

#### Our heat exchanger





# Optimizing heat exchange for industrial applications

The ePLUS® DTS is designed to **optimize thermal exchange between multiple fluid streams**, crucial for various industrial processes such as those in pharmaceutical, chemical, biotech industries, and power generation plants. Its primary function is to efficiently transfer heat from a hot fluid to a colder one, ensuring minimal mixing and maximum energy transfer.

Constructed with a series of tubes in a Double-Tube-Sheet configuration, the ePLUS® DTS facilitates the flow of the main bioprocess fluid and a cooling fluid in close proximity but without contact, providing precise temperature control. This setup maximizes heat transfer surface area and operates in parallel flow configuration, enhancing the system's efficiency—especially in its primary counterflow configuration, which maximizes the temperature difference between fluids.

**Ensuring zero cross-contamination and efficient thermal energy transfe**r, the ePLUS<sup>®</sup> DTS stands out as a reliable solution for critical temperature management in demanding industrial applications.

## Understanding the mechanics of ePLUS<sup>®</sup> DTS heat exchangers

- The ePLUS<sup>®</sup> DTS efficiently cools bioprocess fluids, maximizing heat transfer and preventing fluid mixing.
- Its fully automated operation ensures precise temperature control with minimal manual intervention.
- The system uses high quality stainless steel and precise tube specifications for optimum performance.

### **Key Functionalities**

ePLUS<sup>®</sup> DTS

Fluid streams	Two or more
Applications	Systems for industry and power generation plants
Purpose	Transferring energy from one hot fluid to the othe
Flow configuration	Parallel
Material	Stainless steel AISI 316 L
Temperature control	Optional
Jacketed	Optional
Maximum working pressure	30 bar
Maximum working temperature	200 °C
Maximum fluid viscosity	100 cP
Maximum fluid flow rate	1000 m <sup>3</sup> /h
Pressure drop	<1 bar
Efficiency	> 90%
Maintenance	Low
Certifications	CE, ASME, ISO 9001
Manufacturer	TECNIC
Model	ePLUS® DTS
Number of tubes	Consult according to project
Tube diameter	Consult according to project
Tube thickness	Consult according to project
Tube length	Consult according to project
Tube transfer are	Consult according to project
Dimensions	Please consult



#### Contact

Polígon Industrial Can Pruna Carrer Ponent, Parcela 10, nau 1, 2 i 3 17421 Riudarenes, Spain ↓ +34 972 87 73 27 ☑ sales@tecnic.eu ⊕ tecnic.eu



Technical data subject to change without notice.  $\ensuremath{\mathbb{O}}$  TECNIC Bioprocess Solutions.

