



ONSITE MACHINING SERVICES



**POWERING AFRICA'S FUTURE:
INNOVATIVE ASSET INTEGRITY AND INDUSTRIAL SOLUTIONS**

www.dgc-africa.com

MISSION

Our mission is to provide high-quality asset integrity management and industrial solutions to clients across the continent.

We operate with the highest standards of safety, quality, and integrity, building long-term partnerships based on trust, collaboration, and exceptional service. We are committed to making a positive impact on African communities through sustainability and local content development, and strive to support economic development throughout the continent.



PURPOSE

So that our customers can achieve operational excellence, profitable and sustainable growth, we provide high-quality, innovative, and cost-effective asset integrity management and industrial solutions, that enhance reliability, efficiency, and safety.



110 YEARS IN BUSINESS

DGC AFRICA IS A MEMBER OF THE DICKINSON GROUP OF COMPANIES

Dickinson Group of Companies (DGC) is a family-owned business that has been operating since 1910, providing top-notch furnace and industrial services. Over the past century, DGC has evolved into a leading provider of Asset Integrity Management & Industrial Services, including Asset Integrity Management, Industrial Linings & Coatings, Industrial Products, Abrasion & Wear Protection Solutions, Engineering Services, and Asset & Risk Management Digitisation Solutions.

DGC has an impressive track record in the market, having established an extensive client base among major mining and metals, mineral processing, and manufacturing industries. The company has built a strong reputation through its emphasis on safety and training, in-house skills, a large staff complement, and strategic partnerships with leading technology partners worldwide.



DGC AFRICA'S STRATEGIC FOCUS

With over 50 years of experience in Africa, **DGC AFRICA** has built a strong reputation on the continent. The company's strategic focus is on providing innovative asset integrity management and industrial solutions to a range of industries in Africa, including mining & minerals, metals smelting, sulphuric acid plants, mineral processing, oil & gas, chemical & petrochemical, and power generation.



OVER THE NEXT 3-5 YEARS, DGC AFRICA WILL EMBARK ON A TWO-PHASE STRATEGIC FOCUS:

IN PHASE 1 - The company will expand its services in Southern and Central Africa, including Zambia and the Democratic Republic of Congo, by providing innovative asset integrity management and industrial solutions to a variety of industries, while building strong relationships with clients.

IN PHASE 2 - **DGC AFRICA** will expand its services to West Africa, particularly in Ivory Coast, Ghana, Mali, Burkina Faso, and Guinea, as well as other Anglophone, Francophone, and Portuguese-speaking countries in sub-Saharan Africa, with the aim of becoming a leading provider of asset integrity management and industrial solutions across the continent.

The company will prioritize quality service and strong client relationships, cementing its position as a top service provider to the mining, metals smelting, mineral processing, and large manufacturing industries in sub-Saharan Africa.

DGC AFRICA'S RANGE OF SPECIALIST SERVICES INCLUDE:

	FURNACE SERVICES <ul style="list-style-type: none">Furnace Rebuild ProjectsFurnace DemolitionsRefractory InstallationsPrecast Refractory ShapesFurnace Hotwork ServicesFurnace Inspection Services		MECHANICAL ENGINEERING SERVICES <ul style="list-style-type: none">Engineering, Design & ConstructionStructural, Mechanical, Piping & PlateworkCrane Rental, Heavy Lifting & TransportFurnace Mechanical ProjectsRotary Kiln & Vessel ServicesOnsite Machining ServicesConveyor Maintenance Services
	INDUSTRIAL SERVICES <ul style="list-style-type: none">Industrial VacuumationCatalyst HandlingAbrasion, Chemical & Mechanical Resistant Cold-Welding PolymersOnline Leak SealingStorage Tank Repairs		OUTSOURCED STAFFING SOLUTIONS <ul style="list-style-type: none">Outsourcing of skilled workforce for specialized servicesAccess to a diverse pool of qualified professionalsRecruitment from a global talent poolTailored solutions for the mining metals, and other relevant industriesFlexible management of workforce and staffing solutionsCommitment to quality, safety, and industrial solutions
	INDUSTRIAL LININGS <ul style="list-style-type: none">Corrosion ProtectionIndustrial Acid ProofingFibreglass Reinforced Plastic (FRP)Rust Inhibitors & RehabilitationThermoplastic Polymer CoatingWear Protection Solutions		ASSET RELIABILITY & CONDITION MONITORING <ul style="list-style-type: none">Preventative Maintenance OptimisationReliability Centered MaintenanceNDT & Infrared ThermographyVibration AnalysisOil AnalysisUltrasound



ONSITE MACHINING SERVICES

DGC AFRICA provides onsite/in-situ machining solutions to various industries

DGC AFRICA's Onsite Machining Services is a leading provider of innovative, integrated engineering solutions and quality services with its onsite and in-situ equipment. We specialise in providing high-quality asset integrity management and industrial solutions to clients across Africa. Our mission is to operate with the highest standards of safety, quality, and integrity, building long-term partnerships based on trust, collaboration, and exceptional service. We are committed to making a positive impact on African communities through sustainability and local content development and strive to support economic development throughout the continent.

DGC AFRICA is pleased to announce its collaboration with In Position Machining, a leading South African company in the field of Onsite Machining. Together, we are committed to providing high-quality asset integrity management and industrial solutions to customers throughout sub-Saharan Africa. Our mission is to operate with the highest standards of safety, quality, and integrity, building long-term partnerships based on trust, collaboration, and exceptional service.

At **DGC AFRICA's** Onsite Machining Services, we pride ourselves on our ability to be flexible, client-focused, and service-oriented. Our skilled technicians and state-of-the-art equipment are always ready to tackle any machining challenge, whether it's in the mining, power generation, paper, steel, or refining industry.



SERVICES

OUR COMPREHENSIVE RANGE OF SERVICES

LINE BORING

Line boring is a specialized machining process used to repair and restore cylindrical bores, typically in large equipment and machinery. The process involves enlarging or repairing existing bores using a boring bar that is inserted into the bore and rotated to cut material. Line boring is commonly used in the mining, construction, and agricultural industries to repair or modify equipment such as excavators, bulldozers, and tractors.

