Company Profile

We Are Sphinx Raw Material a Registered Company With Ministry Of Trade And Industry Under Chamber Of Commerce No 103870 And Exporting License No73566 ,We are Member Of Egyptian Federation For Mining And Quarries Materials.

The Company was founded in 2010 as Individual a long Experience in Raw materials practicing. We Have Started Our Business In Exploring And Grading All Types Of **Quartz Silica Sand** Either Raw Material Or Graded In Different Sizes Either In mm Or According To ASTM Mesh Numbers, The Main Goal We Took In Account That Our Wealthy Country With All Minerals With High Purity As Silica Sand, Q**uartz Ore, Kaolin, Dolomite, Lime Stone, Calcium carbonate, quick lime, micro silica, hydrated lime Aggregate. Gravel, Coral Pebbles**

The company has invested in machinery and all facilities as we always looking for long: Long term business, Stability in quality as we are producing by our own machinery, we do not buy a finished product and resell it that is why always we are in continuous cooperating with our customers.

Our Target: honesty, Quality:

To keep in quality, the company has its own lab to check each ton to make sure it meets the customer specification.

Our Manpower Are So Skilled And Well Trained, We Normally Consider Long Term Business Plan With Our Clients To Keep Our Goods Quality And Economic Prices.

The Silica Sand Is Available In Tow Main Places In Egypt, Its Located In Ras Gharb Each Area has Its Own Physical And Chemical Properties. The Reserve goes over 500.000.000 million Tons.

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Head Office: 5B/1 takssem La selky , New Maadi, Cairo, Egypt

The **Silica Sand** Is Widely Used In Many Purposes According To Its High Purity Of **Silicon** Content And Low Iron Content. It's Used In **Glass Industry, Crystal Industry, Silicon Metal,** Silica Sand For Glass**,** Foundry**, Painting, Oil And Gas Stamped Concrete, Water,** Pool Filter**,** Golf Course**, Water Treatment, Plastering, Ceramics And Glaze Frets.**

Regarding To Our Experience In Exporting And Our Strong Relation With Shipping Lines And Forwarding For Over Seas Shipping And Domestic Transportation Trucks, We Can Get The Best Bottom Rock Prices For Shipping Cost.

Our Existing Markets are, GREECE, MALTA, CYPRUS, GEORGIA ,Create , UAE, Albania , ALGERIA, ITALY, SENEGAL, LEBANON ,SYERIA, KUWAIT ,QATAR , TURKEY, LIBYA, IRAQ, JAPAN, PHILIPPINES.

QUARRIES

To appreciate quarry and mining operations in Egypt, one must understand that without them, there would be no great Pyramids and there would be no grand temples. In fact, there would also be little in the way of glorious jewelry, exquisite statuary, or gilded furniture from ancient Egypt. To a very large extent, what we know of ancient Egypt was built from quarry and mining operations. Today, tourists would not be visiting Egypt were it not for the hard, backbreaking work of the quarrymen so many thousands of years ago.

The ancient Egyptians, as far back as prehistory, had a big appetite for various materials, and particularly limestone, which was used in huge quantities. However, they also certainly quarried red, gray and black granite from Aswan, alabaster, diorite, marble, serpentine,

purple porphyry, black slate from Wadi Rahanu, basalt and dolomite. They also mined for metals, such as copper and gold, though silver was usually imported, and iron deposits were not exploited probably until the Late Period. There was also mining for precious stones, such as emeralds, malachite (sehmet, turquoise (mafaket), carnelian, amethyst and other gemstones. Mining for minerals included salt (sodium chloride), Natron, a variant of normal cooking salt, alum, a mineral used for dying cloth and Galena, a lead sulphide used in cosmetics. Finally, one of the most overlooked quarrying was simply Nile Mud, used for pottery making and for making bricks that were used in most common building applications.

Stone form the Nile Valley was quarried by those living in Egypt at least as early as 40,000 years ago, when the Middle Palaeolithic inhabitants of Middle Egypt were quarrying and working cobbles of chert along the limestone terraces on either side of the Nile. These earliest of Palaeolithic chert quarries consisted of pits and trenches for surface extraction, but there are Upper Palaeolithic quarries at nazlet khater 4, on the western bank of the Nile about midway between Asyut and Sohag, that include vertical shafts and subterranean galleries, which in fact foreshadow quarrying methods during the pharaonic period. When the Nazlet Khater 4 site was excavated there, a number of tools were unearthed. These included hammer stones used for the roughest stages of quarrying as well as several picks used for finer work. The picks were carved from the horns of gazelles and hartebeest.

