

Landfill Gas Well Pump Evaluation Guide

From  **QED** Manufacturer of AutoPump Landfill Pumps

What to look for in a landfill gas well pump.

Standard 5-Year Warranty.

QED offers a standard 5-year warranty on the AP4 because we have the experience and data to know we can back it up. No other pneumatic pump manufacturer offers a standard warranty longer than 1-year. Some pump manufacturers do not even publish their warranty period. A manufacturer's warranty is a strong indication of the pump's overall durability. Some of our customers have estimated that the total cost of removing a pump from a well twice for maintenance can equal the total purchase price of the pump.

Experience.

Today's AutoPumps have over 23 years experience and refinement built in. The same successful basic design has been retained, but then steadily improved by the industry's largest, most experienced team of engineers and service experts, dedicated to continuous improvement based on real-world experience.

Application Expertise.

One pump doesn't fit all applications. That's why the AP4 is offered in specialized models to fit specific applications, based on our experience at hundreds of landfills and remediation projects around the world. We have AP4 configurations for high temperatures, high and low pH, high viscosity fluids, high dissolved solids and for high concentrations of various aggressive chemicals.

Service After The Sale.

QED believes it is very important that we be able to quickly analyze and respond to a customer's concern, whether it be a site related issue (chances are, we've seen it before) or answering a quick technical question. The folks in QED's customer service department have over 140 years of combined experience with QED landfill pumps.

Materials Of Construction.

Some manufacturers attempt to cut costs by using a loose mix of material grades. QED selects pump component materials very carefully to fit the application. QED pump component options include premium materials such as SS316, Hastelloy-C and titanium. This same philosophy of using the right materials for the job also applies to the AP4's non-metal components.

Float materials – some manufacturers fabricate their floats out of such inferior materials that they actually have to ship their pumps with internal packing foam to prevent the float from breaking during shipment.

Air Efficiency.

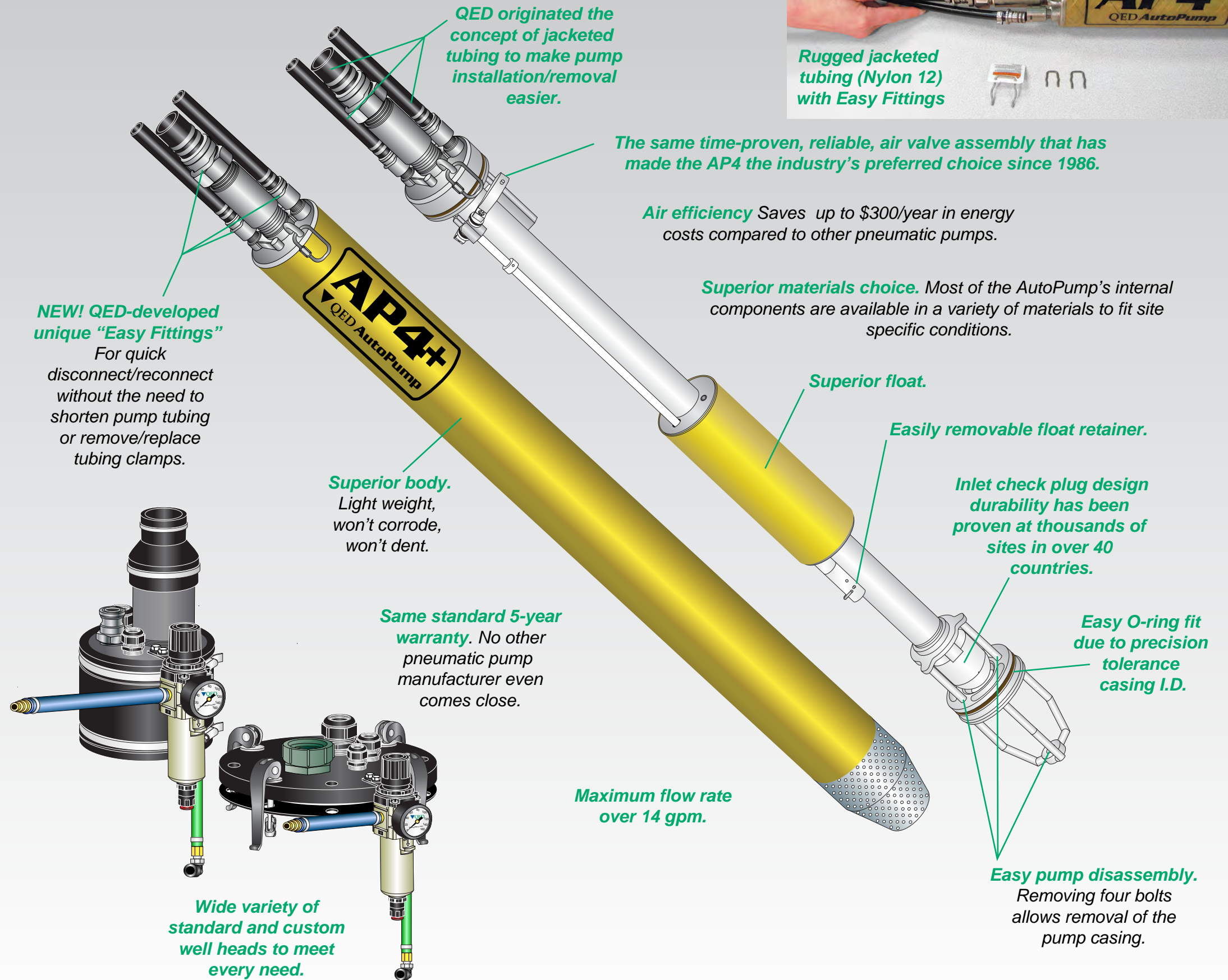
One of the many not-so-obvious, but important, complexities involved in the design of pneumatic pumps is air efficiency; i.e., how much air is required to pump a given volume of liquid. The more air that a pump uses, the more electricity is required to run the air compressor. Compared to other pneumatic pumps, the QED's AP4 AutoPump can save approximately \$300 per year in energy costs.

