





# SERVICES FOR MINING AND INDUSTRIES

### US

We are a Peruvian company with 12 years of experience in the construction and mining field. We have successfully executed important service contracts in the execution of projects in various disciplines, satisfying the needs of our strategic partners.

We are representatives of CALL & NICHOLAS INSTRUMENTS INC. international mining consulting firm that specializes mainly in geological engineering, geotechnical engineering and hydrogeology.

#### Our values are:



**HONESTY** 



**TRUST** 



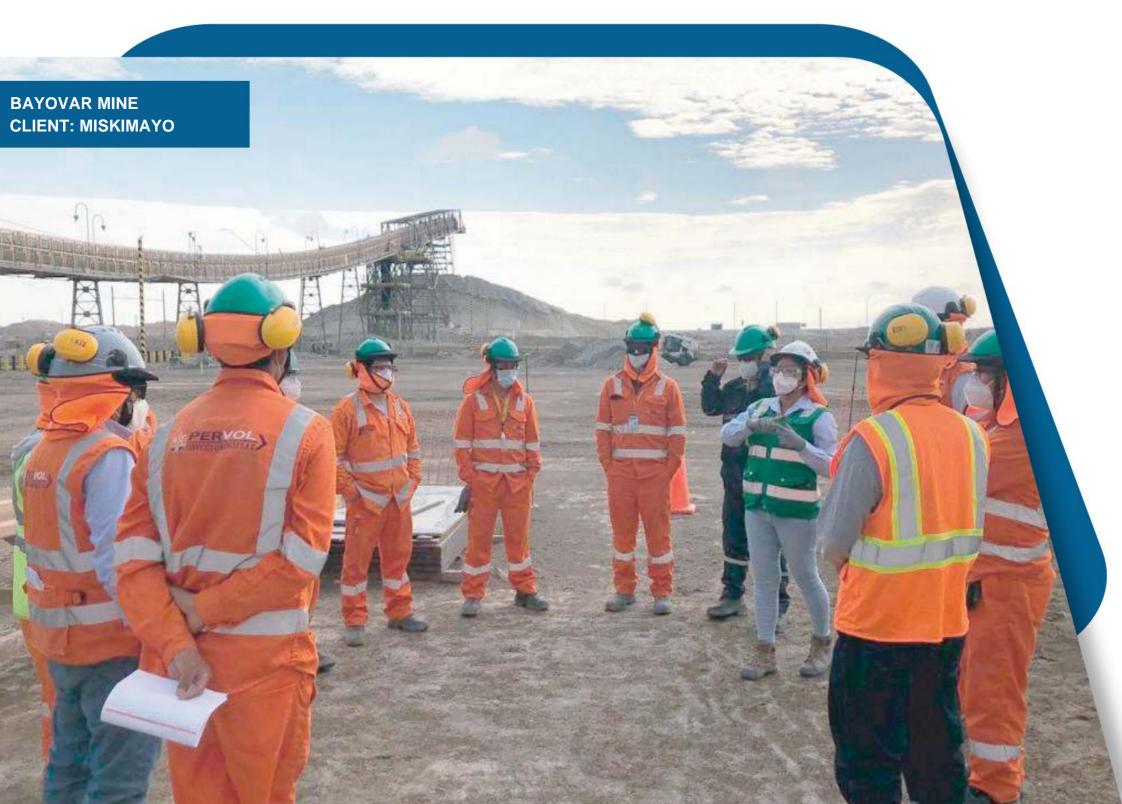
RESPONSIBILITY



**COMMITMENT EMPATHY** 







## OUR MORE PROJECTS IMPORTANT



**MU JUST MINE** 

#### **MARCOBRE**

Civil, mechanical works, sanitary and electrical "Construction services"



THE BAMBAS

#### **MINERAL METAL GROUP**

"Maintenance of Extensometers

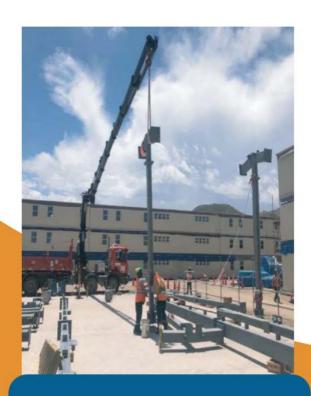
"Slideminder"



**ANTAMINA MINING COMPANY** 

#### **ANTAMINA**

"Programming of the 2nd channel of radius for extensometers electronic"



**MU QUELLAVECO** 

#### ANGLO AMERICAN

"Civil and mechanical works and electrical.

