

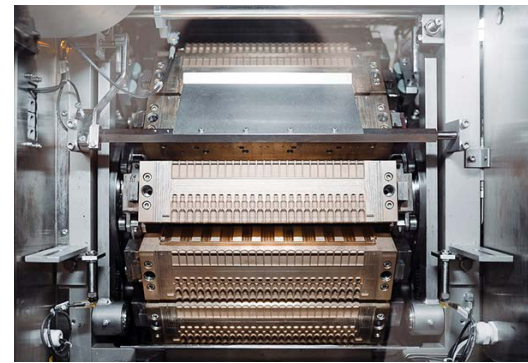
Blow-Fill-Seal Manufacturing

KEY BENEFITS

- **Product Integrity**
- **Enhanced Safety**
- **Quality Fill-Finish**
- **Low Overfill Rate**
- **Compact Supply Chain**
- **Robust Surge Capacity**
- **Changeover Speed**

At the center of ApiJect’s technical solutions is Blow-Fill-Seal (BFS), an FDA-recognized, advanced aseptic fill-finish process.

The efficiency of BFS allows for any size order, large or small, to be fulfilled with reliable quality at high speeds and volumes. Because BFS makes and fills polymer containers, such as low-density polyethylene (LDPE) and polypropylene (PP), those containers can be formed into nearly any size volume and shape.



APIJECT IS REIMAGINING INJECTABLES

Our experts focus on providing the optimal solutions for your needs and increasing your efficiency.

- **Mold and Device Customization**
Our rapid, economically efficient processes for prototyping and R&D utilize CAD and 3D printing, often enabling us to take an initial concept to a successful prototype.
- **Manufacturing / Licensing**
We can also license our proprietary standard mold designs, enabling customers to outsource manufacturing and/or to fill-finish on their own BFS line.
- **ApiJect Technology Platform**
Our platform creates a fast and easy process to formulate and fill your drug product into our Prefilled Injectors. We have designed BFS production lines and secondary packaging lines to be ordered and assembled in preset, modular units which can then be customized to your needs.



- **Technical Consulting**

Our experts can work with your team to determine which BFS machines, molds, secondary packaging machines, and other equipment will meet the specific requirements of your product.

BFS AS A SOLUTION FOR COMPLEX FORMULATIONS

Advances in aseptic BFS have enabled an increasingly wide range of large molecules to be successfully produced using BFS technology, making it suitable and qualified to handle most drug products. More than 100 parenteral preparations have come to market finished in BFS, ranging from simple saline solutions to complex formulations, such as biologicals and vaccines, including mAbs, with stability results equivalent to glass vials.

CONTROLLING DRUG TEMPERATURE THROUGHOUT ASEPTIC BFS FILLING

ApiJect can use a variety of processes to manage the temperature of the drug product throughout the BFS process, allowing for filling across a wide range of drug product types. ApiJect's processes and container design cool the liquid drug product faster than the typical BFS process and container via several methods, including containers with thin walls that absorb less heat; cooling the drug just before filling; cooling the molds; special handling procedures during post-manufacturing handling and packaging; and reducing the drug product / surface area (thus subjecting drug product to less heat).

MEET OUR TEAM

To learn more about ApiJect's technology using Blow-Fill-Seal to package sterile pharmaceuticals and other liquids, contact one of our experts at solutions@apiject.com.



Beth Totin

Chief Commercial Officer



Philip Leslie

Head of Manufacturing



Jeff Price

Principal BFS Engineer

FOR MORE INFORMATION:

Blow-Fill-Seal:
visit apiject.com/publications/BFS

Manufacturing:
visit apiject.com/publications/manufacturing

Company:
visit www.apiject.com