LINCOLN INDUSTRIES / INNOVATION INSPIRED.®



THERMOLINC® FLEX

Patent Pending

DESCRIPTION

ThermoLinc® Flex: Flexible, Durable Exhaust Insulation by Lincoln Industries

Lincoln Industries' ThermoLinc® Flex is an innovative, multi-layer exhaust insulation system engineered for maximum flexibility and durability. Unlike traditional insulation that requires precise sleeves to match specific tube geometries, ThermoLinc® Flex wraps seamlessly around various exhaust configurations, handling different diameters, brackets, and complex geometries with ease.

KEY FEATURES & BENEFITS

Exceptional Flexibility
The wrap design offers superior adaptability compared to rigid sleeves, accommodating a range of shapes and sizes.

Cost-Effective Design:
Minimal tooling requirements mean faster setup and lower costs than metal-encapsulated systems.

In-House Validation & Testing
Lincoln Industries provides complete customer validation and lab testing capabilities under one roof, ensuring quality and reducing lead times.

Adaptable Insulation Thickness
ThermoLinc® Flex can be tailored to various insulation thicknesses, enhancing versatility for different applications.

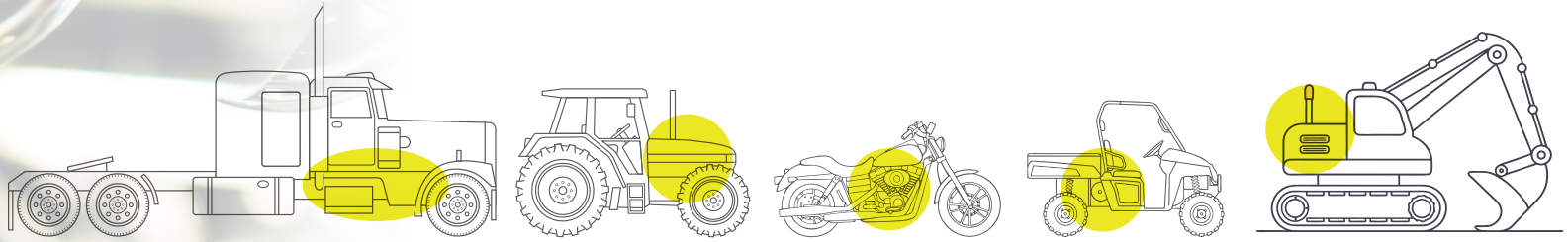
Single-Site Fabrication & Insulation
All fabrication, insulation, and testing are completed in-house, streamlining the production process and ensuring top-tier quality control.

Rapid Prototyping
Our in-house prototyping capabilities allow us to quickly develop and test solutions, expediting time-to-market.

OEM-Approved for High-Volume Applications
ThermoLinc® Flex is approved for high-volume OEM applications in on-highway trucks, meeting rigorous standards for durability and performance.

High-Temperature Resilience
Performs up to 950°C exhaust gas temperatures (EGT), providing a high degree of thermal performance flexibility.

With over a decade of experience and a reputation as a trusted partner to leading brands, Lincoln Industries delivers innovative insulation solutions for both diesel and gas exhaust applications.



PREMIUM PROVEN QUALITY SOLUTIONS

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THERMOLINC® FLEX

PERFORMANCE DATA

ATTRIBUTE	VALUE	STANDARD
Physical Thermal Conductivity	0.06 W/m/k at 260°C, 0.133 at 538°C, 0.244 at 816°C, 0.327 at 982°C	ASTM C1114
Appearance	Uniform cover-multiple tinting options available	Lincoln Industries' Standard
Vertical Burn Test	Cover did not ignite or propagate	Lincoln Industries' Standard: Direct flame (MAPP) 2000°C for 60 seconds
Gravelometer	Passed - Softening of the cover, no holes formed in cover	SAE J400, repeat 100 cycles
Drop Impact	Passed – No external damage	ASTM D-2794 modified
Cold Cracking	No visual degradation	Lincoln Industries' Standard: Dry Ice (-78°C) for 2 hours, 260°C for 2 hours, repeat 10x
High Pressure Wash Adhesion	No visual degradation	STD 423-0015 modified
Vibration	No visual degradation	Lincoln Industries' Standard: Immerse in water 1hr, install on vibe table 24hr, repeat 4X. Equipment: Vibco 4P-100, 24"x24" Vibration Table, 1800 vpm, 0.071" displacement, 3.4G's, 30 Hz.
Neutral Salt Spray	Passed – No visual degradation to insulation cover	ASTM B-117, 96 hour
Chemical Resistance	Passed - No visual degradation to sample material coupons	Lincoln Industries' Standard: 240 hour chemical immersion (see table below)

CHEMICAL

CHEMICAL TESTED	PASSED CHEMICAL IMMERSION AT 240 HRS
Antifreeze (50/50)	X
Antifreeze (extended life)	X
Antigel	X
ATF	X
Water	X
Brake Fluid	X
Brake Fluid (synthetic)	X
Dawn Soap	X
DEF	X

CHEMICAL TESTED	PASSED CHEMICAL IMMERSION AT 240 HRS
Diesel Fuel	X
Gasoline	X
Heat	X
Metal Polish (Aluminum Polish)	X
Metal Polish (Chrome Polish)	X
Motor Oil	X
Motor Oil (synthetic)	X
Water	X
Windshield Wiper Fluid	X