# Nafufill KM 250



## **Structural Fire Protection in the Petrochemical Industry**

Fire protection plays an important role in the repair of reinforced concrete structures in the petrochemical industry. Particularly in case of load-bearing and space-enclosing components such as columns, pillars, beams, ceilings and walls, there are strict specifications regarding the fire resistance class required to secure structural integrity. If the reinforcement of such components is exposed due to damage, any repair must ensure the restoration of adequate fire protection as well as providing the required corrosion inhibition.

The RM (formerly PCC) and SRM (formerly SPCC) Nafufill KM 250 concrete replacement system was able to confirm its full functionality even under the extreme fire testing conditions involving a free burning phase of 300 minutes at 1100 °C (extended hydrocarbon curve), thus ensuring a unique plus in safety for repairs performed in the petrochemical industry.

Outperforming the standard: Fire certification even for 300 minutes of free burn!

EN 1991-1-2 specifies a fire load in form of a temperaturetime curve to assess the fire resistance of reinforced concrete structures in the petrochemical industry.







### EXPERTISE Concrete Repair

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## **Illustration of Required Minimum Layer Thickness** in the petrochemical industry

Centre distance "u" 40–50 mm

★ Required centre distance "u" according to DIN 4102, Part 4 for fire resistance class F 120

Depending on the component, the DIN-specified centre distance "u" varies between 40 and 50 mm.

#### Layer thickness insufficient

Application of Nafufill KM 250 increasing the concrete cover above centre distance "u" possible.

## Required layer thickness

of Nafufill KM 250 (min. 40 mm) as a function of the current centre distance "u" present



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