Arab steel Industry :
Heading for the Future

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This working paper tries to provide a fast analysis on the development of the Arab steel industry during the year 2000-2005 with a look at the prospects of the development of this industry until 2010 through the perspective adopted by the Union in respect of the geographical distribution of the steel industry in the Arab countries within three groups.

Each group comprises the Union's steel producing companies the production of which accounts for about 90% of the total Arab steel production. This group, based on its geographical distribution, includes the countries of the Arabian Maghreb which comprise Mauritania, Morocco, Algeria, Tunisia, Libya, the countries of the Arabian Mashreq which comprise Egypt, Syria, Jordan and Lebanon and the Arabian Gulf Countries which comprise the GCC's countries; Saudi Arabia, United Arab Emirates, Qatar, Bahrain, Sultanate of Oman, in addition to the Arab countries the statistics of which are mentioned under the heading "Remaining Countries". Since the Arab Iron and Steel Union, based on its foundation, is a Union comprising mainly the steel producing companies, thereof, it is mainly considered as a producers Union. So, in its analysis, it sets out from the reality of the data which are directly obtained from the Union's steel producing remember companies as well as from the estimates and forecasts and the analytical pursuit of the new projects, with consideration of the announced time schedules in terms of the start of execution and entering into the production stage of each project. All of this contributes to drawing up a precise picture of the reality of this industry and its future development.

ARAB STEEL INDUSTRY : STATUS QUO

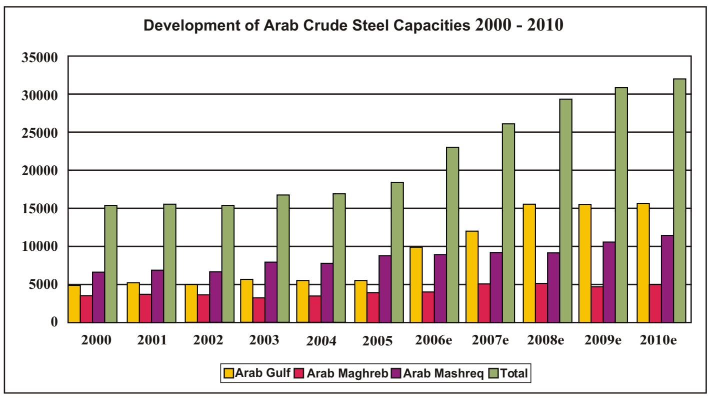
It is the accelerating growth and not the volume which constitutes the source of the growing interest in the Arab steel industry. In the volume language, this industry is still within the least volume goups, because the total Arab steel production of finished products in 2005 had not exceeded 19 million tons and about 14 million tons of crude steel compared to more than one billion tons of crude steel at the world level.

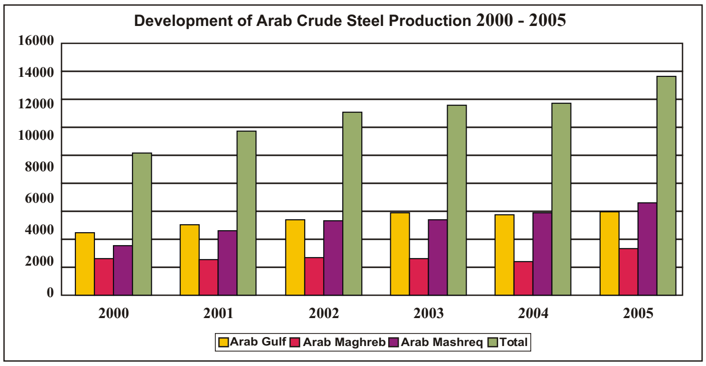
However, the acceleration of growth and the attempt to diversify the variety of products within the past five years have acquired more importance for this industry, in addition to the fact that the new projects and expansions in a number of the existing producing companies, the total number of which has come to be more than 80 new projects and expansions, have made the technologies owners and equipment suppliers put the countries of the Arab region on the list of the major new projects attractive countries in the field of this industry, in addition to the increased volume of imports of steel products to satisfy the growing requirements of these products.

The most prominent fast growth drives which constituted basic factors encouraging many expansions witnessed in this industry are concentrated in three factors: increase and expansion of demand in the domestic markets, involvement in and heading for setting up some export-oriented industries, improvement of the oil prices and availability of the financial liquidity necessary for financing the new projects.

