THEOMNIVOLT

Commodity Trading

Nickel Ore / Copper Ore / Chromite Ore

Incoterms 2020 by the International Chamber of Commerce (ICC)

ASTM EN ISO

20 YEARS EXPERIENCE

CERTIFIED QUALITY CERTIFIED

24/7

"THEOMNIVOLT" *Where Power Meets The Potential*

Our Trajectory

VISION
To emerge as a distinguished leader in the marine, mining and commodity sector by consistently exceeding expectations and upholding our commitments.

MISSION
Enriching the future by facilitating sustained and efficient distribution of marine, mining and commodity products and services, making a lasting impact.

SOCIAL RESPONSIBILITY
- Prioritizing safe, clean, and healthy environments.
- Complying with environmental regulations.
- Contributing positively to society and sustainability.

STRATEGIC APPROACH
- Strategically procure and ensure services / supplies for clients.
- Diversify supply routes to mitigate single-source risks.
- Utilize facilities for income generation.
- Maintain uninterrupted supply to the market.
- Foster global and regional partnerships in the industry.

TEAMWORK
- Respectful communication and collaboration are our foundations.
- We value individual contributions within a cohesive team.
- Embracing diverse perspectives to drive innovation.
- A culture anchored in integrity, respect, and teamwork.

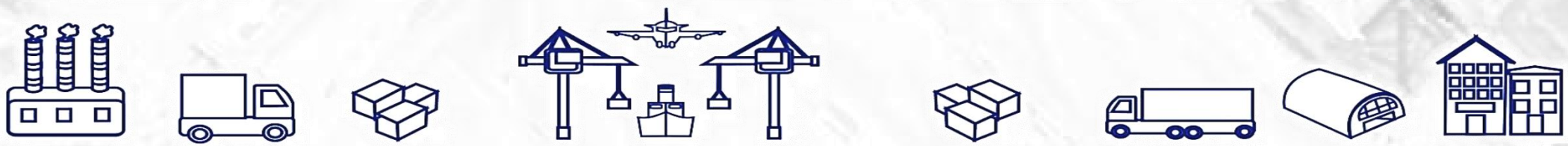
COMMERCIAL EXCELLENCE
- Fostering a profit-driven, efficient business mindset.
- Implementing best practices for optimal performance.

TRUSTED PARTNER
- Building strong relationships with stakeholders.
- Promoting collaboration and mutual trust.
- Aligning with governments, partners, customers, and communities.

THEOMNIVOLT

INCOTERM 2020

Incoterms 2020 by the International Chamber of Commerce (ICC)



INCOTERMS	SELLER	FIRST CARRIER	ALONGSIDE SHIP	LOADING PORT	DESTINATION PORT	ALONGSIDE SHIP	FINAL CARRIER	DESTINATION PLACE	BUYER
EXW	EX WORKS !	AGREED PLACE							
FCA	FREE CARRIER !	AGREED PLACE							
FAS	FREE ALONGSIDE SHIP !	PORT OF LOADING							
FOB	FREE ON BOARD	!	PORT OF LOADING						
CFR	COST & FREIGHT	!	PORT OF DESTINATION						
CIF	COST, INSURANCE AND FREIGHT	!	PORT OF DESTINATION						
CPT	!	COST PAID TO	PLACE OF DESTINATION						
CIP	!	CARRIER & INSURANCE PAID TO	PLACE OF DESTINATION						
DPU	DELIVERED AT PLACE UNLOADED	DELIVERED AT PLACE	!	PLACE OF DESTINATION					
DAP	DELIVERED AT PLACE	!	DESTINATION						
DDP	DELIVERED DUTY PAID	!	DESTINATION						

SELLER'S OBLIGATION ! TRANSFER OF RISK BUYER'S OBLIGATION

THEOMNIVOLT

THEOMNIVOLT "Where Power Meets The Potential"

Nickel Ore

In the Philippines, the majority of nickel production comes from **Laterite deposits**, which are divided into two distinct layers: **Limonite** (High Iron, Low Magnesium) and **Saprolite** (High Magnesium, Low Iron).

The specifications below represent the standard commercial grades exported to China and Japan for the production of Nickel Pig Iron (NPI) and Stainless Steel.

TECHNICAL SPECIFICATION: PHILIPPINE NICKEL LATERITE ORE

The Philippines is a primary global supplier of Direct Shipping Ore (DSO). The specifications are categorized based on Nickel (Ni) content and the Iron (Fe) to Magnesium (MgO) ratios, which determine the smelting process suitability.