The prehistoric Egyptians also exploited the minerals in the cliffs and deserts on either side of the Nile Valley, and in the Sinai. In fact, Archaeologists believe that the very earliest known settlers in the Sinai, arriving about 8,000 years ago, were miners, drawn by the regions copper and turquoise deposits. Some of the earliest known items of jewelry, dated to the prehistoric period, are made from Eastern Desert carnelian. Copper slag is also known from the vicinity of the mines at Bir Nasib in the southern Sinai, and turquoise miners probably exploited the nearby region of Serabit el-Khadim in the Chalcolithic period.

Of course, these prehistoric operations were relatively small in comparison with the massive royal expeditions that were sent out to the Sinai and to Nubia during the first two dynasties,

and downright tiny compared to later expeditions that might include almost twenty thousand men. Some of the notable stone quarries during the Pharaonic Period include Gebel es-Silsila for sandstone, Tura and Ma'sara for fine white limestone, Qua el-Kebir for very hard limestone, Gebel el-Asr for Diorite, Hatnub and Wadi el-Garawi (near Helwan) for Egyptian alabaster (calcite), Gebel Qatrani for basalt, various types of granite from Wadi Hammamat, and several quarries around Aswan for pink granite. In fact, there were very extensive quarry operations in and around Aswan, which became even more notable in later times. During the Roman period, the quarries there continued unabated, and columns carved from Aswan granite are found in quantity around the shores of the Mediterranean. It is, in fact, one of the "big three" decorative rocks of the Roman world, on a par with granite violetto from the Troad and Cipoillino from Greece.

Various metals were mined in Egypt, perhaps most notably gold, copper and later, iron. There were many gold mines around Egypt and in Nubia. Notable, perhaps, is Wadi Hammamat and Bir Umm Fawakhir (actually in Wadi Hammamat, which was still in use at the end of the 20th century), along with Wadi Sid, Wadi Abbed, Wadi el-Hudi, Wadi Allaqi, Buhen Semma, the al-Ela1qi Valley and about 20 kilometers west of Mons Caludianu, Abu Zawal. Copper mines include those at Timna and Serabit el-Khadim in the Sinai, and in the Eastern Desert, Wadi Araba, Wadi Sitra, the Hamash area and at Buhen and Wadi Dara. There were iron mines at Wadi Dib, Wadi Hammamat and at sites near Aswan.

Of course, the Egyptians also mined different gemstones, such as amethyst at Wadi el-Hudi and Gebel el-Asr, and turquoise at Wadi Mughara and Serabit el-Khadim. Egypt is where the world's first emerald mine is located, in the mountain valley of Wadi Sikait in the Eastern Desert. It was mined as early as the Ptolemaic period. The Romans later referred to emeralds as Smaragdus, and named the Sikait region Mons Smaragdus, or Emerald Mountain. Another site was Wadi Gamal, near Marsa Alam, which latter earned the name Cleopatra's Emerald Mine.

Silica Sand For Glass

Silica sand is available in Egypt in different location on the North side of Suez Gulf in Ras Gharb as well in north Sinai in AL AREASH AREA.

The Purity of that Sand Exceeds 99.3%.its used for Manufacturing in different types of Glass, Float glass ,Glass Sheets, Glassware, tableware, Crystal ,Bottles and Container Glass.

The Highest Content of SIO2 and Lowest Iron Content is the main Element in Focusing and Comparison in Silica sand.

