

Solutions for Photovoltaics Manufacturing

For Production Tools & Process Applications

- » Gas Delivery Systems
- » Liquid Chemical Delivery Systems
- » Custom Engineering



ENGINEERING YOUR SUCCESS.

Uniquely equipped to pioneer solar technologies

Since the inception of the semiconductor industry, Parker Hannifin Corporation has been a leader in the development and production of high purity manufacturing solutions. Now, because of similarities in the needs of the Solar industry, Parker is uniquely equipped to pioneer solar specific solutions.

Our most valuable assets are our experienced and dedicated work force. Our engineering and manufacturing staffs have decades of experience working directly with fabricators as well as OEM tool suppliers. Since the establishment of silicon processing technology we have been helping companies to achieve their goals of increased profitability and competitiveness in a rapidly changing world.

World-Wide Distribution

Since Parker Hannifin's founding in 1918 we have been growing as a global force in the motion and fluid control industry. This long history has resulted in a vast global network of distributors, manufacturing facilities, sales staff and field engineers whose main purpose is to support your product needs. Please visit our website at www.parker.com for a listing of Parker representatives near you.

Gas Systems

Parker Hannifin's Veriflo Division, located in Richmond, California, is the leading manufacturer of high purity and ultra high purity gas flow control devices and assemblies. These products are used to control high purity gases that are integral to the manufacture of photovoltaic cells, semiconductor wafers / chips, and flat panel displays. Veriflo products are also used by Original Equipment Manufacturers (OEMs) within these industries. Veriflo has maintained industry leadership for over 95 years through the use of innovative engineering, manufacturing, and quality customer care.

Broad Product Range

Most comprehensive line of high purity and ultra high purity gas flow control devices for the PV industry:

- » Mass Flow Controllers
- » Bulk Gas Valves
- » DISS Cylinder Connections
- » Diaphragm Valves and Bellows Valves
- » Single and Dual Stage Pressure Regulators
- » Check Valves

Broad Materials Range

Everything from Ultra-High Purity Stainless Alloys to Industrial Grade Materials.

To find out more about our gas delivery systems solutions, please call (510) 235-9590.

Liquid Chemical Systems

Parker Hannifin's Partek Operation, located in Tucson, Arizona, has a long history of innovation in the ultra high purity (UHP), chemical delivery market. Partek specializes in the design and manufacture of flow components produced from virgin grades of high purity thermoplastics. Our extensive knowledge of materials and manufacturing results in industry leading designs which provide many advantages to our customers. Our fluid control solutions enable end users to increase their throughput, ensure chemical purity, and to reduce expensive downtime in the exceedingly cost conscious world of solar cell production.

Extensive Material Knowledge

Our facilities can manufacture everything from ultra-high purity Fluoropolymer to Industrial Grade Plastics:

- » PFA/PTFE Diaphragm Valves
- » PFA tube fittings
- » Check, Needle, Ball, Plug, and Stopcock Valves
- » Pressure Regulators
- » Custom Manifolds

Application Specific Materials

Understanding the needs of the solar industry means offering a wide variety of materials to suit specific applications. For a complete list, please call us at (520) 574-2600.



