

VISION AI **FOR INDUSTRIAL INTEGRITY**



**NEXT-GENERATION ASSET INTEGRITY MANAGEMENT
THROUGH STRATEGIC TECHNOLOGY PARTNERSHIP**

www.dgc-africa.com

TRANSFORMING VISUAL DATA INTO OPERATIONAL EXCELLENCE

In the rapidly evolving landscape of industrial operations across sub-Saharan Africa, a revolutionary transformation is taking place. **DGC AFRICA**, building upon more than a century of trusted industrial service, has embarked on a groundbreaking journey that bridges traditional industrial expertise with cutting-edge artificial intelligence technology.

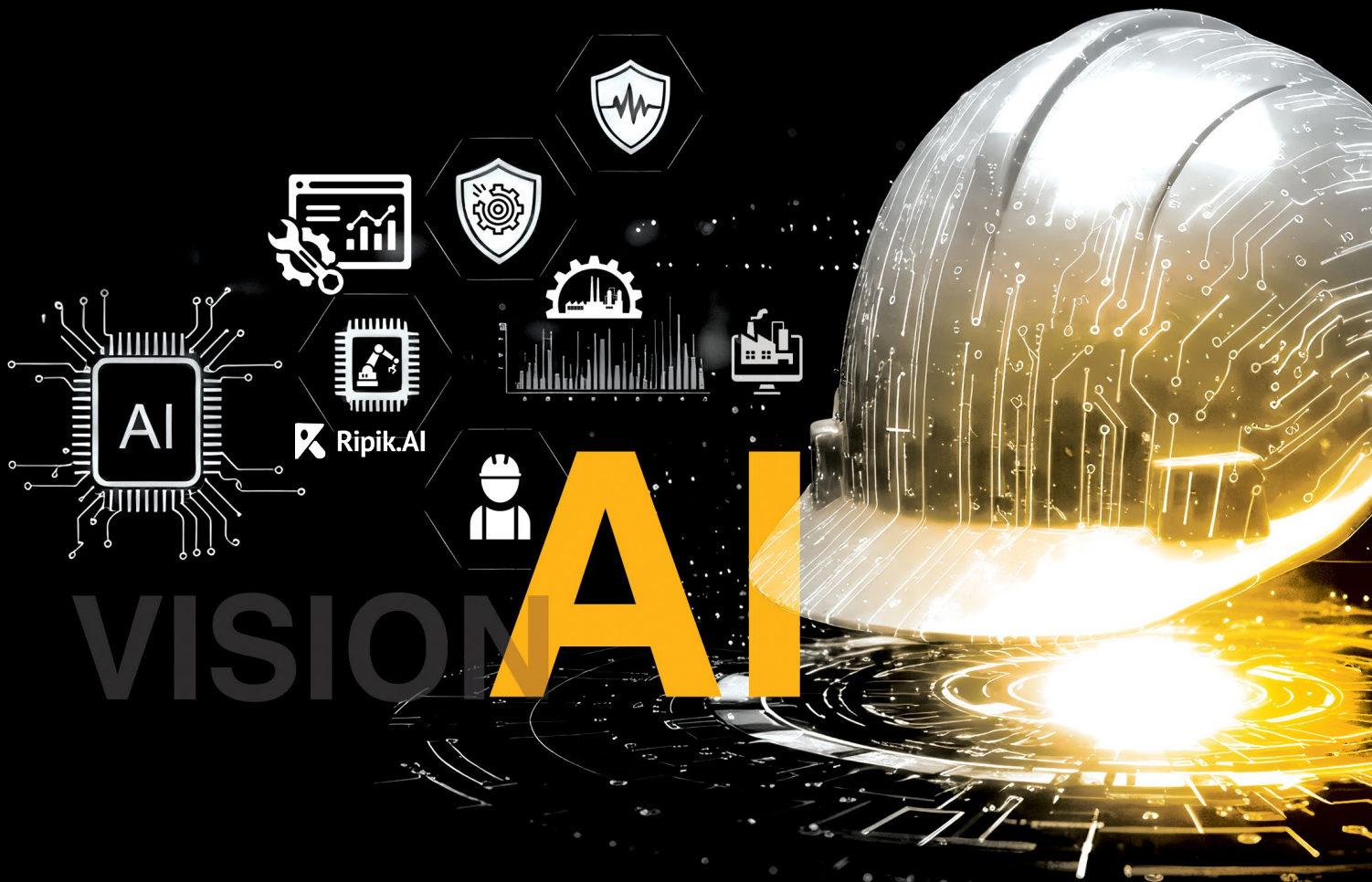


This transformation represents not merely an upgrade to existing services, but a fundamental reimagining of how industrial operations can achieve unprecedented levels of efficiency, safety, and profitability.

As a proud member of the Dickinson Group of Companies, **DGC AFRICA** combines 115 years of industrial heritage with cutting-edge technology partnerships to deliver comprehensive Asset Integrity Management and Industrial Solutions across sub-Saharan Africa. Our Vision AI capabilities, delivered through our strategic partnership with Ripik AI, represent the latest evolution in our commitment to operational excellence, safety, and sustainable growth.

From our roots as a traditional industrial services provider to our current position as a technology-enabled solutions leader, **DGC AFRICA** continues to evolve while maintaining the fundamental values of integrity, innovation, and customer success that have defined our organization for over a century.





OUR **VISION AI PLATFORM** REPRESENTS NOT JUST TECHNOLOGICAL ADVANCEMENT, BUT THE NATURAL PROGRESSION OF OUR MISSION **TO PROVIDE AFRICAN INDUSTRIES** WITH WORLD-CLASS CAPABILITIES THAT DRIVE SUSTAINABLE **COMPETITIVE ADVANTAGE**



Bottom Line Up Front: DGC AFRICA's Vision AI solutions deliver measurable operational excellence, achieving 3-5% yield improvements, 10% reduction in equipment downtime, and 3% energy cost reductions while maintaining our 115-year commitment to industrial excellence across sub-Saharan Africa.

