# N5::GC

NORTHERN STRANDS GROUP OF COMPANIES





## CAPABILITIES OVERVIEW

Northern Strands Group of Companies is the comprehensive solution for your project requirements. Leading in the mining and construction industries with superior craftsmanship, cutting edge innovation, responsiveness and reliability. NSGC is dedicated to health, safety, environment, and community.

## NORTHERN STRANDS

Northern Strands supplies various industries and has evolved into six major divisions. Northern Strands offers the essential tools and technical expertise necessary for mine hoisting and attachments, general rigging, engineered fall protection, suspended access, agriculture terminal maintenance, and training services.



Fortis has a global focus that offers contracting, subcontracting, and consulting services to a wide range of customers. With an extensive portfolio of capabilities in engineering, machining, and fabrication, Fortis specializes in rapid mobilization. Leveraging a team of seasoned professionals and cutting-edge technology, Fortis offers innovative solutions tailored to each project's specific needs.

Fortis has achieved and maintained ISO 9001 Quality Management, 14001 Environmental Management, and 45001 Health and Safety Management Certifications. ISO benefits the customer by ensuring products and services are safe, reliable, and comply with standards. ISO Certification guides continuous improvement which results in increased efficiencies that are passed along to the customer.



Certified Sales and Rentals provides the equipment, vehicles, and tools needed to get the job done. Certified ensures that equipment meets the required standards with in-house repairs, testing, and recertification services. Certified leverages its extensive industry knowledge to source specialized equipment not found anywhere else.

Certified is Saskatchewan's exclusive supplier of XCMG Equipment, offering a robust lineup of machines proven in the global mining and construction industries.

### MINING WIRE ROPE, ATTACHMENTS & EQUIPMENT

Northern Strands' Mine Hoisting Solutions® provides customers worldwide with a wide range of ropes, attachments, and equipment for every type of hoist configuration and shaft design. All attachments are designed and engineered to governing standards, as well as local government regulations, with the manufacturing process being governed by ISO 9001.

#### **WIRE ROPE**

#### SHAFT SINKING ROPES

• 35 x 7 Compacted Non-Rotating

#### HOIST ROPES

 35 x 7 Compacted Non-Rotating, (plastic encased core option) Flattened Strand, NRHD 24, 8-Strand Mixed Core, Full Lock Coil, 6-Strand

#### **GUIDE ROPES**

• Half Lock Coil

#### **BALANCE ROPES**

• 34 x 7, 34 x 19 , PFV & Coated, Flat Balance Ropes

#### SURFACE ROPES

- Hoist, Drag, Boom Pendants6 & 8-Strand options
- Ropes available in diameters ranging from 5/8" to 3"

#### ROPE FINISH AVAILABLE

- Bright
- Galvanized
- Galfan

#### **GRADE OPTIONS**

- 1770 N/mm2
- 1960 N/mm2
- 2160 N/mm2

#### ATTACHMENTS

- Wire Rope Sockets
- Chase Blocks
- Hydraulic Linkage
- Attachment Pins
- Thimble Cappels
- Swivels & Swivel Hooks
- Cheeseweights
- Shaft Sinking Attachments
- Load Cells
- Maneuvering & Suspension Glands
- Electrical Cable Brackets& Wedges
- Customizable Dimensions
- Design & Upgrades
- Testing & Recertification
- Installation & Replacement

#### **EQUIPMENT**

- Single & Multi-Rope Cleaners
- Portable & Stationary Lubrication Systems
- Hoist & Deflection Sheave Liners
- Sheaves
- Helical Groove Cutters
- Reel Winder & Unwinder
- Tensioner
- Socketing Stand
- Wirelock (Socketing Supplies)

- Re-spooling
- Tensioning
- Rope Inspection
- Socketing
- Remediation of Ropes & Reels
- OML Certification
- Rope Testing











## ENGINEERED FALL PROTECTION

#### **SYSTEMS**

- Overhead Lifelines
- Vertical Lifelines
- Horizontal Lifelines
- Rigid Rail Systems
- Walkways
- Platforms & Stairs
- Guardrail Ballasted & Fixed
- Rigid Post Anchors
- Single Point Tie-Off Anchors
- Swing Stage Tieback Anchors
- Custom Dual Post Anchors
- Portable Fall Protection & Travel Restraint
- Ladder Systems
- Patented Bin Safe System
- Hoist Device Systems
- Confined Space Access & Rescue

Northern Strands provides comprehensive engineered fall protection solutions across a variety of industries. Northern Strands' extensive lineup of systems are designed, supplied, and installed to align with all relevant manufacturer and industry standards in compliance with OH&S, CSA, and ANSI regulations.

