



ÇİMSA

DURO



ADVANCED CALCIUM ALUMINATE FLUX FOR STEELMAKING



DURO is an advanced calcium aluminate-based refining material developed for high-quality steel production and specialized metallurgical processes.

Achieving ultra-low sulfur (S) levels is a critical requirement in premium steel manufacturing. These levels can only be reached through effective desulfurization in the ladle combined with the use of an appropriate refining slag.

DURO offers a balanced oxide composition and a high proportion of reactive phases, providing a strong chemical structure. Thanks to these features, DURO ensures rapid and highly efficient desulfurization, significantly improving process performance and productivity in steelmaking operations.



Physical Properties

<30 mm cumulative passing:	Maks. %10
< 5 mm cumulative passing:	Maks. %10

Chemical Composition

Al ₂ O ₃ (%)	CaO(%)	SiO ₂ (%)	Fe ₂ O ₃ (%)
≥40,0	≥48,0	≤4,0	≤2,0

TiO ₂ (%)	MgO (%)	SO ₃ (%)	Na ₂ Eq Alkali (%)	Cl-as ions (%)	S-as ions (%)
≤2,0	≤1,0	≤0,2	≤0,3	≤0,01	≤0,1

Phase Composition

Minor Mineral Phases : C₁₂A₇, CA, C₂S

Ultra-Low S

Capability to achieve extremely low sulfur levels.

Optimal Oxide

Strong chemical structure with high reactive phase ratio.

Fast Desulfurization

Rapid and efficient process for maximum productivity.

Process Control

Ensures stable and controlled steelmaking operations.



ADVANTAGES



MAXIMUM PERFORMANCE

DURO CA Flux delivers rapid and efficient desulfurization at 1375 °C, boosting productivity in steelmaking. Its low melting point enables it to act as an effective flux for optimized process control.



ECO-FRIENDLY TECHNOLOGY

Fluorine-free CA Flux composition ensures safety for both the environment and refractories. Developed under Çimsa's sustainability principles, DURO offers environmentally responsible metallurgy solutions.



CONSISTENT QUALITY

It offers consistent phase structure and chemistry for your steel process. DURO will increase the efficiency of steel production with its special phase structure and provide long-term benefits to steelmakers.



LOW DUST EMISSION

Produced using fusion technology, DURO CA Flux minimizes dust generation during handling. This feature enhances workplace safety and meets environmental standards.



CUSTOMIZED SOLUTIONS

Tailor-made particle size options are available to meet specific customer requirements. DURO CA Flux provides flexibility for diverse process needs.



FLEXIBLE DELIVERY

Available in big-bag or bulk packaging for fast and reliable supply. Çimsa's global logistics network ensures uninterrupted service to over 60 countries.



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