OUR FOUNDATION

WHERE EXPERIENCE MEETS INNOVATION
THE DICKINSON GROUP LEGACY

The story of **DGC AFRICA** begins in 1910, when the Dickinson Group of Companies was founded with a simple yet powerful vision: to provide industrial operations with the highest quality services and solutions available. Over the past 115 years, this commitment has evolved from serving local markets to establishing a global presence, yet the core values that guide our operations remain unchanged.

Today, the Dickinson Group of Companies stands as a global leader in Asset Integrity Management and Industrial Solutions, with expertise spanning diverse industries including mining, metals smelting, mineral processing, and more across continents. We have consistently prioritized innovation, quality, and sustainability in all our endeavours, ensuring operational excellence and client satisfaction across every project we undertake.

DGC AFRICA: BRIDGING EXCELLENCE IN SUB-SAHARAN AFRICA

As the dedicated sub-Saharan African division of this prestigious group, **DGC AFRICA** focuses exclusively on serving the dynamic markets of this region.

**OUR MISSION IS CLEAR & UNWAVERING:
TO FACILITATE OPERATIONAL EXCELLENCE,
PROFITABILITY, & SUSTAINABLE GROWTH
FOR OUR CLIENTS THROUGH A COMPREHENSIVE SUITE OF
HIGH-QUALITY, INNOVATIVE,
& COST-EFFECTIVE ASSET INTEGRITY MANAGEMENT & INDUSTRIAL
SOLUTIONS THAT ENHANCE
RELIABILITY, EFFICIENCY, &
SAFETY ACROSS INDUSTRIES**



THE VISION AI REVOLUTION

TRANSFORMING INDUSTRIAL OPERATIONS

UNDERSTANDING THE UNTAPPED POTENTIAL

In today's industrial landscape, a remarkable paradox exists that represents one of the greatest untapped opportunities for operational improvement. While modern industrial facilities are equipped with hundreds, sometimes thousands, of cameras deployed across manufacturing and processing operations, less than 1% of the captured visual data is actually analysed. This staggering statistic reveals a massive blind spot in industrial operations worldwide.

The challenge facing modern industrial operations is not a lack of visual data, it's the fundamental inability to process and act on that data in real-time. Traditional monitoring approaches rely heavily on human observation, which is inherently limited by attention span, shift patterns, and the physical impossibility of simultaneously monitoring hundreds of camera feeds across complex industrial environments. Human operators, regardless of their skill and dedication, can only focus on a small fraction of the available visual information at any given time.



This limitation has profound implications for operational efficiency, safety, and profitability. Critical equipment anomalies go unnoticed until they become failures. Process variations that could be corrected immediately are allowed to compound over time. Safety hazards develop undetected until they pose serious risks to personnel and operations. The cumulative effect of these limitations represents billions of dollars in lost productivity, increased maintenance costs, and missed optimization opportunities across global industrial operations.

DGC AFRICA'S VISION AI TRANSFORMATION

DGC AFRICA's Vision AI solutions fundamentally transform this landscape by introducing intelligent systems that never tire, never lose focus, and never miss critical details. Our advanced artificial intelligence platforms analyse hundreds of cameras continuously, 24 hours a day, 7 days a week, with precision levels that consistently exceed 95% accuracy.

But this transformation goes far beyond simple monitoring. Our Vision AI systems identify trends and patterns that are completely invisible to human observation, detecting subtle changes in equipment condition, process parameters, and material quality that would otherwise go unnoticed until they manifest as costly problems. These systems can control machines through intelligent automation, responding to detected conditions faster than any human operator could react.

Perhaps most importantly, our Vision AI solutions prepare comprehensive reports and insights that provide unprecedented visibility into operational performance, while intelligently filtering alerts to ensure that operators are only notified of genuine anomalies requiring human intervention. This approach eliminates alert fatigue while ensuring that critical issues receive immediate attention.

The transformation enables industrial operations to shift from reactive maintenance and crisis management to predictive, data-driven operational excellence that maximizes efficiency while minimizing risk. This represents nothing less than a paradigm shift in how industrial operations can be managed and optimized.



PROVEN BUSINESS IMPACT

QUANTIFIED RESULTS ACROSS
GLOBAL DEPLOYMENTS

FINANCIAL IMPACT THAT MATTERS

The true measure of any technological innovation lies not in its sophistication, but in its ability to deliver measurable business results. **DGC AFRICA's Vision AI solutions** have consistently demonstrated substantial improvements that directly impact operational profitability and efficiency. These results are not theoretical projections or marketing promises, they are verified performance data gathered from over 150 deployments worldwide through our partnership with Ripik AI.

DOCUMENTED FINANCIAL IMPACT

- **Over \$15 million in cost savings** delivered across deployments in the last year alone.
- **More than 5,000 hours of equipment downtime avoided** annually through predictive interventions.
- **3-5% improvement in production yields** consistently achieved across diverse industries.
- **10% reduction in equipment downtime** through intelligent predictive maintenance strategies.
- **Significant extension of asset lifecycles** through early intervention and optimized maintenance scheduling.
- **3% reduction in energy costs** achieved through intelligent monitoring and process control optimization.

OPERATIONAL EXCELLENCE BENCHMARKS

The precision and reliability of **DGC AFRICA's Vision AI** solutions consistently outperform traditional monitoring approaches across multiple critical metrics:

PERFORMANCE ACHIEVEMENTS

- **95%+ precision in visual anomaly detection**, setting new industry standards for accuracy.
- **10x more anomalies detected** compared to manual inspection methods.
- **Zero false alerts** achieved through advanced AI algorithms and machine learning optimization.
- **Dramatically reduced response times** enabling faster corrective actions.
- **Minimum 1:5 return on investment** achieved across all deployments within the first year.

These results demonstrate conclusively that Vision AI is not merely a technological upgrade, it represents a fundamental transformation of how industrial operations can achieve unprecedented levels of efficiency, safety, and profitability.

The consistency of these improvements across diverse industrial environments and applications validates the robustness and reliability of our Vision AI platform.

