

# Mumme-Cooling Tower International GmbH

 $\square$ 



M-CTI Mumme-Cooling Tower International GmbH

Rudolf-Diesel-Strasse 17-25 46485 Wesel · Germany Tel. +49 (0) 281-9880-0 Fax +49 (0) 281-9880-99 e-mail info@m-cti.com



Expertise is everything

# **Products**

## Standard cooling towers Saving water and energy for business and industry

The compact cooling towers in the MNK series enable cost effective and energy-saving cooling of process heat in plant of all kinds. The circulation water is recooled by the evaporation cooling process.

## **Special solutions**

- Reconditioning of complete cooling tower systems in the shortest time possible using mobile cranes
- Cooling towers to fit existing cold water basins
- O Noise reduction to meet highest requirements

#### Natural draught cooling towers

Low operating costs and high water flow rates. We can plan, construct and install natural draught cooling towers in robust reinforced concrete for high water flow rates and tailored to your individual requirements.

The construction of a natural draught cooling tower is recommended for water flow rates in excess of 10,000 m3/h. This type of cooling tower is used mainly in power stations and can achieve a cooling performance of several thousand MW.

#### **Functioning principle:**

Its construction uses the chimney effect: air rises through the cooling tower without the aid of ventilators and cools the water which was heated during the production process. As this principle functions without any additional energy supply its operating costs are very low.

The heated cooling air is discharged at the top and emerges only when it has attained a great height. In this way the plant site remains unaffected by spray drift and mist formation - provided that the cooling tower is equipped with a mist eliminator.



# **Our service:**

Water treatment and production processes often cause chemical contamination of the water circulation system and lead to an additional stress on the materials used for the water circulation components.

We can offer you service contracts as appropriate for monitoring and regular maintenance as a means of preserving and prolonging the life cycle of the system.

# Engineering

- O advice on planning reconditioning work or for new systems
- Q design of complete systems
- Q ready-to-operate cold water systems
- everything from the one source from the cooling tower to water treatmen
- O optimisation of existing systems

#### **Everything from the one source.**

We can act as main contractors for you when undertaking comprehensive reconditioning. We can coordinate the whole reconditioning process for individual plants. This could include cooling technology or electronic measurement and control systems up to complete concrete renovation. We can readily undertake work on sites with reconditioning volumes above the 5 million mark in the shortest possible time.

This takes the strain off your staff and creates extra capacity for your production processes.

Our Service team team will be pleased to provide detailed advice and analysis of your existing cooling systems at any time.

#### **Components**

Our wet cooling towers only contain components manufactured by us and selected suppliers.

Our products are designed with care and are manufactured using the most up-to-date and proven technologies.

# Service

#### **M-CTI** service is our strength

In addition to design and installation we can provide comprehensive services which will prolong the life of your cooling tower systems and optimise their performance.

Contact us - your M-CTI team will be able to provide comprehensive expert advice.

#### Maximum performance is what is demanded.

The performance capabilities of a cooling tower should be used to their maximum. In order to achieve this we analyse the condition of your cooling tower using special measurement processes and give you detailed advice about possible optimisation measures.

By using high quality components you will save energy and repair and maintenance costs. Simply exchanging obsolete or contaminated components often achieve the desired result.

In addition we supply high quality components to achieve, for example, a more effective distribution of water in the system and thus to improve the performance of your cooling tower.

## **Based on precise analysis**

Using our mobile metering unit we can quickly be on site with you and can measure and record the precise values for your cooling tower in accordance with DIN 1947. Based on the analysis of the data gathered in this way we can submit an appropriate solution proposal to you.

# M-CTI tailored solutions to meet your requirements

In accordance with your specific requirements we can produce design plans and technical drawings. You will also receive a project plan so that you can verify the agreed process.

We can prepare general plans and detailed dra-Our specialists carry out maintenance on cooling towings for you using the most up-to-date 2D and 3D wers of all kinds and thus ensure that your system operates without problems. Uneven water distribution, temperature, power consumption, water dischar-You will of course receive complete technical docuge,

CAD programmes. mentation for all installations.

# We will ensure a problem-free installation.

We will carry out a professional installation on time using exclusively our own specialist personnel with decades of experience.

Our installations are carried out strictly in accordance with the principles of the SCC\*\* safety management system. In carrying out the work we will comply with the highest health/safety and environmental requirements.

#### **Proper maintenance is everything.**

Every hour without any cooling or with reduced cooling capacity leads to reductions in production or even breakdowns. In order to improve or maintain the performance and the effective life of your cooling tower the top priority is constant monitoring of the system.

Vibrations and machine noise are checked and, if necessary, corrected before they result in faults or breakdowns. Early correction is the top priority and is always more cost effective than subsequent repair or maintenance.

The passage of time also has an effect on cooling towers. But particularly in the case of large cooling towers complete replacement is often either not possible or not desirable. In such cases only reconditioning is required to bring the cooling performance of the system up to the latest standards.