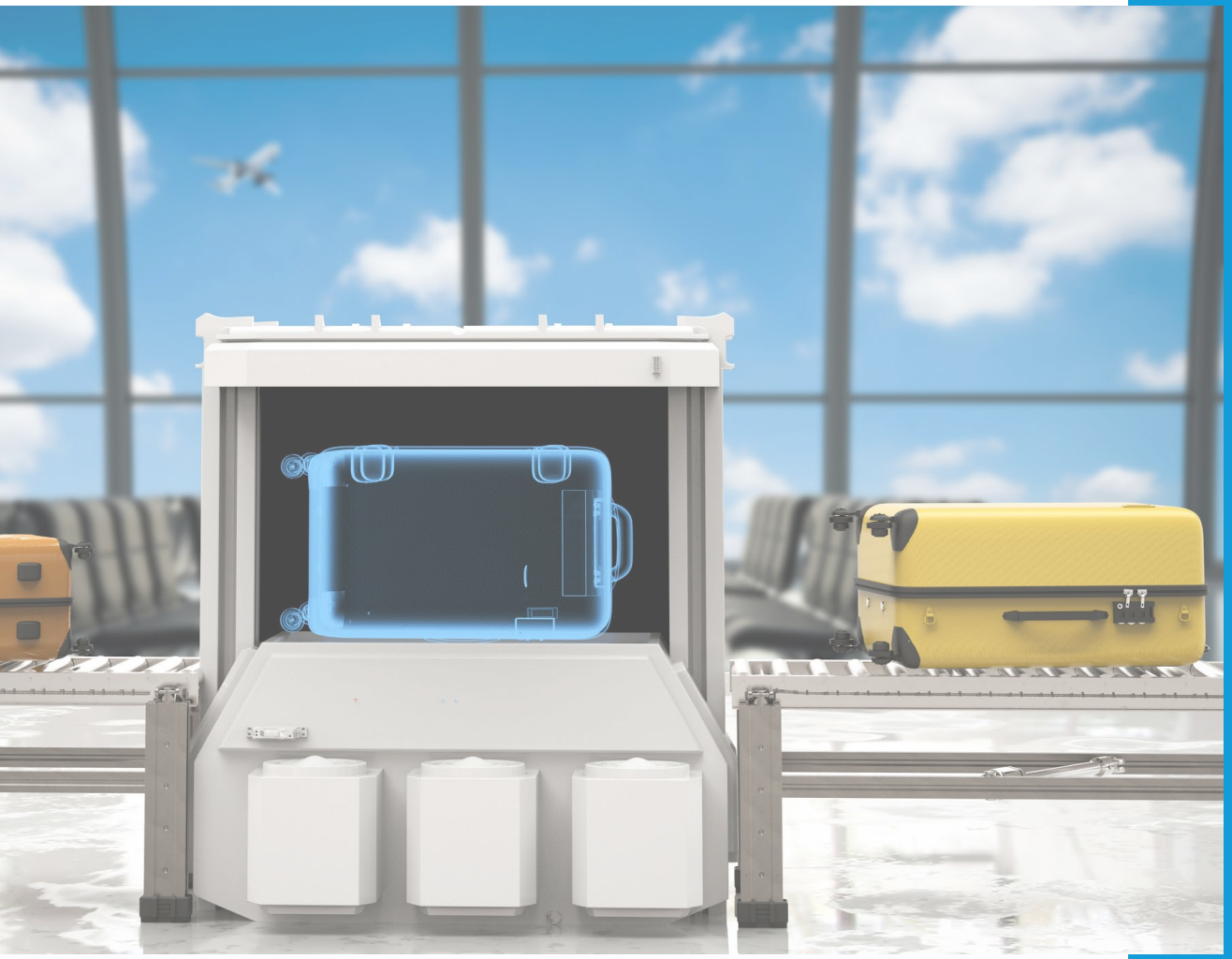
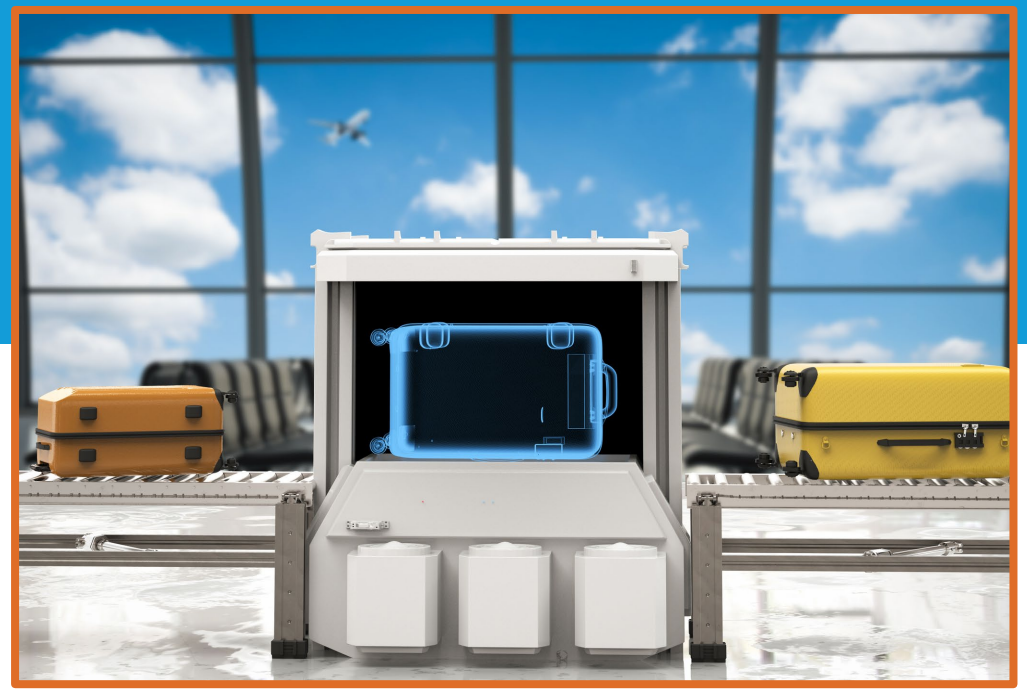
Laird™
THERMAL SYSTEMS