Worldwide Local Assistance.

With factory trained sales and service representatives in 50 states and six continents, QED has you covered before and after the sale.

Read about some of the details in this guide and call QED to learn more, if you like, at [1-800-624-2026](tel:1-800-624-2026) or visit our web site at: qedenv.com

Superior Landfill Gas Well Pump Design Elements



Rugged jacketed tubing (Nylon 12) with Easy Fittings

The same time-proven, reliable, air valve assembly that has made the AP4 the industry's preferred choice since 1986.

Air efficiency Saves up to \$300/year in energy costs compared to other pneumatic pumps.

Superior materials choice. Most of the AutoPump's internal components are available in a variety of materials to fit site specific conditions.

Superior float.

Easily removable float retainer.

Inlet check plug design durability has been proven at thousands of sites in over 40 countries.

Easy O-ring fit due to precision tolerance casing I.D.

Easy pump disassembly. Removing four bolts allows removal of the pump casing.

Maximum flow rate over 14 gpm.

Superior body. Light weight, won't corrode, won't dent.

Same standard 5-year warranty. No other pneumatic pump manufacturer even comes close.

Wide variety of standard and custom well heads to meet every need.

NEW! QED-developed unique "Easy Fittings" For quick disconnect/reconnect without the need to shorten pump tubing or remove/replace tubing clamps.

