



**THE WILLIAMS - CARVER COMPANY, INC.**

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**[www.williamscarver.com](http://www.williamscarver.com)**

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 **Where Ideas Meet Industry**



## WCB-Flow Products

Specialty Equipment for  
the Pharmaceutical Industry



## Pumps Designed Specifically for Pharmaceutical Needs

- \* EHEDG Certified
- \* Pumps Meet BPE Standards
- \* Detailed Documentation Packages
- \* Full Traceability of components
- \* Enhanced Surface Finishes
  - Mechanical polish to 15 Ra
  - Electropolish
- \* Specialty Materials and Processes
  - 316L and Duplex stainless steel wetted parts
  - "Machined from bar stock" centrifugal pumps
  - USP Class VI animal-free elastomers available
  - Silicon Carbide standard seals



## Centrifugal Pumps for the Pharmaceutical Industry

SPX's all-machined centrifugal pumps provide the highest quality stainless components for demanding pure water, CIP and other process applications.

### S-200 Centrifugal Pump – *Designed Specifically for Pharmaceutical*

- \* Machined from bar stock
  - Lower ferrite content to reduce rouging
  - Improved surface finish
- \* On-line Material Test Reports
- \* Robust JM motor
  - Larger shaft and bearings
  - Eliminates impeller shaft
- \* 20Ra standard surface finish (15 Ra available)
- \* Optional casing drain minimizes dead leg



### LR Liquid Ring Pumps– *Ideal for CIP return*

- \* Vacuum capability removes more cleaning fluids
- \* Robust JM motor
  - Larger shaft and bearings
  - Eliminates impeller shaft
- \* Machined from bar stock
  - Lower ferrite content to reduce rouging
  - Improved surface finish
  - 20Ra standard surface finish (15Ra available)



## **P**ositive Pumps for the Pharmaceutical Industry

SPX offers the industry's widest selection of pharmaceutical positive pumps. This allows customers to select the design most appropriate for their particular application.

### **Johnson Top Wing** – *For Ultra-Hygienic Applications*

- \* Bi-Wing rotors
- \* Fully swept interior surfaces
- \* Unique duplex stainless steel shafts and rotors minimize thermal expansion
- \* Over-sized shafts in duplex material decrease deflection
- \* Large diameter bearings extend service life
- \* All stainless steel construction
- \* Front-loading mechanical seals
- \* One-piece body and shaft housing
- \* Standard 20Ra internal surfaces
- \* Flat, recess-less cover
- \* Fully drainable seals and surface areas
- \* Extended lubrication intervals



### **Waukesha Universal II Biopharm** – *For Premium Efficiency*

- \* ECP rotor design produces highest efficiency
- \* Gentlest handling of shear sensitive materials
- \* Waukesha's most popular pump
- \* Optional stainless steel gear case



### **Waukesha Universal Lobe** – *For Economy*

- \* Tri-Lobe rotors
- \* Reduced pulsation
- \* Competitive pricing
- \* Simple assembly
- \* Ideal for handling particulates





## BPE Fittings for the Pharmaceutical Industry

- \* On-line Material Test Reports
- \* Extensive inventory
- \* Comply with all BPE standards



## Tubing

- \* Rath tubing in 316L
- \* Polishes to 10 Ra
- \* Electropolish
- \* Full documentation



## Special Fabrications

- \* Full AutoCAD support
- \* Fast turnaround
- \* Experienced staff



**SPX**®

PROCESS EQUIPMENT

Your local contact:



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SPX Process Equipment

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For more information about our worldwide locations, approvals, certifications, and local representatives, please visit [www.spxpe.com](http://www.spxpe.com).

SPX reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Certified drawings are available upon request.



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