PRODUCT CLASSIFICATION

A. High-Grade Saprolite (High Ni)

Primarily used for RKEF (Rotary Kiln Electric Furnace) smelting to produce Nickel Pig Iron (NPI).

- **Nickel (Ni) Content:** 1.8% – 2.0%
- **Iron (Fe):** 10% – 20%
- **MgO:** 20% – 30%
- **SiO2/MgO Ratio:** 1.8 – 2.2
- **Moisture (MC):** 30% – 35%

B. Medium-Grade Saprolite

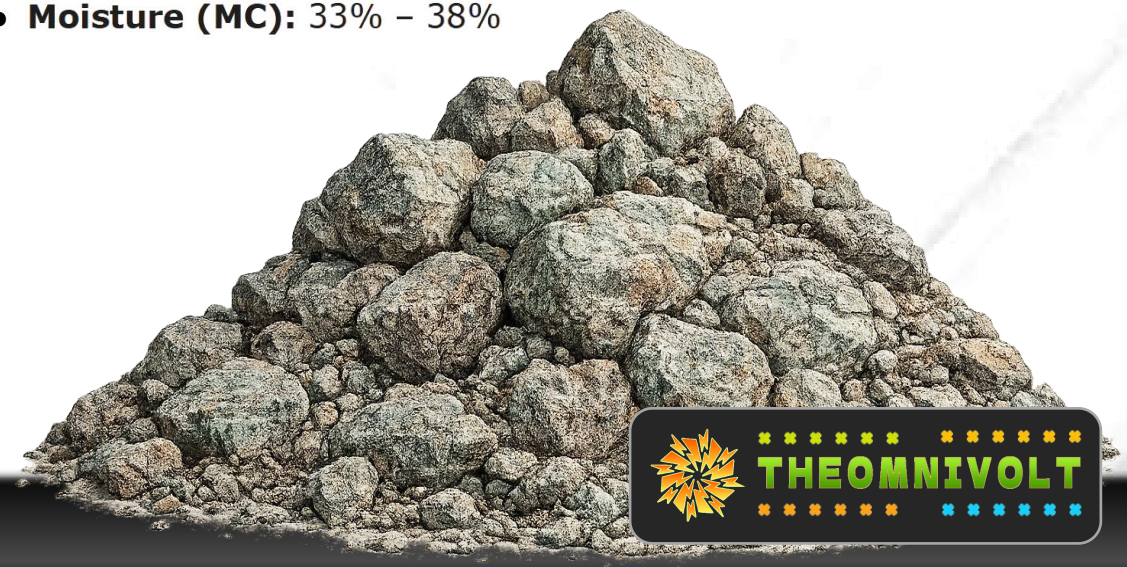
The most common export grade from regions like Surigao and Zambales.

- **Nickel (Ni) Content:** 1.4% – 1.6%
- **Iron (Fe):** 15% – 25%
- **MgO:** 15% – 25%
- **Moisture (MC):** 33% – 38%

C. Low-Grade Limonite (High Fe)

Primarily used for HPAL (High-Pressure Acid Leaching) processing or as a blend for steel mills.

- **Nickel (Ni) Content:** 0.9% – 1.2%
- **Iron (Fe):** 45% – 50% (High Iron)
- **Alumina (Al2O3):** 3% – 7%
- **Moisture (MC):** 35% – 40%



Nickel Ore

TYPICAL CHEMICAL COMPOSITION (DRY BASIS)

Element / Compound	Symbol	Low Grade (%)	Medium Grade (%)	High Grade (%)
Nickel	Ni	0.90 – 1.20	1.40 – 1.60	1.80 – 2.00
Cobalt	Co	0.05 – 0.12	0.02 – 0.05	0.01 – 0.03
Iron	Fe	45.0 – 50.0	15.0 – 25.0	10.0 – 15.0
Silica	SiO2	5.00 – 10.0	30.0 – 45.0	35.0 – 50.0
Magnesia	MgO	1.00 – 5.00	15.0 – 25.0	20.0 – 30.0
Phosphorus	P	< 0.01	< 0.01	< 0.01
Sulphur	S	< 0.05	< 0.05	< 0.05

PHYSICAL CHARACTERISTICS

- **Size Distribution:** Typically 0–300mm (Direct Shipping Ore).
- **Moisture Content (MC):** This is a critical factor in the Philippines due to the tropical climate. Ore is typically sold with **30% to 40% moisture**.
- **Transportable Moisture Limit (TML):** Strict adherence to IMO IMSBC codes is required to prevent liquefaction during sea transit.

