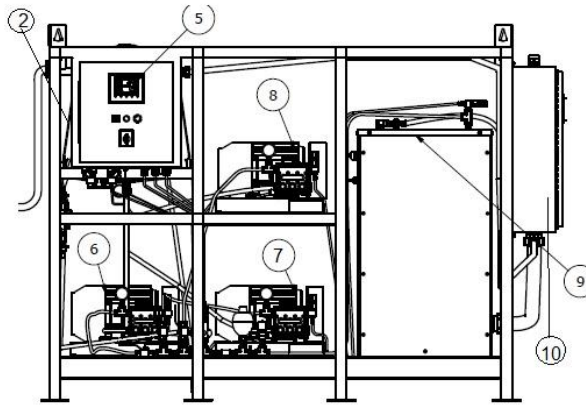


PSC PRESSURE SYSTEMS COMPANY INC.

MULTI-STAGE / MULTI PUMP & CENTRALIZED PUMPING AND PRESSURE WASHING SYSTEMS



E3S425EA3-EK24144A-460 PCO50
12gpm@2500psi w/144kw heater & 50gal tank, PLC controlled



MAIN COMPONENTS PARTS LIST

ITEM	PART NUMBER	DESCRIPTION
2	*PCO50	50GAL. WATER TANK
5	PLC	PLC CONTROL BOX
6	S425EA3 #	PUMP UNIT
7	S425EA3 #	PUMP UNIT
8	S425EA3 #	PUMP UNIT
9	EK24144 440	D. HEAT EXCHANGER
10	*SWITH DISC. BOX	MAIN POWER BOX

WHAT IS A MULTI-STAGE CLEANING SYSTEM?

Certain cleaning operations require more than one person to be cleaning at the same time. Using single operator units at each cleaning job can be expensive and places the responsibility for care of the equipment in the operator's hands.

A multi-stage cleaning system is a series of motor-pump packages connected to the same set of controls and responds to the demand for high pressure water by automatically "staging in" or starting only the number of pumps needed to meet this demand. Conversely, as the demand for water falls, the pumps "stage out" or turn off.

By locating the unit in a convenient location and plumbing it to the cleaning areas, the operator need only connect the high pressure hose / gun assembly at a cleaning station and squeeze the trigger to operate the machine, thus protecting the equipment from potential misuse.

HOW DOES IT WORK?

The high pressure water (usually between 1000 and 3000 psi) leaves the pumping unit and travels through a network of high pressure piping to the areas where cleaning is required. The termination points of the pipe are vertical drops approximately five feet from the ground and usually consist of a PSC CS-1 Cleaning Station with a quick disconnect. The CS-1 allows for the introduction of cleaning chemicals into the high pressure water stream where it is then discharged through a high pressure hose assembly with a trigger gun / wand, without effecting the overall system pressure.

The system is controlled by an automatic stop/start circuit (trigger gun activated) consisting of a flow switch wired to the pump motor control. Once the trigger gun is activated, the flow switch senses a demand for water and signals the control to start the pump motor; with hot water systems the heater is now automatically engaged. Depending on how much piping is used in the distribution system the entire process, whether one or more trigger guns are activated, usually takes place in less than a second. A timer automatically shuts off the centralized pressure washer after 10 to 15 seconds if no high pressure water is called for, preventing excessive stops/starts with multiple gun systems.

THE ADVANTAGES!

Because the centralized system is not moved from place to place, it offers the possibility of using larger pump/motor combinations for multiple outlet applications and when used in conjunction with a heater positioned downstream of the pump, will only heat the water being called for. Additionally, with the use of an electric heat exchanger, no flammable fuel source is required and the system can be installed anywhere.

A PSC centralized cleaning system allows for higher productivity and long-term cost savings when compared to portable propane or oil-fired cleaning equipment and, more importantly, offers the flexibility demanded in today's working environment. PSC Multi-Stage / Centralized cleaning systems are designed to fit your cleaning requirements, thus eliminating the need of having to adapt your cleaning requirements to an off-the-shelf machine.



