### **DI Water System Case Study**







## **Background**

A large manufacturer of printing ink needed a high purity piping system to produce a new prototype of ink. The DI water system called for a continuous loop system and required strict adherence to a low TOC. Asahi's Purad® PVDF piping system was chosen due to its low leachout ratings and the ability of the zero deadleg valves to reduce the possibility of bacteria build-up within the loop.

## **Solution**

Asahi/America was able to design and pre-fabricate the system in the company's clean room. The Purad® PVDF spools were then shipped to the ink manufacturer, where they were joined using the EF 110-B HPF electrofusion machine. Asahi's product quality and ability to value add through system design and clean room pre-fabrication were able to successfully satisfy customer specifications.

## **Ideal Applications**

- UPW
- WFI
- Photovoltaic
- Pharmaceutical
- Nanotech

## **Asahi Advantage**

- Custom fabrication options
- On-site weld training opportunities
- Advanced IR welding technology available
- Start-to-finish project assistance

Asahi/America is a supplier of a wide range of valves, actuators, pipe, fittings, and welding equipment for high purity, commercial, industrial and environmental applications. Discover more at www.asahi-america.com

## **Applied Products**







## Purad® Ultra High Purity PVDF Piping System

#### **Pipe and Fittings**

- 20-315 mm (1/2" 12") SDR21 (230psi)
- 90-315mm (3" 12") SDR33 (150psi)

#### **Valves**

- T-342 diaphragm valves: 20-110mm (1/2" 4")
- T-343 zero dead leg valves: 20-110mm (1/2" 4")
- Type-21 ball valves: 20-110mm (1/2" 4")
- Regulating valves: 20-75mm (1/2" 2 1/2")

#### **Sizes**

- 20-315mm (1/2"-12") SDR21 (230psi)
- 90-315mm (3"-12") SDR33 (150psi)

#### **Applications**

- Pharmaceutical
- Semiconductor

UPW

Photovoltaic

• WFI

Nanotech

#### Welding methods







# EF 110-B Beadless Electrofusion Welding Tool

#### **Features/ Benefits**

- Uses HPF couplings over piping components to weld the material
- Ideal for final remote tie-in welds
- An optional balloon may be inserted to reduce weld beads and crevices
- 110-230 VAC power converter
- 25' leads avilable upon requesty

#### **Size Range**

• 20 - 63mm (1/2" - 2")

#### **Materials**

PVDF

#### **Notes**

- Available for purchase or rental
- · Weld with or without balloon

## **Ultra High Purity Piping Systems**

At the core of the Purad® system is its resin. Utilizing only high purity grades of Solvay Polymer's SOLEF™ 1000 series resins, Purad® provides unmatched quality and low leachouts for all of its pipe, fittings, valves, and raw material. Absolutely no stabilizers, additives or processing agents are used during production.