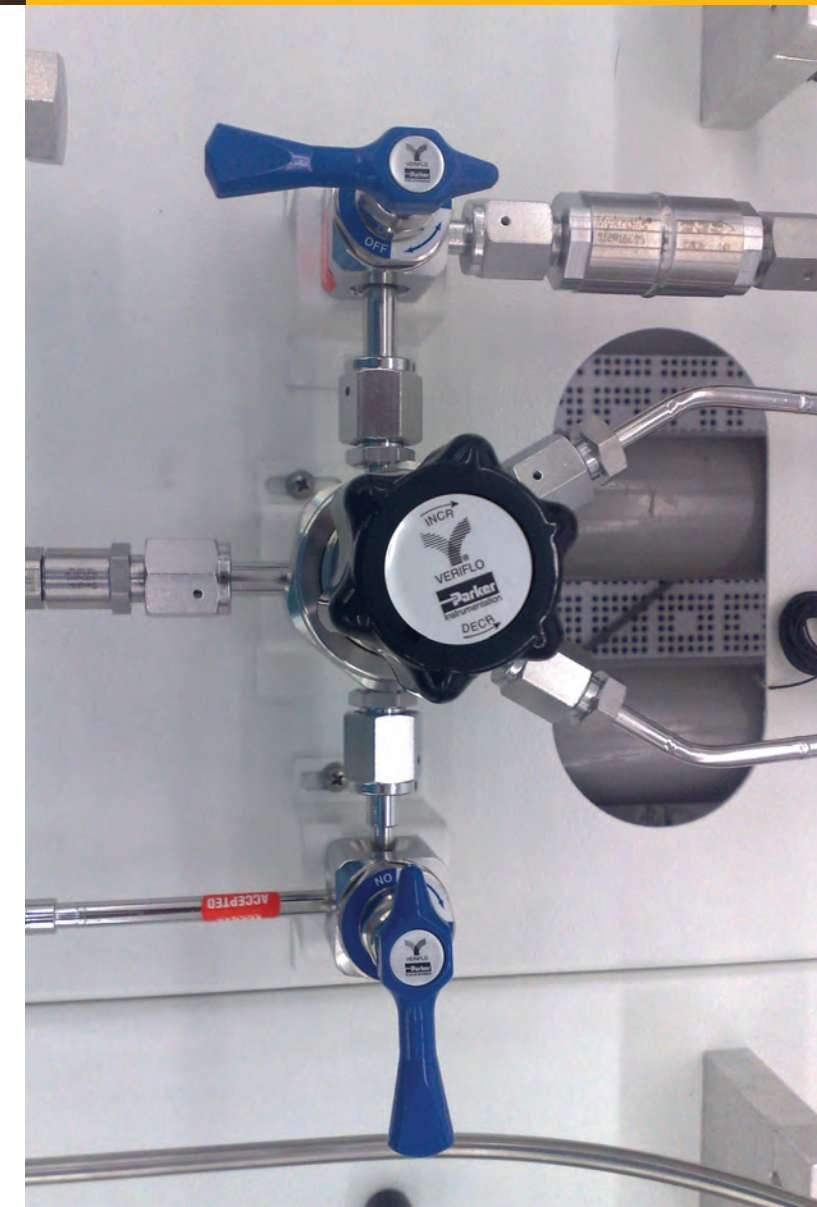
Custom Engineering

Capabilities Include:

- » Computational Fluid Dynamics (CFD)
- » Finite Element Analysis (FEA)
- » Diverse Fluid Laboratory Testing
- » Rapid Prototyping
- » 3-D Modeling

Parker Hannifin's long tradition of providing fluid control solutions to the world has resulted in our focus on advanced methods of design and manufacture. We encourage our design engineers to work closely with your design and manufacturing staffs. This working relationship contributes to rapid design of components that meet or exceed your expectations. From 3D models, finite element analysis (FEA), to computational fluid dynamic studies (CFD), we have the tools to help you improve your fluid handling designs.

To find out more about our custom engineering solutions, please call us at (520) 574-2600.



For Gas Delivery Systems

Parker Hannifin Veriflo Division

250 Canal Boulevard
Richmond, California 94804 USA

Phone: (510) 235- 9590

Email: Veriflo.Sales@Parker.com

Web: www.Parker.com/Veriflo

For Liquid Chemical Delivery Systems

Parker Hannifin Partek Operation

7075 East Southpoint Road
Tucson, Arizona 85756 USA

Phone (520) 574-2600

Email: PartekSales@Parker.com

Web: www.Parker.com/Partek

For Tubing Products

Parker Hannifin TexLoc

4700 Lone Star Blvd.
Fort Worth, Texas 76106 USA

Phone: (817) 625-5081

Email: TexLoc@Parker.com

For Automation Products

**Parker Hannifin Electromechanical
Automation Division**

5500 Business Park Drive
Rohnert Park, CA 94928 USA

Phone: (800) 358-9068

Email: EMN_Support@parker.com

Web: ParkerMotion.com/Solar