HOT TAPPING

Hot tapping is a technique used to create a branch connection on an existing pipeline without interrupting the flow of the fluid or gas being transported. The process involves drilling a hole into the pipeline, installing a valve, and attaching a branch pipe to the valve. Hot tapping is used in the oil and gas industry, as well as in water treatment and distribution systems.

ROLLER GRINDING

Roller grinding is a process used to maintain and repair large rotating rollers used in heavy machinery such as cranes, excavators, and conveyor systems. The process involves grinding the surface of the roller to remove damage and wear and restore the roller to its original dimensions. Roller grinding is essential for ensuring the smooth and efficient operation of heavy machinery in industries such as mining, construction, and manufacturing.

FLANGE FACING

Flange facing is a machining process used to resurface and clean the mating surfaces of flanges in piping systems. The process involves machining the surface of the flange to ensure that it is flat and smooth, which helps to create a leak-free seal when the flanges are bolted together. Flange facing is used in a variety of industries, including oil and gas, chemical processing, and power generation.

MILLING & KEY MILLING

Milling is a machining process used to remove material from a workpiece using a rotating cutter. Key milling is a specific type of milling used to create keyways or slots in a workpiece. Milling and key milling are used in a variety of industries to produce a wide range of products, from machine parts and components to automotive and aerospace components.

PIPE CUTTING & WELD PREPPING

Pipe cutting and weld prepping is a process used to prepare pipes for welding and installation. The process involves cutting pipes to length and preparing the edges of the pipe for welding, including bevelling and facing. Pipe cutting and weld prepping are used in a variety of industries, including oil and gas, power generation, and water treatment.

BORING & TAPPING

Boring and tapping are machining processes used to create holes and threads in a variety of materials, including metal, plastic, and wood. Boring involves enlarging an existing hole, while tapping involves cutting threads into a hole. Boring and tapping are used in a variety of industries to produce a wide range of products, from machine parts and components to automotive and aerospace components.

KILN TYRE & SUPPORT ROLLER GRINDING

Kiln tyre and support roller grinding is a specialized service used to refurbish and repair large rotary kilns, dryers, and similar equipment used in various industries, including cement, mining, power generation, and chemical plants. The process involves grinding the surfaces of the kiln tyres and support rollers to remove wear and damage and restore their original specifications.

JOURNAL TURNING & CUTTING

Journal turning and cutting is a machining process used to repair and restore cylindrical surfaces, typically on large equipment and machinery such as turbines and generators. The process involves turning and cutting the surface of the journal to remove damage and wear and restore it to its original dimensions. Journal turning and cutting is used in industries such as power generation and heavy equipment manufacturing.

INDUSTRIES

Some of the industries that utilise onsite machining services include:



MINING



OIL AND GAS



POWER GENERATION



CHEMICAL PROCESSING



WATER TREATMENT



STEEL PRODUCTION



PAPER & PULP



MANUFACTURING



AEROSPACE & AVIATION



MARINE & OFFSHORE



CONSTRUCTION



AGRICULTURE



RAILWAY



FOOD & BEVERAGE



PHARMACEUTICAL

BENEFITS

DGC AFRICA's onsite machining services offer several benefits to industries that rely on heavy machinery and equipment. These benefits include:



CUSTOMIZED SOLUTIONS

DGC AFRICA's onsite machining services offer customized solutions that are tailored to meet the specific needs and requirements of each industry and project. This ensures that clients receive the most effective and efficient service possible.



SAFETY, QUALITY & INTEGRITY

DGC AFRICA prioritizes safety, quality, and integrity in all its onsite machining services. Technicians are trained to operate safely, and all work is performed in accordance with industry regulations and standards, ensuring high-quality work and long-lasting results.



ENHANCED EQUIPMENT PERFORMANCE & RELIABILITY

DGC AFRICA's onsite machining services enhance the performance and reliability of equipment by repairing and maintaining components to the required specifications. This reduces the risk of equipment failure and breakdowns, increasing productivity and profitability.



IMPROVED PART PERFORMANCE

DGC AFRICA's onsite machining services improve the performance of parts by repairing and maintaining components to the required specifications. This improves the overall efficiency of machinery and equipment, resulting in faster and more accurate production processes.



REDUCED MAINTENANCE COSTS & EQUIPMENT DOWNTIME

DGC AFRICA's onsite machining services help to reduce maintenance costs and equipment downtime by repairing and maintaining components on-site. This eliminates the need for equipment to be transported to a repair facility, reducing downtime and costs associated with transportation.



INCREASED PRODUCTIVITY & EFFICIENCY

DGC AFRICA's onsite machining services increase productivity and efficiency by repairing and maintaining components on-site, ensuring that machinery and equipment operate at peak performance levels. This improves production processes and increases profitability.



COST-EFFECTIVE SOLUTIONS

DGC AFRICA's onsite machining services provide cost-effective solutions to clients by eliminating the need for equipment to be transported to a repair facility. This reduces costs associated with transportation and downtime, providing clients with efficient and cost-effective solutions.



WIDE RANGE OF SERVICES

DGC AFRICA's onsite machining services offer a wide range of services, including line boring, roller grinding, flange facing, milling, key milling, pipe cutting, weld prepping, kiln tyre, support roller grinding, and journal turning and cutting. This enables clients to access a comprehensive range of onsite machining solutions from a single provider.

