CW Tube



Leading technology for individual solutions

# THE ELLIPTICAL FIN TUBE -REINVENTED



#### Inspired by concept of efficiency – Making proven solutions even better

The hot dip galvanized elliptical fin tube – with its favorable flow characteristics – has been proving its marketability for decades and will continue to play an outstanding role on the heat exchanger market in the future.

Wherever heat transfer is needed in industrial production processes, the elliptical fin tube has demonstrated its high efficiency in areas of application that include the following:Refineries

- Petrochemical industry
- Steel mills and the rest of the steel industry
- Natural-gas facilities
- Power plants
- Paper industry
- Textile industry and others

# Experience, knowledge and precision

Kelvion has conducted development work in collaboration with the Westphalian University of Applied Sciences in Gelsenkirchen, Germany. Their work has shown that the elliptical fin tube still offered room for optimization.

With the method of numerical flow simulation (CFD) we have e.g. investigated the effects of new turbulators on the fins. The results were validated by wind tunnel measurements. A patent was applied for the new invention which is called: CW Tube

## **High efficiency**

- in heat transfer
- flow performance results in a product with
  - low operating expenses
  - less material usage
  - low CO<sub>2</sub>-emissions
     low noise emissions

## Lighter, higher efficiency and more silent – The CW Tube redefines standards

As a result of reduction in specific air-side pressure drop, while achieving a higher heat transfer coefficient at the same time, the CW Tube reaches the following:

- up to 25 % less requirement of heat exchanger tubes
- up to 30 % less electrical power consumption of the fans

This pays off in many respects: Both investment and operating costs can be saved. In parallel the environment will be protected by reduction of  $CO_2$ - and noise emission.

These benefits get together with a high degree of product reliability, even under extreme conditions.

	Reduction of	Increase of
	Power consumption	Efficiency
	Material usage	Thermal performance
	Carbon footprint	Solidity
	Weight	Corrosion resistance
Noise level		Cleanability
	and more	and more

#### Heat transfer





Air velocity

Kelvion GmbH Dorstener Straße 484, 44809 Bochum, Germany Phone +49 234 980-1961 Fax +49 234 980-2014 www.kelvion.com

## Contact

- Sales Air Heater, Air Dryer: Björn Stemmann
  Phone +49 234 980-1926, bjoern.stemmann@kelvion.com
- Sales Air Preheater: Joachim Postert Phone +49 234 980-1975, joachim.postert@kelvion.com
  Sales Air Fin Coolers: Frank Floreck
- Phone +49 234 980-1958, frank.floreck@kelvion.com
- After-Sales & Service: Waldemar Nowinski Phone +49 234 980-1744, waldemar.nowinski@kelvion.com
  Research & Development: Christian Wüllner
- Telefon +49 234 980-1969, christian.wuellner@kelvion.com