QUALITY ASSURANCE & DOCUMENTATION

Tthe following documents are typically required:

1. **MGB (Mines and Geosciences Bureau) Clearance:** Verification of the Ore Transport Permit (OTP).
2. **Certificate of Analysis (COA):** Issued at the loading port per hatch.
3. **Surveyor Report:** Confirming the Ni/Fe ratio and moisture limits.

INDUSTRIAL APPLICATIONS: NICKEL ORE (Ni)

The "Battery Metal". Nickel is primarily valued for its resistance to corrosion and its ability to withstand extreme temperatures.

A. Stainless Steel Production (65-70% of Global Use)

Nickel is an essential alloying element in the 300-series stainless steels (e.g., Grade 304 and 316). It provides ductility and toughness.

- **Applications:** Kitchenware, medical instruments, chemical processing plants, and structural architecture.

B. EV Battery Technology (Rapidly Growing)

Nickel is a core component in Lithium-ion batteries, specifically **NMC** (Nickel Manganese Cobalt) chemistries.

- **Impact:** Higher nickel content allows for higher energy density, giving Electric Vehicles (EVs) longer range.

C. Superalloys

Nickel-based superalloys can maintain structural integrity at temperatures near their melting point.

- **Applications:** Jet engine turbines, nuclear power systems, and rocket engines.

Copper Ore

A compiled technical report on the specifications for Philippine Copper Ore. The Philippines is rich in **Porphyry Copper** deposits, which often contain significant associated values of **Gold (Au)** and **Silver (Ag)**.

The specifications below cover both the raw **Direct Shipping Ore (DSO)** and the more common **Copper Concentrates** produced by major mines like Carmen Copper, Philex, and Oceanagold.

TECHNICAL SPECIFICATION: PHILIPPINE COPPER ORE & CONCENTRATES

Copper production in the Philippines primarily involves porphyry deposits. While some low-grade ore is shipped directly (DSO), most exports are in the form of high-value concentrates produced through flotation circuits.

PRODUCT CLASSIFICATION

A. Copper Concentrates (Primary Export)

Produced via froth flotation to increase copper grade for international smelters.

- **Copper (Cu) Content:** 22% – 28% (Standard) / 28% – 32% (Premium)
- **Gold (Au) Credit:** 0.5g/t to 30g/t (Highly variable by region)
- **Silver (Ag) Credit:** 20g/t to 100g/t

B. Direct Shipping Ore (DSO / Raw Ore)

Raw rocks shipped with minimal processing.

- **Copper (Cu) Content:** 1.5% – 5.0% (High-grade DSO)
- **Form:** Lumpy and fines mixture.

PHYSICAL CHARACTERISTICS

- **Form (Concentrate):** Fine powder (80% passing 75 microns).
- **Form (DSO):** Lumpy (0mm – 200mm).
- **Moisture Content (MC):** * Concentrates: 8% – 10% (Critical for safety).
  - **DSO:** 5% – 15% (Weather dependent).

Copper Ore

TYPICAL CHEMICAL COMPOSITION (DRY BASIS)

Element/ Impurity	Symbol	Concentrate Range (%)	DSO Range (%)
Copper	Cu	24.0 – 28.0	1.5 – 5.0
Gold	Au	5.0 – 15.0 g/t	0.2 – 1.5 g/t
Silver	Ag	40.0 – 80.0 g/t	5.0 – 15.0 g/t
Iron	Fe	20.0 – 30.0	15.0 – 25.0
Sulphur	S	25.0 – 35.0	2.0 – 8.0
Silica	SiO_2	5.0 – 10.0	40.0 – 60.0
Arsenic	As	< 0.20 (Penalty > 0.5)	< 0.10
Mercury	Hg	< 10 ppm	< 2 ppm

QUALITY ASSURANCE (QA/QC)

- **Sampling:** Automated sampling at the loading belt is preferred for concentrates.
- **Umpire Analysis:** In case of disputes between buyer and seller, a neutral third-party lab (e.g., AH Knight, ALS, or SGS) is used as an "Umpire."

INDUSTRIAL APPLICATIONS: COPPER ORE (Cu)

The "Doctor of Economics". Copper is often called "Dr. Copper" because its demand is a leading indicator of global economic health due to its universal use in infrastructure.

A. Electrical & Electronics (60% of Global Use)

Copper has the highest electrical conductivity of any non-precious metal.

- **Applications:** Power grids, building wiring, telecommunications, and high-speed internet cables (though fiber optics have replaced some of this, local data centers still rely on copper).