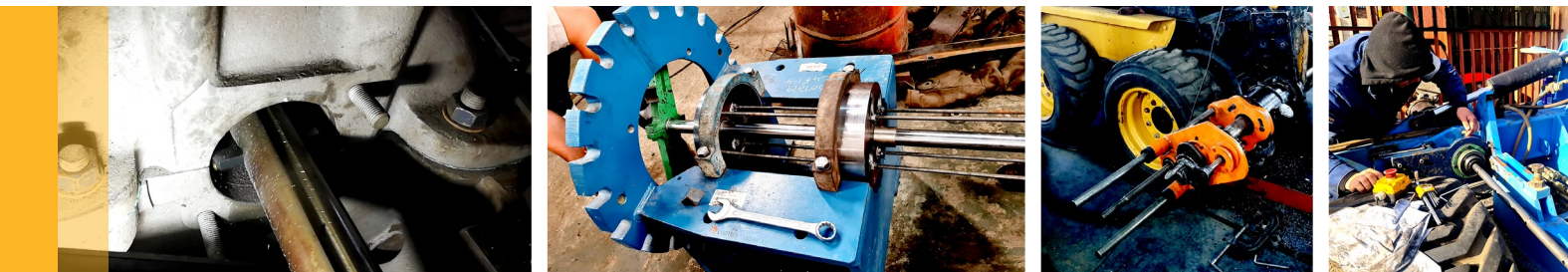
Overall, onsite machining services offer a convenient, cost-effective, and high-quality solution for industries that rely on heavy machinery and equipment, helping to minimize downtime, increase productivity, and maintain asset integrity.

LINE BORING

LINE BORING IS A SPECIALIZED ON-SITE MACHINING PROCESS USED TO REPAIR AND REFURBISH BORES AND BEARING LOCATIONS IN LARGE INDUSTRIAL EQUIPMENT SUCH AS ENGINES, GEARBOXES, DRIVE SHAFTS, PIPELINES, HEAT EXCHANGERS, TANKS, AND OTHER STRUCTURAL COMPONENTS.

This process involves creating accurate and straight bores to restore the alignment of the equipment, improving its performance and reliability.

DGC AFRICA's Line Boring service is carried out by skilled technicians using state-of-the-art equipment and tools, ensuring that the work is performed to the highest quality standards. The company's team of experienced technicians has the knowledge and expertise to handle the most complex line boring projects, ensuring that the equipment is restored to its original specifications.



OUR LINE BORING SERVICE INCLUDES:

- Repairing or refurbishing bores and bearing locations in heavy equipment, machinery, and engines
- Creating accurate and straight bores to restore the alignment of the equipment
- Improving performance and reliability

The Line Boring process begins by measuring the bore's diameter and checking for any misalignment or damage. Once the measurements are recorded, the technician sets up the boring equipment and starts the cutting process. The cutting head is advanced into the bore and removes material until the bore reaches the desired diameter. The cutting head is then withdrawn, and the next bore is bored in a similar manner. The process is repeated until all the bores are cut to the required diameter and alignment.

INDUSTRIES THAT BENEFIT FROM DGC AFRICA'S LINE BORING SERVICE INCLUDE:

MINING

Mining equipment, such as crushers, mills, and conveyor systems, require regular maintenance and repair to ensure reliable performance. Line Boring is a cost-effective solution for repairing bores in mining equipment, reducing downtime, and improving productivity.

CONSTRUCTION

Large construction machinery such as bulldozers, cranes, and excavators require precise alignment and bore repair to maintain optimal performance. Line Boring is an ideal solution for repairing and refurbishing bores in construction machinery, improving their efficiency and reliability.

POWER GENERATION

Power plants rely on large turbines, generators, and other equipment that require regular maintenance and repair to ensure consistent performance. Line Boring is a cost-effective method for repairing bores in power generation equipment, reducing downtime, and improving productivity.

MARINE

Ships and other marine vessels rely on a variety of equipment, including engines, propeller shafts, and rudders. Line Boring is an effective solution for repairing and refurbishing bores in marine equipment, ensuring reliable performance and minimizing downtime.

DGC AFRICA's Line Boring service provides a comprehensive solution for repairing and maintaining large industrial equipment in various industries, ensuring precision, efficiency, and cost-effectiveness.



HOT TAPPING

HOT TAPPING, ALSO KNOWN AS PRESSURE TAPPING OR LIVE TAPPING, IS A SPECIALIZED METHOD USED TO MAKE CONNECTIONS TO AN IN-SERVICE PIPELINE OR VESSEL WITHOUT INTERRUPTING THE FLOW OR SHUTTING DOWN THE SYSTEM. IT IS A WIDELY USED TECHNIQUE IN VARIOUS INDUSTRIES, INCLUDING OIL AND GAS, PETROCHEMICAL, POWER GENERATION, AND WATER TREATMENT.

The Hot Tapping process involves drilling a hole into the pipeline or vessel while it is under pressure, creating a new branch connection. The drilling machine used in Hot Tapping is equipped with a valve that can be closed and opened to control the flow of the pipeline during the process. The equipment used in Hot Tapping is designed to withstand high pressure and temperature, ensuring the safety of the operators and the system.

DGC AFRICA's Hot Tapping services enable safe and efficient on-site connection of piping and pipelines without the need for shutdowns or interruptions. The company's team of highly skilled technicians and engineers has extensive experience in providing Hot Tapping services for various industries, including oil and gas, power generation, chemical and petrochemical, and water treatment.

DGC AFRICA uses state-of-the-art equipment and cutting-edge technology to ensure the highest level of safety and efficiency in its Hot Tapping services. The equipment is designed to be versatile and adaptable to different sizes and types of pipelines, making it suitable for a wide range of applications.

THE HOT TAPPING PROCESS TYPICALLY INVOLVES THE FOLLOWING STEPS:

- Preparing the site: The area where the Hot Tapping will take place is carefully prepared to ensure safety and to minimize any impact on operations. This includes isolating the area and ensuring that all safety measures are in place.
- Drilling the hole: A pilot hole is drilled through the pipeline wall using a specially designed drilling machine. The size of the hole is determined by the size of the branch connection required.

- **INSTALLING THE VALVE:** Once the pilot hole is drilled, a valve is installed to control the flow of the pipeline. This valve is designed to withstand the high pressure and temperatures of the pipeline and is installed using a specially designed tapping machine.
- **CUTTING THE BRANCH CONNECTION:** Using a cutting tool, the branch connection is cut from the main pipeline. The cutting tool is designed to ensure a clean and precise cut, minimizing any damage to the pipeline.
- **INSTALLING THE BRANCH CONNECTION:** The branch connection is installed and secured using a welding process or a mechanical connection, depending on the requirements of the pipeline.
- **TESTING AND COMMISSIONING:** The newly installed branch connection is tested and inspected to ensure that it is operating safely and efficiently. Once the testing is complete, the system is commissioned and returned to service.