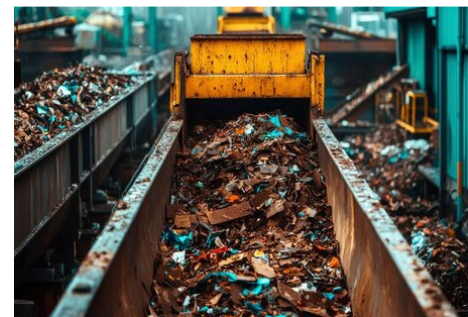
COMPREHENSIVE VISION AI SOLUTIONS PORTFOLIO

MATERIAL MONITORING FOR NET ZERO GOALS

In an era where sustainability and environmental responsibility have become critical business imperatives, industrial operations increasingly require precise material monitoring to achieve both operational efficiency and environmental compliance targets.

DGC AFRICA's material monitoring solutions provide continuous, real-time analysis that optimizes resource utilization while supporting comprehensive environmental compliance initiatives.

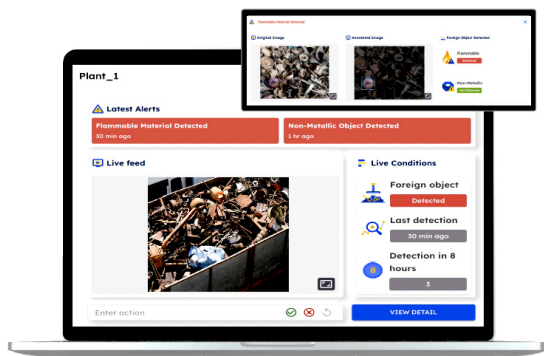
Our advanced AI algorithms continuously monitor and analyse material streams with unprecedented precision, identifying opportunities for waste reduction and process optimization that directly contribute to sustainability goals.



THIS INTELLIGENT MONITORING EXTENDS BEYOND SIMPLE DETECTION TO PROVIDE ACTIONABLE INSIGHTS THAT ENABLE OPERATIONS TEAMS TO MAKE INFORMED DECISIONS ABOUT RESOURCE ALLOCATION & PROCESS ADJUSTMENTS

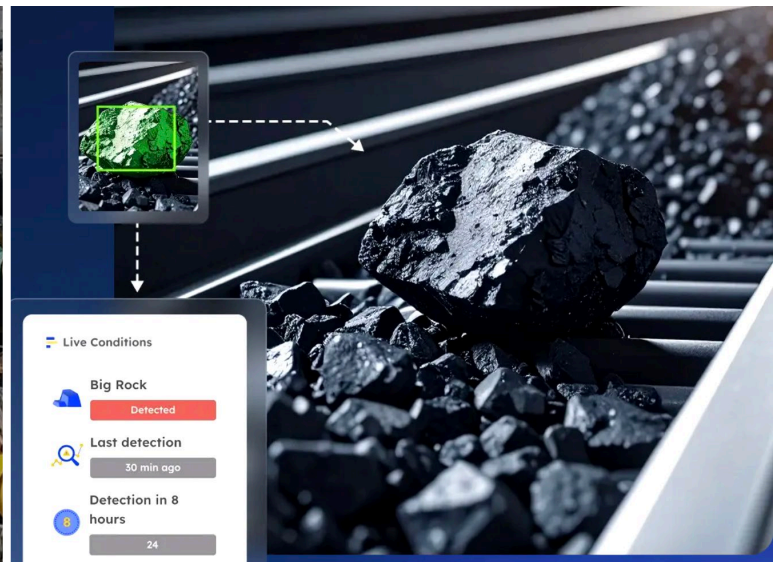
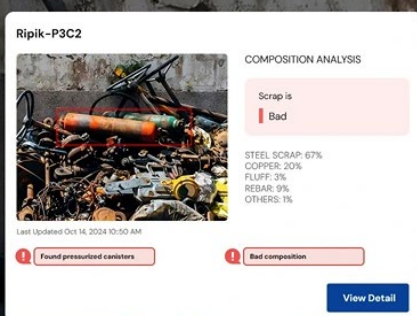
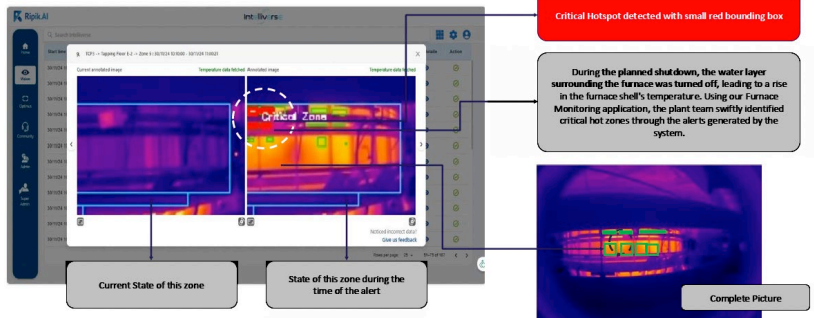
ADVANCED MATERIAL MONITORING CAPABILITIES

- **Foreign Object Detection:** Our sophisticated AI systems provide advanced identification of unwanted materials and debris, preventing equipment damage and ensuring product quality consistency
- **Particle Size Analysis:** Real-time granulometry and particle sizing capabilities through our proprietary SizeSense technology enable continuous process optimization and quality control
- **Moisture Monitoring:** Infrared-based moisture detection systems ensure optimal material control and energy efficiency throughout the production process
- **Quality Control:** Comprehensive fines and undersized particle detection prevents process inefficiencies and waste, contributing to both operational excellence and environmental stewardship.



Root Cause Analysis Conducted by Plant Team for Identified Hotspot (2/3)

Case:3 Water flow stopped due to shut down



EQUIPMENT MONITORING FOR ZERO DOWNTIME

Equipment failures represent one of the most costly and disruptive challenges facing industrial facilities worldwide. Unplanned downtime can cost operations millions of dollars while creating cascading effects throughout the entire production system. **DGC AFRICA's** predictive monitoring solutions transform maintenance strategies from reactive crisis management to proactive, intelligence-driven interventions.

OUR VISION AI SYSTEMS CONTINUOUSLY MONITOR CRITICAL EQUIPMENT THROUGH ADVANCED COMPUTER VISION TECHNOLOGIES, ENABLING MAINTENANCE TEAMS TO IDENTIFY POTENTIAL ISSUES LONG BEFORE THEY DEVELOP INTO FAILURES.