Liquid Cooling for X-ray Scanning Equipment

Introduction



Industrial X-ray scanners generate a large amount of heat that must be quickly dissipated away

Liquid Cooling Systems ensure high performance and long-life operation

Application Overview

Industrial X-ray equipment is commonly used within:

- Manufacturing processes
- Automotive
- Food and beverage processing
- Luggage scanners
- Pipeline inspection stations

Design Objectives

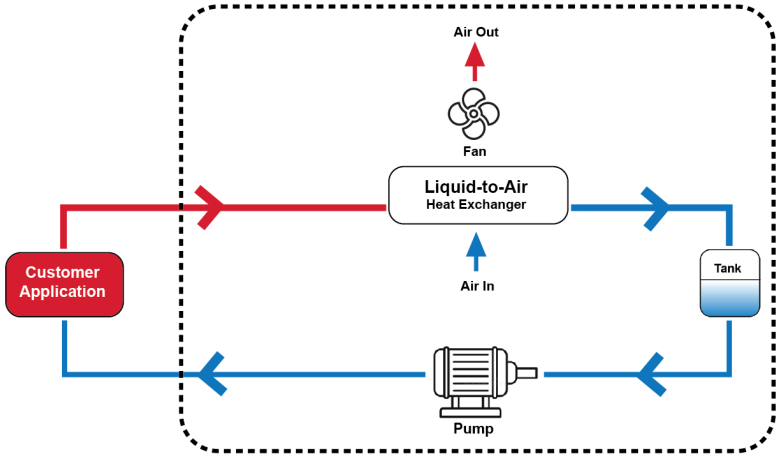
Industrial X-ray require less power and lower image resolution than medical X-ray

Cooling System Design Requirements:

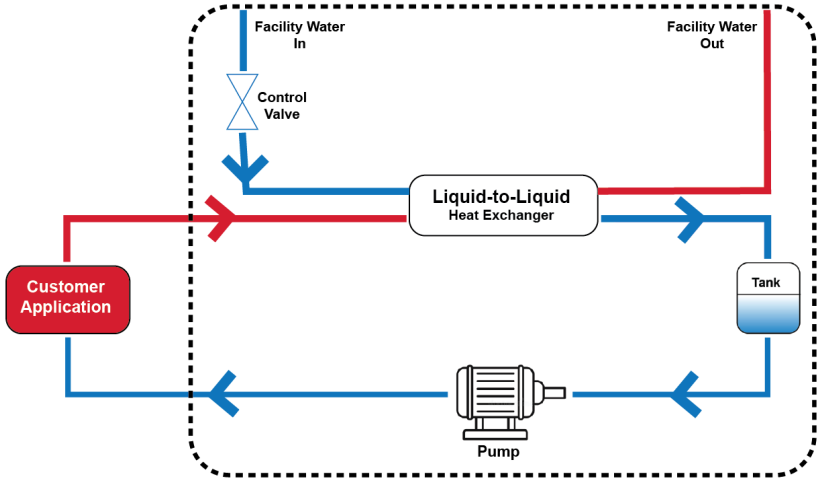
- **Cost-Effective**
- **Easy To Maintain**
- **High Reliability**

