

KALCAST C153

Material data sheet

Product features

Lining material for protection against abrasive wear and impact wear. KALCAST C153 is a high carbon chromium casting that is available in form of plates, individual shapes, pipes and bends.

Quality features

KALCAST C153 is made with the aim of achieving high resistance against abrasive wear combined with satisfactory resistance against impact wear.

Product properties

Feature	Unit	Data
Chemical composition	Wt.-% C	3
	Wt.-% Cr	16
depending on the customer's specification	Wt.-% Mo	max. 1
	Wt.-% Fe	78
Hardness	Vickers HV	620
Density	g/cm ³	7.8
Thermal coefficient of expansion	K ⁻¹ (20 – 350 °C)	11 x 10 ⁻⁶
Thermal conductivity	W/mK (20 – 350 °C)	13
Max. application temperature	°C	350
Max. thermal shock resistance	°C/h	70

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 C153 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 C153.

Installation

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

Advantages

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

Application examples

Typical applications of KALCAST C153 are – e. g.

- discharge screw conveyors of road asphalt machines
- concrete mixers
- crushers
- bunker flights
- hammers, e. g. for metal shredders
- grinding mills, e. g. for plastic recycling
- pump housings
- impact bars
- screw conveyors
- chutes
- fan housings
- cyclones
- mixer blades
- grinding rollers/grinding tables
- pulverized coal bends (outer radius)