Below Is Different Grades of White Silica Sand For Glass Manufacturing:

Applications Glassware & Crystal

1-prcocessed from Ras Gharb quarries

2-stored and exported in Bulk shipment from port ABOU ZNIEMA PORT (red sea port)

3-vessel of 5000-25000 M tons Max can enter the port draft

4-for orders of 1000 tons or less can be packed in big bags of 1250kg-1500kg

5-containres of 20 feet can be stuffed with 25-27 tons

Applications Float Glass. Container Glass. Glass sheets

1-prcocessed from Ras Gharb quarries

2-stored and exported in Bulk shipment from port Suze PORT (red sea port)

3-vessel of 5000-25000 M tons Max can enter the port draft

4-for orders of 1000 tons or less can be packed in big bags of 1250kg-1500kg

5-containres of 20 feet can be stuffed with 25-27 tons

3-Silica Sand 100MUL (Ras Gharb)

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1-Silica Sand (Ras Gharb)

Chemical analysis	
Oxides	%
SIO2	99.3-99.5%
FE2O3	0.0150
AL2O3	00.20-0.30
TIO2	0.02500
CR2O3	0.0020
Moisture	0.40

Characteristics

Color	White
Grain Shape	Semi round- Angular
Bulk Density	(1400 – 1570 kg/m3)
Specific Gravity	2.2 – 2.5
Turbidity	<100
Hardness	7 Moh
Attrition Loss	below 1% in 100 hours backwashing
Acid Solubility	below 2% [24hours in 20% Hal]

Chemical analysis	
+0.630MM	1% MAX
-0.125MM	3%MAX

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Chemical Specification For Kaolin

Constituent	Type (A) %		Constituent	Type (B) %
SiO2	50-60%		SiO2	50-60%
Al2O3	27-30%		Al2O3	20-325%
Fe2O3	0.8-1.3%		Fe2O3	0.8-1.2%
TiO2	1.3-2.2		TiO2	1.3-2.2
CaO	0.10-0.25		CaO	0.10-0.25
MgO	0.05-0.15		MgO	0.05-0.15
Na2O	0.07-0.15		Na2O	0.07-0.15
K2O	0.03-0.06		K2O	0.03-0.06
L.O.I.	10.5-11.00		L.O.I.	9.0-10.00

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Calcium Carbonate

Sphinx controls raw material resources for marble, limestone and dolomite in order to make calcium carbonate fillers.

Calcium carbonate is an exceptional compound. The chemical formula $CaCO_3$ represents a raw material that exists everywhere in nature – whether dissolved in rivers and oceans, melted as "cold" carbonatite lava and solidified as a mineral, dripstone or as a parent material for whole mountain ranges.

Plants and animals need calcium carbonate to form their skeletons and shells, and even modern mankind could hardly imagine life without calcium carbonate. Almost every product in our day-to-day life contains calcium carbonate or comes into contact with it while being produced.

What is calcium carbonate?

Calcium carbonate accounts for more than 4% of the earth's crust. As a result, the three calcium carbonate minerals – calcite, aragonite and vaterite – are among the most important rock-forming minerals. Rocks are not the only calcium carbonate deposits in nature – almost all stretches of water and countless plants and animals contain huge amounts of calcium carbonate as well. These natural resources are linked by the calcium carbonate cycle.

Plants and animals absorb calcium carbonate in water, where it usually exists dissolved in the form of calcium hydrogen carbonate $Ca(HCO_3)_2$, and use it to build up their skeletons and shells. After their death, mussels, coccoliths, algae and corals form sedimentary deposits on sea beds and the rock-forming process is set in motion.

The first stage is the sedimentation process, from which chalk and limestone originate. Chalk is a poorly compacted sedimentary calcium carbonate rock whose diagenesis is incomplete.

A completed sedimentation process results in the formation of limestone. If the sedimentation process takes place in water containing magnesium, dolomitization may occur. Part of the calcium ions in the crystal lattice are replaced by magnesium ions, leading to the formation of dolomite ($CaMg(CO_3)_2$).

Marble is a metamorphic rock resulting from the recrystallization of limestone under high pressure and temperature. Whether chalk, limestone, dolomite or marble, all carbonate rocks are subject to erosion. These dissolve under the influence of wind, temperature and water, and the cycle is ready to start anew.

Sphinx offers a wide range of GCC products to the market from lump form to the superfine grades utilizing Alpine Hosokawa technology. We provide the advantage of tailor made products for our global key customers. At the same time, Sphinx actively monitors both market and customer trends to help guide our products' development for the future.

With our exceptionally high brightness products, we focus on meeting and exceeding the utmost performance expectations of the market . Sold under the ACCM trademark, our products are marketed in many different geographies around the world and in diversified industrial applications including paints, polymers, paper filling and coating, adhesives, sealants, rubber, caulks and in construction products, glass , etc.