This predictive capability allows for maintenance interventions to be scheduled during planned downtime, dramatically reducing both maintenance costs and production disruptions.

FEATURED EQUIPMENT MONITORING SOLUTIONS

- **BeltMind:** Advanced conveyor health monitoring system providing predictive maintenance capabilities with progressive defect tracking that monitors crack development over time.
- **ThermoSight:** Comprehensive hot spot identification and thermal profiling system designed specifically for furnace refractory monitoring and energy optimization.
- **Kiln Monitoring:** Real-time kiln health assessment system that prevents costly failures while optimizing energy consumption and extending equipment life.
- **Switchyard Monitoring:** Specialized electrical equipment thermal monitoring ensuring both safety compliance and operational reliability.



CONSTANTLY MONITORS

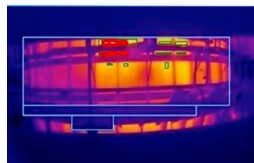
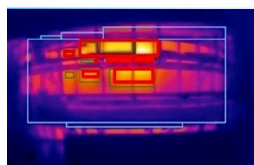
24x7 pair of eyes checking for defects

ALERTS ENABLING PREDICTIVE MAINTENANCE

Informs about the severity of alert on WhatsApp / Mail and stops conveyor belt if required.

INTEGRATES WITH WORKFLOWS

Stops conveyor belts in extreme scenarios by connecting with DCS / SCADA systems.



Impact

50%

Reduction in Downtime

By detecting hotspots early, the solution reduces unplanned downtime, preventing up to 30 days of production loss due to complete refractory failure.

5 Cr

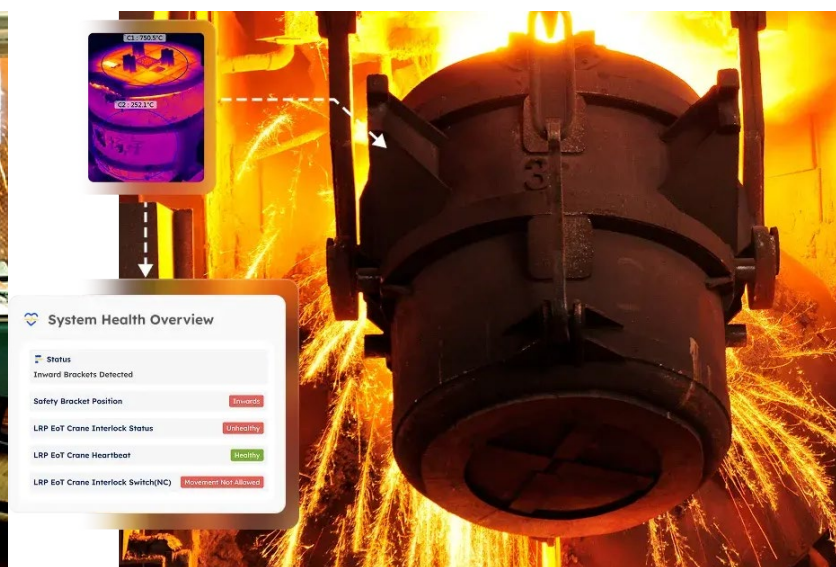
Cost Savings on Maintenance

Continuous monitoring reduces the need for costly maintenance, saving approximately ~5 Cr in potential repair expenses.

4 Cr

Prevention of Production Loss

The solution helps avoid a loss of 4,200 tons of production, which translates to a savings of ~4 Cr, ensuring consistent output and financial stability.



System Health Overview

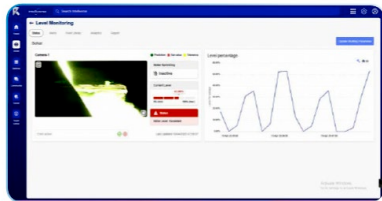
| | |
|------------------------------------|--------------------------|
| Status | Inward Brackets Detected |
| Safety Bracket Position | Inwards |
| LRP EoT Crane Interlock Status | Unhealthy |
| LRP EoT Crane Heartbeat | Healthy |
| LRP EoT Crane Interlock Switch(NC) | Movement Not Allowed |



PROCESS MONITORING FOR ZERO INCIDENTS

Safety and process integrity remain paramount concerns across all industrial operations. A single safety incident can have devastating consequences for personnel, equipment, and business continuity. **DGC AFRICA's** process monitoring solutions provide continuous, intelligent surveillance that prevents incidents while simultaneously optimizing operational parameters for maximum efficiency.

Our AI-powered systems create a comprehensive safety net that protects both personnel and equipment while maintaining optimal production parameters.



THESE SYSTEMS LEARN FROM OPERATIONAL PATTERNS & CAN IDENTIFY POTENTIAL SAFETY HAZARDS OR PROCESS DEVIATIONS BEFORE THEY DEVELOP INTO SERIOUS PROBLEMS



CORE PROCESS MONITORING APPLICATIONS

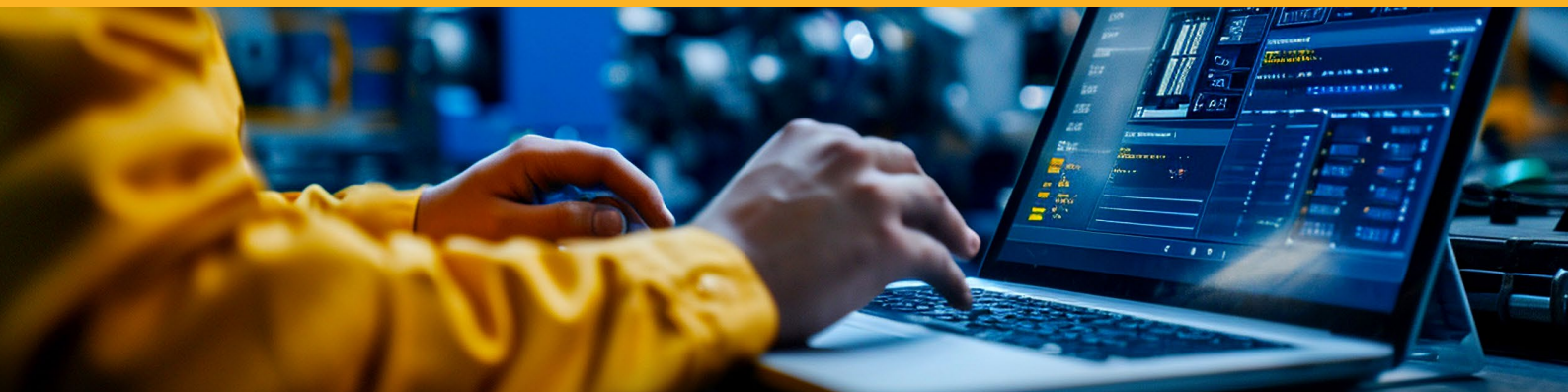
- **JamGuard:** Intelligent big rock and unwanted object detection system that prevents equipment damage and production disruption before materials can cause harm.
- **Blending Optimization:** Real-time process control ensuring consistent material mixing and quality while optimizing resource utilization.
- **Casting Monitoring:** Advanced quality control during metal casting operations, reducing defects and waste while ensuring consistent product quality.
- **Dispatch Control:** Automated logistics and material flow optimization system that improves throughput while reducing operational costs.

