



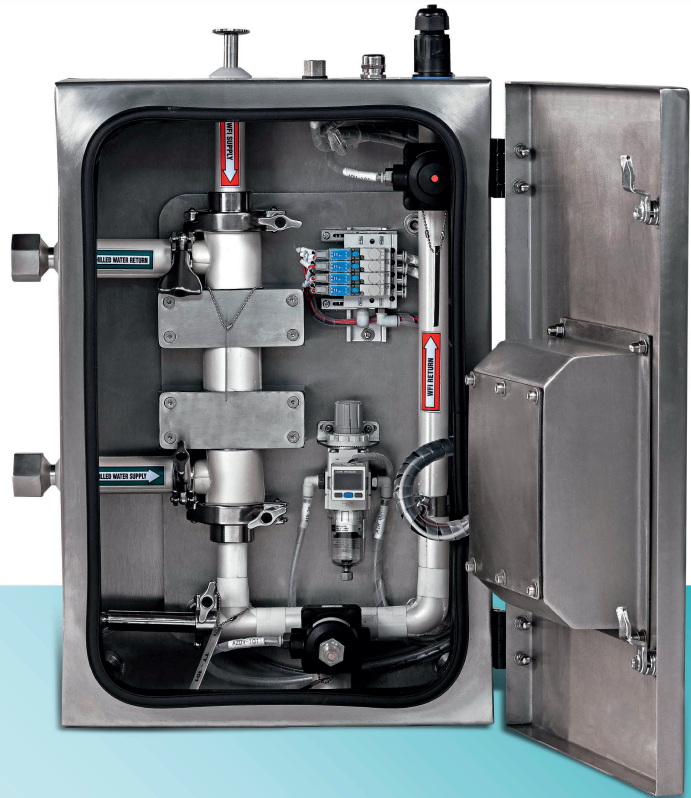
# WFI/PW COOLERS



WFI/PW TEMPERATURE CONTROL

# INTRODUCTION

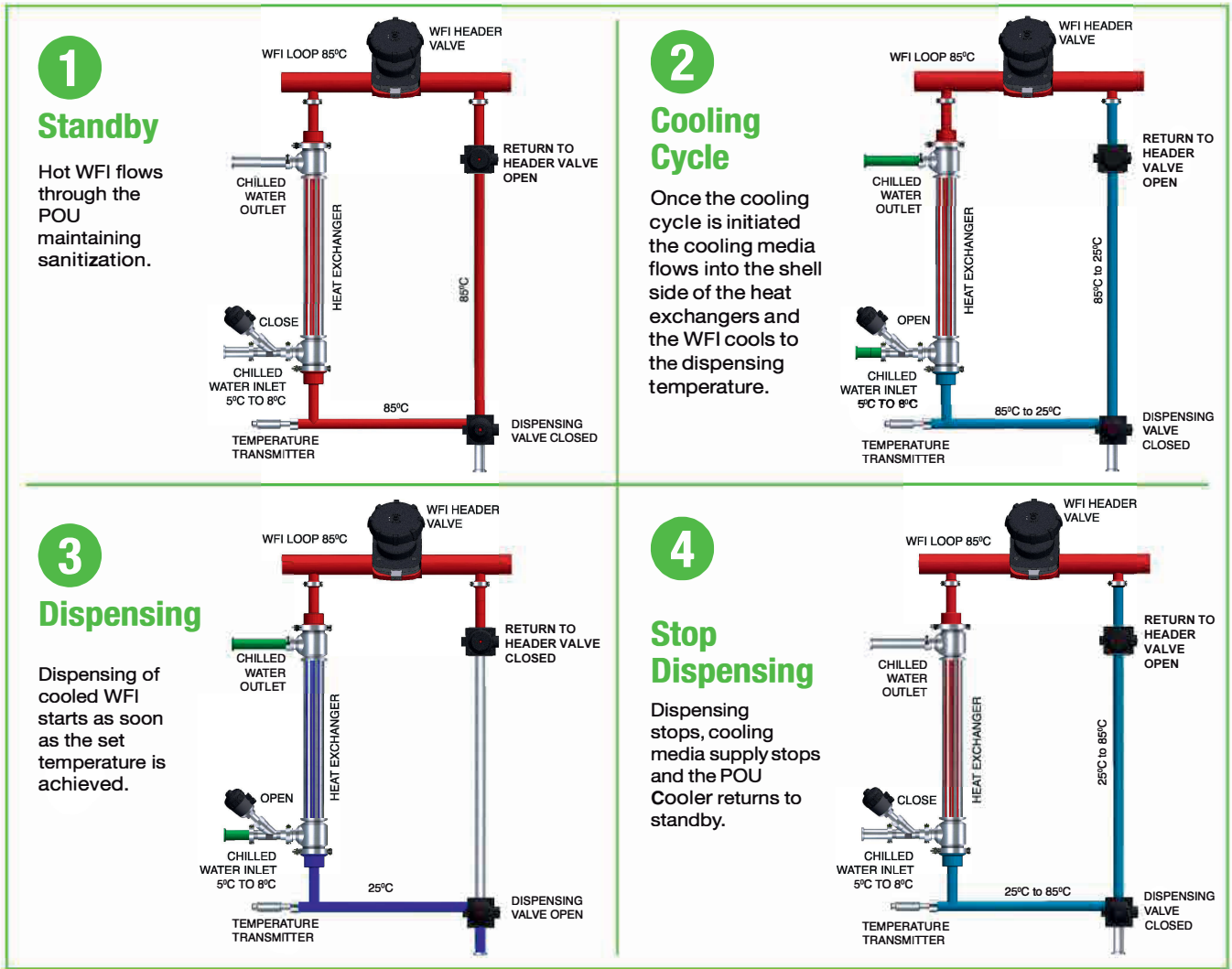
PUREX POU Coolers are designed to instantly dispense temperature controlled WFI. Our POU's meet the high-quality requirements and hygienic standards of the pharmaceutical industry. PUREX POU's feature compact, high performance sanitary shell and tube heat exchangers with a double tube sheet configuration. We offer a range of POU models from standard off-the-shelf units to highly customized designs.