#### **SERVICES**

- Site Assessments
- Consulting
- Customizable Systems
- Inspection & Recertification
- Testing
- · Engineering & Drafting
- Reverse Engineering
- Commissioning
- New Installation
- Repair & Modification

#### LOCATIONS

- Railcar Loadout Facilities
- Ore Barns
- High-Rise Rooftops
- Bridge Decks
- Mine Shafts
- Rooftops
- Towers
- Grain Bins
- Commercial Buildings
- Industrial Facilities

## SUSPENDED ACCESS

Northern Strands offers the largest suspended access rental fleet in Western Canada. Within the Suspended Access Division, Northern Strands offers swingstages, specialized work platforms, lifting systems, and material handling solutions for both rental and purchase. Skilled technicians are available to provide on-site system assembly and expert consultation for material handling and rigging requirements.

#### SYSTEMS

- Swing Stages
- Spider Hoists
- Lifeline Ropes
- Multi Hoist Control
- Tieback Anchors
- Low Pressure Incline Platforms
- Single & Multi-Point Suspension Applications

#### LOCATIONS & APPLICATIONS

- Highrise Buildings
- Bridges
- Mine Shafts
- Sloped Roofs
- Glazing Applications
- Sheeting
- Concrete Restoration
- Inspections
- Beehives & Ore Barns

- On-site Technical Assistance
- Consulting
- System Setup & Demobilization
- Reconfiguration
- Training
- Material Hoisting
- Rigging Consultation
- Hoist Recertification
- System Maintenance & Inspection







### INDUSTRIAL RIGGING, EQUIPMENT & LIFTING SUPPLIES

The Northern Strands Rigging Division offers a vast inventory of industrial and general rigging, equipment, and lifting supplies. Northern Strands maximizes customer benefits by utilizing an extensive network of suppliers and leveraging in-house expertise. Expert technicians manufacture custom rigging solutions on demand and provide compliance certificates.

#### RIGGING

- Slings
- Shackles
- Blocks
- Swivel Hoists Rings
- Swivels
- Turnbuckles
- Sockets
- Hooks
- Sleeves
- Eyebolts

#### WIRE ROPE

- Bright Steel Wire Rope
- Galvanized Aircraft Cable
- Stainless Steel Aircraft Cable
- Progressioner Cable
- Crane Rope
- Non-Rotating Ropes

#### MATERIAL HANDLING

- Lifting Lugs & D-Plates
- Plain & Geared Trolleys
- Beam Clamps
- Spreader Beams
- Chain Hoists & Lever Hoists
- Hand Winch
- Air Winches (Tuggers)
- Permanent Magnet Lifter
- Plate Clamps (Vertical & Horizontal)

#### WIRE ROPE ACCESSORIES

- Drop Forged Clips
- Sleeves
- Stops
- Thimbles

#### LUBRICATION & LUBRICATION SYSTEMS

- Wire Rope Cable Lubrication
- Elaskon, Unolit & Gibbs Brand Lubricants

#### CHAIN & ACCESSORIES

- Multiple Chain Styles & Grades Available
- Master Links & Components
- · Links & Hooks
- Chain Assemblies

#### LOAD SECUREMENT

- Transport Chain with Tags
- Tie Down Straps
- Load Binders
- · Logging Tie-Downs

## SYNTHETIC ROPES

- Dyneema Rope & Winch Lines
- Double Braided Polyester Tow Rope
- General Purpose Poly Rope
- Tow Straps
- Synthetic Soft Shackles

#### **FALL PROTECTION**

- Harnesses
- Lanyards
- Self-Retracting Lanyards
- · Miner's Belts
- · Roofer's Kits
- D-Ring Extensions