UNDERSTANDING VISION AI AGENTS

THE NEXT EVOLUTION IN INDUSTRIAL INTELLIGENCE

DGC AFRICA's **Vision AI Agents** represent a fundamental leap forward from traditional monitoring technologies. These intelligent systems don't simply detect anomalies and alert operators, they reason about what they observe, orchestrate multiple workflows simultaneously, and take autonomous action based on their analysis of visual data.

Unlike conventional monitoring systems that operate on predefined rules and thresholds, Vision AI Agents continuously learn from operational patterns, adapt to changing conditions, and make intelligent decisions about when and how to intervene. This learning capability means that the systems become more effective over time, developing an increasingly sophisticated understanding of normal operational parameters and potential deviation patterns.



EACH VISION AI AGENT IS DESIGNED TO FUNCTION
AS A SPECIALIZED EXPERT, FOCUSING ON SPECIFIC
ASPECTS OF INDUSTRIAL OPERATIONS
WHILE MAINTAINING SEAMLESS INTEGRATION
WITH BROADER OPERATIONAL SYSTEMS

This approach ensures that every critical aspect of operations receives dedicated, expert-level monitoring while maintaining coherent, coordinated responses across all systems.

CORE CAPABILITIES OF VISION AI AGENTS

INTELLIGENT ANALYSIS & RESPONSE

- **Advanced Anomaly Detection:** Continuous 24x7 visual monitoring with precision levels consistently exceeding 95% accuracy.
- **Pattern Analysis:** Sophisticated insight generation from visual data that identifies trends invisible to human observation.

- **Pattern Analysis:** Sophisticated insight generation from visual data that identifies trends invisible to human observation.
- **Conversational Interface:** Natural language query capabilities allowing operators to ask questions about operational status in plain English.
- **Automated Workflows:** Intelligent routing and communication through email, WhatsApp, SMS, and other channels.
- **Machine Control Integration:** Direct integration with control systems enabling immediate automated responses to detected conditions.

TRANSFORMATIONAL OPERATIONAL BENEFITS

- **Enhanced Detection Capability:** Catch 10x more anomalies than traditional manual inspection methods.
- **Elimination of False Alerts:** Advanced AI algorithms ensure zero false alerts, eliminating operator fatigue and ensuring critical issues receive appropriate attention.
- **Accelerated Response Times:** Dramatically reduced time between problem detection and corrective action.
- **Optimized Process Control:** Enable more precise and responsive process control based on real-time visual analysis.
- **Continuous Monitoring:** Provide 24x7 monitoring capabilities without human fatigue or attention limitations.



**REAL-WORLD
SUCCESS**

**BELTMIND PROGRESSIVE
MONITORING CASE STUDY**

THE INDUSTRIAL CHALLENGE

A major mining operation was experiencing a costly pattern of recurring conveyor belt failures that caused significant unplanned downtime and emergency maintenance costs. These failures were impacting operational profitability and creating safety concerns for maintenance personnel who had to respond to emergency repairs under challenging conditions.

Traditional inspection methods were proving inadequate for early problem identification. Manual visual inspections, conducted during scheduled maintenance windows, were failing to detect developing problems early enough to prevent catastrophic failures. The operation needed a solution that could provide continuous monitoring and early warning of developing belt issues.

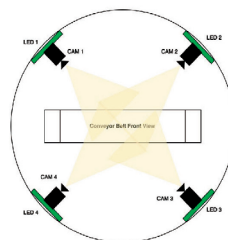
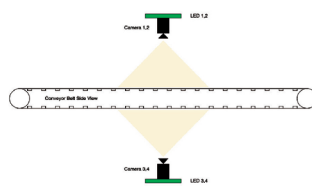
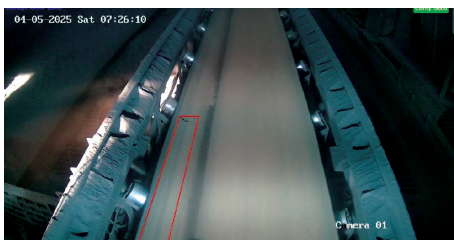
THE DGC AFRICA SOLUTION

DGC AFRICA implemented our BeltMind Vision AI agent to provide continuous conveyor monitoring capabilities. This advanced system was designed to offer 24/7 surveillance of critical conveyor systems with intelligent defect detection and progression tracking capabilities that could identify problems at their earliest stages and monitor their development over time. The BeltMind system was configured to detect various types of belt damage, from minor surface scratches to significant structural defects, while tracking the progression of any identified issues over time.

THIS PROGRESSIVE MONITORING CAPABILITY WAS CRUCIAL FOR ENABLING PREDICTIVE MAINTENANCE STRATEGIES.

5 APRIL: PROGRESSIVE MONITORING

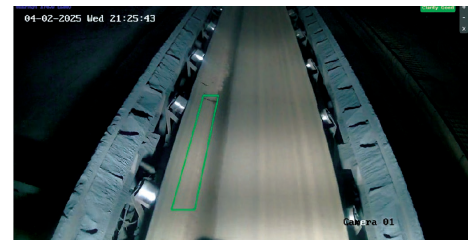
The system's progressive tracking capabilities identified that the crack size had increased with visible expansion over the three-day period. A medium severity defect alert was raised, accompanied by a progressive trend alert indicating accelerating deterioration that required attention from the maintenance team.