DEVELOPMENT OF PRODUCTION AND PRODUCTION CAPACITIES (2000-2005)

The period 2000-2005 has constituted a strong setting out base for the development of this industry. The crude steel production has risen from 8.9 million tons in 2000 up to 13.7 million tons in 2005, i.e., up with an annual growth rate of 7.48%. Correspondingly, the production capacities of crude steel have grown with lower rates than the production growth rate. The total production of crude steel amounted to 18.4 million tons in 2005 against 15 million tons in 2000, i.e., with an annual growth rate of 3.1%. The annual growth rate in the Arabian Mashreq countries constituted the highest rate either in production or in production capacities, but the growth trend of the period 2005-2010 shows that





the highest growth rate will be achieved in the Arabian Gulf countries. The initial estimates indicate that the Gulf countries will achieve a growth rate of 19% in the production capacities. The production capacities generated from the new projects which will come on stream during the next years are divided between 49% in the Arabian Gulf countries, 35% in the Arabian Mashreq countries and 15% in the Arabian Maghreb. Based on the announced new projects and their coming on stream, it is expected that the volume of crude steel will reach 32.2 million tons per year in 2010.

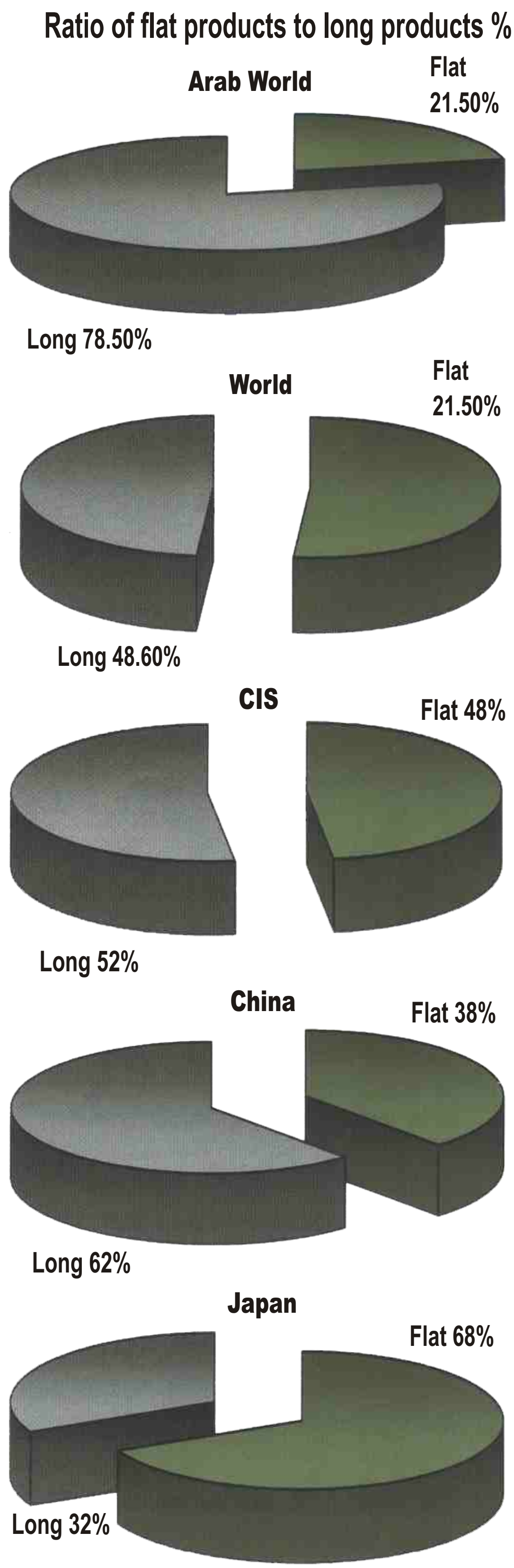
It is expected that the increase of the volume of the crude steel production capacities will be 13.8 million tons by 2010. All the increase will be achieved by the use of the electric furnaces, which will change the share of contribution of both the blast furnaces and electric furnaces for the total of crude steel production. The share of the blast furnaces now, which will be used in both Egypt and Algeria, amounts to 24.6% against 85.4% for the electric furnaces. It is worth noting that all the mills set up over the past three decades used the electric furnaces route.