"Construction services"



**MU MISKYMAYO** 

#### BAYOVAR

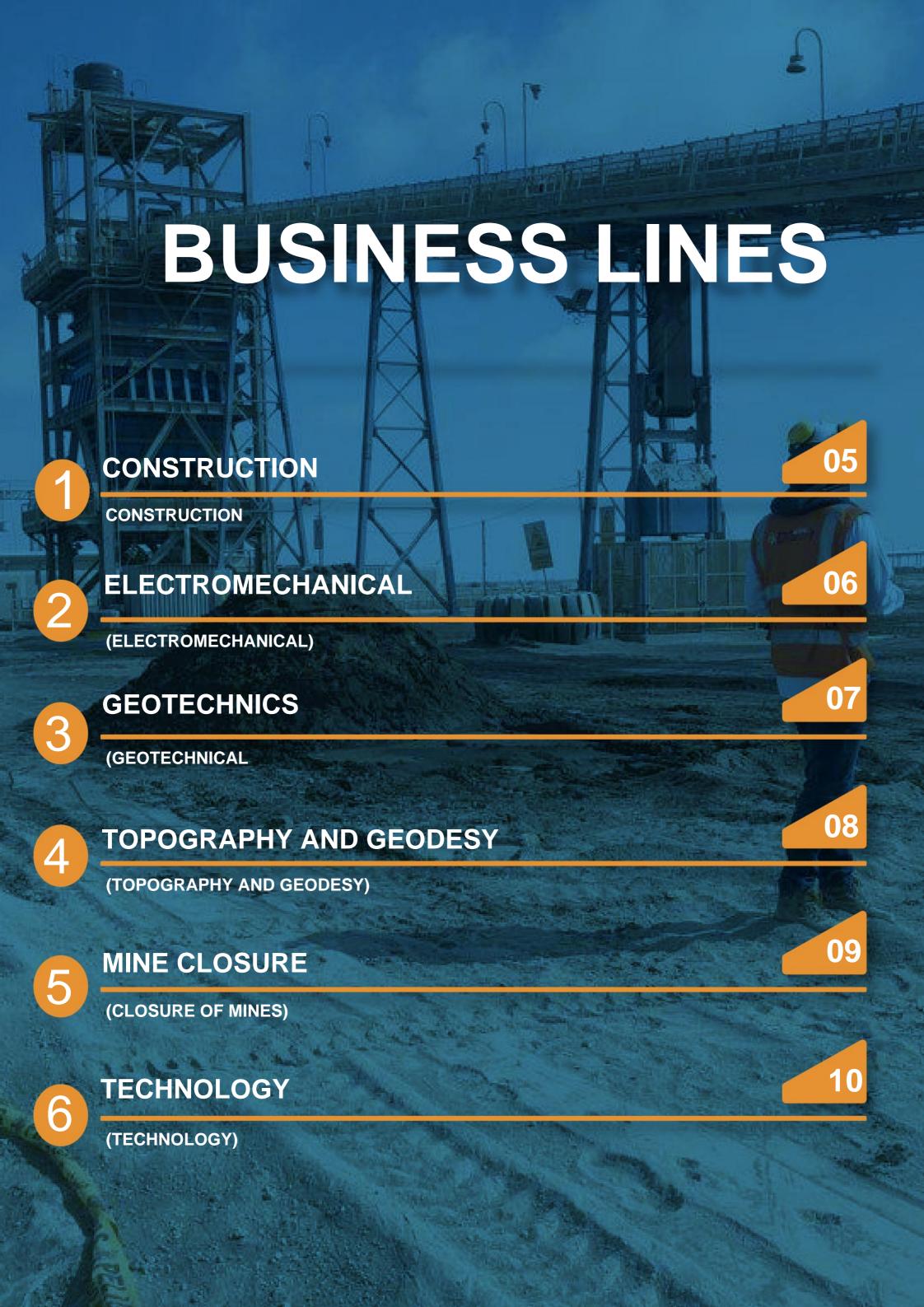
"Construction of walls



**MU PUCAMARCA** 

#### **MINSUR**

"Drilling work on "3D PHASE PAD"



## 1 CONSTRUCTION

With **vast experience in the field**, working for more than 12 years with different mining clients regulated by the highest international requirements in safety, quality and environmental awareness, which guarantees that we are a company with high standards.

