

Ground Granulated Blast Furnace Slag (GGBFS)



Product Overview:

- **Product Type:** Supplementary Cementitious Material (SCM)
- **Description:** GGBFS is a fine granular material that is a byproduct of the iron manufacturing process. It is produced by quenching molten blast furnace slag with water or steam, resulting in a glassy granular product. GGBFS is known for its pozzolanic properties, which make it an excellent choice for enhancing the properties of concrete and other construction materials.
- **Source:** UAE, India & China

Key Features:

- **Pozzolanic Reactivity:** GGBFS is highly pozzolanic and reacts with calcium hydroxide to produce additional cementitious compounds, enhancing the strength and durability of concrete.
- **Reduced Heat of Hydration:** It helps in controlling the heat generated during the cement hydration process, making it suitable for mass concrete applications.
- **Improved Workability:** GGBFS enhances the workability of concrete, making it easier to place and finish.
- **Enhanced Durability:** It improves concrete's resistance to sulfate attacks, chloride penetration, and alkali-silica reactivity (ASR).
- **Environmental Benefits:** Using GGBFS in concrete significantly reduces carbon emissions and conserves natural resources, making it an environmentally responsible choice for construction projects.

Applications:

- **Concrete Production:** GGBFS is widely used as a supplementary cementitious material in concrete production, reducing the need for Portland cement and improving the long-term performance of concrete.
- **Mass Concrete:** It is suitable for mass concrete applications, such as dams, bridges, and foundations, where heat generation during curing needs to be controlled.
- **High-Performance Concrete:** GGBFS is used to produce high-performance concrete with enhanced strength and durability.
- **Sustainable Construction:** It is a key component in sustainable construction practices, helping reduce the environmental impact of construction materials.
- **Infrastructure Projects:** GGBFS is valuable in infrastructure projects, including roads, bridges, and tunnels, where durability and long-term performance are crucial.

Technical Specifications:

Properties	Unit	ASTM C989
Sulfur Trioxide (SO ₃)	%	2.5 Max
S ₂	%	2.5 Max
Loss on Ignition (LOI)	%	3.0 Max
Fineness Blaine	%	Typical 410–470 m ² /kg
Magnesium oxide	%	18 Max
Activity Index at 28 days	%	95 Min



Quality Standards:

GGBFS products conform to ASTM C989 and other international standards for supplementary cementitious materials.

Storage and Handling:

Store GGBFS in a dry environment to prevent moisture absorption. Handle with care to minimize dust generation.

Environmental Benefits:

Using GGBFS in construction materials significantly reduces greenhouse gas emissions and conserves natural resources. It is an environmentally responsible choice for sustainable construction practices.

masheed is a **leading supplier** of GGBFS in Saudi Arabia. We maintain a leading position by delivering the best value to all our stakeholders in a sustainable manner. We are dedicated to both **environmental preservation and societal progress**

masheed Logistics Solutions:

Our partnership with SESCO Trading strengthens our position as a leading supplier in the Saudi Arabian market



Sourcing

Strategic partnership with major **GGBFS** manufactures in **China**



Cement Terminals

Houston, Tampa, and 10 worldwide terminals



Carrier- Floating Terminals

Sailing the oceans with **4 cement carriers** including **Linda Cem Bulk Carrier**

Warehousing

- **Total Space:** 180,000 square meters of warehouse space.
- **Distribution Hubs:**
 - Dammam
 - Yanbu
 - Jeddah
 - Neom

NEOM Warehouse: Masheed has added a new warehouse at NEOM, designed to facilitate faster and more efficient deliveries to support the ongoing and future projects in the NEOM region.



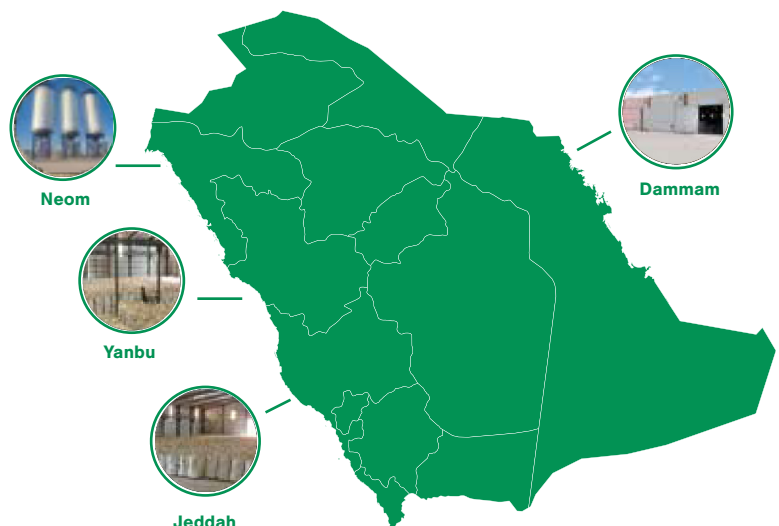
Neom Silos Warehouse

Features of Masheed's Distribution Network

- **Operational Efficiency:**
 - **Debaggging system** and silos to manage bulk GGBFS , ensuring smooth operations for our clients and projects.
 - **Floating terminal** at Yanbu port gives masheed **faster response time** for bulk deliveries to it's customer.
- **Comprehensive Coverage:** Masheed's network ensures timely and complete deliveries across all regions of Saudi Arabia.



Floating terminal



masheed distribution hubs