



## TECHNICAL DATA SHEET – DENSIT® WEARCAST 2000 CHEMICALLY BONDED CORUNDUM-CERAMIC

Revised: v2 04/2021

### DESCRIPTION

Densit® WearCast 2000 wear resistant linings provide superior protection against heavy erosive wear at temperatures up to 400°C (750°F).

### CONSUMPTION AT 25 MM

Densit® WearCast 2000	73 kg/m <sup>2</sup>
Steel fibres*	3.3 kg/m <sup>2</sup>
Densit® Anchoring mesh	1 m <sup>2</sup> /m <sup>2</sup>
Densit® Curing Compound	0.25 l/m <sup>2</sup>

### CONSUMPTION AT 40 MM

Densit® WearCast 2000	117 kg/m <sup>2</sup>
Steel fibres*	5.3 kg/m <sup>2</sup>
Densit® Anchoring mesh	1 m <sup>2</sup> /m <sup>2</sup>
Densit® Curing Compound	0.25 l/m <sup>2</sup>

\* See the data sheet for steel fibres

### SPECIFICATION

- Install mesh
- Install or build mould
- Mix dry compound with water and fibres
- Add water and mix for 6 minutes
- Add appropriate steel fibres\*) and mix another 3 minutes
- Pour mix into mould under vibration
- Remove mould after adequate curing time

Densit® WearCast 2000 is a castable one-component ready-mix delivered in 25 kg bags.

The bags must be stored on a dry stock to maintain the good properties of the compound. The guaranteed shelf life is 14 months from production date. A paddle mixer must be used for mixing the compound. A significant change in consistency of the material (from dry to plastic) must be observed within 3 minutes from addition of water. Avoid Densit® compound to make contact with aluminium or galvanised steel. Densit® WearCast 2000 should be cast in suitable moulds with adequate reinforcement like steel bars and/or standard expanded metal mesh.

**TECHNICAL DATA**

PROPERTIES	STANDARD	DENSIT® WEARCAST 2000
Density kg/m <sup>3</sup> - (lb/ft <sup>3</sup> )	EN 1015-6	2950 (184)
Compressive strength - MPa	EN 12190	170
Flexural strength - MPa	EN 196-1	23
Dynamic E-modul - MPa	EN 12504-4	70-80 10 <sup>3</sup>
Casting shrinkage - vol. %		0.2
Thermal conductivity - w/m°C		1.5
Coeff. of thermal expansion - 1/°C (1/°F)	EN 1770	10x10 <sup>-6</sup> (5.6x10 <sup>-6</sup> )
Heat capacity - KJ/kg°C		0.9-1.0
Max. service temperature - °C (°F)		400 (750)
Abrasion resistance - cm <sup>3</sup> /50cm <sup>2</sup>	DIN 52108	1 - 1.5
Erosive resistance - min/cm <sup>3</sup>		200
Chemical composition -	EN 196-10	
% CaO		18
% SiO <sub>2</sub>		25
% Al <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>		55
% Fe <sub>2</sub> O <sub>3</sub>		<0.2
% Cr <sup>6+</sup>		<0.0002
Bag size - kg		25
Pallet size - kg		1250

*The figures given are typical values.*

*Please contact ITW Performance Polymers or the nearest distributor for further information.*