2S1430EAS - 28 gpm @ 3000 psi
with high temperature pump seals and thermostatic shutdown

System controls include:

- ◆ Low inlet water pressure protection. Inlet water temperature protection. Monitors the inlet water pressure and the inlet water temperature and stalls the system when unsafe conditions are experienced. An illuminated reset button will light when this occurs. When safe levels are restored, the system can be reset and cleaning can continue.
- ◆ Complete automatic operation. Controlled by flow switches, the operator does not need to be in the same area as the equipment to operate it. When connected to a network of high pressure piping, cleaning can begin by simply connecting a high pressure hose / gun assembly to strategically placed cleaning stations, opening a ball valve and squeezing the trigger gun. Time consuming set up and relocating of equipment is eliminated. In addition the potential for misuse of the equipment is minimized.
- ◆ Selector switches. Individual pump control switches and a primary pump selector switch provide the ability to alternate which pump is to start first, as well as allowing either pump to be taken off-line for servicing.
- ◆ Motor circuit protection. Motor circuit fusing, overload protection as well as control circuit fusing are standard.

Pump system:

Continuous-duty piston or plunger pumps are belt driven by high efficiency motors. The system is flow switch activated and monitored, and includes solid state time delay shutdown to protect the system components from severe loads due to the various guns opening and closing. Regulating unloader valve(s) maintain the system pressure and Check valves are fitted on each pump unit to isolate and protect them. The system is mounted on a heavy duty, powder coated steel frame, with individual steel pulley guards. Inlet and discharge accumulators are included.

* In cases when the feed water is supplied from a holding tank, we recommend that a circ. pump be fitted to the feed tank to ensure that the high pressure pumps do not starve for water. This circ. pump may be connected to the system controls making it completely automatic as well.



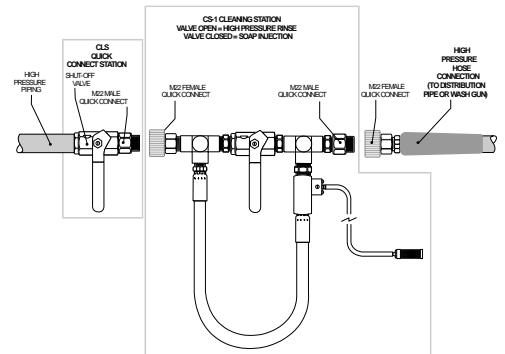
4S2010EAS - 80 gpm @ 1000 psi
with stainless steel frame, pump bases and belt

TYPICAL APPLICATIONS:

- FOOD PROCESSING FACILITIES
- PHARMACEUTICAL COMPANIES
- PULP AND PAPER MILLS
- CARGO SHIPS
- RENDERING PLANTS
- AUTOMOTIVE DEALERSHIPS
- HOTELS AND CONVENTION CENTRES
- ANY MULTI-OPERATOR CLEANING APPLICATION



3S1022EAS - 30 gpm @ 2200 psi
designed for future addition of 4th pump/motor



PSC CLS/CS-1 for remote chemical injection

FACTORY ADDED OPTIONS:

- **CLS** Cleaning Station Assembly c/w 1/2" ball valve and hose quick connect
- **CS-1** Chemical Injection Station c/w adjustable chemical injector, wash/rinse control valve and swivel connection
- **CS-1 SSB** Chemical Injection Station (as above) housed in lockable stainless steel panel box
- **LWPP** Low Inlet Water Pressure Protection
- **SA** Nitrogen Charged pump pulsation Surge Arrestor
- **SRA** Surge Relief Assembly (must be installed on domestic water supply line when the supply line has a back-flow preventer, pressure reducing or check valve present)
- **ETM** Elapsed Time Meter

All PSC Multi-Stage / Centralized cleaning systems are available with optional stainless steel frame, pump bases and covers for food grade applications