#### **CIVIL WORKS**

- Comprehensive construction of leaching platforms (Pads).
- Installation of geosynthetics (geotextile, geomembrane, geoweb, geocell, GCL, others.)
- Construction of roads for the transit of giant trucks (Haul Road).
- Opening/Development and Closing of Quarries (Clay Soil Liner).
- Construction of accesses and platforms for geological drilling.
- Construction of water storage ponds, sedimentation ponds.
- Installation of HDPE pipes.
- Surface mining, quarries and others.
- Earthworks (excavations, filling, removal of excess material).
- Civil and industrial infrastructure works in general.
- Construction of deposits and dams.
- Excavations and placement of subdrains and drains.
- Implementation of camps and facilities.
- Maintenance and construction of access roads.



## **ELECTROMECHANICAL** AND ELECTRICAL WORKS

We have a multidisciplinary team with high skills and knowledge in the execution of electromechanical services, prioritizing their success along with safety and quality.

#### **ELECTROMECHANICAL WORKS**

- Manufacture, supply and assembly of metal structures for industrial warehouses.
- Installation of metal covers for metal structures.
- Manufacture, supply and assembly of metal carpentry (fences, railings, etc.).
- Supply and installation of constant pressure water system.
- Supply and installation of compressed air system.

#### **ELECTRICAL WORKS**

- Mining infrastructure and buildings.Electrical installations.
- Assembly and maintenance of substations.
- Comprehensive electrical maintenance.
- Energy backup systems and regulated networks.
- Configurations and tests of consumption control and monitoring systems.



## **3** GEOTECHNICS

Our **geotechnical**, **geological** and **civil engineers are specialists** in soil and rock studies. We carry out geotechnical investigation campaigns and land treatment for foundations, foundations and stabilization.

#### **GEOTECHNICS**

- Preparation of geological geotechnical mapping.
- Geodynamic risk zoning studies.
- Design and supervision of geotechnical instruments.
- Supervision and logging geotechnical of diamond drilling.
- Execution of diamond and rotopercussive drilling.
- Execution of DPL, SPT, LPT, CPT tests, soil and rock sampling.
- Supervision of lefranc CV permeability tests.

#### **SOIL MECHANICS**

- Study of soils for urbanizations and residential buildings.
- Soil study and foundation study of infrastructure works, high voltage lines, etc.
- Study for zoning of land extensions and feasibility studies for specific projects.
- Study of soils for civil works.
- Study of soil mechanics for new road projects.
- Foundation study of bridges and overpasses.
- Study of soils for industries.

#### GEOTECHNICAL INSTRUMENTATION AND MONITORING

- Installation of instrumentation (piezometers, inclinometers, extensometers, others).
- Monitoring of instrumentation (piezometers, inclinometers, milestones, others.
- Well inspection with inspection camera.
- Monitoring of vibration analysis due to blasting using seismographs and accelerographs.





#### **TOPOGRAPH AND GEODESY**

We have a professional topographical service, providing permanent support to our clients based on international regulations.

#### **OPEN PIT SURVEYING**

- Geometric survey of mining components.Staking out drilling points.
- Rethinking gradients.
- Rethinking of mineralized limits.
  Cubication control.

#### **UNDERGROUND TOPOGRAPHY**

- Survey of underground works.
- Precision polygonals.
- Control and execution of projects.
- Direction and gradient stroke.
- Lifting inclined peaks.



#### **EXPLORATORY TOPOGRAPHY**

- Layout and direction of DDH drills. Sample collection.
- Trace and correlation of veins.Geodesic Networks.
- Topographic points and geological points.

#### **CIVIL WORKS**

- Control of civil and river works.
- Topographic control of buildings.
- Road topography. Power lines networks.
- Rural measurement and divisions.
- Platform leveling.
- Assembly control.



## **MINE CLOSURE**

**Execution of services for closure of the various components of Open Pit and Underground mines,** we guarantee the definitive closure of mining infrastructure in accordance with the commitments of our clients' Mine Closure Plan.

#### **CLOSING ACTIVITIES**

- Dismantling, demolition and final disposal -

Removal of infrastructure, mobile and fixed equipment, transmission lines, basic services, among other

- Demolition of facilities related to the processing and installations of mining components.
- Final disposition resulting from dismantling and demolition for area recovery.

#### **Physical Stability**

- Earthworks through cutting and filling to obtain the slopes and final configuration of the components according to previous studies.

#### **Geochemical Stability**

- Filling with borrowed materials to mitigate effluents with acid drainage according to the analysis of the material of the components to be closed.