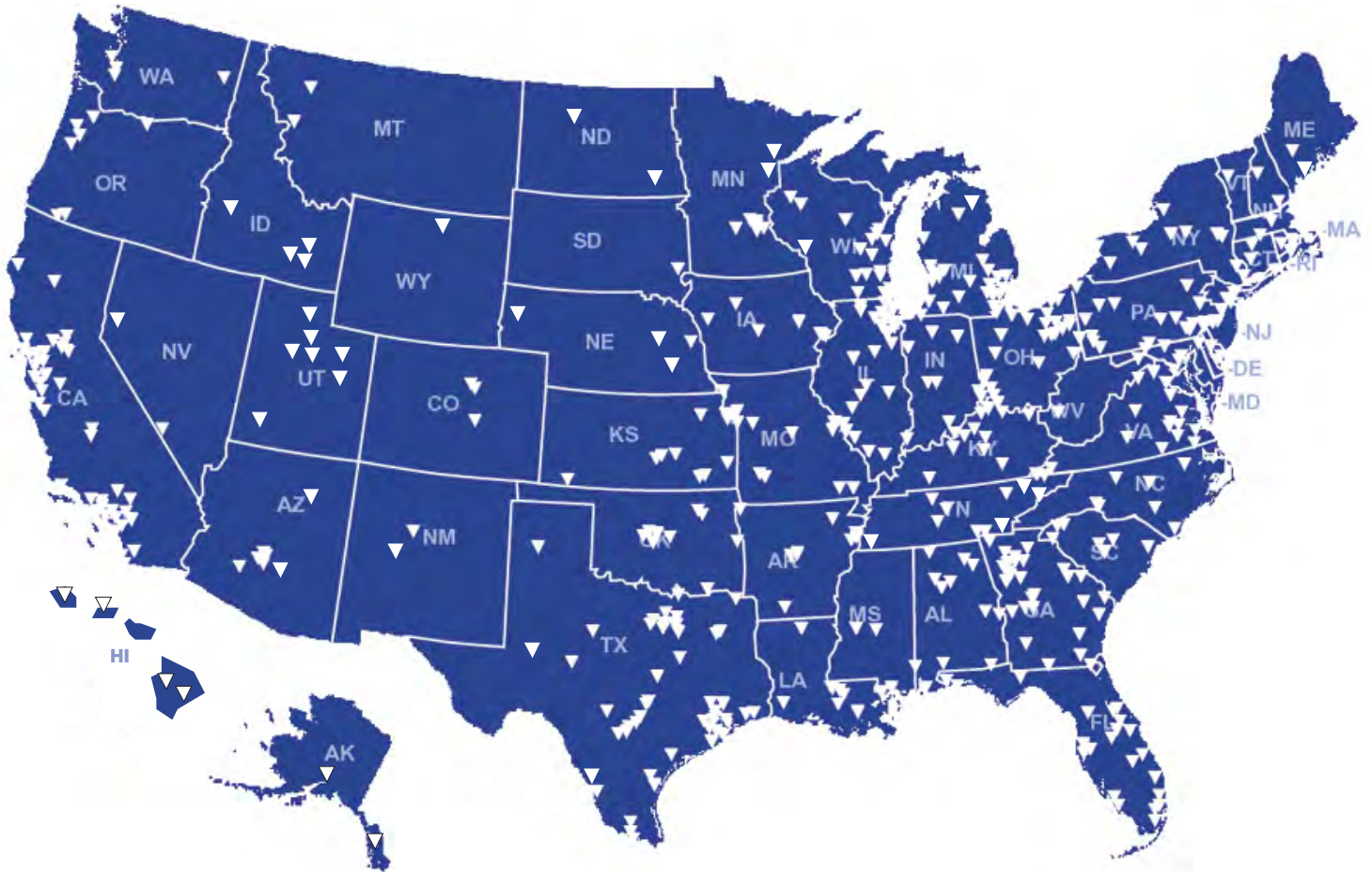
QED originated the concept of jacketed tubing to make pump installation/removal easier.

