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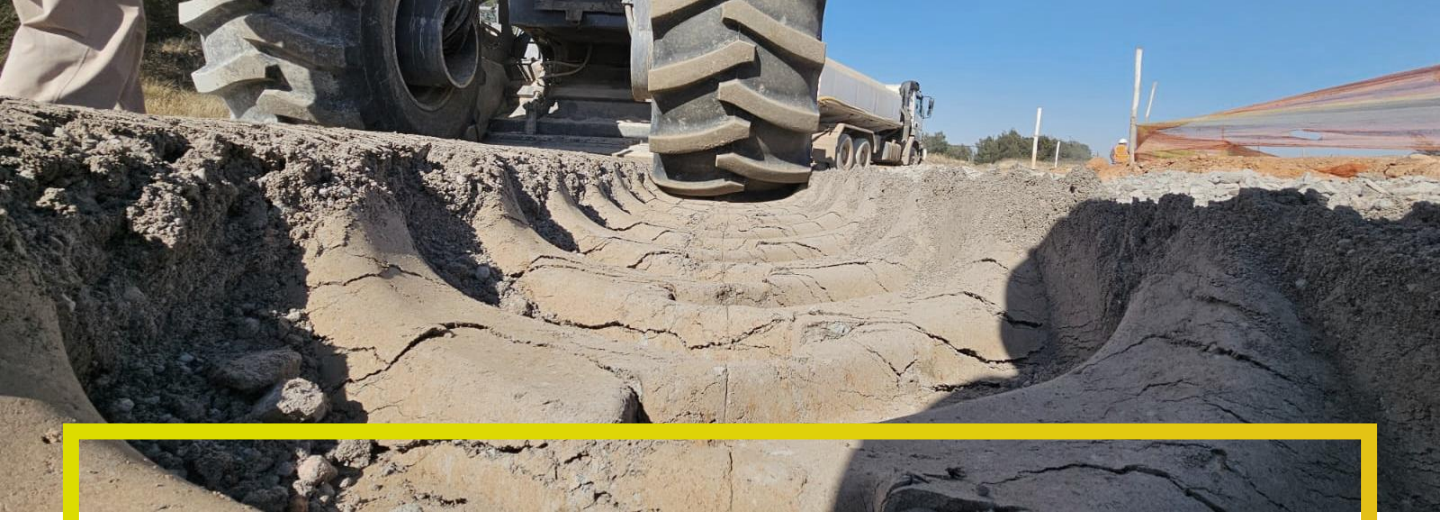
TECHNICAL & COMMERCIAL BRIEF

Ash Stabilisation/Liner System

High Strength • Carbon-Saving • Cost-Effective • Engineered for Performance



ARC Innovations has developed an engineered ash stabilisation roadway/liner system utilising legacy ash to produce durable, load-bearing road layers for internal power station infrastructure.

The system stabilises ash through controlled binder activation, converting a waste material into a reliable pavement layer for heavy industrial traffic.

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Engineering Advantages

- Engineered ash stabilisation system
- Improved strength and stiffness over untreated ash
- Negligible shrinkage and good dimensional stability
- Good compaction behaviour and workability
- Low permeability relative to untreated material
- Suitable for road base, subbase, and platform layers

Commercial Advantages

- Lower construction cost than imported natural aggregates
- Reduces dependence on quarries and long-haul transport
- Utilises on-site legacy ash, lowering disposal costs
- Predictable and scalable material supply
- Supports cost reduction and sustainability objectives

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Key Engineering Results

- Consistent strength gain suitable for heavy-duty pavements
- High achieved compaction and density
- Stable performance with minimal shrinkage
- Improved resistance to deformation and rutting
- Predictable behaviour under controlled moisture conditions

Construction Methodology

1. Legacy ash processing and grading control
2. Binder addition and moisture conditioning
3. Homogenisation and mixing
4. Placement in controlled lifts
5. Compaction to specified density
6. Final trimming and curing

Quality Assurance

- Moisture and density control
- Binder dosage verification
- Strength testing of stabilised material
- Layer thickness and level checks

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When engineered correctly, legacy ash can be effectively stabilised to form durable roadway/liner layers with reliable structural performance.

The stabilised ash system provides a cost-effective and sustainable alternative to conventional granular materials while reducing ash disposal liabilities.

Contact
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