TIMELINE OF SUCCESS

2 APRIL: INITIAL DETECTION

The BeltMind system detected minor scratch marks with slight abrasion on the conveyor belt surface. A low severity alert was automatically generated and transmitted to the maintenance team. At this stage, the damage was minimal and would have been completely missed during routine visual inspections due to its subtle nature.



8 APRIL: CRITICAL INTERVENTION

The same crack had converted to high severe damage, triggering a high severity alert that enabled the plant team to schedule and complete necessary repairs during planned downtime. Without this early warning system, this damage would have continued to progress until catastrophic failure occurred during operation.



MEASURABLE OUTCOMES

OPERATIONAL IMPACT

- **Prevented major equipment failure** that would have resulted in extended unplanned downtime and emergency repair costs.
- **Enabled predictive maintenance scheduling** based on actual equipment condition rather than arbitrary time-based intervals.
- **Avoided significant production losses** through proactive intervention during planned downtime.
- **Delivered return on investment within weeks** of implementation through avoided downtime costs and optimized maintenance resource allocation.

THIS CASE STUDY DEMONSTRATES THE TRANSFORMATIONAL IMPACT OF VISION AI ON MAINTENANCE OPERATIONS, enabling the shift from reactive crisis management to proactive, data-driven maintenance strategies that optimize both equipment performance and maintenance costs.

TECHNOLOGY PLATFORM EXCELLENCE



Ripik.AI

THE RIPIK VISION PLATFORM

ENTERPRISE-GRADE SCALABILITY & PERFORMANCE

For enterprises requiring comprehensive Vision AI deployments across multiple sites and operational contexts, **DGC AFRICA offers the robust Ripik Vision Platform (RVP)**. This enterprise-grade solution is specifically designed to meet the demanding requirements of large-scale industrial operations while providing the flexibility and ease of use needed for efficient management across diverse operational environments.

The platform architecture has been developed to handle the complex requirements of industrial environments, where reliability, security, and performance are not merely preferences but absolute necessities. Every aspect of the platform has been engineered to deliver consistent performance under the demanding conditions typical of industrial operations.

COMPREHENSIVE SECURITY FRAMEWORK

INDUSTRY-LEADING COMPLIANCE

- **SOC1, SOC2, ISO, and GDPR certified** ensuring comprehensive data protection and regulatory compliance.
- **AWS and Azure marketplace certification** providing enterprise-grade security and integration capabilities.
- **NVIDIA Inception and Intel Architecture certification** ensuring optimized performance and compatibility.
- **Enterprise-grade security architecture** eliminating the need for repeated Vulnerability Assessment and Penetration Testing (VAPT) requirements.

RAPID DEPLOYMENT & MANAGEMENT EXCELLENCE

SPEED & EFFICIENCY

- **Plug-and-play deployment** capability enabling full system implementation in under one week.
- **90% reduction in deployment time** for new use cases compared to traditional monitoring solutions.
- **Pre-built integrations** with existing industrial control and management systems.

CENTRALIZED MANAGEMENT

- **Single platform management** for multiple deployments across different sites and operational contexts.
- **Centralized use case tracking** and comprehensive video surveillance management.
- **Integrated alert summary and user management** providing complete operational visibility.
- **Dedicated account management** with comprehensive tiered support structure (L1: 4-8 hours, L2: 24-48 hours, L3: 3-7 days).



DGC AFRICA'S DISTINCTIVE **COMPETITIVE ADVANTAGES**

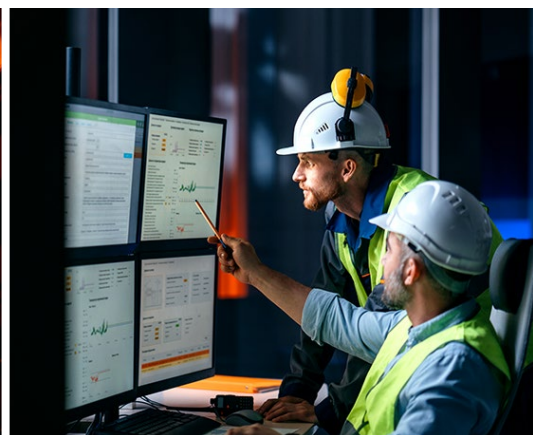
UNMATCHED INDUSTRIAL HERITAGE AND REGIONAL EXPERTISE

As a fourth-generation company with over 115 years of continuous experience serving African industrial markets, **DGC AFRICA** possesses an unparalleled depth of understanding regarding the unique challenges, regulatory environments, and operational constraints that define successful industrial projects across sub-Saharan Africa.

THIS EXTENSIVE REGIONAL EXPERTISE ENSURES THAT OUR VISION AI IMPLEMENTATIONS ARE NOT MERELY TECHNICALLY SOUND, BUT ARE SPECIFICALLY OPTIMIZED FOR THE OPERATIONAL REALITIES THAT CHARACTERIZE AFRICAN INDUSTRIAL ENVIRONMENTS

Our comprehensive experience spans diverse industrial sectors, from mining and smelting operations to cement production and power generation, providing us with insights that enable more effective implementations and significantly faster time-to-value for our clients.

We understand the operational rhythms, seasonal variations, infrastructure constraints, and resource limitations that characterize African industrial operations, allowing us to design Vision AI solutions that deliver maximum impact within realistic operational parameters.



PAN-AFRICAN MARKET LEADERSHIP

With established operations across South Africa, Zambia, Democratic Republic of Congo, Zimbabwe, Madagascar, and planned expansion into West Africa, **DGC AFRICA** maintains the largest regional footprint of any specialized industrial services provider in sub-Saharan Africa.