DGC AFRICA'S HOT TAPPING SERVICE IS A COST-EFFECTIVE SOLUTION FOR CONNECTING PIPELINES WITHOUT THE NEED FOR SHUTDOWNS OR INTERRUPTIONS.

WITH ITS EXPERIENCED TEAM OF TECHNICIANS AND STATE-OF-THE-ART EQUIPMENT, DGC AFRICA IS ABLE TO PROVIDE SAFE, EFFICIENT AND RELIABLE HOT TAPPING SERVICES TO A WIDE RANGE OF INDUSTRIES.

HOT TAPPING IS A WIDELY USED TECHNIQUE IN VARIOUS INDUSTRIES, INCLUDING:

OIL & GAS

Hot Tapping is widely used in the oil and gas industry to install taps and valves for new production wells, as well as to repair damaged pipelines and vessels without interrupting the flow of oil or gas. It is also used to install pressure gauges and other instrumentation, making it easier to monitor the flow of oil and gas in pipelines.

Hot Tapping is particularly useful in offshore drilling platforms, where it is essential to maintain the continuous flow of oil and gas.

WATER TREATMENT

Water treatment plants use Hot Tapping to install new pipelines and valves, connect new pipelines to existing ones, and repair damaged pipelines without interrupting the flow of water.

Hot Tapping is particularly useful in water treatment plants, where it is essential to maintain the continuous flow of water to customers.

CHEMICAL PLANTS

Chemical plants use Hot Tapping to connect new pipelines to existing ones, install new taps and valves, and repair damaged pipelines without shutting down the system. Hot Tapping is particularly useful in chemical plants, where the production process is continuous and shutting down the system would cause significant downtime and loss of revenue. It is also used in chemical plants to install new instrumentation, making it easier to monitor the flow of chemicals and other fluids.

MANUFACTURING

Manufacturing plants use Hot Tapping to install new pipelines and valves, connect new pipelines to existing ones, and repair damaged pipelines without interrupting the production process.

Hot Tapping is particularly useful in manufacturing plants, where downtime can cause significant financial losses.

PETROCHEMICAL

Petrochemical plants use Hot Tapping to connect new pipelines to existing ones, install new taps and valves, and repair damaged pipelines without shutting down the system.

Hot Tapping is particularly useful in petrochemical plants where the production process is continuous and shutting down the system would cause significant downtime and loss



These industries utilize Hot Tapping for a range of purposes, including creating new branch connections to pipelines and vessels, installing taps, valves, and pressure gauges, diverting the flow of a pipeline, draining or filling the pipeline, and repairing or replacing damaged pipeline sections. Hot Tapping is a cost-effective method of connecting pipelines and vessels without interrupting the flow or shutting down the system, which saves time, reduces downtime, and eliminates the need for costly equipment transportation.

Hot Tapping is a highly specialized process that requires experienced technicians and specialized equipment to ensure safe and efficient operations. **DGC AFRICA's** commitment to quality and customer satisfaction makes it a preferred provider of Hot Tapping services in the industry.



ROLLER GRINDING

ROLLER GRINDING IS A SPECIALIZED PROCESS USED TO IMPROVE THE SURFACE FINISH AND GEOMETRY OF CYLINDRICAL PARTS, SUCH AS ROLLERS, SHAFTS, AND BEARINGS. THIS PROCESS INVOLVES REMOVING MATERIAL FROM THE SURFACE OF THE PART USING A GRINDING WHEEL, RESULTING IN A PRECISE AND CONSISTENT FINISH.

DGC AFRICA's Roller Grinding service is carried out by skilled technicians using state-of-the-art equipment and tools, ensuring that the work is performed to the highest quality standards. The company's team of experienced technicians has the knowledge and expertise to handle the most complex roller grinding projects, ensuring that the parts are restored to their original specifications.

OUR **ROLLER GRINDING** SERVICE INCLUDES:

- Grinding the surface finish of cylindrical parts, such as rollers, shafts, and bearings
- Improving the geometry and roundness of the parts
- Removing any defects or irregularities in the surface of the parts

INDUSTRIES THAT **BENEFIT** FROM OUR ROLLER GRINDING SERVICE INCLUDE:

MINING

In the mining industry, roller grinding is used to maintain and repair large mining equipment such as conveyor belts, crushing and grinding mills, and other machinery. Roller grinding can be used to repair the bearings and surfaces of these machines, which are subjected to heavy wear and tear.

PAPER & PULP

The paper and pulp industry use roller grinding to maintain and repair the rollers used in paper-making. These rollers are subjected to heavy wear and tear, and roller grinding can be used to restore them to their original condition, improving the quality and efficiency of the papermaking process.

PRINTING & PACKAGING

The printing and packaging industry uses roller grinding to maintain and repair the rollers used in printing presses and other printing equipment.

Roller grinding can be used to restore the surface of the rollers, ensuring that the printing process produces high-quality prints.

STEEL & ALUMINIUM

The steel and aluminium industry uses roller grinding to maintain and repair the rollers used in rolling mills. These rollers are subjected to heavy wear and tear, and roller grinding can be used to restore them to their original condition, ensuring that the rolling process produces high-quality steel or aluminium sheets.

AUTOMOTIVE

The automotive industry uses roller grinding to maintain and repair the rollers used in manufacturing and assembling automobiles.

These rollers are subjected to heavy wear and tear, and roller grinding can be used to restore them to their original condition, improving the efficiency and quality of the manufacturing process.

AEROSPACE

The aerospace industry uses roller grinding to maintain and repair the rollers used in manufacturing and assembling aircraft. These rollers are subjected to heavy wear and tear, and roller grinding can be used to restore them to their original condition, ensuring that the manufacturing process produces high-quality aircraft components.