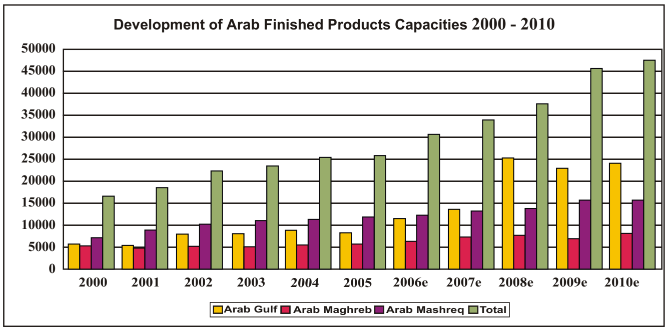
LONG AND FLAT PRODUCTS (2000-2005) AND PROSPECTS OF 2010:

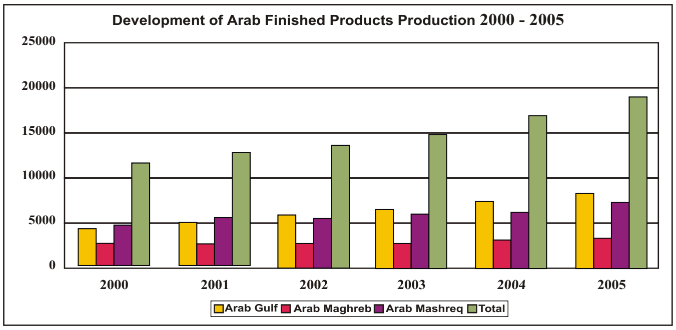
- The annual growth amounted to 8.4%. It rose from 9.2 million tons in 2000 up to 15 million tons in 2005. The Arabian Gulf countries occupied the first rank in terms of achieving a growth rate of 11.4% followed by the Arabian Maghreb 10.8% and the Arabian Mashreq 4.1%.
- The gap between production and production capacities is estimated to be more than five million tons in 2005. The average operation rate amounted to 76% in 2005.
- For the period 2005-2010, the expected production capacity will reach 35.3 million tons per year in 2010, i.e., the estimated annual growth rate in the coming period will reach 9.9%. The volume of the increase of the production capacities of the long products during the next five years is expected to reach 15.5 million tons. The new production capacities of the long products are distributed as follows :

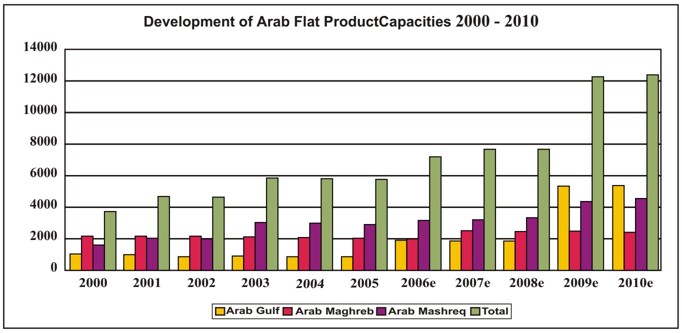
- 75% at the level of the Arabian Gulf countries.
- 18.4% at the level of the Arabian Mashreq countries.
- 6.6% at the level of the Arabian Maghreb countries.

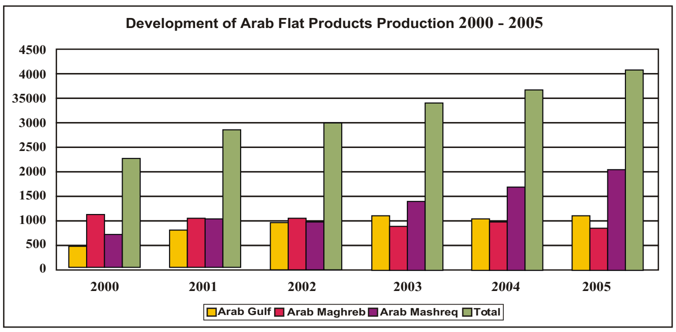
Regarding the production of flat products, production rose from 2.2 million tons in 2000 up to 4.1million tons in 2005. The production capacities of flat products are expected to reach 12.4 million tons in 2010, i.e., with an increase of 6.6 million tons of the available capacities in 2005. Most of this increase in the production capacity of flats is distributed as











follows.