REGIONAL LEADERSHIP BENEFITS

- **Local Compliance Expertise:** Deep understanding of regional regulations, standards, and compliance requirements across multiple jurisdictions.
- **Cultural Competency:** Multi-lingual teams with comprehensive local market knowledge and cultural sensitivity.
- **Optimized Supply Chain:** Efficient logistics and parts availability across challenging regional environments.
- **Rapid Emergency Response:** Proven capability for rapid mobilization and critical support across multiple countries.

STRATEGIC TECHNOLOGY PARTNERSHIP EXCELLENCE

THE RIPIK AI PARTNERSHIP ADVANTAGE

DGC AFRICA's selection of Ripik AI as our strategic technology partner reflects a comprehensive evaluation of global capabilities and strategic alignment with our commitment to delivering world-class solutions to African industries.

**THIS PARTNERSHIP COMBINES RIPIK AI'S
CUTTING-EDGE TECHNOLOGY PLATFORM
WITH DGC AFRICA'S DEEP REGIONAL
EXPERTISE & ESTABLISHED SERVICE INFRASTRUCTURE,
CREATING A UNIQUE VALUE PROPOSITION
FOR INDUSTRIAL OPERATIONS
ACROSS SUB-SAHARAN AFRICA**



PROVEN TECHNOLOGY FOUNDATION

- **Established Track Record:** Over 50 enterprise customers served with 150+ successful deployments managed by a team of 80+ specialists.
- **Industry Recognition:** Certified presence on AWS and Azure marketplaces with NVIDIA Inception program membership.
- **Technical Excellence:** Comprehensive SOC1, SOC2, ISO, and GDPR compliance ensuring enterprise-grade security and reliability.
- **Global Support Capabilities:** Operations spanning USA, Europe, and India providing comprehensive 24/7 support capabilities.

VERIFIED PERFORMANCE METRICS

- **Over \$15 million in documented cost savings** delivered across deployments in the past year.
- **More than 5,000 hours of equipment downtime** prevented through predictive interventions.
- **Successful deployments** across leading industrial companies including GERDAU, Tata Steel, JSW Steel, ArcelorMittal, Nucor, Jindal Steel & Power, Bahrain Steel, Holcim, UltraTech Cement, Adani Cement, and Vedanta.

CUSTOMER SUCCESS & INDUSTRY RECOGNITION

Our strategic partnership has enabled us to serve some of the world's most demanding industrial operations, consistently delivering measurable improvements in operational efficiency, safety, and profitability.

Customer Testimonials

“Ripik.AI has a very deep and granular understanding of what Artificial intelligence is. They helped my team appreciate what AI could do for us and helped streamline our production process and significantly improve our efficiency.”

VINEET JAISWAL, CDIO, ESSAR OIL LIMITED, EX-PRESIDENT, VEDANTA GROUP

“Pinak and his team have worked with us closely for several manufacturing transformation use cases. They have an unparalleled understanding of the process and can bring impact very quickly.”

POORAV SHETH, GROUP CDO, GODREJ AND BOYCE

“Alerts are triggered when particles exceed the set threshold, and it works very well. The software is easy to use and well designed. The trial was a valuable learning experience, and the Ripik team provided excellent service.”

DIGITAL TRANSFORMATION TECHNOLOGY LEAD, HOLCIM LOCALIZED DELIVERY EXCELLENCE

While leveraging world-class technology capabilities, **DGC AFRICA** ensures that all implementations reflect our deep understanding of African industrial requirements and operational constraints.

INDUSTRY-SPECIFIC APPLICATIONS

STEEL MANUFACTURING OPTIMIZATION

Steel production environments present unique challenges that require specialized monitoring solutions capable of operating effectively in extreme conditions while providing the precision needed for optimal process control.



OUR VISION AI SYSTEMS ARE SPECIFICALLY CONFIGURED & OPTIMIZED TO HANDLE THE DEMANDING REQUIREMENTS OF STEEL MANUFACTURING OPERATIONS, INCLUDING HIGH TEMPERATURES, CHALLENGING LIGHTING CONDITIONS, & COMPLEX PROCESS INTERACTIONS

SPECIALIZED STEEL INDUSTRY APPLICATIONS

- **Advanced Material Quality Control:** Real-time sizing analysis and quality assessment of coke, sinter, Direct Reduced Iron (DRI), iron ore, and coal inputs.
- **Comprehensive Equipment Health Monitoring:** Continuous surveillance of furnace refractory systems, conveyor networks, and critical processing equipment.
- **Enhanced Safety Systems:** Automated compliance monitoring and comprehensive process safety oversight ensuring regulatory adherence.
- **Energy Optimization:** Intelligent process control systems designed to improve fuel efficiency and reduce energy consumption.





CEMENT INDUSTRY ADVANCEMENT

Cement manufacturing requires precise control of high-temperature processes combined with careful monitoring of material quality throughout the complex production chain.

CEMENT INDUSTRY SOLUTIONS

- **Raw Material Management Systems:** Automated lime-stone and coal sizing analysis with integrated moisture detection capabilities
- **Advanced Kiln Optimization:** Sophisticated flame monitoring and thermal profiling systems for optimal energy utilization
- **Comprehensive Quality Assurance:** Real-time foreign object detection and automated material classification systems
- **Environmental Compliance Monitoring:** Continuous emissions monitoring with automated control systems ensuring regulatory compliance

OUR VISION AI SOLUTIONS
PROVIDE THE CONTINUOUS
OVERSIGHT NEEDED
TO OPTIMIZE THESE
INTRICATE OPERATIONS
WHILE ENSURING
CONSISTENT PRODUCT QUALITY
& ENVIRONMENTAL COMPLIANCE



MINING & MINERAL PROCESSING ENHANCEMENT

Mining operations face unique challenges related to material variability, equipment reliability demands, and safety requirements in often remote and challenging locations.

OUR VISION AI SOLUTIONS ARE
SPECIFICALLY DESIGNED TO
ADDRESS THESE CHALLENGES
WHILE PROVIDING THE ROBUST
PERFORMANCE NEEDED IN
DEMANDING MINING ENVIRONMENTS

MINING INDUSTRY INDUSTRY SOLUTIONS

- **Raw Material Management Systems:** Automated lime-stone and coal sizing analysis with integrated moisture detection capabilities
- **Advanced Kiln Optimization:** Sophisticated flame monitoring and thermal profiling systems for optimal energy utilization
- **Comprehensive Quality Assurance:** Real-time foreign object detection and automated material classification systems
- **Environmental Compliance Monitoring:** Continuous emissions monitoring with automated control systems ensuring regulatory compliance



POWER & ENERGY SECTOR SOLUTIONS

Power generation facilities require continuous monitoring to ensure safety, reliability, and environmental compliance while maintaining optimal operational efficiency.