- Rigging Inspections
- Technical Consulting
  - Wire Rope Sling Charts
  - Crosby Rigging Guides
  - Crosby Block Guides
- Engineered Lifting Plans
- Custom Wire Rope Slings
- Custom Chain Slings
- Custom Synthetic Slings
- Pull Testing (Vertical & Horizontal)
- Compliance Certificates
- Mobile Test Bed
- Cable Assemblies







## GRAIN TERMINAL EQUIPMENT & PROGRESSIONERS

Northern Strands offers a comprehensive range of products and services catering to car progressioners and grain terminals. Northern Strands' car progressioner and grain terminal offerings include system design, installations, repair, refurbishment, fabrication, and ongoing maintenance support. A comprehensive selection of inventory includes internally manufactured components, readily available Nordstrong parts, cables, accessories, motors, brakes, specialized bearings and housings, connection links, and gearboxes tailored to suit all sizes of car progressioners.

#### SYSTEMS - IN STOCK

- New & Refurbished Progressioners
- Gear Boxes
- Braked Motors
- Reconditioned Drums
- SEW Parts
- Pillow Blocks & Bearings
- Sheaves
- Buckets, Bucket Elevator Belts& Accessories
- Drive Chain
- Limit Switches
- Drag Chain Assemblies
- Head Pulley Lagging
- Thern Winches

#### **SERVICES**

- Onsite Technical Assistance
- Replacement Cable & Rope Assemblies
- Maintenance & Greasing
- Gear Box Rebuilds
- · Design & Installation
- Drum Replacements
- Emergency Repairs
- Service & Inspections
- Supply & Installation of Buckets, Bucket Elevator Belts & Accessories
- Bucket Elevator Boot Replacement
- Head Pulley Replacements
- Shutdowns & Turn-Arounds

- Spouting & Chute Turning & Rebuilding
- Design, Supply & Installation of Load-out Spout Systems & Upgrades
- Terminal-related Parts & Specialty Item Sourcing
- Gin Pole & Lifting System Inspections & Certifications
- General Repairs
- Manual Man Lift Repairs
- Bulk Weigher Test Weight Recertification
- Weight Exchanges
- Supply & Installation of Drag Chains

### **TRAINING**

Northern Strands provides training seminars aimed at enhancing workplace safety and ensuring compliance with safety regulations. All seminars are led by highly knowledgeable and seasoned instructors, holding accreditations from industry authorities like Crosby, SALA, SAIA, and Miller. Northern Strands courses consistently deliver the latest, up-to-date information in compliance with current regulations. A commitment to excellence is evident through ongoing audits of course materials and continuous updates to reflect the most current standards.

#### COURSES

- Fall Arrest & Air Winch (Tugger) Safety
- Wire Lock® Socking
- Crosby<sup>®</sup> Rigging
- Suspended Access Equipment
- Overhead Traveling Crane Operator
- · Below the Hook Rigging

- Training Delivered at Customer Sites or at our Training Facilities
- Facilities Located in Saskatoon & Winnipeg
- Quick Turnaround Time on Course Delivery





# MINING & INDUSTRIAL CONSTRUCTION

Fortis offers a comprehensive range of services catering to the mining, utility, and construction industries. Expert project team members along with experienced tradespeople complete site assessments and develop meticulous safe work procedures for projects. In-house project management, engineering, manufacturing, and testing allow Fortis to expedite project deliverables thereby maintaining schedules and controlling costs for the customer.

- Consulting
- Project Management
- Shaft Development
- · Shaft Liner Repair
- Incident Remediation
- · Mine Decommissioning
- Underground Belt Line Installation
- Structural Steel Installation, Remediation, & Replacement
- Shaft Services Installation & Decommissioning
- Waterway Safety & Spill Boom Installation
- Shaft & Underground Material Transportation

#### **SERVICES**

- Mine Hoisting Systems Installations
- Bridge & Highway Cable Barrier Installation & Replacement
- Mine Development & Rehabilitation
- Operational Support -Underground & Shaft Mine
- Electrical Cable Installation & Decommissioning
- Hoist Rope Work Consultation
- Shaft Steel Inspections, Audits, Installations & Replacements
- Hoisting System Rope Installations, Replacement & Maintenance

- Hoisting System Maintenance Program Development
- Industrial & Underground Construction
- Ground Support Installation
- Elevator Structural Steel Supply & Installation
- Spill Boom Design, Supply & Installation
- Lifting Lug, Monorail & Overhead Crane Installation
- Cable Tensioning on Dams
- ISO 9001, 14001, 45001

## ENGINEERING

Fortis has an accomplished engineering team comprised of mechanical and structural engineers, alongside CAD/CAM technologists who are experts in their fields. By combining diverse knowledge and experience, Fortis approaches problems from multiple perspectives, ensuring that the optimal solution is found and customized for each client. From concept to installation and maintenance, Fortis provides a full range of services.

