Coal Solutions





Facilitating the global coal supply chain

Coal, a cornerstone of industrial development, plays an indispensable role in shaping our modern world. From powering our energy grids and fueling manufacturing processes to being a fundamental component in steel production, coal's influence reverberates through every facet of society. As the global coal supply chain grows increasingly intricate, navigating its multifaceted terrain becomes an intricate challenge. Monitoring every juncture of this complex journey to ensure the accuracy and caliber of transactions is a daunting endeavor. Stakeholders cannot physically oversee every phase of the expansive supply chain, necessitating a trusted ally to assume this crucial role.

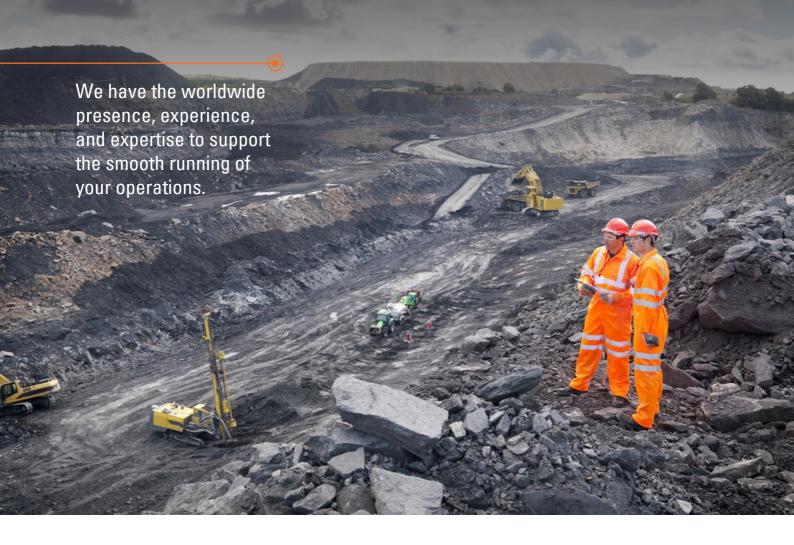
That's where SGS comes in.

Through cutting-edge technologies, rigorous testing, and uncompromising standards, SGS ensures that produced and traded coal meets the highest benchmarks of quality and quantity.

With our global network of trusted, independent experts and state-of-the-art laboratories, we help companies trade globally with confidence.



Keen to learn more about SGS's unique offerings? Keep on reading.



We offer a wide range of solutions to support you along your journey

Our global network of qualified inspectors and laboratory technicians will accurately and swiftly determine the quality and quantity of your coal commodities. Our international risk management experts will help you to identify and minimize any potential risks associated with your business. Benefit from our most accurate market intelligence data to aid decision-making, giving you a competitive advantage in the market.







Inspection



Risk Management



Market Intelligence



A comprehensive range of coal expertise

You operate globally, sourcing and transporting coal commodities from all around the world. Our global network of experts will be your trusted partner on the ground, ensuring the quality, quantity and safety of your goods throughout the supply chain.

Our trusted experts and comprehensive range of coal services will help you trade globally with confidence.





Step towards creating a safe, high-quality supply chain

Quality underpins coal commodities trading. To safeguard your reputation and gain the best possible trading outcomes, you need to demonstrate that your products comply with the necessary requirements and regulations.

Our highly skilled specialists work in advanced laboratory facilities to provide crucial sample preparation and physical testing, chemical testing. Working in state-of-the-art laboratories and boasting best-in-class technical excellence, our experienced staff will confirm that your commodities meet both local and international regulations, as well as your contractual obligations.

Thanks to our range of laboratory accreditations and ongoing membership of internationally renowned industry bodies, you know you can trust us.

- Proximate, ultimate and the full range of coal, ash and mineral analysis
- Sink-float/washability testing
- Mineralogy testing
- Physical and particle size analysis
- · Coke strength and reactivity testing
- Analysis of met, steam coal, pet coke and ash
- Operating on-site and near-site laboratories
- Proficiency test programs
- Customized quality assurance programs, audits and training



Inspection.

To ensure nothing goes unnoticed

Whether you're looking to achieve consistent product quality or are struggling with weight mitigation, working hand in hand with a trusted global partner will play a crucial role in ensuring your organization's long-term success.

Working from the world's major ports and mining locations, we aim to minimize commercial risk by quickly and accurately determining the physical properties of coal commodities. Our experts provide initial sampling, quality and quantity inspection, confirming that your commodities meet all relevant regulatory and contractual requirements.