## WHY PUREX

- Dispense flow rates of 0.5 GPM ( 115 LPH ) to 25 GPM ( 5700 LPH ) at any range of temperatures
- ASME BPE compliant
- Most features and options can be customized
- Sanitary double tube sheet heat exchanger design eliminates the risk of cross contamination
- POU Performance unaffected by loop pressure variations
- Advanced automation features allow integrated management of POU Systems and client controls to optimize WFI loop performance
- Comprehensive Factory Acceptance Testing ( FAT ) of each POU system
- Site Factory Acceptance Testing ( SAT ) available for each POU system

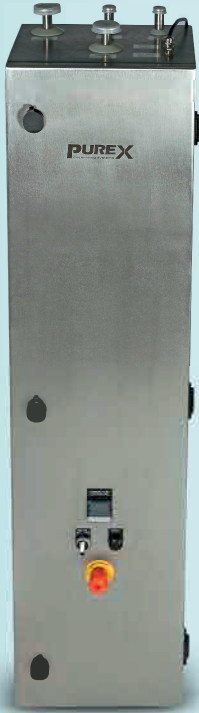
# PROCESS FLOW DESCRIPTION



## CONSTRUCTION FEATURES

Heat Exchangers	Sanitary double tube sheet shell and tube
POU Cabinet	SS 304 construction with matt finish and door lock
Electrical Enclosure	Segregated enclosure, CE and UL options
Contact Surface	Contact surface finishes are passivated as per Pharma requirements
Instruments	Process instrumentation as required by customer
Valves	Sanitary diaphragm (GEMU specified)
Insulation	PVDF insulation

## PUREX ECONOMY



The ECONOMY model is a standard off -the- shelf solution. This unit automatically dispenses WFI at the set point temperature and is controlled via a simple switch. The actual WFI temperature is visible on the display meter mounted on the cabinet door. This unit includes provisions for wall mounting or it can be installed on a floor frame.

### FEATURES

- Automated operation
- Adjustable flowrate dispense valve
- Dispenses at temperature set point
- UL & CE Certified
- ASME BPE compliant
- High Temperature Alarm
- Emergency stop button

### PRODUCT INFORMATION

MODEL NO	STEC 05
CAPACITY	0.5 to 5 GPM (115 - 1100 LPH)
DISPENSING MODE	Hot Dispense or Cold Dispense
OPERATION	Fully Automatic (ON/OFF switch)

## PUREX ADVANCED

The ADVANCED model works in fully automatic and in manual mode.

### FEATURES

- Continuous POU System Status display via HMI
- 3 levels of user security controls
- Programmable Alarms
- UL & CE Certified
- ASME BPE compliant
- WFI Health Status Input

### PRODUCT INFORMATION

MODEL NO	STAC 05	STAC 15
CAPACITY	0.5 to 5 GPM (115 - 1100 LPH)	5 to 15 GPM (1100 - 3400 LPH)
DISPENSING MODE	Hot Dispense or Cold Dispense	
OPERATION	Fully Automatic or Manual through HMI	
COMMUNICATION	Accepts WFI status input	





# PUREX CUSTOM

The CUSTOM model is designed to meet the client's specific requirements and supports a wide range of dispense flow rates up to 25+ GPM. Most features and options can be customized.

This model can be configured to dispense WFI at various temperatures and flow rates. Its operation is PLC controlled, fully automatic and can integrate with other skids and equipment within the facility.