#### OUR SERVICES

- Structural Engineering
- Mechanical Engineering
- Drafting & Drawing
- 3D Modelling
- On-site Project Engineering
- Construction Methodology & Sequence Drawings
- Consulting
- Fabrication Drawing Packages

#### AREAS OF EXPERTISE

- Engineered Lift Plans
- Custom Lifting Devices
- Mine Shaft Equipment Lowering Plans
- Material Handling
- Shaft Conveyance & Work Stages (Galloways)
- Fall Arrest & Restraint
- System Design Mining Rope Attachments
- Shaft Sinking & Maintenance



## **FABRICATION**

Fortis has a team of industry experts, featuring CWB-certified welders and fabricators. Fortis' fabrication department ensures swift response to urgent orders, effectively minimizing downtime. Fortis' well-equipped fabrication shop boasts the advantage of two 10-tonne overhead cranes, facilitating the smooth execution of even the most intricate and sizable projects with ease.

#### PRODUCTS & EQUIPMENT

- Safety Barriers
- Spreader Beams & Lugs
- Reel Trailer & Reeling Machines
- Personnel Carriers & Personnel Baskets
- Concrete Buckets
- Head Covers
- Work Platforms Galloways
- Conveyor Brackets
- Custom Fabrication
- Lifting Apparatus
- ROPS & FOPS

#### **SERVICES**

- Skip Rebuilds
- New Skip Fabrication Testing & Proof Loading
- Tiling (Wear Surfaces -Ceramics)
- Sheave Re-grooving (in-situ)
- Mag Particle Testing
- Ultrasonic Testing
- Dry Film Thickness Testing
- Ultrasonic Thickness Testing

#### **CAPACITIES**

- 10,000 sq ft Fab Shop
- Multiple Positioning Jibs
- Two 10T Overhead Cranes
- CWB Certified Journey-Person Welders & Fabricators
- CWB Supervisors CWB Level 2 Weld Inspector
- CWB Certified Steel & Stainless
- TSASK Certification for Pressure Piping
- ISO 9001 Quality Management

## MACHINING

Fortis' machine shop stands out with its cutting-edge CNC machines and milling equipment, ensuring precision cuts for every project. In collaboration with the Northern Strands Mine Hoisting Division, and the Fortis Mining and Fabrication Departments, the Fortis Machine Shop is a crucial part of providing a full-service solution to each customer. With a large inventory of ready-to-customize attachments, Fortis is always prepared to respond promptly to emergency requests. Fortis' machining capabilities are extensive, producing custom mining attachments such as chase blocks, cheese weights, swivels, and sockets for various applications worldwide.

#### PRODUCTS & EQUIPMENT

- Custom Hoisting & Rigging Products
- Custom Sheaves, Pins & Bushings
- Steel, Iron, Brass, Bronze, Stainless & Plastics
- Mining Wire Rope Attachments

#### **SERVICES**

- Custom Machining
- Line Boring

#### CAPACITIES

- Two CNC Band Saws 12" x 16"
- Four Mills: Max Range 54", 20", 25"
- Three Lathes Max Turn Length 80"; Max Dia 22"
- Multiple positioning Jibs









## RECERTIFICATION & TESTING

Fortis' specialized Recertification and Testing Department is equipped and certified to expertly repair and recertify crucial mining and construction equipment. Fortis' horizontal test beds are versatile and can accommodate a wide range of equipment, including slings, ropes, chain falls, chain slings, D-plates, spreader beams, mining attachments, and electrical cable brackets. For specialized needs, Fortis offers custom pull testing services.