Landfill Gas Well Pump Comparison Checklist

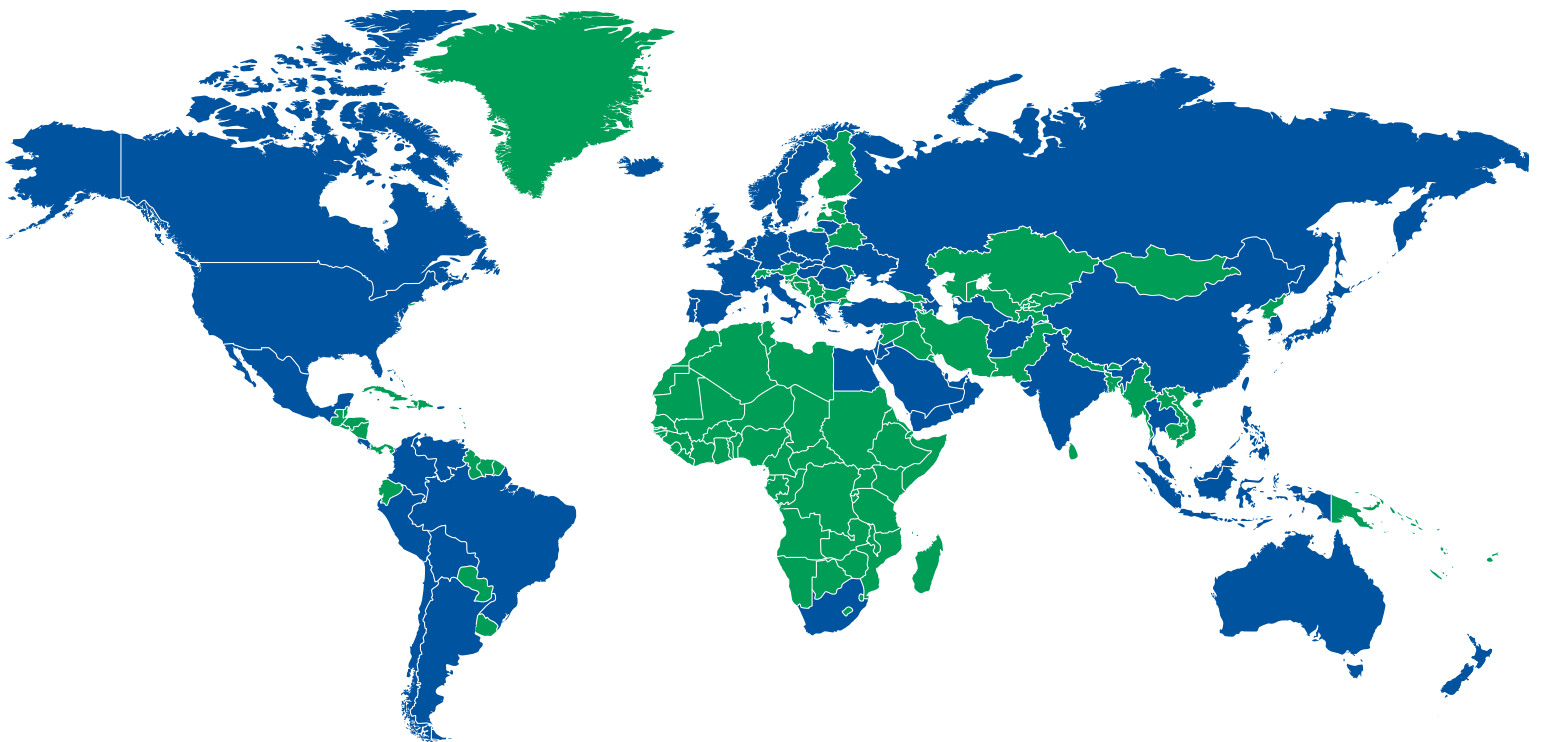
Pumps	QED	Other
1. #1 in proven long-term pump reliability , based on actual performance for over 27 years?	YES	
2. Standard five-year published pump warranty?	YES	
3. Proof of reliability , based on 24 years of field experience with the same time-proven landfill gas well pump design?	YES	
4. Maximum flow rate in excess of 14-gpm with actual pump curves?	YES	
5. Low-drawdown (Sub-Title D - 12" Action Level) pumps available?	YES	
6. Wide variety of materials of construction for challenging applications such as high temperatures, high-low pH, corrosive environments, high viscosity, depths to 400 feet?	YES	
7. Proven durable float material?	YES	
8. Decades-proven air valves which operate reliably without the need for protective screens that are prone to clogging?	YES	
9. Pumps removable with easy-disconnect fittings designed for easy installation and service?	YES	
10. System options that include other exclusive innovations such as the "Easy Bolt" for quick flange removal and replacement?	YES	
11. Proven pump design which does not allow corrosion/scale to prevent pump disassembly?	YES	
12. Engineered design optimized to minimize air use/energy consumption?	YES	
13. Field-proven design to maximize preventive maintenance intervals/minimize O&M costs?	YES	

Customer Support	QED	Other
14. Number of factory staff for site-specific questions or system design?	23	
15. Number of experienced, factory-trained field representatives for local assistance and training.	39	
16. Number of OSHA-certified field service technicians for installation and troubleshooting?	9	
17. Combined factory staff pump experience of over 1,300 years?	YES	
18. Available 24/7 Technical Support Hotline?	YES	

QED has equipment at over 500 landfills in the United States...



and installations in over 75 countries (blue).



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Accessories:

- *Flow Counters*
- *Wide Range of Well Head Types*
- *Easy Bolts*
- *Easy Fittings*

Best Service/Support in the Industry

A phone call or email into QED sets up quick delivery of a system matched to your needs by experts.



EASY BOLT

Flange access is made easy with QED's Easy Bolts that latch open and closed.



EASY FITTING

Easy Fittings let you snap together pumps and tubing and disconnect them, with no hassle or tube cutting.



Bundled Tubing

Pre-cut to length for well, fittings installed, ready to snap into the pump for fast, easy installation.

