

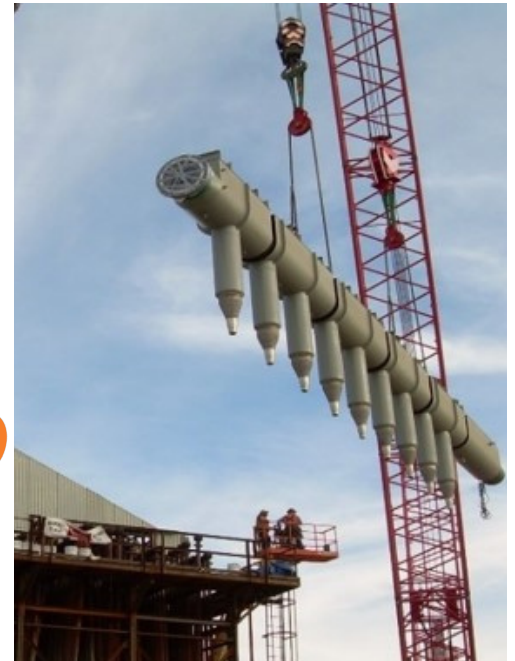
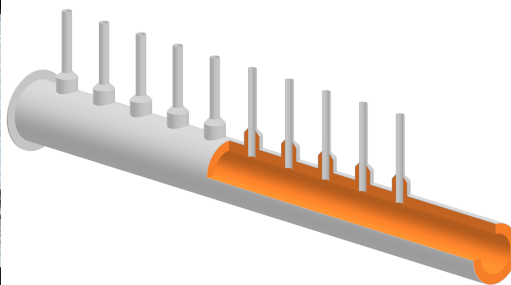
PETROMAX® 25 NS is a high-performance, synthetic aggregate refractory castable engineered for demanding hydrogen and syngas applications. Featuring a self-flowing design, high purity, and low silica content, it delivers an outstanding strength-to-density ratio along with excellent insulating properties. Allied also has gunning and vibration cast versions.

Key Advantages:

- Easier installation
- Similar thermal performance to dual-layer designs
- Superior thermal insulation performance combined with high mechanical strength
- Excellent strength-to-density ratio
- Low thermal expansion to reduce piping stress
- Enhanced reliability and long-term operational excellence
- One-step dry out, unlike dual-layer linings that require two-stage drying (each layer separately)

Innovative Single-Layer Design Advantage

Allied's patented **PETROMAX® 25 NS** technology delivers a single-layer lining solution that is similar to the thermal profile of traditional dual-layer systems—while simplifying installation, improving performance and reliability, and enabling a one-step dry out.



Global **Refractory** Solutions

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EQUIPMENT:

Hydrogen Transfer Line

INSTALLATION:

10" PETROMAX® 25 NS

Single Layer

Single Cast

RESULTS:

(Compared to traditional dual layer system)

Heat Loss/Shell Temperature = Similar

Hot Face Strength = Similar

Installation Time = Better

Field Joint Installation = Better

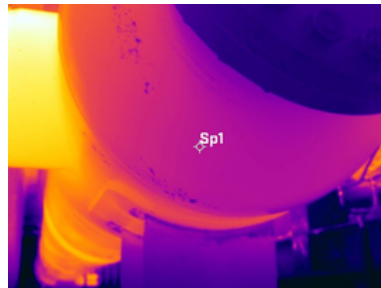
Dryout (single stage) = Better

Reliability = Better

Performance = See photos



Single pour, single layer installation



Thermal scan after 3 years and ongoing.
Cold Face Average ~ 295°F (146°C)



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