#### CAPABILITIES

- Material Baskets
- Lifting Beams & Spreader Bars
- Personnel Baskets
- Wire Rope Slings
- Web Slings
- Round Slings
- Chain Slings
- Rigging Hardware
- Mining Wire Rope Attachements
- D-Plates

#### **SERVICES**

- Proof Load to Customer Request
- Pull to Destruction
- Sandblasting & Painting
- Non Destructive Testing
- Mag Particle Testing
- Ultrasonic Testing
- Dry Film Thickness Testing
- Positive Material Identification
- Custom Pull Testing

#### CAPACITIES

• Pull Testing to 380,000 lbs



### SALES & RENTALS

Certified has an extensive inventory of mining and construction equipment and tools. Certified is set apart by a commitment to quality - every piece of equipment undergoes rigorous recertification after each rental term, ensuring it arrives underground-ready with all required certificates. Certified's used equipment inventory features a distinctive and constantly-evolving selection, catering to a wide range of customers.

- Air Winches (Tuggers) 1,000-19,000lb. rating
- Lever Hoists up to 9 ton
- Chain Hoists Electric, Air, up to 20T with Customized Lift
- Reeving Hoists 44,000lbs Capacity
- Twin Bull Wheel Tensioner
- Scooptrams 1.25yd to 6yd
- Brokk 170 Demolition Robot
- Telehandlers & Attachments
- Personnel Transport Vehicles
- Skidsteers
- Trailers Seacans, Office, Fuel
- Trolleys Plain & Geared
- Beam Clamps & Plate Clamps
- Snatch Blocks Multiple Sizes
- Construction & Crane Blocks
- Deflection Sheaves

- EQUIPMENT AVAILABLE
  - Spreader Beams
  - Machine Skates
  - Retractable Lifelines
  - Load Cells
  - Overhaul Balls
  - Material Lifting Jacks
  - Exosphere Anchor System
  - Confined Space Hoists
  - Reel Handling & Stands
  - Personnel Baskets, Material Baskets & Cages
  - Compressors & Generators
  - Hydraulic Cylinders & Jacks
  - Power Equipment -Hammers & Rock Drills
  - Drills Jackleg, Stoper, Sinker
  - Power Distribution
  - Equipment Power Packs

- Greenlee Equipment Welding
- Equipment & Accessories
- Contrete & Grout Equipment
- · Skids Tables, Tools, Panels
- Transformers
- Pumps

#### **SERVICES**

- Sales of New & Used Equipment
- Rentals Daily, Weekly, Monthly
- Emissions Testing & Certification
- Parts & Service
- Fully Accredited Mechanical Shop
- Full Rebuilds & Refurbishing of Equipment
- Certificate Provided

### MECHANICAL REPAIR, RECERTIFICATION & TESTING

Certified Sales & Rentals Mechanical Shop is a fully accredited facility dedicated to equipment recertification and repair. Certified specializes in the recertification of mining and construction tools and equipment. With a fully licensed mechanical shop providing services for equipment rentals and customer equipment.

#### **EQUIPMENT & ASSETS**

- Rough Terrain Vehicles
- Chain Hoists
- Lever Hoists
- Air Winches
- Kubotas
- Mining Tools & Equipment
- Lifting Devices Underground
- Equipment Trucks, Jumbos Scooptrams, Personnel Carriers

#### SERVICES

- 250,000lbs of Configurable Test Weights
- Pull to Destruction
- Sandblasting & Painting
- Non Destructive Testing
- Fleet Maintenance
- Scoop Tram Rebuild & Refurbish
- · Emissions Testing
- Rebuild & Refurbish Equipment

#### CAPACITIES

- Pull Testing (static & dynamic)
- Licensed Heavy Duty Mechanics
- · Licensed Millwrights









## XCMG DISTRIBUTOR

Certified Sales & Rentals takes pride in its exclusive partnership with XCMG, serving as Saskatchewan's premier dealer. With a robust selection of machinery known for its performance in both the mining and construction sectors, XCMG exceeds equipment requirements. Founded in 1943, XCMG stands as the third-largest global construction machinery company.

#### **EQUIPMENT**

- Telehandlers
- Aerial Lifting Platforms
- Scissor Lifts
- Skidsteers
- Forklifts
- Roller Packers

- Sale of New & Used Equipment
- Rentals Daily, Weekly & Monthly
- Emissions Certificates Parts & Service
- Leasing Options Available

















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