



SAINT-GOBAIN PERFORMANCE CERAMICS & REFRACTORIES

REPAIR PRODUCTS

FOR BLAST FURNACES



FULL RANGE OF REPAIR PRODUCTS

CASTABLES - SIALFRAX™ CAST

Colloidal-silica bonded Al₂O₃-SiC-Carbon castables

- SIALFRAX™ 18 CAST
- SIALFRAX™ 18 CAST+

SHOTCRETE - SIALFRAX™ SHOT

Colloidal-silica bonded Al₂O₃-SiC-Carbon castables

- SIALFRAX™ 18 SHOT
- SIALFRAX™ 18 SHOT+
- SIALFRAX™ 30 SHOT
- SIALFRAX™ 30 SHOT+

Cement bonded 60 % Al₂O₃ castable

- ALFRAX® 60 SHOT

FEATURES & BENEFITS

SIALFRAX™ CAST



Excellent hot and mechanical strengths



Minimized lining wear rate



Very good resistance to thermal shock, creep, erosion, chemical attack

SIALFRAX™ SHOT



Fast installation rate



Low rebound (< 5.0 %)

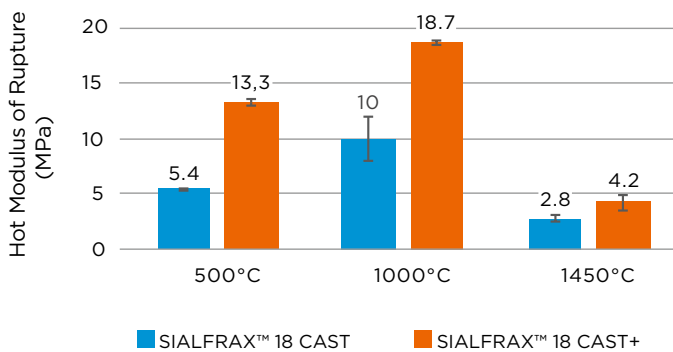


Ideal for a combination of fast pumping + robot application techniques



Excellent adhesion, no matter what wall thickness is required

HOT MODULUS OF RUPTURE



Application of shotcrete - Sialfrax™ Shot

SIALFRAX™ - CAST+ and SHOT+ SERIES

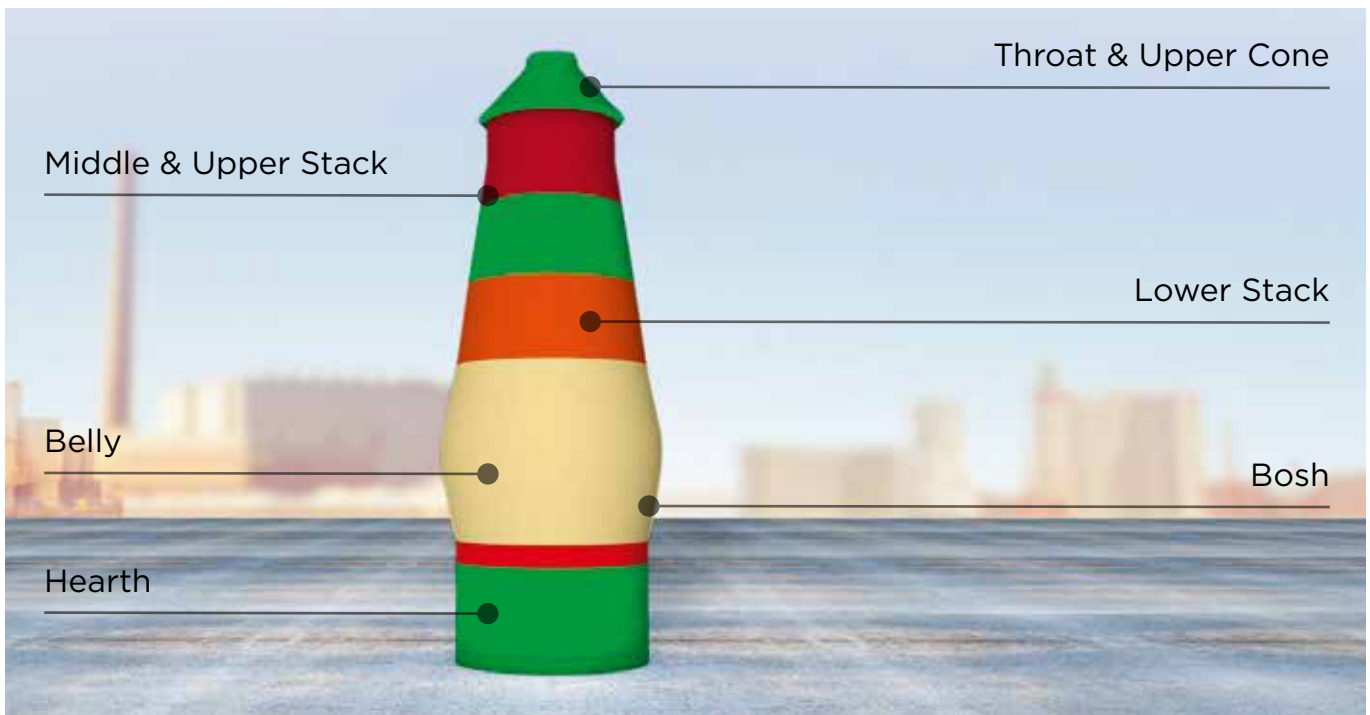
Our PLUS (+) special products comprise a new generation of colloidal silica-bonded materials, which were designed to obtain very good rheological properties, a more dense structure and lower porosity, enabling them to deliver extremely high abrasion and corrosion resistance guaranteeing the maximum protection for blast furnace walls.

