

Technical specification LOOP

Description

LOOP is an analysing tool which ensures the quality of a metal before casting. It gives information if the metal has the right quality, or if adjustments has to be made before casting.

Material

The material consists of compressed AES fibre, which stands for Alkaline Earth Silicate. AES fibre can handle temperatures up to $1100\,^{\circ}$ C. As a binder starch is used, which causes harmless gases when combusted.

Chemical composition in %

| SiO ₂ | 60-67 |
|------------------|-------|
| CaO | 27-33 |
| MgO | 3-7 |
| Al_2O_3 | <1 |
| Fe_2O_3 | <0,6 |

Physical properties

 $\begin{array}{ll} \text{Color} & \text{White/beige} \\ \text{Melting point} & >1330 \, ^{\circ}\text{C} \\ \text{Density} & 270 \, \text{kg/m}^{3} \\ \text{Modulus of rupture} & >700 \, \text{kPa} \end{array}$

Highest recommended user

temperature: 1100 °C

Thermal conductivity in W/mK

Average temp:

400 °C 0,07 600 °C 0,10 800 °C 0,14

Dimensions

External dimensions

Lower part: 196x196x14 mmFiller: $\emptyset 65 \times 50 \times \emptyset 80 \text{ mm}$ Stopper: $\sim 80 \text{ mm}$ pullwire height

Weight ~ 150 g (total weight for lower part, filler and stopper before usage)