FOOD & BEVERAGE

The food and beverage industry uses roller grinding to maintain and repair the rollers used in food processing equipment, such as dough mixers and rollers used in sugar and chocolate production. Roller grinding can be used to restore the surfaces of these rollers, ensuring that the food processing equipment operates efficiently and produces high-quality food products.



ROLLER GRINDING IS AN ESSENTIAL PROCESS IN MAINTAINING THE PERFORMANCE AND RELIABILITY OF CYLINDRICAL PARTS, AND ROLLER GRINDING SERVICE PROVIDES A COMPREHENSIVE SOLUTION THAT ENSURES PRECISION, EFFICIENCY, AND COST-EFFECTIVENESS.

The Roller Grinding process begins by mounting the part on a precision spindle and rotating it against a grinding wheel. The grinding wheel removes material from the surface of the part, resulting in a precise and consistent finish. The technician monitors the grinding process and makes adjustments as necessary to ensure that the part meets the required specification.

Our commitment to quality and customer satisfaction makes us a preferred provider of Roller Grinding services in the industry. Roller Grinding is an essential process in improving the surface finish and geometry of cylindrical parts, and **DGC AFRICA's** Roller Grinding service provides a comprehensive solution that ensures precision, efficiency, and cost-effectiveness.

FLANGE FACING

FLANGE FACING IS A PROCESS USED TO RESTORE THE SEALING SURFACE OF A FLANGE, ENSURING THAT IT IS FLAT AND SMOOTH. THIS IS IMPORTANT IN INDUSTRIES WHERE THE SEALING SURFACE OF A FLANGE MUST BE PERFECTLY FLAT TO PREVENT LEAKS AND ENSURE EFFICIENT OPERATION.

Flange facing can be done using various methods, including manual grinding, machine grinding, and milling. The choice of method depends on the size of the flange, the condition of the flange, and the precision required.

DGC AFRICA's flange facing service is performed by skilled technicians using state-of-the-art equipment and tools, ensuring that the work is performed to the highest quality standards. The company's team of experienced technicians has the knowledge and expertise to handle the most complex flange facing projects, ensuring that the flange is restored to its original specifications.

OUR **FLANGE FACING** SERVICE INCLUDES:

- **INSPECTION:** Before flange facing, the flange is inspected to determine the condition of the sealing surface. This includes checking for any damage, corrosion, or other issues that may affect the quality of the flange facing.
- **SET UP:** The technician sets up the flange facing equipment, ensuring that it is positioned correctly and aligned with the flange.
- **FLANGE FACING:** The flange is faced using a grinding tool or milling machine, depending on the size and precision required. The flange facing process removes any imperfections, ensuring that the sealing surface is flat and smooth.
- **FINISHING:** The technician performs a finishing pass to ensure that the flange surface is smooth and free from any imperfections.
- **INSPECTION:** After flange facing, the flange is inspected again to ensure that the sealing surface is flat and smooth. Any defects or imperfections are corrected, ensuring that the flange is ready for use.

Industries that benefit from our flange facing service include oil and gas, petrochemical, power generation, and manufacturing. These industries use flange facing to ensure that their equipment is operating efficiently and to prevent leaks that can cause damage and downtime.

SOME OF THE INDUSTRIES THAT **BENEFIT** FROM FLANGE FACING SERVICES IN-

OIL & GAS

Flange facing is widely used in the oil and gas industry to ensure proper sealing of pipelines and valves, reducing the risk of leaks and improving the safety of the system. Flange facing is also used in the installation of new pipelines, valves, and fittings.

POWER GENERATION

Power plants use flange facing services to ensure the proper sealing of steam and water pipes, reducing the risk of leaks and improving the efficiency and reliability of the system.

PETROCHEMICAL

Petrochemical plants use flange facing services to maintain the proper sealing of pipelines, valves, and fittings, reducing the risk of leaks and ensuring the safety and reliability of the system.

MANUFACTURING

The steel and aluminium industry uses roller grinding to maintain and repair the rollers used in rolling mills. These rollers are subjected to heavy wear and tear, and roller grinding can be used to restore them to their original condition, ensuring that the rolling process produces high-quality steel or aluminium sheets.

AEROSPACE

The aerospace industry uses flange facing services to ensure the proper sealing of hydraulic and fuel systems, reducing the risk of leaks and improving the safety and reliability of the aircraft.

MINING

The mining industry uses flange facing services to maintain the proper sealing of pipelines and valves used in the transportation of minerals and other materials, reducing the risk of leaks and improving the efficiency and reliability of the system.

MARINE

The marine industry uses flange facing services to maintain the proper sealing of pipelines and valves used in the transportation of liquids and gases, reducing the risk of leaks and improving the safety and reliability of the system.

FLANGE FACING IS A CRITICAL MACHINING PROCESS USED IN VARIOUS INDUSTRIES THAT INVOLVE THE USE OF FLANGES. OVERALL, FLANGE FACING IS A CRITICAL MACHINING PROCESS THAT HELPS TO ENSURE THE PROPER SEALING OF PIPELINES, VALVES, AND FITTINGS, REDUCING THE RISK OF LEAKS AND IMPROVING THE EFFICIENCY, RELIABILITY, AND SAFETY OF VARIOUS SYSTEMS USED IN DIFFERENT INDUSTRIES.



MILLING & KEY MILLING

MILLING AND KEY MILLING ARE MACHINING PROCESSES USED TO REMOVE MATERIAL FROM A WORKPIECE AND CREATE KEYWAYS OR SLOTS FOR MECHANICAL COMPONENTS SUCH AS KEYS OR PINS. THESE PROCESSES ARE WIDELY USED IN VARIOUS INDUSTRIES, INCLUDING MANUFACTURING, AEROSPACE, AUTOMOTIVE, POWER GENERATION, AND MARINE.

DGC AFRICA's Milling and Key Milling services are carried out by skilled technicians using state-of-the-art equipment and tools, ensuring that the work is performed to the highest quality standards. The company's team of experienced technicians has the knowledge and expertise to handle the most complex milling projects, ensuring that the workpiece is machined to the required specifications.

