



DGC REFRACTORIES

**MELTING TANKS | FOREHEARTHES & WORKING ENDS
TIN BATHS (FLOAT GLASS) | REGENERATORS & CHECKER CHAMBERS
PORT CROWNS, SUPERSTRUCTURES, & BREAST WALLS | HOT REPAIR ZONES**

GLASS INDUSTRY

Industry Application Guide

**HIGH-PURITY REFRACTORY
MATERIALS FOR GLASS
MANUFACTURING EXCELLENCE**



INDUSTRY FOCUS

GLASS PRODUCTION DEMANDS EXCEPTIONALLY STABLE & HIGH-PURITY REFRACTORIES THAT CAN MAINTAIN STRUCTURAL INTEGRITY AT ELEVATED TEMPERATURES WHILE RESISTING CORROSIVE VAPOURS & MOLTEN GLASS CONTACT.

With rising expectations for production uptime, fuel efficiency, and glass quality, the role of refractory linings in modern glass plants has never been more critical.

DGC Refractories provides a comprehensive range of premium-grade, shaped refractory materials engineered for float, container, and fibreglass tank furnaces, as well as tin baths, regenerators, and hot repair solutions. Our products are engineered for optimal thermal efficiency, metal purity, and lining longevity.

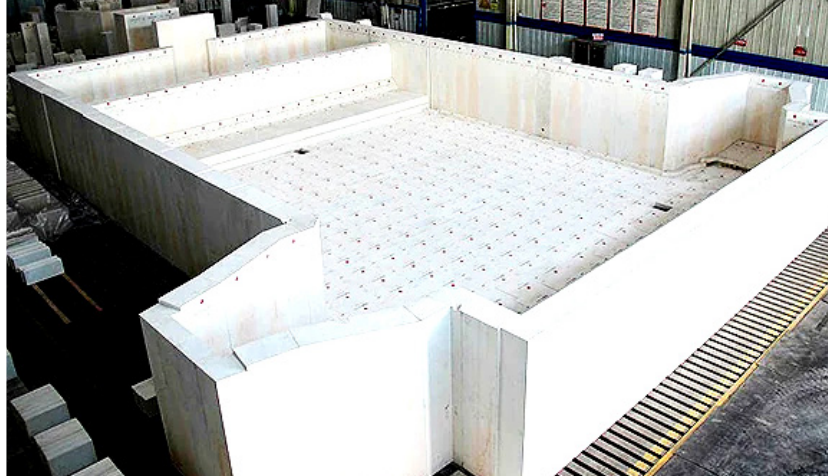


CORE APPLICATION AREAS

Our refractory systems are used in all major areas of glass manufacturing, including:

- Melting Tanks
- Forehearth & Working Ends
- Tin Baths (Float Glass)
- Regenerators & Checker Chambers
- Port Crowns, Superstructures, and Breast Walls
- Hot Repair Zones

Each section requires tailored thermal conductivity, corrosion resistance, and low impurity content to ensure minimal glass defect rates.



REFRACTORY **PRODUCT** RANGE

SHAPED REFRACTORIES

- **Fused Cast AZS Bricks**
High corrosion resistance, used in contact zones with molten glass
- **Silica Bricks**
Excellent creep resistance at high temperatures; used in crowns and checker chambers
- **Zircon Bricks**
Outstanding resistance to alkali vapours and sodium oxide corrosion
- **Sillimanite and Mullite Bricks**
Low thermal expansion and high thermal shock resistance
- **Low Porosity Fireclay Bricks**
Used in structural zones with moderate temperatures
- **Magnesia Bricks**
Suitable for regenerator zones and other alkali-exposed areas
- **Corundum Bricks & Corundum-Mullite Bricks**
High alumina products for enhanced resistance to chemical attack

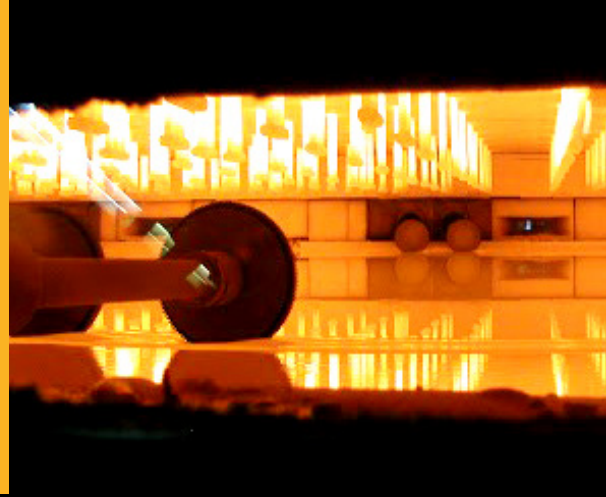


**ALL MATERIALS ARE MANUFACTURED
IN ACCORDANCE WITH STRINGENT QUALITY
STANDARDS & HAVE TRACEABLE BATCH RECORDS**



PERFORMANCE BENEFITS

- Long service life and stable thermal performance under cyclic loading
- Superior mechanical integrity under high load and thermal stress
- Lower porosity and slag resistance in key exposure zones
- Consistent dimensional tolerances for smooth installation



TECHNICAL SUPPORT & QUALITY ASSURANCE

DGC Refractories provides:

- Furnace lining design support
- On-site assessment and material specification assistance
- Hot repair product selection guidance
- Consistent material testing and QA documentation

Our support ensures materials meet the strict tolerances and high-purity requirements of global glass producers.

SUSTAINABILITY & RELIABILITY FOCUS

We contribute to environmentally responsible glass production by:

- Offering high-durability bricks that reduce replacement cycles
- Enabling greater energy recovery through thermal insulation design
- Promoting cleaner melt operations through low-impurity refractory chemistries.

DGC REFRACTORIES
**PRECISION
MATERIALS
FOR THE ART
& SCIENCE
OF GLASSMAKING**



www.dgc-africa.com REACH OUT TO US contactus@dgc-africa.com

OVER A CENTURY OF SERVICE. A FUTURE BUILT ON ENGINEERED RESILIENCE.