B. Electric Vehicles & Renewables

An EV requires roughly **4x more copper** than an internal combustion engine (ICE) vehicle.

- **Applications:** Wind turbines (massive amounts of copper in the generator), solar panels, and EV charging stations.

C. Antimicrobial Surfaces

Copper and its alloys (brass/bronze) are naturally antimicrobial.

- **Applications:** High-traffic touch surfaces in hospitals and public transport to prevent the spread of bacteria and viruses.

Chromite Ore

A compiled technical report on the specifications for Philippine Chromite Ore. The Philippines is historically one of the world's significant sources of high-grade **Metallurgical** and **Refractory** grade Chromite.

The specifications below represent the standard commercial grades exported for ferrochrome production and refractory brick manufacturing.

TECHNICAL SPECIFICATION: PHILIPPINE CHROMITE ORE

Philippine Chromite is highly valued for its high **Cr_2O** content and favorable Chrome-to-Iron (Cr:Fe) ratios. It is generally classified into two main commercial types: Metallurgical and Refractory.

PRODUCT CLASSIFICATION

A. Metallurgical Grade (High Chrome)

Used primarily in the production of Ferrochrome for the stainless steel industry.

- **Cr_2O Content:** 48% – 52% (Premium) / 42% – 46% (Standard)
- **Cr:Fe Ratio:** 2.5:1 to 3.0:1
- **Form:** Lumpy (10mm – 150mm) or Concentrates (Fines)

PHYSICAL CHARACTERISTICS

- **Lumpy Ore:** 10mm to 150mm (typically 80% min). Hard, lumpy texture preferred for furnace stability.
- **Concentrates (Fines):** 0mm to 3mm. Produced via gravity separation (jigging/shaking tables) from lower-grade ores.
- **Moisture Content (MC):** * Lumpy: 1% – 3%
  - Concentrates: 8% – 12%

B. Refractory Grade (High Alumina)

Highly sought after for the manufacture of refractory bricks and casting sands due to its thermal stability.

- **Cr_2O Content:** 30% – 38%
- **Al_2O Content:** 25% – 32% (High Alumina)
- **Fe_2O_3:**< 15%
- **Form:** Mostly Lumpy

Chromite Ore

TYPICAL CHEMICAL COMPOSITION (DRY BASIS)

Element / Compound	Symbol	Metallurgical Grade (%)	Refractory Grade (%)
Chromic Oxide	**Cr_2O**	48.0 – 50.0	32.0 – 36.0
Iron Oxide	**FeO / Fe_2O**	12.0 – 15.0	12.0 – 14.0
Alumina	**Al_2O**	10.0 – 14.0	28.0 – 32.0
Magnesia	**MgO**	10.0 – 15.0	16.0 – 18.0
Silica	**SiO_2**	3.0 – 6.0	2.0 – 5.0
Phosphorus	***P***	< 0.005	< 0.005
Sulphur	***S***	< 0.01	< 0.01

QUALITY ASSURANCE (QA/QC)

Standard export requirements include verification from the **Mines and Geosciences Bureau (MGB)** and independent laboratory analysis.

1. **Cr:Fe Ratio Calculation:** This is the most critical metric for metallurgical buyers. A ratio below 2.0:1 often incurs heavy penalties.
2. **Silica Control:** Low silica **(SiO_2 < 4%)** is preferred to reduce slag volume in smelting.
3. **Physical Integrity:** For lumpy ore, a "Degradation Test" may be required to ensure the ore doesn't crumble into fines during transit.

INDUSTRIAL APPLICATIONS: CHROMITE ORE (Cr)

The "Hardener". Chromite is the only commercial source of Chromium. It is irreplaceable in many metallurgical processes because there is no known substitute for its anti-corrosive properties.

A. Metallurgical (Ferrochrome)

Approximately 90% of chromite is converted into **Ferrochrome (FeCr)**.

- **Applications:** It is the ingredient that makes "stainless" steel stainless. By forming a thin oxide layer on the surface, it prevents the iron from rusting. It is also used in "Hard Chrome" plating for automotive parts.

B. Refractory Industry

Because chromite has a high melting point and stable thermal expansion, it is used to make bricks for lining high-temperature furnaces.

- **Applications:** Lining for cement kilns, steel-making ladles, and glass-melting furnaces.

C. Chemical Industry

Chromium chemicals are used in various specialized processes.

- **Applications:** Leather tanning (Chromium III salts), pigments (chrome yellow), and wood preservation.

