly — streamlining supplier management for the customer and reducing risk during ramp-up.

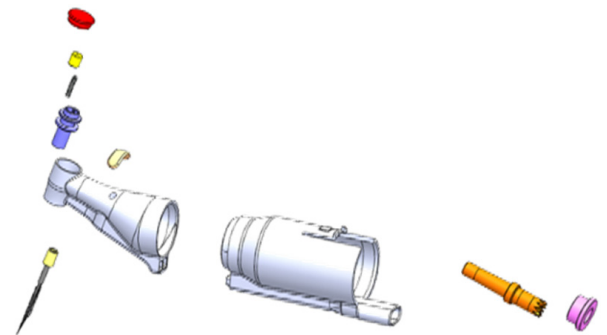
Our collaborative approach enabled the customer to realize their vision of a recyclable and reusable root canal handpiece, advancing sustainability in dental care. Saint-Gobain Medical helped accelerate development, simplify production, and deliver a reliable, scalable solution for a technically demanding, high-innovation product.

Saint-Gobain Medical can help **develop solutions to transform** your business.

Our customers rely on our **expertise to implement tailored solutions** that significantly improve their operations and set the stage for future success.

**Contact us today** to start your journey towards optimized results and lasting success.

Design for Manufacturability (DFM)  
at the component level



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