POWER INDUSTRY SOLUTIONS

- **Fuel Quality Management:** Automated coal analysis and handling optimization systems
- **Equipment Health Monitoring:** Continuous monitoring of boilers, turbines, and auxiliary equipment
- **Safety Systems:** Comprehensive thermal monitoring of electrical equipment ensuring operational safety
- **Environmental Control:** Advanced emissions monitoring and efficiency optimization systems

OUR VISION AI
SOLUTIONS PROVIDE
THE COMPREHENSIVE
OVERSIGHT
NEEDED TO
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OPERATIONS



SUPPORTING INDUSTRIAL EXCELLENCE

OUR COMPREHENSIVE SERVICE PORTFOLIO

While Vision AI represents the cutting edge of our technological capabilities, **DGC AFRICA's** strength lies in our comprehensive portfolio of industrial services that support operational excellence across all aspects of asset integrity management. These services, refined over 115 years of industrial experience, provide the foundation upon which our Vision AI solutions deliver maximum value.

ASSET RELIABILITY SOLUTIONS

Our asset reliability services employ advanced strategies and cutting-edge technologies to enhance equipment reliability and maximize operational uptime. Through strategic partnerships with industry leaders including EAMS Africa, we provide comprehensive condition monitoring, oil analysis services, and metallurgical optimization solutions that complement our Vision AI capabilities.



FURNACE & SMELTER SERVICES

Drawing upon more than a century of specialized experience, our furnace and smelter services encompass the complete lifecycle from demolition and rebuild projects to ongoing maintenance and optimization. These services are crucial for industries engaged in metals smelting and mineral processing operations across sub-Saharan Africa.



INDUSTRIAL SERVICES

Our industrial services focus on enhancing operational excellence through specialized solutions including industrial vacuumation, catalyst handling, silo cleaning, and high-pressure water blasting services. These services address the unique operational challenges faced by heavy industries while maintaining the highest standards of safety and efficiency.



MECHANICAL ENGINEERING SERVICES

Our comprehensive mechanical engineering capabilities span from greenfield and brownfield project development to complex equipment installations and shutdowns. These services provide the engineering foundation that enables successful Vision AI implementations and ongoing operational optimization.



INDUSTRIAL LININGS & PRODUCTS

Our industrial linings and products portfolio provides essential protection solutions for harsh industrial environments. From advanced weld overlay systems to specialized refractory products, these solutions extend equipment life and enhance operational reliability.





SUPPORT SERVICES

Our support services encompass workforce solutions, skills development programs, materials handling, and power generation services that ensure comprehensive operational support across all aspects of industrial operations.

IMPLEMENTATION EXCELLENCE

YOUR PATH TO VISION AI SUCCESS

COMPREHENSIVE THREE-PHASE IMPLEMENTATION APPROACH

DGC AFRICA has developed a proven three-phase implementation methodology that ensures successful Vision AI deployments while minimizing operational disruption and maximizing time-to-value for our clients.

PHASE 1: Assessment and Strategic Planning Our implementation process begins with a comprehensive assessment of your facility, existing infrastructure, and operational requirements. This detailed evaluation includes thorough site analysis, identification of high-impact use cases, and development of a customized implementation roadmap that aligns with your operational priorities and resource constraints. During this phase, our experienced team works closely with your operations and maintenance personnel to understand your specific challenges and objectives.

PHASE 2: Rapid Deployment and Integration Following completion of the planning phase, our experienced implementation team manages all aspects of system deployment, including camera installation, network configuration, software setup, and seamless integration with existing control systems. Our proven plug-and-play approach ensures minimal disruption to ongoing operations while delivering full system functionality in under one week.

PHASE 3: Ongoing Optimization and Support After successful deployment, we provide continuous monitoring, performance tuning, and optimization services to ensure maximum value from your Vision AI investment. This includes regular performance reviews, system updates, expansion planning as your needs evolve, and comprehensive support through our tiered support structure.

TRANSFORM YOUR OPERATIONS WITH VISION AI EXCELLENCE

The industrial landscape of sub-Saharan Africa stands at a pivotal moment of transformation. Organizations that embrace the power of Vision AI technology today will establish competitive advantages that extend far beyond immediate operational improvements. **DGC AFRICA's** unique combination of proven industrial expertise and cutting-edge artificial intelligence capabilities provides the foundation for this transformation.

Join the growing community of industry leaders across sub-Saharan Africa who have revolutionized their operations through **DGC AFRICA's** comprehensive Asset Integrity Management platform, now enhanced with world-class Vision AI technology. Our proven combination of deep regional expertise and global innovation delivers immediate operational improvements while positioning your operations for long-term competitive advantage in an increasingly demanding industrial environment. The opportunity to transform your operations through Vision AI is available today. The question is not whether this transformation will occur, but whether your organization will lead this change or follow others who recognized the opportunity earlier.

READY TO BEGIN YOUR VISION AI JOURNEY?

Contact **DGC AFRICA** today to schedule your personalized consultation and discover how **Vision AI** can fundamentally transform your industrial operations. Our experienced team stands ready to assess your specific requirements and develop a customized implementation strategy that delivers measurable results from day one.



TRANSFORM YOUR INDUSTRIAL OPERATIONS
WITH VISION AI FOR INDUSTRIAL INTEGRITY.

WHERE 115 YEARS
OF AFRICAN INDUSTRIAL EXPERTISE
MEETS CUTTING-EDGE
ARTIFICIAL INTELLIGENCE

Over a Century of Trusted Service — Committed to Safety, Quality and On-Time Delivery



OUR OFFICES

**CONTACT US TO
LEARN HOW DGC
CAN HELP TRANSFORM
YOUR OPERATIONS
& DELIVER
SUSTAINABLE
COMPETITIVE
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