

DV & TM SERIES TUNDISH FLUX



A SMARTER ALTERNATIVE TO RICE HULL ASH

While rice hull ash is widely used across the industry for its insulation properties and cost efficiency, it can introduce several operational challenges. Its addition often generates significant dust, increasing operator exposure to airborne particles with high silica content (typically over 90%). This not only raises safety concerns but also drives greater housekeeping demands. In addition, variability in combustion behavior can lead to inconsistent slag performance, making process control more difficult.

OPTA offers two versatile lines of slag conditioning solutions that provide full and partial rice hull replacement, the DV and TM line of products. Both are engineered for outstanding performance in billet and bloom casting operations, while emphasizing the safety and cleanliness of the ladle operating platform of the caster.

DV SERIES

CaO	1-20%
SiO ₂	40-80%
Al ₂ O ₃	4-15%
MgO	2-11%
C	2-30%

TM SERIES

CaO	1-20%
SiO ₂	30-60%
Al ₂ O ₃	3-10%
MgO	2-9%
C	5-35%



ADVANTAGES:

- Reduced airborne particulates during addition.
- Controlled melting behavior for consistent tundish coverage.
- Improved operator visibility during casting.
- Further alignment with internal EHS and sustainability targets.
- Engineered performance tailored to your operational needs.

Partner with our technical team and leverage our deep industry expertise, cutting-edge technology and advanced technical services. We can tailor a solution to meet your specific process and quality requirements.

SCAN
HERE



Optimal performance from tap to cast.

PRODUCT PERFORMANCE WITHOUT COMPROMISE

OPTA's rice hull replacement slag solutions are engineered to deliver reliable coverage and thermal insulation for casting through controlled melting behavior. These adaptable fluxes enable precise tuning of the slag environment while meeting the demands high-spec casting applications.

These solutions are engineered to match or exceed the traditional performance of rice hull-containing products while delivering improved process consistency and control. They provide reliable thermal insulation across a wide range of operating temperatures and promote stable, continuous slag layer formation, helping operators maintain more predictable and efficient furnace conditions.

	DV SERIES Rice Hull-Free			TM SERIES Partial Rice Hull Replacement		
	1300	1400	1500	1200	1250	1300
Temperature (°C)	1300	1400	1500	1200	1250	1300
Melt Behavior Description	Light surface melting, granular texture remains	Moderate melting with glassy patches	High melting uniform and glassy	Fragmented melt, uneven distribution of dark material	Increased glass formation, some dark clumps remain	Mostly continuous melt with minimal unmelting regions
Estimated Melt (%)	25	60	90	30	55	75

The **DV Series** is designed to deliver consistent, uniform coverage through engineered melting, ensuring a predictable transition to a fully liquid slag layer. It provides stable insulation without reliance on rice hulls, supporting more controlled and reliable furnace performance.

The **TM Series** is designed to provide a gradual transition in melting behavior while maintaining the familiarity operators expect. It preserves known melting characteristics and supports a range of applications, from partial to full replacement of rice hulls, balancing insulation performance with operational flexibility. Available in both rice hull-containing and rice hull-free formulations, each option delivers an engineered solution with comparable melting and insulating behavior, while the rice hull-free version offers enhanced safety performance and improved operational stability.

Same TM Series design, one with and one without rice hulls:

- Both deliver an engineered solution with comparable melting and insulating behavior.
- The rice hull free formulation enhances safety performance and operational stability.



Optimal performance from tap to cast.