Chromite Ore

COTECNA
Trust for a moving world

COTECNA ELITE PHILIPPINES, INC.
Edward Lim Building
KM 3., Brgy. Luna, Surigao City
Surigao del Norte, Philippines
Tel No. (08) 6827-7817

ANALYTICAL TEST REPORT

Customer's Name :	Nickel Ore	COMDIV :	
Customer's Address :		Vessel Name and Voyage Number :	NOT APPLICABLE
Date/s Received :	JUNE 26,2025	Method :	ISO 18227:2014
Date/s of Analysis :	JUNE 30,2025	Date Reported :	JULY 02,2025

This is to report the results of samples processed by [redacted] received, and analyzed at Cotecna Elite Philippines Laboratory in Surigao City.

JO Number	Declared Sample and Quantity		Preparation		Sample Packaging	
M-SUR2025-172-01	3- Ore		Fused Bead		Box/Plastic	
Lot/Sublot Name	**%Ni**	**SD**	**%Fe**	**SD**	**%Co**	**SD**
A41 A	2.084	0.0141	14.76	0.0141	0.157	0.000424
A41 A (D)	2.064		14.74		0.156	
A42 A	1.855	0.00990	44.04	0.262	0.465	0.00304
A42 A (D)	1.841		43.67		0.469	
A4XT A	1.700	0.0184	13.99	0.0990	0.0274	0.00156
A4XT A (D)	1.674		13.85		0.0252	

Disclaimer
I. Results of the analysis relate only to the samples tested or received by the Laboratory. Samples from different portion of the same lot may produce different results. This report should not be reproduced except in full without the approval of the Company.

Remarks
I. Errors of measurement is presented as standard deviation and computed every duplicated sample. Criteria on the acceptance of the standard deviation is based on the quality assurance and control procedure implemented by the Laboratory.

Reference Methods and Documents:
S-QS-EXTD-002 ISO 18227 :2014 Soil Quality – Determination of Elemental Composition by X-Ray Fluorescence
S-QS-EXTD-007 Japanese Industrial Standard Method 8100 – Particulate Materials – General Rules for methods of Sampling, Rev.2018
S-SP-WI-001 Minerals and Ore Sample Preparation
S-MO-WI-002 Quality Control for Minerals and Ore Analysis

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Copper Ore

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email: services@yaiqablabs.com
www.yaiqablabs.com

DATE: February 7, 2026

MINERAL ASSAY REPORT

CUSTOMER'S NAME: .
REFERENCE CODE: KORYA490226
SAMPLE ORIGIN: KORYA ABC
DATE RECEIVED: Fe

ELEMENT(S) ASSAYED	CONC.	ERR. (%)
Cu	13.92%	n/a
Ag	2.63 ppm	n/a
Au	1.04 ppm	n/a

SAMPLE DETAILS

SAMPLE NAME	SAMPLE WEIGHT (g)	STREAK	SPECIFIC GRAVITY (g/cc)	MOISTURE CONTENT (%)
KORYA ABC	50g	n/a	n/a	0.11

METHOD: Chemical Assay, Gravimetric Analysis, Titration
ANALYSIS: **13.92% Cu**
ANALYSIS: **2.63 ppm Ag**
ANALYSIS: **1.04 ppm Au**

NOTICE:
9.) The company assures the client its test report procures the necessary work to verify the classification of the mineral resource present in the sample. Thus, the clients expect the accuracy of the sample ('s) percentage.
10.) The process is done accurately using Dry, Chemical, and XRF Analysis.
11.) The report's analysis is concisely based upon the exact sample given by the clients, regardless of the whole area where it was drawn.
12.) Every report that was released from the Laboratory is highly confidential and may not be reproduced unless prior authorization given by the client (owner).

Analyzed and Performed by:
Mr. Wohali T. Stevenson

中国[illegible]集团[illegible]有限公司
CHINA CERTIFICATION & INSPECTION GROUP PHILIPPINES INC.
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Tel: (0063 2) 86310308, Fax: (0063 2) 82345739
Laboratory Address: CCIC Warehouse, Rocha Compound, Sc. Kinabutan, Brgy. Rizal, Surigao City

ORIGINAL

Chromite Ore

CLIENT
COMMODITY : CHROMITE ORE
CONTACT PERSON
ADDRESS
CONTACT DETAILS
LAB NO./JOB NO.
REPORT NO.