Target:

Minimize your lining wear rate!

APPLICATION AREAS

With lifetimes of blast furnace campaigns increasing up to 20 years and beyond, intermediate refractory repairs gained significant importance. Saint-Gobain provides colloidal-silica bonded castables (SIALFRAX™ CAST series) for re-profiling the hearth and repairing the tapholes as well as high-performance shotcreting materials (SIALFRAX™ SHOT series) for the repair of all linings within the blast furnace: throat, upper cone, upper/middle/lower stack, belly, bosh, and hearth.



A WIDE RANGE OF LINING SOLUTIONS FROM TOP TO BOTTOM

From a materials requirements perspective, a blast furnace refractory lining may be split into five areas from top to bottom.

AREA	MAIN WEAR MECHANISM	SUITABLE SHOTCRETE PRODUCTS	
		1st option	2nd option
Hearth	Molten Iron / Slag Erosion	SIALFRAX™ 18 CAST+	SIALFRAX™ 18 CAST
Bosh	Abrasion / Strong Alkali Attack	SIALFRAX™ 30 SHOT+	SIALFRAX™ 30 SHOT
Lower Stack	Abrasion / Strong Alkali Attack	SIALFRAX™ 18 SHOT+	SIALFRAX™ 18 SHOT
Middle & Upper Stack	Abrasion at < 1000°C	ALFRAX® 60 SHOT	SIALFRAX™ 18 SHOT
Throat & Upper Cone	Abrasion at < 1000°C	ALFRAX® 60 SHOT	-

* All shotcrete materials are also available as a castable.

SAINT-GOBAIN



1 in **4** products
did not exist 5 years ago



170.000
employees



sales of
€ 42.6 billion



represented in
70
countries



3.800
researchers



8
main R&D centres

OUR MISSION

Saint-Gobain designs, manufactures and distributes materials and solutions which are key ingredients in the well-being of each of us and the future of all.

OUR PURPOSE

MAKING THE WORLD A BETTER HOME.

SAINT-GOBAIN PERFORMANCE CERAMICS & REFRACTORIES

OUR MISSION

To design, develop and supply solutions and services for extreme operating industrial conditions. Our engineered ceramics and refractory products are manufactured to the highest industrial standards and deliver enhanced performance while minimizing environmental impact.



WE ARE COMMITTED TO BEING CARBON FREE BY 2050.

GLOBAL PRESENCE

NORTH & SOUTH AMERICA

Latrobe (USA)
Niagara Falls (USA)
Worcester (USA)
Vinhedo (Brazil)

MIDDLE EAST & AFRICA

Dubai (UAE)

EUROPE

Castellón (Spain)
Cologne (Germany)
Corsico (Mi), (Italy)
Prague (Czech Republic)
Rainford (United Kingdom)
Rödental (Germany)
Vénissieux (France)

INDIA

Bangalore
Halol

PACIFIC

Melbourne (Australia)

JAPAN

Seto
Tokyo

CHINA

Shanghai

ASIA

Seoul (Korea)

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PERFORMANCE CERAMICS & REFRACTORIES

