

## LITHIUM SLAG TECHNOLOGY

BLOOH Solution's innovative technology provides solutions to the challenges of cement production, where extremely high dust levels, steam, temperatures and remote locations are commonplace. Reliability in demanding applications is paramount and BS products are designed to meet this challenge.

The presence of admixtures in the mix design of concrete is essential to its performance. L-Slag 40S is a concrete admixture based on lithium slag technology. Lithium slag (LS) is a waste residue produced during the processing of lithium products. The particles of L-Slag 40S are less than 1  $\mu$ m in diameter, which is about 100 times smaller than the typical particle size of cement particles.

# ADVANTAGES OF THE CONCRETE ADMIXTURE L-SLAG 40S

#### **Abrasion resistance**

Concrete containing lithium slag has very high abrasion resistance. In soil and pavement construction, it increases durability in heavily trafficked areas. Its use saves time and money and improves operational efficiency for the facility operator.

#### **High strength**

Compressive strengths are dramatically increased for high-performance concretes. L-Slag 40S in combination with Sika superplasticizer is used to produce very high strength concretes. Additionally, it facilitates the pumping of concrete during the construction of high-rise buildings.

#### **Corrosion resistance**

The reduced permeability of lithium slag provides protection against the penetration of chloride ions, making it ideal for applications where concrete must resist chemical attacks.

#### Sulfate and chemical resistance

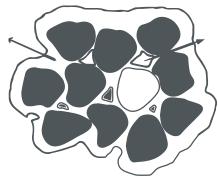
Concrete containing lithium slag has low permeability and high chemical resistance, providing increased protection against sulfates.

#### Freeze-thaw resistance

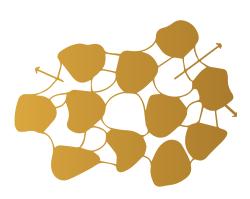
The reduced permeability gives the concrete excellent freeze-thaw resistance, as less water is trapped in the cement paste.

#### **Heat reduction**

The use of lithium slag as a substitute for cement leads to a lower temperature rise and temperature differential in concrete with the same strength. This reduces the risk of cracking and associated reduction in strength and durability.



NORMAL CONCRETE



**BS-L-SLAG 40S** 



# **PRODUCTS**

# L-SLAG 40S CONCRETE ADMIXTURE

This additive uses L-Slag 40S technology to improve the strength, durability, and workability of concrete. It can be used in a variety of applications, from structural construction to decorative surfaces. The recommended dosage rate is 2-5% of the weight of the cementitious material, depending on the desired outcome.





### L-SLAG 40S MORTAR ADDITIVE

This additive is designed for use in mortar mixes and offers similar benefits as the concrete additive L-Slag 40S, including increased strength and durability. It can be added in the ratio of 5-10% of the weight of the cementitious material.

## L-SLAG 40S FLOOR COATING SYSTEM

This flooring system uses a combination of L-Slag 40S technology and other materials to create a durable, high-performance surface that can withstand heavy traffic and abrasion. It is available in a variety of colors and finishes and can be customized to specific project requirements.





## L-SCHLACKE 40S REPAIR MORTAR

This repair mortar is formulated with L-Slag 40S technology to ensure excellent bonding strength and durability. It can be used for patching and repairing concrete surfaces and structures, including vertical and overhead applications.

# DRIVING INNOVATION FORWARD!