QUANTITY : 1
SAMPLE WEIGHT (kg) : 4.00
SAMPLE PACKAGING : BOX
AS RECEIVED
SAMPLE IDENTIFICATION : COBBLES
DATE RECEIVED : 14/07/2025
DATE TESTED : 18/07/2025
DATE REPORTED : 23/07/2025

LABORATORY TEST RESULT

SAMPLE LAB NO./CODE	PARAMETERS								
	Cr_2O_3 (%)	Fe (%)	Al_2O_3 (%)	S (%)	MgO (%)	SiO_2 (%)	P (%)	Cr:Fe ratio	Moisture (%
S25070083	42.6	16.8	14.80	0.011	15.0	8.86	0.014	2.54	0.65
TEST METHOD	XRF FUSION								GB/T 24222-2009

*** Remarks:**
1. The tests were conducted upon customer's request.
2. This sample was submitted by the client solely for the testing and is tested as received.

END

Authorized Signatory: JAVON [illegible]
Laboratory Supervisor
PRC Reg. No. 0012619

Chromite Ore

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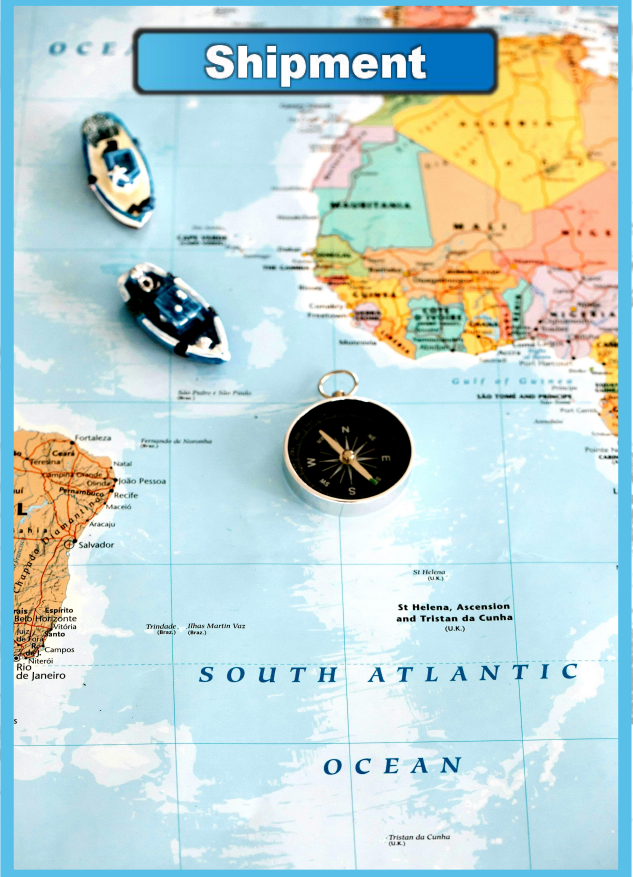
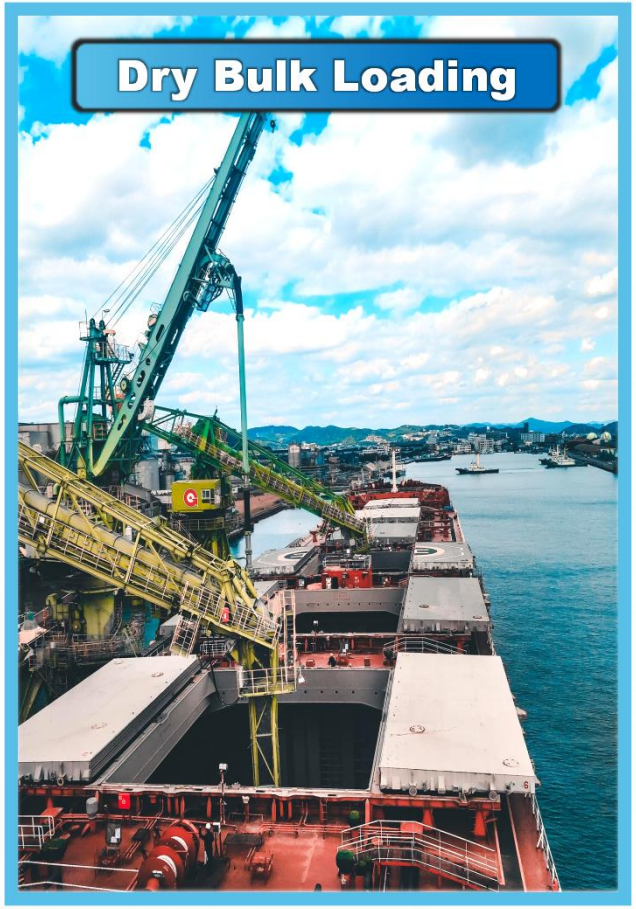
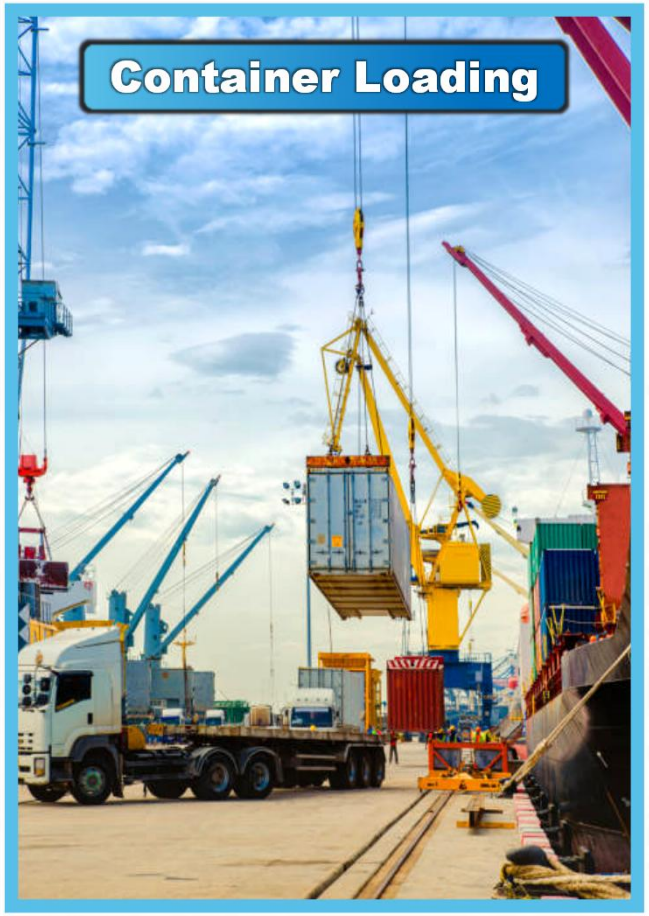
Shipment



