



apiject™

## ApiJect™ Technology Development Center

ApiJect is a U.S.-based, medical technology company using Blow-Fill-Seal (BFS) manufacturing to revolutionize how the world fills, finishes, and delivers injectable pharmaceutical drugs and sterile liquids.

The ApiJect Technology Development Center in greater Orlando, Florida is focused on helping pharmaceutical companies prepare their drug product for high-speed, high-volume production in a new type of scalable prefilled syringe that is made largely using the Blow-Fill- Seal aseptic process.

**Design, Testing, and Engineering services to help put your drug product in an ApiJect-designed BFS prefilled injector.**

- Drug Product Compatibility Testing
- Prototype BFS Mold Design & Manufacturing
- Blow-Fill-Seal Filling for Prototype Container Testing
- Blow-Fill-Seal Device Development
- Commercial Mold Design Maintenance
- Commercial Blow-Fill-Seal Container Testing
- Drug Product Feasibility Filling
- Blow-Fill-Seal Operator Maintenance

### Expertise and Machinery

#### Our Experienced Industry Leaders

- In-house expertise in BFS manufacturing and device design/engineering with the ability to rapidly provide proof-of-concept and small-scale manufacturing.
- BFS experts, device engineers, computer numerical control (CNC) machinists, and scientists, each with at least 15 years of field-related experience.

#### Our Best-in-Class Machines and Utilities

- Machine shop with Hurco® 3-axis milling machines for prototype BFS mold design and production.
- Weiler Lab+ BFS machine for small-scale BFS evaluations (<5,000 containers per hour).
- Rommelag® 434 BFS machine for medium scale BFS evaluations (>5,000 containers per hour).



## Planned Future Expansion

As of March 2023, the ApiJect Technology Development Center has expanded from its existing 16,000 square feet footprint to a 32,000 square feet freestanding facility. This expansion provides additional infrastructure space to further ongoing research and development, as well as to better support our pharma partners' device development efforts.

## Unlocking Blow-Fill-Seal for Prefilled Injectables

The ApiJect Platform is a device design and manufacturing process that can make scalable, prefilled, single-dose formats for a wide-range of biologics and other sterile pharmaceutical liquids.

By bringing together a prefilled BFS container with a push-attach Needle-Hub – or other drug delivery system – the pharma partner receives all the manufacturing efficiency and scale benefits of the aseptic BFS process with convenience and simplicity of a prefilled injector.



## Harnessing the Scale and Economics of Blow-Fill-Seal

Blow-Fill-Seal (BFS) is a globally-trusted aseptic packaging technology where the pharmaceutical-grade plastic container is made, filled with the liquid drug product, and sealed in a rapid, continuous process. One larger BFS machine is able to fill-finish up to 15MM doses a month.



### Extruding

The polymer parison is extruded from granulated resin and positioned inside the open mold.

### Blowing

The mold closes and, in doing so, welds the base. Sterile air is blown into the parison to create the desired shape.

### Filling

The exact amount of filling as measured by the dosing system is fed into the container via the mandrel.

### Sealing

Once the mandrel is removed, the head mold comes together to form the desired closure type.

### Demolding

Opening the mold releases the container from the system and the next cycle begins.