- 68.9% in the Arabian Gulf countries.
- 24% in the Arabian Mashreq countries.
- 7% in the Arabian Maghreb countries.

It must be noted here that as a result of the increasing demand in the Arabian Maghreb countries and the dependence of some of these countries, in particular Algeria, on imports from the world markets to cover this demand, this situation will be a strong impetus to direct a part of the coming investments to develop this industry in such a way as to strengthen its contribution to the total production.

Having an overlook on the finished, long and flat products in the period 2000-2005, it may be said that the total production of the Arab countries in 2005 amounted to 19.1 million tons against 11.4 million tons in 2000, i.e., with an annual growth rate of 8.8%.

The expected production capacities are distributed according to the regional groups until 2010 which they are expected to reach 48 million tons of long and flat products, i.e., with an annual growth rate of 10.8% during the period 2005-2010. Most of this growth will take place in the Arabian Gulf region.

Through the distribution of the production between long and flat products during the period 2000-2005, we may notice a growing share of production of flat products in 2005 compared to 2000 when their share in 2005 amounted to 21.5% against 19.45% in 2000, while the share of the long products dropped from 80.55% down to 78.5% during the same period of comparison. The share of the long products is expected to decline to be more balanced with the share of the flat products during the next years.

DEVELOPMENT OF STEEL PRODUCTS CONSUMPTION:

The consumption volume grew to a great extent during the period 2000-2005. Consumption reached its peak during 2005 with a figure expected to have reached 33.5 million tpy against 20.7 million tons in 2000, i.e., with an increase of 12.8 million tons. Most of consumption concentrated on the long products in order to meet the need of the construction sector which is considered the main drive of the consumption growth.

The annual consumption growth during the period 2000-2005 amounted to 8.3% which is almost the second largest rate of consumption at the world level after China where the consumption rate during the comparison period amounted to 18.1%. The consumption growth rate in the Arabian Gulf countries constituted the highest one. It amounted to 14.7%. The consumption volume in the Arabian Gulf countries constituted about 51% of the total Arab steel consumption, and it also constitutes 76.4% of the total increase of the consumed quantities during the same period. In spite of the fact that the growth rate taking place in the consumption levels are considered high, the average per capital consumption is still below the world level for the majority of the Arab countries. Should we exclude the Arabian Gulf countries where the per capita average consumption reached a figure, comparable to the world figures, the per capita average consumption in these countries is still poor.

The per capita average consumption in Egypt, which is the biggest Arab steel producing country, amounted to 84 Kgs in 2005. This would probably be mainly due to the growing population growth rate.

ARAB MARKET : ANALYSIS OF THE STATUS OF THE MARKET IN RESPECT WITH IMPORTS AND EXPORTS

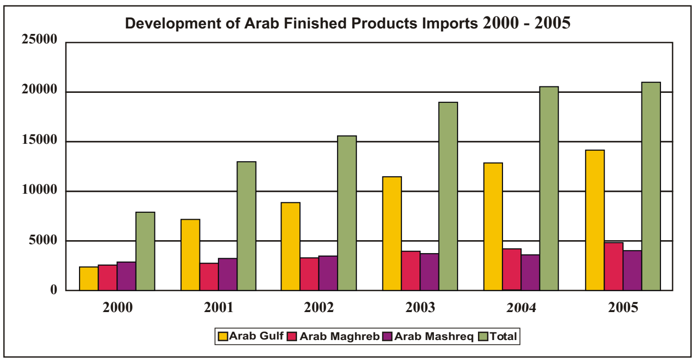
The volume of imports amounted to 20.9 million tons in 2005 against 7.9 million tons in 2000, i.e., the volume of imports had doubled three times and the annual growth rate amounted to 17.6%. Most of the Arab countries are considered net steel importers, while Egypt is the only one Arab country considered a net steel exporter at the level of finished products. Its exports amounted to 1.8 million tons in 2005.