Products

M 2 Chips

M 2 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0
Bulk density	1.4g/cm3
Hardness in Moh's Scale	3
Moisture	0.2 %

Chemical Analysis	%
CaCO3	99.6
CaO	55.40
MgO	0.15
Fe2O3	0.001
Al2O3	0.001
SiO2	0.01
L.O.I	44.02

- **Grain size specs :**
- **Standard** size (2 – 3) MM.
- 4 % more than 3 MM.
- 0.5 % less than 100 Mic.
- More than 90 % between (1.5 - 3) MM .

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M 4

M 4 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0 Max.
Bulk density	1.2 g/cm3
Hardness (Moh's Scale)	3
Moisture	0.2 %

Chemical Analysis	%
$CaCO_3$	99.6
CaO	55.40
MgO	0.15
Fe_2O_3	0.001
Al_2O_3	0.001
SiO_2	0.01
L.O.I	44.02

- **Grain size specs .**
- Over 2 .5 mm = 0 %.
- 10 % less than 710 µ.
- More than 80 % between 710µ and 2mm.
- Under 106 µ ≤ 1 %.

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M 6

M 6 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0 Max.
Bulk density	1.2 g/cm3
Hardness (Moh's Scale)	3
Moisture	0.2 %

Chemical Analysis	%
CaCO3	99.6
CaO	55.40
MgO	0.15
Fe2O3	0.001
Al2O3	0.001
SiO2	0.01
L.O.I	44.02

- **Grain size specs .**
- Over 2 mm = 0 %.
- 80 % between 500 µ and 1.4 mm.
- 5 % over 1.4 mm.
- Under 106 µ ≤ 3 %.

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M 7 , Filter 1 product

M 7 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0
Bulk density	1.2 g/cm3
Hardness in Mohs	3
Moisture	0.2 %

Chemical Analysis	%
CaCO3	99.6
CaO	55.60
MgO	0.15
Fe2O3	0.001
Al2O3	0.001
SiO2	0.01
L.O.I	44.02

- **Grain size specs .**
  - Filter 1 dust
  - 97 % less than 100 µ.

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M 9

M 9 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0 Max.
Bulk density	1.2 g/cm3
Hardness (Moh's Scale)	3
Moisture	0.2 %

Chemical Analysis	%
CaCO3	99.6
CaO	55.40
MgO	0.15
Fe2O3	0.001
Al2O3	0.001
SiO2	0.01
L.O.I	44.02

- **Grain size specs**
  - Over 500µ ≤ 10 %.
  - 43% between 250 µ and 500 µ.
  - 44 % between 100 µ and 250 µ .
  - Under 100µ = 5%.

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M 10

M 10 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0 Max.
Bulk density	1.2 g/cm3
Hardness (Moh's Scale)	3
Moisture	0.2 %

Chemical Analysis	%
CaCO3	99.6
CaO	55.40
MgO	0.15
Fe2O3	0.001
Al2O3	0.001
SiO2	0.01
L.O.I	44.02

- **Grain size specs .**

  - Over 500 µ = 0 %.
  - Over 250 µ = ≤ 0.5 %.
  - Over 75 µ = 15 % ≤ X ≤ 30 %.

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M 10

M 10 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0 Max.
Bulk density	1.2 g/cm3
Hardness (Moh's Scale)	3
Moisture	0.2 %

Chemical Analysis	%
CaCO3	99.6
CaO	55.40
MgO	0.15
Fe2O3	0.001
Al2O3	0.001
SiO2	0.01
L.O.I	44.02

Grain size specs .

- D97 = 45 micron
- D50 = 11.2 micron
- 2 µ = 12.3 %.

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M 96

M 6 is a highly pure and bright Calcium Carbonate product produced from our limestone quarries in Minia.

Physical Characteristics	
Density	2.7 g/ml
Refractive index	1.59
pH value (ISO 787/9)	9.0 Max.
Bulk density	1.2 g/cm3
Hardness (Moh's Scale)	3
Moisture	0.2 %

Chemical Analysis	%
CaCO3	99.6
CaO	55.40
MgO	0.15
Fe2O3	0.001
Al2O3	0.001
SiO2	0.01
L.O.I	44.02

- **Grain size specs .**
- Over 1 mm ≤ 10 %.
- More than 80 % between 100 µ and 1.0 mm.
- Under 106 µ ≤ 10 %.

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