



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

Revised: 12/2018

### DESCRIPTION

Densit® WearCast 2000 HT wear resistant linings provide superior protection against heavy erosive wear at temperatures up to 1200°C (2190°F).

### CONSUMPTION AT 25 MM

Densit® WearCast 2000 HT	76 kg/m <sup>2</sup>
Steel fibres*	3.4 kg/m <sup>2</sup>
Densit® Anchoring mesh 1 m <sup>2</sup> /m <sup>2</sup>	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 HT	121 kg/m <sup>2</sup>
Steel fibres *	5.5 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>

\* Steel fibre selection depends on temperature and chemical environment. 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 HT 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 HT should be cast in suitable moulds with adequate reinforcement like steel bars and expanded metal mesh.

### TECHNICAL DATA

PROPERTIES	STANDARD	DENSIT® WEARCAST 2000 HT
Density - kg/m <sup>3</sup> - lb/ft <sup>3</sup>	EN 1015-6	3050 (190)
Compressive strength - MPa	EN 12190	170
Flexural strength - MPa	EN 196-1	16
Dynamic E-modul - MPa	ASTM C597	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	6.9x10 <sup>-6</sup> (3.8x10 <sup>-6</sup> )
Heat capacity - KJ/kg°C		0.9-1.0
Max. service temperature - °C (°F)		1200 (2190)
Abrasion resistance - cm <sup>3</sup> /50cm <sup>2</sup>	DIN 52108	0.8-1.0
Erosive resistance - min/cm <sup>3</sup>		200
Chemical composition -	EN 196-10	
% CaO		6
% SiO <sub>2</sub>		6
% Al <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>		87
% Fe <sub>2</sub> O <sub>3</sub>		<0.3
% C r <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.