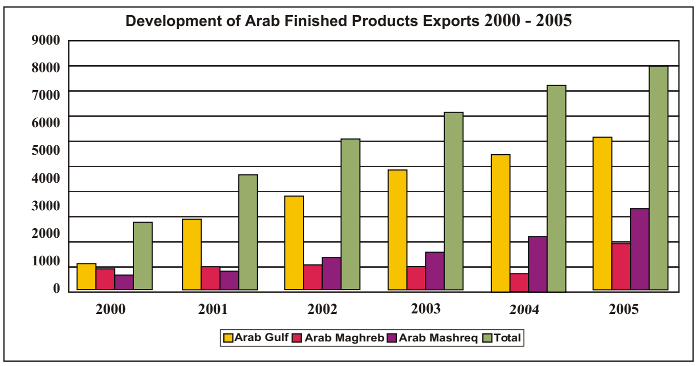
Ukraine ranks first among the countries from which import was made with a figure of 5.8 million tons of various steel products in 2005. Turkey ranks the second. The volume of imports from Turkey is estimated to have been approximately 2.5 million tons in 2005. The United Arab Emirates and Kingdom of Saudi Arabia have an advanced rank among the steel products importing countries.

As far as exports are concerned it can be said that involvement of the private sector in the field of the steel industry has motivated setting up a number of export oriented industries channelled mainly to foreign countries, especially in the field of flat products and the field of galvanized and coated products produced by a number of the cold-rolling mills which had strongly grown during the past five years.

In general, exports constitute about 20%-25% of the total production, excluding the re-exports made by a number of countries, in particular the GCC's countries as re-exports constitutes a principal part of exports.

While exports of flat products account for more than 50% of the total exported products, it is noticeable that there is a decline in exporting the long products, it is noticeable that there is a decline in exporting the long products as a result of the growing demand in the domestic market for these products, which resulted in stopping exports of these products. On contrary, some Arab countries have increased their imports of these products to cover their local need,





which has accelerated setting up many new projects for producing the long products, in particular rebar.

Estimates indicate that the volume of the exported quantities in 2005 including re-export amounted to 7.8 million tons against 2.4 million tons in 2000. In this respect, we point out that the figure of 2000's exports has been based on the total production and it does not include the re-export figures.

RAW MATERIALS : IRON ORE:

The scarce availability of the raw materials required to be used in the steel production is one of the problems facing the steel producers in the Arab countries.

Mills needs still depend on sourcing the raw materials in the world markets. Pellets are one of the main materials imported from the world markets. In the Arab world there is now only one mill producing pellets in Bahrain with a production capacity reaching 4 million tons. The largest iron ore producer in the Arab world is Mauritania whose production comes near to 11 million tons. Mauritania exports its total production to the world market. It ranks the tenth among the top exporters of iron ore. Regarding the iron ores currently produced in Egypt and Algeria are being used to satisfy the needs of the blast furnaces available in these two countries.

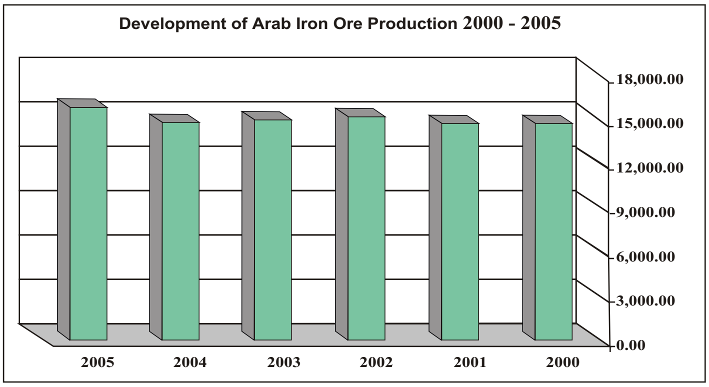
Recently concentration has been made on the importance of investing the mineral ores available in the Arab world. There are huge reserves of iron ore in Mauritania and Algeria as well as in some other countries which have not so far come into the investment phase. Announcement has been made on the possibilities of investing these ores by entering into partnerships with international investors, as it had taken place for the partnership pf Mittal steel in Al-Hadjar mill in Algeria as well as in the iron ore mines with 70% for Mittal steel and 30% for the Algerian side. Also the Mauritanian SNIM has entered into an investment partnership with the Austrllian Spheres Company with the purpose of setting up an iron ore palletizing mill with a production capacity of 7 million tons. Start-up of production will be made in 2009. This is an open partnership for other investors, either by Arab investors or international companies to enter into it.

