

# CERAMIC CUP SAVINGS

IN BLAST FURNACE OPERATIONS



## SAVE COSTS & ENERGY

## FOR A SUSTAINABLE FUTURE

At Saint-Gobain, our commitment to sustainability enables us to develop innovative, effective solutions that meet the challenge of protecting the environment.

**Already our Coranit AL extends hearth wall life by approximately 10 years, our latest development is expected to increase hearth wall life by a further 2 to 3 years.**

### BENEFITS CERAMIC CUP



Lower energy consumption



Reduction of CO<sub>2</sub> emissions



Quick Pay-Back within 2 years



Recycling of slag:  
no Ilmenite addition

**Saint-Gobain's 3rd generation Ceramic Cup quality Coranit SlagR has improved resistance to iron, slag, alkali corrosion** and wears very gradually over the lifetime of the hearth.

Due to its excellent quality the life of your blast furnace hearth will be extended.



## CASE STUDY FOR EUROPEAN BLAST FURNACE HEARTH

### CO<sub>2</sub> emission - price development affects every industry sector

The key result is a constant increase of the price per ton of CO<sub>2</sub> emissions - in one year the price per ton has more than doubled.<sup>1</sup>

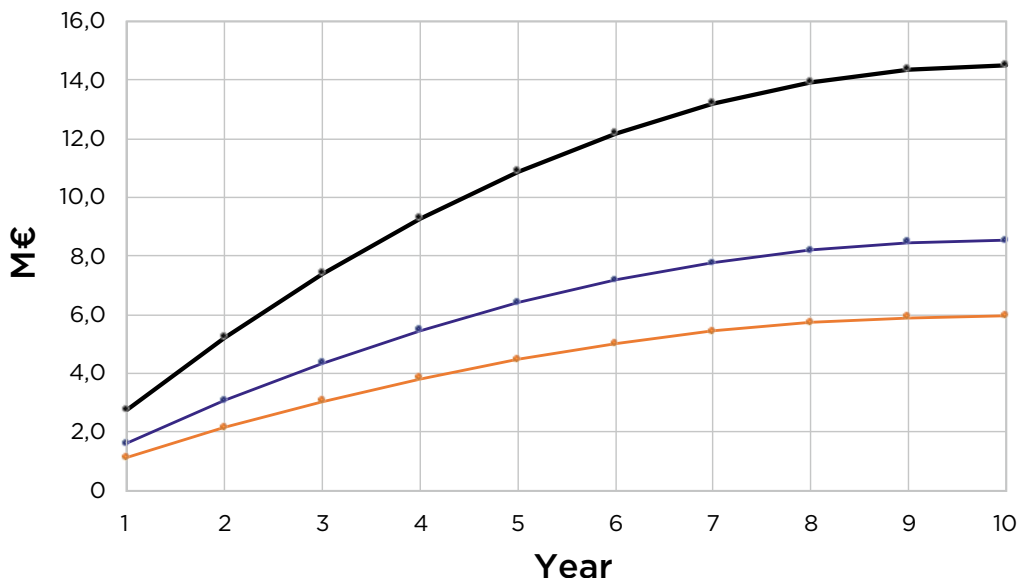
**TOTAL CO<sub>2</sub> SAVINGS**

**65 KT**

**TOTAL COKE SAVINGS**

**20 KT**

### Ceramic Cup Savings (M€) after "x" years:



- By direct coke saving
- By CO<sub>2</sub> tax saving (M€)
- Cumulated Total (M€)

Graph: Case study calculated on an existing blast furnace with ceramic cup (hearth diameter 11m)

<sup>1</sup> www.ec.europa.eu/clima/policies/ets\_en    <sup>2</sup> in hearth with Saint-Gobain Ceramic Cup

### Leverage Our Expertise.

Saint-Gobain Performance Ceramics & Refractories engineers and researchers collaborate with you, our customers, to solve operational challenges with customized hearth lining solutions.

**For more information: [Ceramics.refractories@saint-gobain.com](mailto:Ceramics.refractories@saint-gobain.com)  
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**PERFORMANCE CERAMICS & REFRACTORIES**