Dry Bulk Loading



Container Loading



Synergistic Ventures

Marine Services

THEOMNIVOLT stands as the premier choice for global marine services, offering expertise in multiple diversified marine services with a team of Captains and Cheif Engineers. With unmatched reliability and compliance, we ensure safe, efficient, and timely solutions across every ocean.

Mining Activities

From exploration to full-scale production, THEOMNIVOLT provides end-to-end mining design, planning, financing, and operational excellence. Our team of engineers, and mining specialists guarantees sustainable, profitable, and world-class project execution.

THEOMNIVOLT

For more details, log on to our website. www.theomnivolt.biz

Diversified Marine Activities

- Ship Building
- Chartering
- Sale & Purchase
- Ship-to-Ship (STS) Operation
- Decarbonization Management
- Technical Management
- Crew Management
- Repairs & Maintenance
- Dry Dock
- Pre-SIRE Inspection
- Vessel Audit
- Tanker Management Self Assessment (TMSA)
- Agency & Husbandry Service

For more details, log on to our website.

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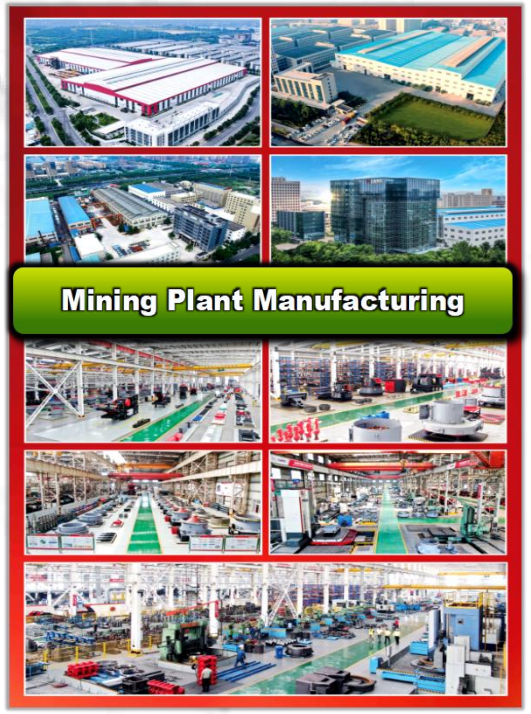
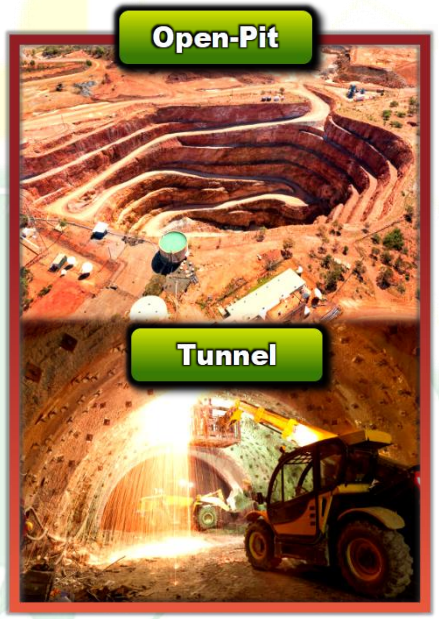
Mining Activities