The shortage in the availability of the pellets have pushed a number of the Arab and world companies to accelerate activity in setting up new pellets producing mills. The Gulf Industrial Investment Companies (GIIC) in Bahrain is planning to set up a new mill with a production capacity of 6 million tons. So, it is expected that the production capacity will reach 11 million tons by 2010.

In addition, CVRD has announced its intention to set up a pellets project in Sultanate of Oman with a production capacity of 7 million tons. There is also the Mauritanian project with a production capacity of 7 million tons: this means that the new total production capacities of pellets in both Bahrain and Mauritania will reach 18 million tons in 2010.

DIRECT REDUCTION IRON (DRI)

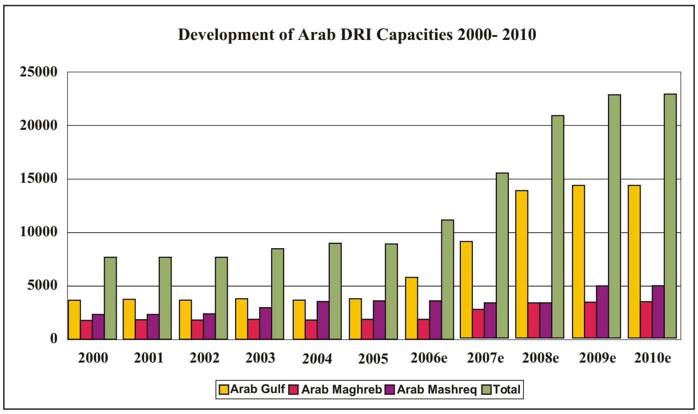
Production of the Arab companies of direct reduction iron

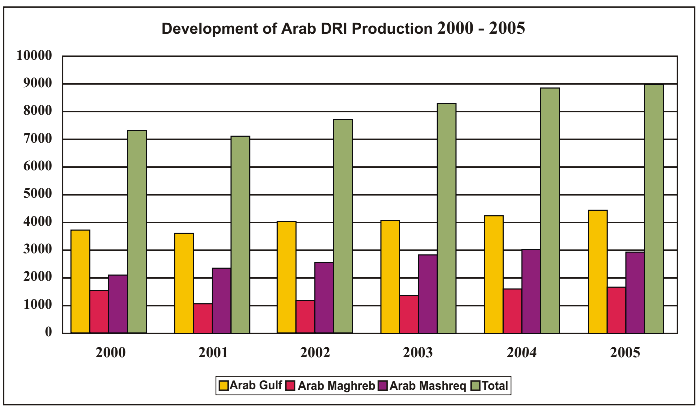


amounted to 13.75 million tons / year in 2005 against 8.92 million tons in 2000, i.e. with an annual growth rate of 7.48% it is also expected that the new projects will add a new production capacity estimated to be of 22.85 million tons until 2010.

Production of the Arab countries accounts for 16% of the world production. In case of execution of the announced production capacities, the growth rate will be 16.9% during the next five years.

Existence of a strong demand for this material and the possibility of exporting it to the world markets are among the factors which encouraged expansion to increase production of direct reduction iron. Libyan iron and Steel Company exported a quantity of its production of direct reduction iron to the world markets during 2006.





VALUE ADDED PRODUCTS :

The Arab steel industry is heading to be involved in the field of production of value-added products. The coming expansions include setting up new projects are concentrated in Saudi Arabia and United Arab Emirates in addition to the planned expansions in Libya and Maghreb. This will result in doubling the existing production capacity in the Arab countries.

The new projects also include setting up a special steel mill with a capacity of 90 thousand tons in Bahrain. Presently there is one mill in the Arab world for producing this type of products in Egypt with a production capacity of up to 140 thousand tons, known as Arco Steel Company.

NEW PROJECTS : PROSPECTS OF THE FUTURE

The number of the new projects during the next five years is more than double of the number of the projects which were executed within two decades. The number of the announced projects or those of which a big number will start up during 2007 constitutes an unprecedented number in the history of this industry at the Arab level. The number of these projects amounted to 87 projects most of which are concentrated in the Arabian Gulf countries. The biggest number of these projects is concentrated in Saudi Arabia (23 projects) followed by the United Arab Emirates (17 Projects), Qatar (3 projects), sultanate of Oman (3 projects) and Bahrain (2 projects). The Arabian Maghreb countries come in the second rank. Egypt accounts for the biggest number of these projects, followed by Syria and Jordan.