Comparing Technologies

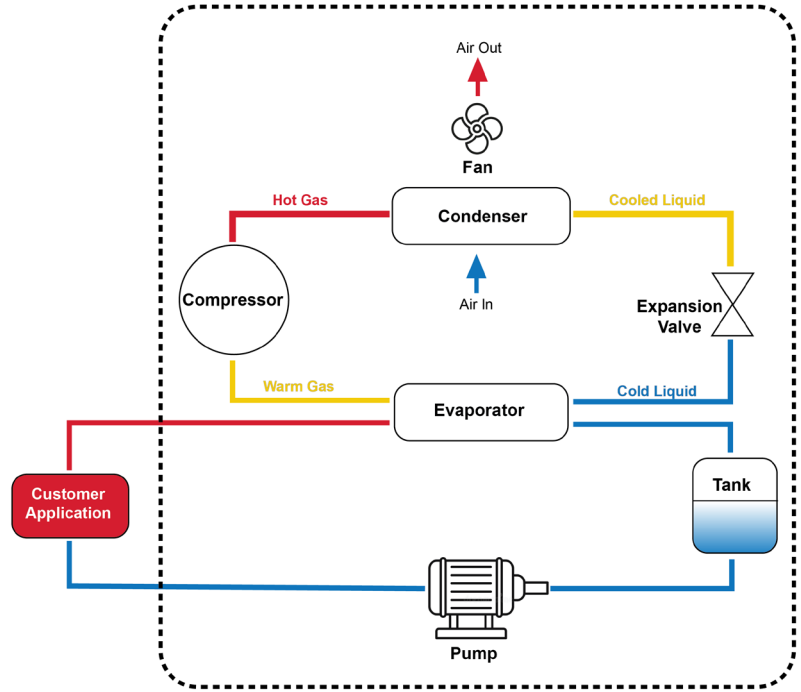
Liquid Cooling offer many advantages over air-based cooling systems