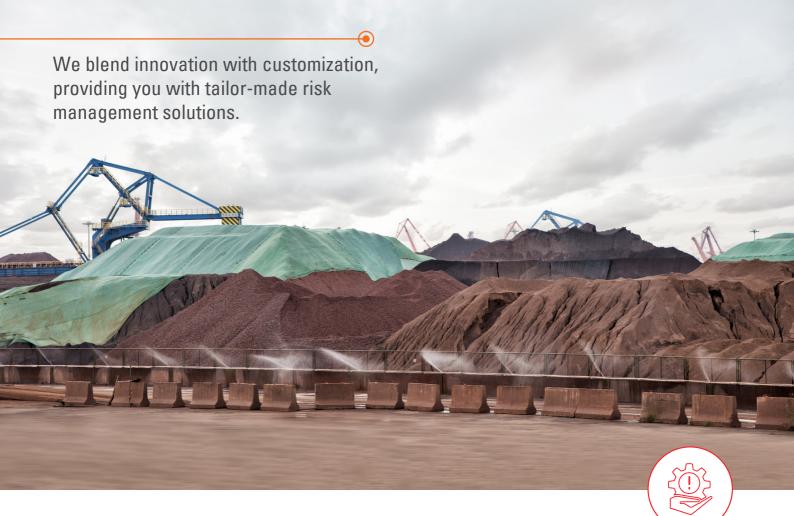
Our global team of dedicated experts will act as your eyes and ears on the ground, supporting every stage of your supply chain Our certificates are recognized globally and are renowned for their reliability.

Shipment services

- Inspection
- Load and discharge supervision
- Rail, vessel and barge assessment
- Vessel and barge gauging
- Draft surveys
- Quality and quantity evaluations

Inventory services

- Stockpile management services
- Volume computation
- Density determination
- Tonnage calculation



Risk management.

Manage risks and operate with confidence

Transporting commodities across continents is far from simple. There is a risk at each stage of your complex supply chain. The key is to proactively identify and quantify the specific risks associated with your business and then make decisions about how to manage and mitigate them.

We specialize in de-risking complex mineral and metal commodities supply chains. Our services include providing initial stock monitoring agreement (SMA) and stock verification services to confirm that the quality and quantity of your goods match your contractual expectations.

Our highly experienced experts will ensure that your commodities do not lose their value as a result of being stored under the wrong conditions or due to any breaches in security. We've also leveraged IoT technology to create smart warehouse solutions, providing you with an easier way to manage remote warehouses and maintain visibility over the inventory they contain.

When commodities make it out of the warehouses, our guarantee services help you transport them safely and seamlessly.

Our global network of internationally acclaimed risk management experts working with the latest cuttingedge digital technologies makes us the ideal partner to manage risk at every stage of the supply chain; safeguarding your commodities and ensuring success of your operations.



Stay one step ahead with market intelligence

We're living in the Information Age.
To succeed in today's fast-moving landscape, organizations operating within the minerals and metals commodities sector must have access to the latest, most accurate data.

Our market intelligence solutions provide you with crucial information to power success throughout every stage of your supply chain.

Our unique global network consists of trusted and experienced teams working with advanced technologies. Our expertise can reveal the quality of local mineral and metal commodities and identify potential opportunities going forward.

We also analyze existing supply chains and communicate the precise impact of various government policies throughout different jurisdictions.

With expert teams on the ground throughout the world, you can benefit from our strategic data gathering and processing — no matter where you're located. Work with the latest, most reliable information to enable effective data-driven decision-making going forward.



Sampling Services

Get a truly representative of the whole

Our comprehensive range of services are designed to optimize the coal supply chain. We undertake several types of sampling services to address different types of customer requirements and specifications.

- Design, construction and operation of Mechanical Sampling Systems (MSS)
- · Manual, belt and auger sampling
- Channel sampling
- Sampling system audits, bias testing, operation and preventative maintenance.

Our services for MSS include:

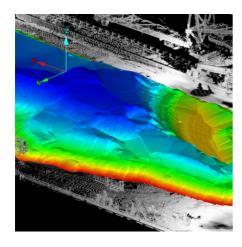
- Inspection
- Bias testing
- Precision testing
- Sample collection and analysis
- Validation & calibration
- Design with turnkey construction and commissioning
- Operational & maintenance services



Stockpile Assessments

Our state-of-the-art 3D scanning technology that uses laser technique for automatic capture of prism to deliver fast and accurate results.

Offering a range accuracy of 4mm and repeatability of 3mm, the 3D scanning technology is the answer for super high speed scanning measurement. The accuracy remains consistent for ordinary and critical assessments.



