



# DEHN protects.

Process and filling systems from KRONES



## Customer

KRONES AG

## Project

### Industry

Process industry

### Application

Type 2 SPDs with integrated fuse for protecting the power supply of filling systems

### Hardware

DEHNgard M TNS CI 275 FM

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## KRONES AG

The KRONES company headquartered in Neutraubling (Germany) designs, develops and manufactures machines and complete lines for the process, bottling, canning and packaging industry as well as intralogistics. Every day, millions of bottles, cans and specially shaped containers are "processed" by means of KRONES systems; particularly in the beverage, food, chemical, pharmaceutical and cosmetics industry.

## Challenge

These systems must be optimally and flexibly designed to suit the above mentioned industries and must be permanently available. The compact system layout makes the most out of the available space and minimises long pipe sections and distances, thus increasing productivity. A reliable power supply system that is able to withstand the effects of surges is essential for safe operation.

## Solution

Due to KRONES's high quality standards, the decision was made in favour of DEHNguard® arresters with integrated backup fuse. These universal type 2 surge arresters consist of compact plug-in protection modules which house the actual surge arrester and an arrester backup fuse. Thus, the user does not have to worry about arrester-specific dimensioning requirements such as backup protection in the event of a short-circuit and impulse current carrying capability.

The "Thermo Dynamic Control" monitoring device evaluates the surface temperature of the heavy-duty varistor and the intensity of the discharge current. The operating-current-free mechanical indicator with green and red flags indicates the readiness for operation of every protective circuit. This indicator shows the activation of the arrester monitoring device and tripping of the integrated arrester backup fuse and monitors both the N-PE and phase conductor paths as required by the IEC 60364-5-53 standard.

If required, the protection modules can be easily replaced without tool by means of the module release button. Naturally, the DEHNguard® M CI surge arresters are also KEMA-certified.



## Benefits of the DEHN solution

- ➔ Surge protection and arrester backup fuse integrated in a single module, thus fulfilling the requirement for uninterrupted supply (availability) in a practice-oriented and space-saving way
- ➔ High discharge capacity
- ➔ Permanent monitoring of the arrester and the arrester backup fuse
- ➔ KEMA certification

## Benefits for KRONES

The demand for uninterrupted supply of filling systems can be easily fulfilled by means of space-saving and practice-oriented surge protection.