Liquid-to-Air



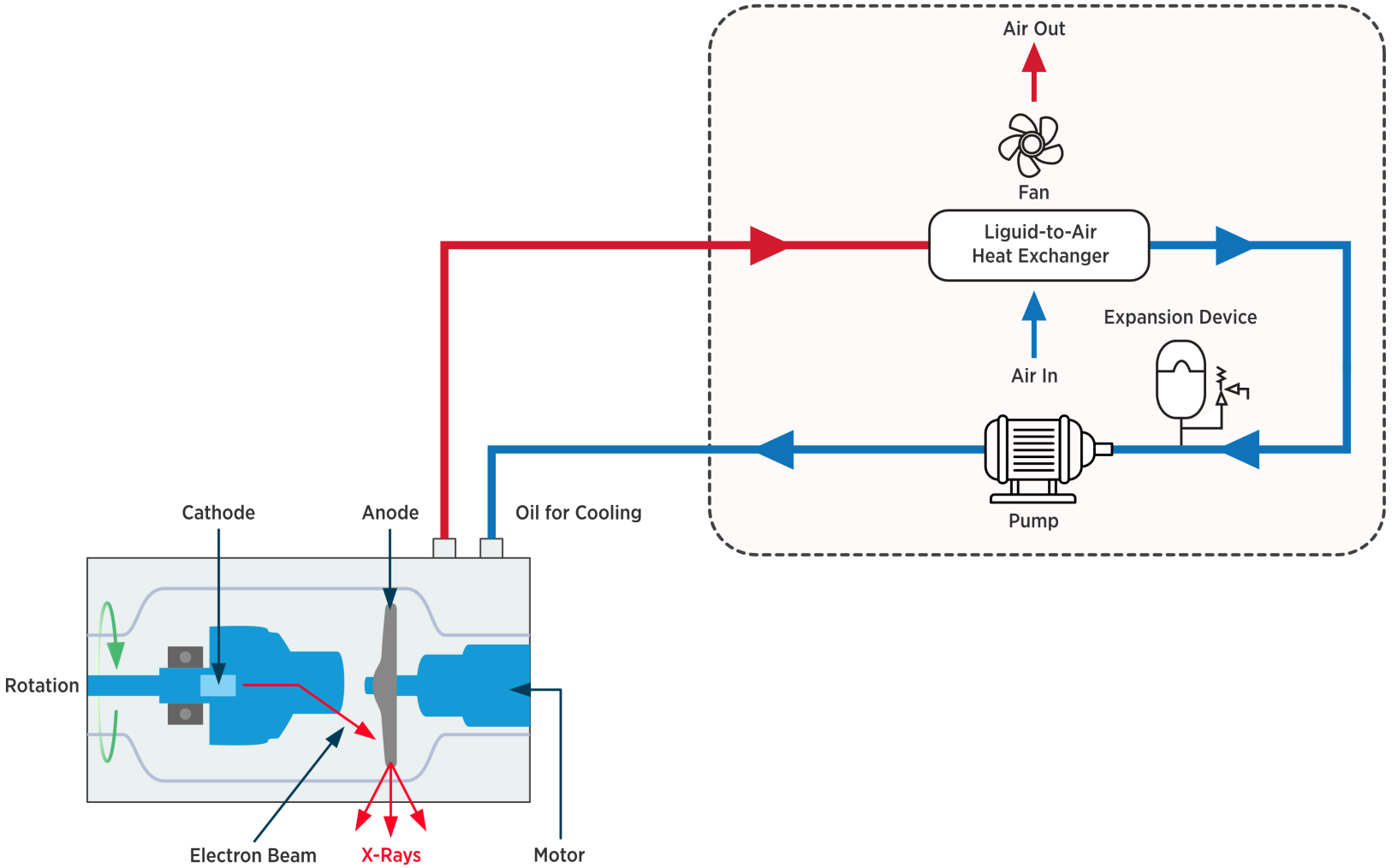
Liquid-to-Liquid



Recirculating Chiller

Liquid Cooling of X-ray Systems

Liquid-to-air heat exchanger systems are the most cost-effective cooling solution for industrial X-ray



LA5000 Liquid-to-Air Heat Exchanger

- High Reliability
- Low Maintenance Features
- Low noise operation
- Operates above ambient temperatures
- Cost-effective cooling solution
- Meets laboratory standards

RoHS COMPLIANT

CE

5000
Watts of
Cooling Capacity

Conclusion

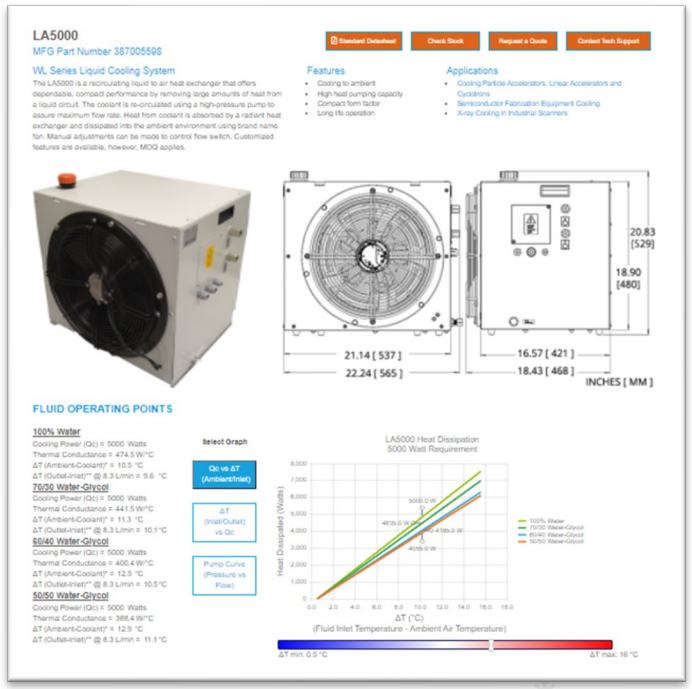
Industrial X-ray Equipment **requires a cooling solution to dissipate a large amount of heat** to the surrounding environment