OUR MILLING AND KEY MILLING SERVICE INCLUDES:

- Removing material from a workpiece to create a desired shape or size
- Creating keyways or slots for mechanical components
- Improving the surface finish of a workpiece
- Achieving tight tolerances and precise dimensions

The Milling process involves a rotating cutting tool that removes material from the workpiece, producing a flat or contoured surface. The cutting tool is mounted on a spindle that is driven by a motor, and the workpiece is clamped in place on a worktable. The cutting tool can be moved in multiple directions, allowing for precise control over the shape and size of the machined surface.

Key Milling is a specialized form of milling used to create keyways or slots in a workpiece. Keyways are commonly used to connect mechanical components, such as gears or pulleys, to a rotating shaft. Key milling involves removing material from a workpiece to create a rectangular groove, or keyway, that matches the shape and size of the key or pin.

INDUSTRIES THAT **BENEFIT** FROM OUR MILLING AND KEY MILLING SERVICES INCLUDE:

OIL & GAS

The oil and gas industry utilize milling and key milling services to create accurate and precise components for drilling rigs, pipelines, refineries, and other equipment. This ensures that the equipment operates efficiently and reliably, minimizing downtime and maximizing production.

POWER GENERATION

The power generation industry relies on milling and key milling services to produce accurate and precise components for power plants. This enables the industry to maintain reliable and efficient equipment, reducing downtime and increasing productivity.

AEROSPACE

The aerospace industry utilizes milling and key milling services to produce accurate and precise components for aircraft engines, landing gear, and other critical parts. This ensures that the aircraft operates safely and efficiently, minimizing downtime and maximizing flight time.

AUTOMOTIVE

The automotive industry uses milling and key milling services to produce accurate and precise components for engines, transmissions, and other critical parts. This ensures that the vehicles operate efficiently and reliably, minimizing downtime and maximizing production.

MINING

The mining industry relies on milling and key milling services to create accurate and precise components for mining equipment. This enables the industry to maintain reliable and efficient equipment, reducing downtime and increasing productivity.

MANUFACTURING

The manufacturing industry uses milling and key milling services to create custom parts for machinery and equipment. This ensures that the equipment operates efficiently and reliably, minimizing downtime and maximizing production.



MILLING AND KEY MILLING ARE ESSENTIAL MACHINING PROCESSES USED IN A WIDE RANGE OF INDUSTRIES. DGC AFRICA'S COMMITMENT TO QUALITY AND CUSTOMER SATISFACTION MAKES US A PREFERRED PROVIDER OF MILLING AND KEY MILLING SERVICES IN THE INDUSTRY.



PIPE CUTTING & WELD PREPPING

PIPE CUTTING AND WELD PREPPING ARE IMPORTANT PROCESSES IN THE FABRICATION AND INSTALLATION OF PIPELINES IN VARIOUS INDUSTRIES. THESE PROCESSES INVOLVE CUTTING AND PREPARING PIPES TO ENSURE THEY ARE READY FOR WELDING, JOINING, OR INSTALLATION.



DGC AFRICA's pipe cutting and weld prepping services utilize state-of-the-art equipment and techniques to ensure accuracy, efficiency, and safety. Our team of skilled technicians has extensive experience in pipe cutting and weld prepping for various industries, including oil and gas, petrochemical, power generation, and water treatment.

Pipe Cutting Pipe cutting involves the removal of sections of pipes to make way for new pipe sections or to create openings for fittings or valves. At **DGC AFRICA**, we use various cutting techniques, including flame cutting, plasma cutting, and abrasive cutting, depending on the pipe material and project requirements. Our equipment can cut pipes up to 60 inches in diameter, and we can cut pipes of various thicknesses and materials, including carbon steel, stainless steel, and other alloys.

Weld Prepping Weld prepping involves preparing the pipe ends for welding by removing any contaminants, such as rust, paint, or oil, and creating a bevelled edge to ensure a strong and durable weld. At **DGC AFRICA**, we use various techniques, including machining and grinding, to achieve the desired bevel angle and surface finish. Our skilled technicians ensure that the weld prep is done accurately and efficiently, ensuring the quality and strength of the final weld.



THE **PIPE CUTTING AND WELD PREPPING** SERVICES OFFERED BY DGC AFRICA ARE ESSENTIAL IN VARIOUS INDUSTRIES, INCLUDING:

MINING

Mining operations often require pipelines for transporting water, slurry, and other materials. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient transportation of materials in mining operations.

PETROCHEMICAL

Petrochemical plants use pipelines to transport various chemicals and products. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient transportation of chemicals and products.

MANUFACTURING

Manufacturing plants use pipelines to transport various fluids and materials. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient transportation of fluids and materials.

OIL & GAS DRILLING OPERATIONS

Oil and gas drilling operations use pipelines to transport drilling mud, water, and other fluids. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient transportation of fluids during drilling operations.

OIL & GAS

In the oil and gas industry, pipelines are used to transport crude oil, natural gas, and other petroleum products. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient transportation of petroleum products.

CONSTRUCTION

Construction projects often require the installation of pipelines for various purposes, including water and gas distribution. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient distribution of water and gas.

POWER GENERATION

Power plants use pipelines to transport steam, water, and other fluids. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient transportation of fluids.

WATER TREATMENT

Water treatment plants use pipelines to transport water to customers. Our pipe cutting and weld prepping services ensure that pipelines are accurately cut and prepared for welding, ensuring the safe and efficient transportation of water.

IN ALL THESE INDUSTRIES, ACCURATE PIPE CUTTING AND WELD PREPPING IS CRUCIAL FOR ENSURING THE SAFE & EFFICIENT TRANSPORTATION OF FLUIDS AND MATERIALS.

Our team of skilled technicians uses state-of-the-art equipment and techniques to provide high-quality pipe cutting and weld prepping services.

Our pipe cutting services include the use of precision cutting machines to ensure clean and accurate cuts, while our weld prepping services include the use of machines that bevel and face the edges of the pipes to ensure accurate welding. We also offer custom solutions to fit the specific needs of each industry and project.

