

KALCAST C101

Material data sheet

Product features

Lining material for protection against impact and sliding abrasion. KALCAST C101 is an iron alloy casting that is available in form of individual shapes, pipes, bends and plates.

Quality features

KALCAST C101 is made with the aim of achieving high resistance against impact wear combined with good resistance against abrasive wear.

Product properties

Feature	Unit	Data
Chemical composition	Wt.-% C	1.2
	Wt.-% Mn	13
	Wt.-% Fe	82
Hardness	Vickers HV (cold hardened)	580
Density	g/cm ³	7.8
Thermal coefficient of expansion	K ⁻¹ (20 – 300 °C)	19 x 10 ⁻⁶
Thermal conductivity	W/mK (20 – 300 °C)	15
Max. application temperature	°C	300
Max. thermal shock resistance	°C/h	120

Due to the manufacturing process, it is not possible to exclude small variations in the properties of the product. This affects tolerances in the size, outer appearance and surface finish. Included are some typical features of hard cast materials, such as cavities and pores, all of which can be present within the range of specified tolerances.

Approximate figures are given for all technical data. They are based on assessment of tests on specific samples and cannot be considered as a guarantee for which Kalenborn would have to assume legal responsibility.

Subject to technical changes and errors.

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Product description

KALCAST C101 components are made by casting, which allows the production of linings with complicated geometric shapes. Tiles normally have dimensions up to 300 x 300 mm. The wall thickness can range from 15 to 70 mm.

Pipes can be supplied with a lining made of KALCAST C101 or as a completely cast pipe, including cast-on flanges if required. Inside diameters range between 40 and 800 mm, wall thickness between 15 and 70 mm.

Installation

Made-to-measure shaped elements in setting compounds. Mechanical fixing is also possible.

Advantages

High resistance against impact wear combined with good resistance against abrasive wear.

Application examples

Typical applications of KALCAST C101 are – e. g.

- pulverized coal pipes and bends
- concrete mixers
- crushers
- shot blasting machines
- hammers
- deflecting wall
- pump housings
- impact bars
- grinding rollers/grinding tables