- High-speed HDR camera with panoramic & snapshot capabilities.
- Wide 360° horizontal, 270° vertical view.
- Rapid data collection: 200K+ points/sec.
- Covers 1200m w/ 50kHz, 100kHz, 200kHz acquisition.
- Robust modeling software for advanced analysis.
- Enhanced visibility: Co-aligned 650nm red laser.
- Swift, accurate results Fastest field-tofinish performance with surface, point, and global scan registration.
- Efficient workflow: Queue multiple scans.
- · Convenient wireless handheld controller.
- Portable & user-friendly ergonomic design.



Coal Wash-Plant Services

Fuelling efficiency with specialized solutions

Our comprehensive suite of services encompasses every facet of plant efficiency and optimization. Through meticulous plant audits and efficiency tests, we delve into the heart of your operations to assess performance and identify areas for improvement. Our consulting expertise brings forth tailored solutions for optimization and troubleshooting, ensuring seamless and effective processes. Utilizing advanced process simulations, we create dynamic models that help to enhance productivity. Furthermore, our adept heat accounting and material balancing techniques provide clarity and precision in resource allocation. We offer specialized Coal Degradation Study which provides invaluable insights into the transformation of coal properties over time.

With a holistic approach, we empower your operations to achieve peak performance, ushering in a new era of operational excellence.

- Plant audit/efficiency tests and plant sampling
- Optimization and troubleshooting consulting
- Process simulations
- Heat Accounting and material balancing
- Coal Degradation Study



Real-time Analysis

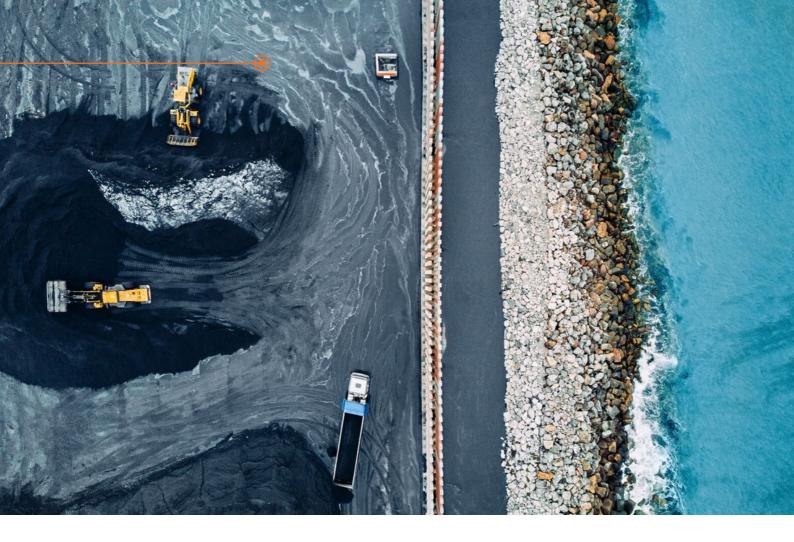
Fuelling efficiency with specialized solutions

Our specialized coal analysis services encompass a spectrum of crucial functions. From design and installation to calibration and operational support, we offer end-to-end solutions for on-line analysis systems. Our real-time quality control mechanisms, facilitated by cutting-edge sorting and blending systems, empower you to maintain optimal coal quality throughout production.

Additionally, our engineering expertise extends to crafting compelling capital justifications for the implementation of these advanced systems, ensuring their seamless integration into your operations.

With precision at every stage, our services redefine coal analysis, enabling you to make informed decisions, enhance efficiency, and elevate the value of your coal resources.

- Design, commission, install, operate, calibrate and support of on-line analysis systems
- Real time control of quality using sorting and blending systems
- Engineering services to develop capital justifications for these systems



Reserve Evaluation

Fuelling efficiency with specialized solutions

Drawing from the science of geostatistics, we craft a comprehensive reserve calculation that provides a clear roadmap for efficient resource management. Through conditional simulation and evaluation, we navigate the complexities of uncertainty, enabling informed decision-making. Our prowess extends to moisture-holding capacity and rank determination, uncovering crucial information that influences coal processing and utilization. Understanding the geological dynamics at play, we delve into rock mechanics and geotechnical testing, ensuring the stability and safety of extraction operations.

Our comprehensive approach results in a strong evaluation, providing deep insights into your coal reserves. This knowledge enables strategic decisions to boost efficiency, optimize operations, and ensure a sustainable future

- Design of drilling program
- Logging and core sampling
- Core analysis
- Geostatistics and reserve calculations
- Conditional simulation and evaluation
- Moisture-holding capacity and rank determination

Our unrivaled global network



500+

130 +

140 +

Laboratories

Countries

Years

We are uniquely positioned to boast highly experienced specialists on the ground and in laboratories throughout the world. Our global presence of local experts means that we'll be on hand at all times to optimize your commodities supply chain, regardless of where your shipments are coming from or going to.

