

DIRECT FIRED KILNS

Efficient Heat Management for Industrial Wood Drying

System Components:

Heat Plants: Green Sawdust Gasifier, EBS Dry Shavings Burner, Natural Gas Burners

Mixing Chamber: Combines combustion air, kiln return air, and fresh air for uniform delivery into the kiln.

Recirculation Fan: Circulates hot air from the mixing chamber through the kiln.

Heat Distribution: Manual gates ensure even heat throughout the kiln.



Heat Source Options:

Feature List	Green Sawdust Gasifier	EBS Burner System	Natural Gas Burners
Capacity	15-50MM BTU/HR	15-70MM BTU/Hr	15-70MM BTU/Hr
Fuel	48-56% MC Green Sawdust	14-16% MC Dry shavings	Natural Gas
Cost to Run	\$	\$\$	\$\$\$
Feature #1	Optimized combustion control.	Vortex Chamber for longer retention, reducing ash carryover.	Compatible with wood waste systems for dual-fuel efficiency.
Feature #2	Reduced ash and wear through innovative design.	Weekly maintenance requires minimal downtime.	Easy to operate and zero ash carryover

Key Features of KDS Windsor's Heat Plants:

Efficient Ash Management: System is designed for lowest ash carryover.

Balanced Airflow: Even distribution using multiple under-grate air inlets.

Quarterly Maintenance: The system is designed for quick clean-out and relighting.

Factory-Poured and Cured Refractory Lined Chamber: To withstand the extreme heat generated during operation, the gasifier's chamber and hot duct are lined with factory-poured and cured refractory material. This enhances the durability of the system, ensuring longevity and reliable performance under continuous use.