There is a number of new projects and expansions in the Arabian Maghreb countries. In Libya there are 7 expansion projects. There are also other projects in Algeria, Morocco, Tunisia and Mauritania. The long products are at the top of the list of projects, followed, in the second rank, by the direst reduction and pellets projects. The cold rolling projects take up a distinctive status among these projects. Morocco, Egypt and Saudi Arabia witness coming of a number of these projects into the execution phase during the next five years.

Though most production of these projects, particularly in the field of long products, concentrate on the domestic market influenced by the strong demand seen in the Arab markets motivated bye the economic growth and the improved oil prices, as some of these projects have taken into consideration export to the world markets.

Some of them have also found in being involved in the field of this industry a good investment opportunity which secures a guaranteed financial return within a longer period of time but of a less risk, contrary to some consumable industries which are characterized with their rapid return within a short period of time.

ARAB STEEL COMPANIES :
THE NEW FACE OF THE STEEL INDUSTRY

The present image of the Arab steel companies will change within the next years. Now there is one company among 65 companies. Whose production capacity exceeds 5 million

Country	Total Projects	Country	Total Projects
Saudi Arabia	30	Yemen	3
UAE	18	Syria	2
Egypt	10	Jordan	2
Libya	7	Muritania	1
Oman	5	Kuwait	1
Bahrain	4	Sudan	1
Qatar	3	Total	87

Distribution of projects and expansions by Country

tons of finished products. In 2007 there will be two companies, EZZ-Dikheila, Egypt and the Saudi Iron and Steel Company, and by 2010 there will be three companies with a production capacity of 5 million tons each.

According to 2005's indicators there are now in the Arab world, two new companies holding 35% of the total Arab production capacity which is estimated by 25.7 million tons; they are EZZ-Dikheila (5.2 million tons) and the Saudi Iron and Steel Company (3.8 million tons). There are also 5 companies which produce long and flat products. The production of the remaining companies is restricted to the long products and the cold-rolled products. There are also 11 companies the production capacity of each of which amounts to more than half a million tons.

It is also expected that the number of the companies the production of each of which will exceed one million tons during the next five years will be ten companies.

ARAB STEEL INDUSTRY: OPPORTUNITIES AND RISKS

The steel industry in the countries possess numerous opportunities motivating it towards the growth trend. Of these opportunities are :

- Unsaturated markets having the capacity to accommodate huge quantities of products.
- Wide size of the market.
- The increasing demand for more than 300 million people within a wide geographical spot.

Of the opportunities also are

- Availability of capitals looking for guaranteed investments.
- The average per capita consumption is still poor, as it is less than the average per capita consumption at the world level. This is a logical justification to increase the steel production which can be achieved through the new projects.

In addition, there are also the following opportunities:

- The new dynamism of the private sector in the field of investment in this industry, and
- Extension of investment to go beyond its regional borders.

There are also other opportunities which may enable this industry to grow faster. Such opportunities are represented by the presence of the most up-to-date technologies in this industry and the average lifetime of the existing mills which allows them to run effectively.

Besides, there is an auxiliary structure for this industry represented in the availability of cheap energy sources, qualified seaports, communication network, advanced roads and export possibilities to the open world market.

MOST SERIOUS RISKS:

* Connection of the new expansions and projects with the oil prices which are always subject to fluctuations.
* The industry lacks raw materials, which requires directing the new investments to enter into the raw materials and steel inputs related projects. The industry lacks projects at this level.
* In addition the unbalanced growth among the steel using sectors. It is noticeable that there is a great growth in the real estates sector, forcing production to be concentrated on the long products.
* Also the big rise of production at the world level and the risk of having excessive production capacity which will result in increasing the exports volume and looking for markets, the consequence of which will be going back to the anti-dumping actions, constituting one of the risk threatening the steel markets in the Arab region.
* There is also another risk represented in the possible non-response of the demand in the domestic market to the increased production, even though this risk does not look to be near, but it cannot be ignored, resulting in the decline of prices and resorting to the unfair, competition among procedures.
* Of the risks common between the Arab steel industry and other industries in the world is that the rapid growth of this industry is connected with regional and international economic and political factors, as any changes that would take place in them will adversely affect the anticipated growth expectations in the field of this industry.

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