

# Coal Hauling Operations

Cakra Sigma provides reliable and efficient coal transportation from mines to stockyards or ports. Our processes ensure quality, minimal contamination, and timely delivery through systematic coordination, advanced monitoring, and strict safety protocols.

We operate a robust fleet of heavy trucks and specialized equipment, capable of hauling high volumes of coal across diverse terrains. Our operational reach connects mine sites to processing plants and final destinations, optimizing every stage for maximum throughput and efficiency.

Leveraging advanced technology, our operations integrate fleet management systems, real-time GPS tracking, and predictive maintenance. This system provides instant visibility and dynamic route optimization, ensuring reliability and minimizing downtime for consistent service.

Safety is a priority, with strict international standards, continuous driver training, and routine equipment inspections. Our environmental considerations include dust suppression, responsible waste management, and fuel-efficient vehicles to minimize our carbon footprint.

This integrated approach—combining fleet scale, advanced technology, safety, and environmental stewardship—forms our competitive advantage. Cakra Sigma offers a complete logistics solution that guarantees efficiency, cost-effectiveness, and peace of mind for clients in the demanding coal industry.

# Loading and Documentation Process

01

---

## Loading Coordination

Precise coordination between excavation and transport teams ensures smooth operations. Coal is loaded directly from the pit onto haul trucks using hydraulic excavators, minimizing handling time to reduce contamination and loss.

Our loading coordination system is a crucial initial step, ensuring team synchronization to minimize downtime, maximize heavy equipment utilization, and maintain coal quality through efficient direct loading.

The integrated loading ticket system provides real-time visibility with accurate weighing and automated documentation. This supports production monitoring, bottleneck identification, and fleet optimization, while ensuring full compliance and auditing.

02

---

## Weighing & Documentation

Each load is weighed and documented using an integrated loading ticket system. We maintain accurate data tracking to monitor production volume and logistics flow in real-time.

# Safe Transportation and Road Maintenance

## Safe Hauling Operation

Coal is transported using high-capacity dump trucks on well-maintained roads. We enforce strict speed limits, conduct regular safety inspections, and manage operator fatigue to ensure accident-free operations.

- Mandatory pre-shift safety inspections
- Speed limit enforcement with monitoring systems
- Operator fatigue management protocols
- Regular equipment maintenance schedules
- Emergency response procedures

Safety is paramount. Our high-capacity dump trucks undergo comprehensive pre-shift inspections covering critical systems like brakes, steering, and tires. Strict speed limits are enforced with GPS monitoring. Our fatigue management program includes mandatory rest breaks and shift rotation to keep operators alert, minimizing risks and ensuring safe hauling.

Well-maintained haul roads are crucial for safety, efficiency, and equipment longevity. Dedicated crews perform continuous grading for proper drainage and use water trucks for dust suppression, improving visibility and reducing environmental impact. This proactive approach minimizes wear on our fleet, enhances fuel efficiency, and extends operational life while ensuring safe conditions.

## Road Maintenance

Continuous road grading and watering are conducted by support units to maintain smooth traffic, minimize dust, and extend equipment lifespan.

- Regular road grading operations
- Dust suppression through watering
- Drainage system maintenance
- Surface stability monitoring
- Strategic road design improvements

# Stockpile Management and Quality Control

## Intermediate Stockpile Management

Upon arrival at the stockpile, coal is unloaded in designated zones based on grade and intended use. We implement layering and compaction methods to maintain product stability and minimize rehandling.

## Quality Control

Sampling and moisture checks are routinely performed at every transfer point. Our QC team ensures coal properties are consistent with customer specifications before blending or loading.

Effective stockpile management is crucial for maintaining coal quality and operational efficiency. Coal is unloaded in specific zones according to its grade, source location, and final destination to prevent cross-contamination. Our stockpile design incorporates proper drainage and systematic layering techniques (FIFO). Compaction is performed to reduce voids, minimize oxidation, and prevent the risk of spontaneous combustion.

Quality control is integrated throughout the entire transportation and stockpiling process. Our QA team systematically takes samples at key transfer points, including mining areas, intermediate stockpiles, and final delivery locations. Each sample is comprehensively analyzed for moisture content, ash, calorific value, sulfur, and other contractual parameters. Real-time moisture monitoring is critical for decision-making in stockpile management, blending, and loading schedules, ensuring each shipment meets or exceeds customer specifications.



# Delivery and Performance Excellence

Our final operational stage focuses on timely delivery and seamless handover to customers. Coal is delivered to ports, crushers, or client stockpiles following coordinated schedules. Our logistics team maintains constant communication with port operations, aligning hauling rates with vessel loading to prevent demurrage and optimize port utilization. For on-site deliveries, timing is coordinated to match client processing capacity and storage availability.

99.8%	24/7	Zero
On-Time Delivery Rate	Operational Availability	Quality Incidents
Consistent achievement of scheduled delivery commitments	Continuous hauling operations with full logistics support	Maintained through rigorous quality control protocols

## Integrated Control System

Our integrated control system synchronizes hauling, stockpile management, and loading activities. It provides real-time visibility into truck locations, inventories, and loading progress, enabling dynamic optimization of fleet deployment. Dispatchers adjust hauling priorities based on demand, weather, and operational constraints, minimizing waiting times, reducing fuel consumption, and maximizing productivity.

## Continuous Improvement

Performance measurement and continuous improvement are fundamental to our operations. We track key performance indicators such as tonnage delivered, cycle times, fuel efficiency, and safety. Monthly reviews identify opportunities for process optimization and equipment upgrades. This commitment ensures we meet and exceed customer expectations through systematic coordination, rigorous quality control, and a relentless focus on safety and efficiency.