#### **Hydrological Stability**

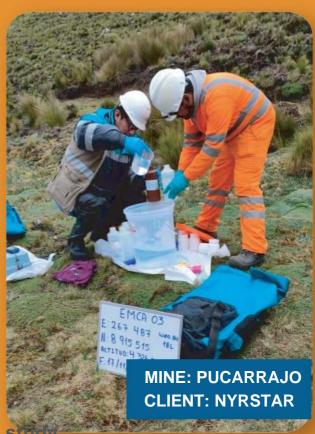
- Structure works for collection, transportation, diversion and management of contact and non-contact waters, according to a hydrological st

#### Revegetation

- Coverage of organic material for the revegetation of native species in the project area and thus the recovery of mining components according to the ecosystem design.

#### POST CLOSURE MAINTENANCE AND MONITORING

- Maintenance work according to the schedule presented in the Mine Closure Plan.
- Minimum control measures against impacts caused naturally or by third parties that may damage the physical, geochemical and hydrological stability, and that may affect the definitive closure of the components.





## 6 TECHNOLOGY

**EXCLUSIVE REPRESENTATIVES IN SOUTH AMERICA** 

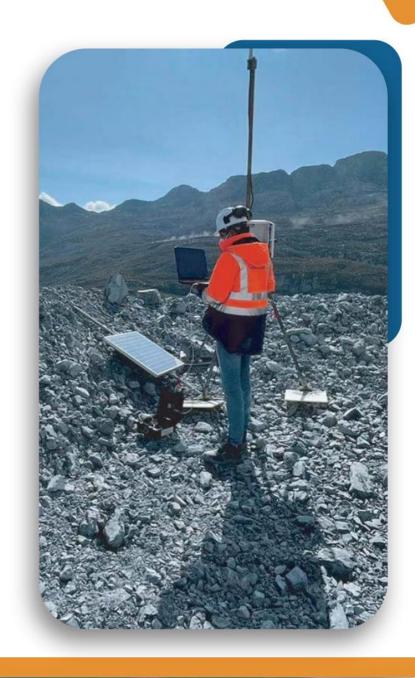
CALL & NICHOLAS INSTRUMENT INC.



### SUPPLY, INSTALLATION, TRAINING AND MAINTENANCE OF SLIDEMINDER EXTENSOMETERS

- Extensometer (SlideMinder).
- SlideMinder radio conversion kit.
- OREAD software.
- WiFi communication or radio telemetry.









## **VALUE PROPOSAL**



#### **CARE FOR THE ENVIRONMENT**

Design, supply and installation of photovoltaic systems as a source of energy.





#### **PATRIMONIAL SECURITY**

Design, supply and installation of antiintrusion system as a control measure in situations of possible accidents.



#### **TECHNOLOGICAL INTEGRATION**

Design, supply and integration of technological equipment for booth automation and accessories.

#### **Monitoring Booth**

(Design, Manufacturing, Supply and installation)

#### Characteristics

- Manufacture and assembly of monitoring booth.
- Manufacture and installation of access stairs and perimeter fence.
- Supply and installation of equipment for anti-intrusion system (cameras video surveillance, sensors, antennas, etc.).
- Supply and installation of photovoltaic systems as a source of energy electric for the operation of the booth and anti-intrusion system.
- Configuration of the radio link system from the booth area towards ICC Mina (Integrated Control Center).



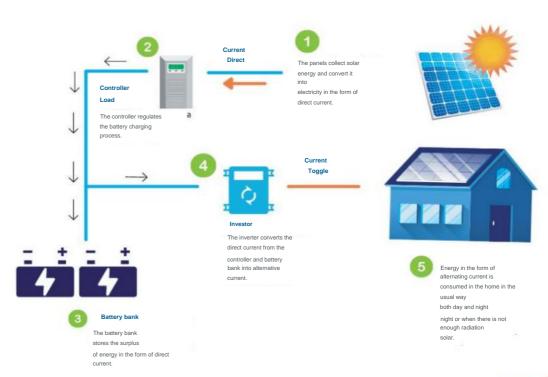
## INTEGRATION OF SYSTEMS PHOTOVOLTAIC

We design and carry out customized projects in which the client's energy consumption profile, the radiation potential according to their geographical location and the available space are analyzed to size the photovoltaic system that best suits their needs and with which we can obtain a better performance and return on investment.

We also offer the engineering, supply, assembly and commissioning of our photovoltaic systems and we use top quality products. Our solutions allow the client to constantly monitor and control their consumption and the generation of their solar panels.

## Isolated photovoltaic system (Off Grid)

This type of installation is ideal for remote areas, far from the urban network and with difficult access to the conventional electrical network. Its configuration allows you to take advantage of the sun's energy during the hours of the day and night.









## OUR PARTNERS STRATEGIC

We work hand in hand with our clients, satisfying and adding value to their objectives.











































## Solutions and innovations in mining and construction



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