We provide **Specialized Technical, Operational, and Financial Solutions,** reinforced by **Authorized Distributorship** from a reputable, **40-Year-Old Mining Plant & Equipment Manufacturer.**

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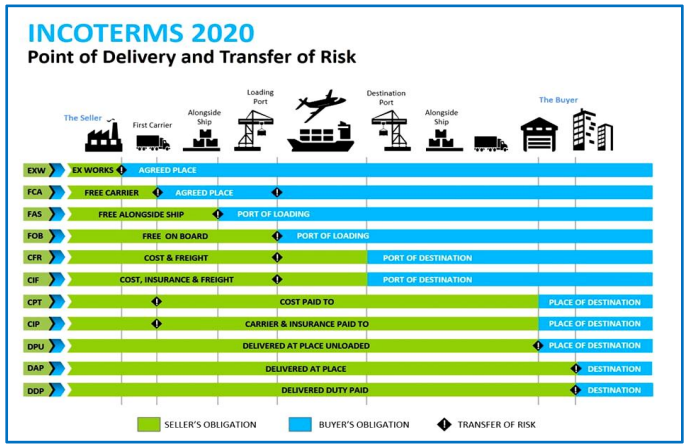
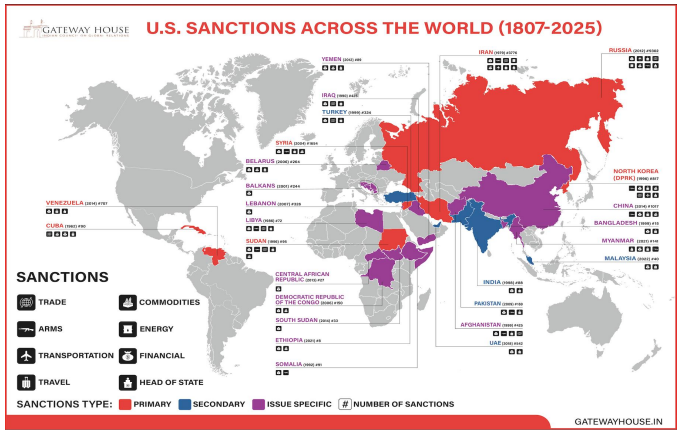
Commodity Trading



Based on the current geopolitical landscape and recent policy announcements, the US sanctions framework significantly impacts global commodity sales in 2025:

- The US Treasury's Office of Foreign Assets Control (OFAC) has intensified restrictions on Russia's energy sector, specifically targeting major oil producers and the affiliated maritime logistics networks to suppress commodity revenue streams.
- Compliance risk for commodity traders remains elevated due to the increased scrutiny of the shadow fleet and the potential for secondary sanctions on international actors facilitating the illicit transport of sanctioned crude oil and petroleum products.



GASOIL (EN590)

LPG & LNG

BUNKER FUEL

1. Ship-To-Ship (STS)
2. Truck-To-Ship (TTS)
3. Port/Pipe-To-Ship (PTS)

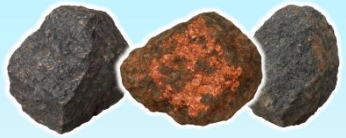
BITUMEN

Penetration / Viscosity Grade

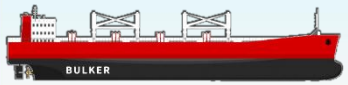
PALM OIL

CP - 10 / 8 / 6

MINERAL ORES



Chromite / Copper / Nickel



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Reach Us

THEOMNIVOLT

Website:
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business@theomnivolt.biz

GUIDELINES

Email Subject:

Mention exact requirement, keep them brief (around 5–9 words), personalize them, incorporate keywords, and urgency (if required)

Email Matter:

Keep it brief and straightforward. Just the most crucial details should be included.