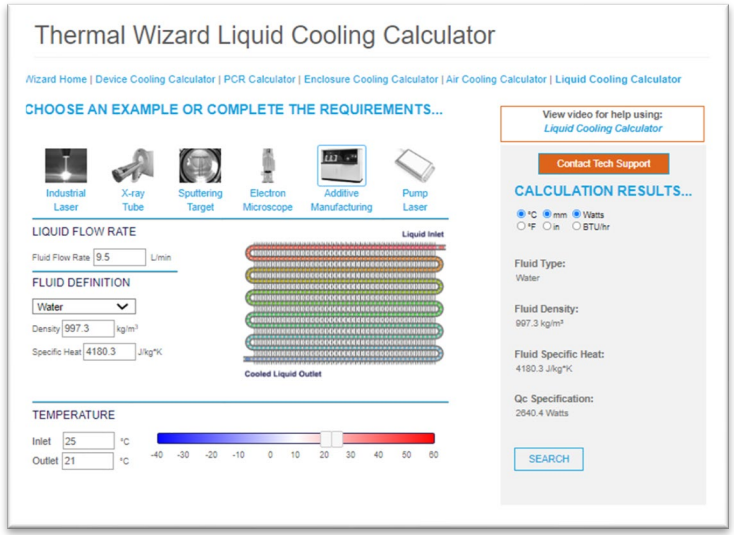
Liquid cooling systems offer several advantages over air-based heat transfer mechanisms

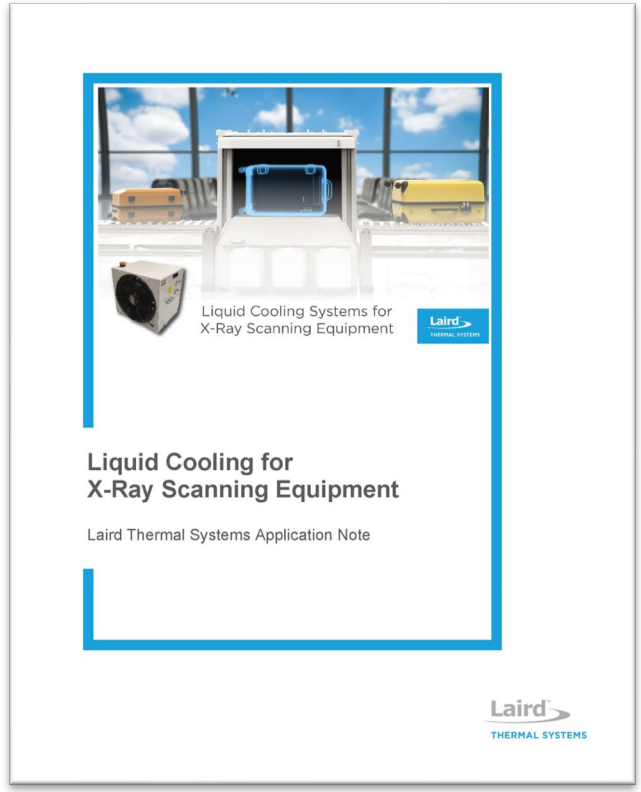
Liquid-to-Air Heat exchangers are the most economical option for **operation above ambient temperatures**

The LA5000 features improved fan and heat exchanger technology **providing high reliability and long-life** operation with **low maintenance**

Visit lairdthermal.com







Datasheet | **Liquid Cooling Calculator** | **Application Note**

About Laird Thermal Systems

Laird Thermal Systems develops thermal management solutions for demanding applications


Medical


Analytical


Industrial


Transportation


Telecom

DIVERSE PRODUCT PORTFOLIO
Thermoelectric Coolers, Thermoelectric Cooler Assemblies, Temperature controllers and Liquid Cooling Systems

SOLVING COMPLEX ISSUES
Our engineers use advanced thermal modeling and management techniques to solve complex heat and temperature control problems

ACCELERATING TIME-TO-MARKET
We partner closely with our customers across the entire product development lifecycle.

MAXIMIZING PERFORMANCE
Our global manufacturing and support resources help customers maximize productivity, uptime, performance and product quality

Laird Thermal Systems is the optimum choice for standard or custom thermal solutions

Learn more by visiting
www.lairdthermal.com

Laird™

THERMAL SYSTEMS

Have a question or need more information about
Laird Thermal Systems? Please contact us via the website at www.lairdthermal.com

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