Accurate pipe cutting and weld prepping are crucial for ensuring the safe and efficient transportation of fluids and materials in various industries, including mining, oil and gas, power generation, water treatment, manufacturing, and construction. Our team of skilled technicians and state-of-the-art equipment provide high-quality pipe cutting and weld prepping services to meet the specific needs of each industry and project.

Pipe cutting and weld prepping are important processes in the fabrication and installation of pipelines. **DGC AFRICA's** pipe cutting and weld prepping services utilize advanced equipment and techniques to ensure accuracy, efficiency, and safety.

BORING & TAPPING

BORING AND TAPPING ARE SPECIALIZED ON-SITE MACHINING PROCESSES USED TO REPAIR, REFURBISH, OR CREATE NEW BORES AND THREADS IN LARGE INDUSTRIAL EQUIPMENT SUCH AS ENGINES, GEARBOXES, DRIVE SHAFTS, PIPELINES, HEAT EXCHANGERS, TANKS, AND OTHER STRUCTURAL COMPONENTS.

These processes involve creating accurate and straight bores and threads to restore the alignment of the equipment, improving its performance and reliability.

DGC AFRICA's Boring and Tapping services are carried out by skilled technicians using state-of-the-art equipment and tools, ensuring that the work is performed to the highest quality standards. The company's team of experienced technicians has the knowledge and expertise to handle the most complex boring and tapping projects, ensuring that the equipment is restored to its original specifications.

OUR BORING AND TAPPING SERVICE INCLUDES:

- Repairing or refurbishing bores and threads in heavy equipment, machinery, and engines
- Creating accurate and straight bores and threads to restore the alignment of the equipment
- Improving performance and reliability

INDUSTRIES THAT **BENEFIT** FROM OUR BORING AND TAPPING SERVICE INCLUDE:

MINING

Mining companies utilize Boring and Tapping to repair or create new bores and threads in heavy equipment used in mining operations, such as excavators, loaders, and trucks. The accurate and straight bores and threads ensure the equipment operates efficiently and reliably.

STEEL & ALUMINIUM

Boring and Tapping are used in steel and aluminium mills to repair or create new bores and threads in equipment such as rollers, extruders, and casting machines. These processes ensure the equipment operates efficiently and produces high-quality products.

FOOD & BEVERAGE

Food and beverage companies use Boring and Tapping to repair or create new bores and threads in equipment such as mixers, blenders, and conveyors. These processes ensure the equipment operates smoothly and efficiently, meeting the strict hygiene and safety standards.

PAPER & PULP

Boring and Tapping are used in paper and pulp mills to repair or create new bores and threads in equipment such as refiners, digester blow lines, and screen rotors. These processes help maintain the quality and consistency of the paper products.

AUTOMOTIVE

Automotive companies utilize Boring and Tapping to repair or create new bores and threads in engine blocks, transmission housings, and other components. The accurate and straight bores and threads ensure the components operate efficiently and reliably.

PRINTING & PACKAGING

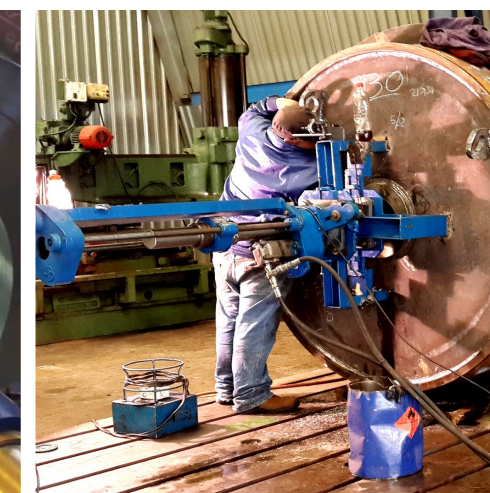
Printing and packaging companies use Boring and Tapping to repair or create new bores and threads in equipment such as printing press cylinders and packaging machinery. The accurate and straight bores and threads ensure the equipment operates smoothly and efficiently.

AEROSPACE

Boring and Tapping are used in the aerospace industry to repair or create new bores and threads in aircraft engines, landing gear, and other components. The accurate and straight bores and threads ensure the components operate efficiently and safely.

BORING AND TAPPING ARE ESSENTIAL PROCESSES IN REPAIRING AND MAINTAINING LARGE INDUSTRIAL EQUIPMENT, AND DGC AFRICA'S BORING AND TAPPING SERVICE PROVIDES A COMPREHENSIVE SOLUTION THAT ENSURES PRECISION, EFFICIENCY, AND COST-EFFECTIVENESS.

Our commitment to quality and customer satisfaction makes us a preferred provider of Boring and Tapping services in the industry.



KILN TYRE & SUPPORT ROLLER

KILN TYRE & SUPPORT ROLLER GRINDING IS A SPECIALIZED SERVICE USED TO REFURBISH AND REPAIR LARGE ROTARY KILNS, DRYERS, AND SIMILAR EQUIPMENT USED IN VARIOUS INDUSTRIES, INCLUDING CEMENT, MINING, POWER GENERATION, AND CHEMICAL PLANTS. THIS PROCESS INVOLVES GRINDING THE SURFACES OF THE KILN TYRES AND SUPPORT ROLLERS TO REMOVE WEAR AND DAMAGE AND RESTORE THEIR ORIGINAL SPECIFICATIONS.

INDUSTRIES THAT **BENEFIT** FROM OUR KILN TYRE & SUPPORT ROLLER GRINDING SERVICE INCLUDE:

CEMENT

Cement production involves large rotary kilns that are critical to the manufacturing process.

The kiln tyres and support rollers must be maintained to ensure efficient and reliable operation of the kilns, which is essential for the production of high-quality cement.

MINING

The mining industry uses large rotary kilns for the processing of minerals and metals. The Kiln Tyre & Support Roller Grinding service ensures that the kiln tyres and support rollers are maintained to enable the efficient processing of minerals and metals.