## SOME AVAILABLE FEATURES

- Multiple dispensing flow rates
- Multiple dispensing temperatures
- Dump to drain during cooling mode
- Header Isolation Valves (including Zero Dead Leg models)
- NEMA 4X compliant cabinet
- UL & CE certification
- Clients specified automation hardware
- Custom programming for unique operational sequences
- Integrated with other equipment skids

## PRODUCT INFORMATION

MODEL NO	STCC
CAPACITY	0.5 GPM to 25 GPM (115 – 5700 LPH)
APPLICATION	Cooling or Heating
DISPENSING MODE	Hot Dispense or Cold Dispense
OPERATION	Fully Automatic or Manual through HMI
COMMUNICATION & CONTROL	Supports a wide range of control and communication



# CONTROL OPTIONS

## Fully Automatic Stand Alone System

The unit works independently without any communication with other systems

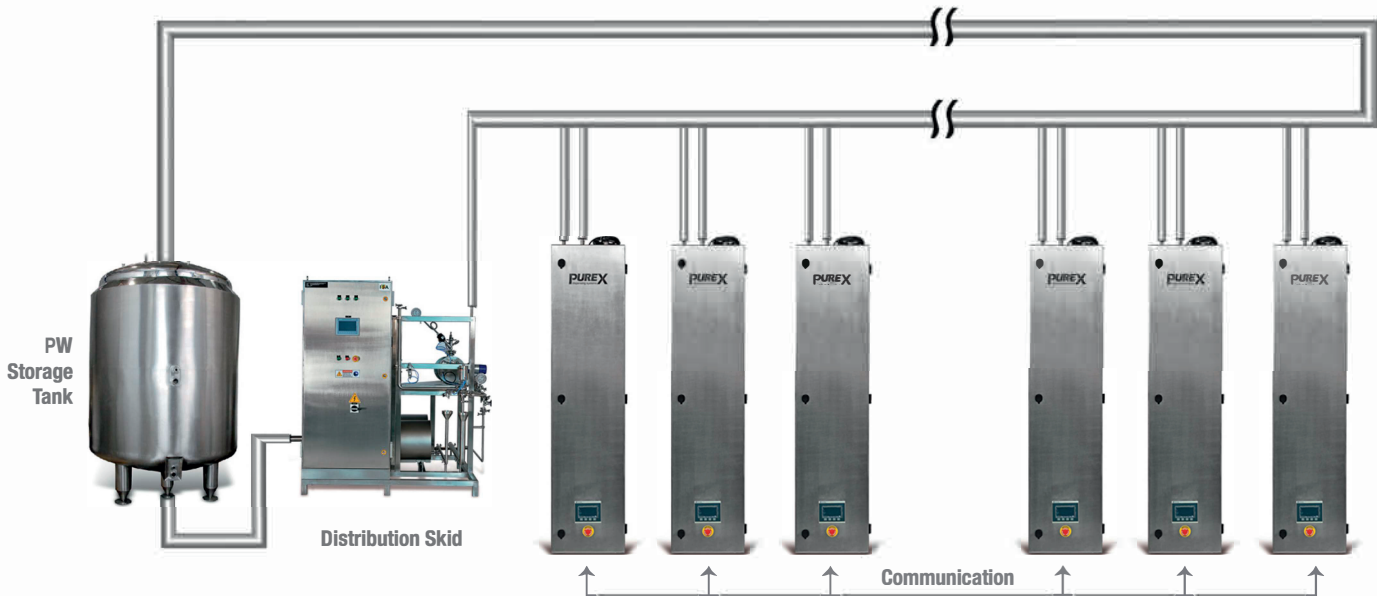
## Remote Start/Stop Operation

The user can start/ stop the POU remotely. This is helpful when the POU unit is not accessible to the user as a result of physical installation requirements, i.e. either it is installed at higher elevation or a different room location.

## Communication Options



# POU to POU Communication



When multiple POUs are installed in series on loop, the simultaneous operation of POUs is controlled to ensure the minimum required loop velocity as per Pharmaceutical guidelines. This is achieved by the POU to POU communication feature in which all POUs communicate with each other using Ethernet protocol. The user can limit the maximum number of POUs in operation to ensure the loop velocity is maintained

## Documentation & Tests

The Technical Documentation includes the following:

**Section 1**  
General  
Documentation

**Section 2**  
Component  
Description

**Section 3**  
Hardware and  
Software  
Documentation

**Section 4**  
Piping, Fitting  
and Welding  
Documentation

**Section 5**  
Operating  
and Instruction  
Manuals

**Section 6**  
Validation  
Protocols

## FAT

**Test A**  
Mechanical Component  
Acceptance Test

**Test B**  
Electrical  
Acceptance Test

**Test C**  
Functional  
Test

**PUREX**  
dispensing systems

**EXERGY**  
HEAT TRANSFER SOLUTIONS

  
**HYDROPURE**  
Transforming water