

SPARE PARTS

BULLETIN # PVS-80021001-RSP

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Unique Systems entered the process vacuum industry in 1973 when we began manufacturing spare parts for Elliott[®] steam jet ejectors. Our precision manufacturing techniques and meticulous quality control procedures quickly earned us a "no rejects" reputation. As a result of our consistency and reliability we progressed from supplying parts to complete assemblies & small systems, shipping them directly to end-users. We ultimately acquired Elliott's vacuum technology – technical & design specifications, engineering & test data, microfilm & original mechanical drawings – *worldwide!*

We excel at producing the highest-quality replacement parts – specializing not only in vacuum equipment but close-tolerance steam turbine & compressor parts. Supplying spare parts of any kind brings us back to our roots – it's something we do superbly – and as our customer you should only expect the best! We've become a manufacturing vendor for several other "ejector OEM's" as well. *If our competitors can depend on us – so can you!*

There are also times where OEM spare parts, service & support are difficult to obtain or simply no longer available. Unique Systems has a great deal of experience refurbishing or replacing obsolete & outdated equipment. All our replacement parts are designed to meet or exceed your requirements; and, as a manufacturing supplier, **we can save you substantial time & money!**

We also offer field engineering services including start-up, performance testing & analysis, system maintenance & troubleshooting assistance and operator training (individual or group seminars).

EJECTOR VACUUM SYSTEMS

Having no moving parts, ejectors are the simplest form of vacuum pump; however, they do require periodic maintenance and repairs to maintain system performance at optimal efficiency. Unique Systems can supply anything from gasket sets, motive nozzles & diffusers, to complete replacement assemblies, ready-for-installation. Providing customers with options, whether it be material changes to extend product life under corrosive or high-wear conditions, to replacing outdated, cast iron components with fabricated replacements, we are uniquely suited to meet your needs.

We have complete information pertaining to **all former Elliott**[®] **vacuum systems** – **over 50,000 records** – including ejectors, condensers, deaerating feedwater heaters, scrub coolers, grease extractors and other ancillary products.

PUMP & HYBRID VACUUM SYSTEMS

Pump & hybrid vacuum systems are often complex and require preventative maintenance. Realizing that prevention of downtime is an important consideration, Unique Systems maintains a comprehensive inventory of the most commonly required parts; and, we have arrangements with key suppliers to provide priority delivery of non-stock components. We offer standardized rebuild kits consisting of wear-items and key components such as valve seats, seals, bearings, solenoids, gasket sets, etc. We support all of our equipment with the same approach...

Great Customer Service & Common-Sense

The Unique "VIP" Service Advantage

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DEAERATING FEEDWATER HEATERS

Our records contain complete design information and mechanical drawings for all former Elliott Deaerating Feedwater Heaters ("Deaerators"). We offer a complete line of replacement components including replacement trays & spray nozzles.



Monel & Bronze Spray Valve Assemblies for Deaerating Feedwater Heaters



DUAL TRAP ASSEMBLY

Our dual trap is used to control the removal of condensate from both the ejector inter-& aftercondenser to the main condenser hotwell. It takes the place of a loop seal & trap or two separate traps and is divided into two separate chambers. The condensate from the intercondenser drains by gravity into the right-hand chamber as seen from the discharge side of the trap. The condensate from the aftercondenser drains by gravity into the left-hand chamber. The condensate discharge is controlled by separate floatoperated valves and discharges into the hotwell of the main condenser. There are removable covers on each chamber to permit access to the valve mechanism which can easily be replaced. Replacement parts are readily available.

QUICKCHECK® EJECTOR STEAM CHEST

Unique Systems designs and manufactures its ejectors, including large, complex systems, with care and precision. Our innovation and commitment to providing only high-quality products is demonstrated by our <u>patented</u> Quickcheck[®] Ejector Steam Chest.

Inspection and maintenance of ejector assemblies has traditionally required from **several hours** to **days**, depending upon size and location of the equipment. You must isolate equipment and disconnect motive and process piping, remove the ejector stage and disassemble it. With our Quickcheck Steam Chest **this is a thing of the past!**



The Quickcheck Steam Chest's user-friendly design permits inspection, maintenance and prompt return of an ejector to service, *including replacement of the steam nozzle*, if necessary, without disassembling the entire unit! It requires the effort of only one person with an ordinary socket wrench to remove the cap on the steam chest. Each new unit includes a precision-machined **Performance Gauge Rod™** which instantly checks the critical nozzle and diffuser bores ensuring proper stage operation. Best of all, this is completed within **MINUTES!!**

The Quickcheck Steam Chest consists of a steam chest, nozzle holder and nozzle; therefore, it eliminates the need for various extensions and spacers which can easily be confused. It is designed to save valuable **TIME** and **MONEY!**

On ejector installations where routine maintenance and prevention of down-time are important considerations, users will realize the important benefits of this product.

The Quickcheck Steam Chest is available for use on most ejector assemblies. It can be retro-fit onto existing ejectors, including those by other manufacturers, and is also available for high-corrosion and high-temperature conditions.

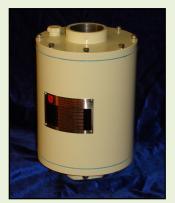
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VACUUM CONDENSATE DRAINER



One of our newest products is a variable-flow condensate drainer, which uses a "unique" variable orifice design to allow a wide range of flow, covering most capacities required for HEI venting. It is specifically designed for draining condensers under vacuum. It is <u>not</u> a steam trap! Standard construction is carbon steel body with stainless steel internals.

Please contact Unique Systems for additional details.

VACUUM PRIMING VALVE



Designed specifically for condenser waterbox priming applications, which allows air to escape while completely filling the waterbox sections, it provides a reliable, mechanical means of stopping the water from ingressing into the vacuum system. Bronze construction is standard for sea water service. Complete assemblies with bypass valve and controls are available for optimized performance.



Basic Vacuum Priming Valve & Automated Priming Valve Assembly

www.uniquesystems.com

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