POWER GENERATION

The power generation industry uses rotary kilns in the production of power. The Kiln Tyre & Support Roller Grinding service ensures that the kiln tyres and support rollers are maintained to enable efficient and reliable operation of the kilns.

CHEMICAL PLANTS

The chemical industry uses large rotary kilns for the processing of chemicals. The Kiln Tyre & Support Roller Grinding service ensures that the kiln tyres and support rollers are maintained to enable efficient and reliable processing of chemicals.



DGC AFRICA's Kiln Tyre & Support Roller Grinding service is carried out by experienced technicians using state-of-the-art equipment and technology, ensuring that the work is performed to the highest quality standards. The company's team of skilled technicians has the knowledge and expertise to handle the most complex Kiln Tyre & Support Roller Grinding projects, ensuring that the equipment is restored to its original specifications.

OUR KILN TYRE & SUPPORT ROLLER GRINDING SERVICE INCLUDES:

- Grinding of kiln tyres and support rollers to remove wear and damage
- Ensuring accurate and smooth surfaces for efficient operation of the equipment
- Improving performance and reliability

THE KILN TYRE & SUPPORT ROLLER GRINDING **PROCESS** BEGINS BY:

- Measuring the surfaces of the kiln tyres and support rollers and checking for any misalignment or damage.
- Setting up the grinding equipment once measurements are recorded.
- Advancing the grinding head onto the surface of the kiln tyre or support roller, removing material until the surface is smooth and within the required tolerances.
- Repeating the process until all surfaces are ground to the required specifications.

KILN TYRE & SUPPORT ROLLER GRINDING IS AN ESSENTIAL PROCESS IN MAINTAINING LARGE ROTARY KILNS AND SIMILAR EQUIPMENT USED IN VARIOUS INDUSTRIES.

DGC AFRICA'S KILN TYRE & SUPPORT ROLLER GRINDING SERVICE PROVIDES A COMPREHENSIVE SOLUTION THAT ENSURES PRECISION, EFFICIENCY, AND COST-EFFECTIVENESS. INDUSTRY.

Our commitment to quality and customer satisfaction makes us a preferred provider of Kiln Tyre & Support Roller Grinding services in the industry.



JOURNAL TURNING & CUTTING

JOURNAL TURNING & CUTTING IS A PRECISION MACHINING PROCESS THAT INVOLVES THE REMOVAL OF MATERIAL FROM THE SURFACE OF JOURNAL BEARINGS, SHAFTS, AND OTHER CYLINDRICAL COMPONENTS TO RESTORE THEM TO THEIR ORIGINAL SPECIFICATIONS.

This process is essential in industries such as power generation, mining, and manufacturing, where equipment such as turbines, generators, and pumps must operate at optimal efficiency.

INDUSTRIES THAT **BENEFIT** FROM OUR JOURNAL TURNING & CUTTING SERVICE INCLUDE:

POWER GENERATION

Power plants rely on equipment such as turbines and generators to produce electricity. Journal bearings and shafts in these machines must be maintained to ensure efficient and reliable operation.

MINING

The mining industry uses equipment such as crushers, conveyors, and mills, which rely on journal bearings and shafts. Journal Turning & Cutting ensures that these components are maintained to enable efficient and reliable processing of minerals.

MANUFACTURING

Manufacturing plants use a wide range of equipment that relies on journal bearings and shafts. Journal Turning & Cutting ensures that these components are maintained to enable efficient and reliable production of goods.

Our commitment to quality and customer satisfaction makes us a preferred provider of Journal Turning & Cutting services in the industry.

In conclusion, **DGC AFRICA's** Onsite Machining Services offers a comprehensive range of innovative, integrated engineering solutions, and quality services to clients across various industries in Africa. With its highly skilled technicians, state-of-the-art equipment, and commitment to safety, quality, and integrity, the company has built a reputation as a reliable and trusted partner for its clients.

Additionally, **DGC AFRICA's** focus on sustainability and local content development demonstrates its dedication to making a positive impact on African communities and supporting economic development throughout the continent.

Whether it's line boring, hot tapping, roller grinding, flange facing, or any other onsite machining service, **DGC AFRICA** is equipped to handle the machining challenges of today and tomorrow, and to build long-term partnerships based on trust, collaboration, and exceptional service.

JOURNAL TURNING & CUTTING IS AN ESSENTIAL PROCESS FOR MAINTAINING THE EFFICIENCY AND RELIABILITY OF EQUIPMENT IN VARIOUS INDUSTRIES. DGC AFRICA'S JOURNAL TURNING & CUTTING SERVICE PROVIDES A COMPREHENSIVE SOLUTION THAT ENSURES PRECISION, EFFICIENCY, AND COST-EFFECTIVENESS.

DGC AFRICA offers a comprehensive Journal Turning & Cutting service that is carried out by skilled technicians using state-of-the-art equipment and technology. Our team has the expertise and knowledge to handle even the most complex journal turning and cutting projects, ensuring that the equipment is restored to its original specifications.

THE PROCESS OF JOURNAL TURNING & CUTTING INCLUDES THE FOLLOWING STEPS:

INSPECTION OF THE COMPONENT

The component is thoroughly inspected to determine the extent of wear and damage.

REMOVAL OF THE COMPONENT

The component is removed from the equipment and brought to our facility.

SET UP OF THE EQUIPMENT

Our technicians set up the equipment, including the lathe and cutting tools, to ensure that they are aligned and ready for use.

TURNING AND CUTTING

The technician uses the lathe and cutting tools to remove material from the surface of the journal bearing or shaft until it is restored to its original dimensions.

FINISHING

The surface of the journal bearing or shaft is finished to ensure that it is smooth and meets the required specifications.

CONCLUSION

In conclusion, **DGC AFRICA's** Onsite Machining Services offers a comprehensive range of innovative, integrated engineering solutions, and quality services to clients across various industries in Africa. With its highly skilled technicians, state-of-the-art equipment, and commitment to safety, quality, and integrity, the company has built a reputation as a reliable and trusted partner for its clients.

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