

## **Sub: Invitation For Investment Opportunities**

The Ministry of Industry and Minerals / Republic of Iraq has the pleasure to announce several Investment Opportunities to rehabilitate and modernize its selected factories in different industrial sectors.

Specialized International Companies, Businessmen, and Financers are invited to participate in these Opportunities that may achieve economic feasibility and create rapid positive revenues.

The concept is that the investor and his supporting team shall rehabilitate and manage the plant on his account against a share of production achieved for a negotiated period of time.

The strength points of these opportunities are:-

- 1- High local demand of the products.
- 2- Availability of trained and experienced manpower.
- 3- Availability of local raw materials.
- 4- Adequate investment legislations and favorable terms for agreement.
- 5- Fast return on investment.

The Ministry expresses its willingness to assist you with all the necessary clarification as well as facilitating necessary visits to the factories ( if required).

You are kindly requested to submit your offers within the indicated validity ( Tuesday, June 5,2007) :-

**Contact Details**

**Tel: 00964 1 8162006 Ext. 3127 , 3122**

**E-mail :invest@industry.gov.iq**

**Mobile: 00964 7901 371 867**

**Address: Ministry of Industry / Investment Department .**

**Nidhal Street**

**Baghdad – Iraq**

**Republic of Iraq**  
**Ministry of industry & Minerals**  
**Investment Department**



**Investment File**

**For Rehabilitation**  
**of**

**Karbala Cement Plant**  
**(Karbala Governorate)**

**March/2007**

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## **Part I**

### **INVESTMENT OPPORTUNITY Rehabilitation of Karbala Cement Plant**

The Ministry of Industry and Minerals (MIM) / Investment Department invites Investors and international Competent Companies to invest in rehabilitation of Karbala Cement Plant at Karbala Governorate - south of Iraq, about 90KM from Karbala City. That is to finance and implement the activities to rehabilitate the plant in accordance with Modern Cement Industry Technology, to operate and Manage the factory at the investor expenses against a share of production.

#### **History of the plant**

The plant is one of many Cement plants operated by the state company of southern region ( totally owned by the State) . It was implemented by the German firm (Krupp Polysius A.G) in accordance with a contract signed on 31/1/1981, the plant was operated by (Krupp polysius) for the period beginning 1985 up to 1990.

In 1991 the plant was shut-down due to damages resulted by air raid.

The plant is based on dry process, the product is Sulpher- resisting Cement at a designed capacity of 1920 000 ton clinker/year(2000 000 ton Cement/year).

Due to shortage of financial resources and the Embargo imposed on Iraq during nineteen's, a low quality spare parts were used and poor maintenance was implemented which caused reduction in the production capacity and the necessity to rehabilitate and modernize the plant to cope with new development in Cement Industry , and to bring the plant to its design capacity.

#### **The project advantages**

The Strength point of the project is:-

- 1- The plant is located at an area of abundance raw material needed for Cement Industry, huge limestone and Gypsum reserve is available there.
- 2- Kerbala Governorate where the plant is located, has a long history in Cement Industry with a rather low cost labors of good experience in different levels .
- 3- Availability of filling Station in Bags and loose.
- 4- The growing demand on Cement to meet the requirements of the reconstruction plans in Iraq.
- 5- Adequate security of the area.

#### **Concept and Evaluation Criteria:**

**The evaluation criteria for selecting the investor shall be :-**

- 1- The share of the MIM as a percentage of production offered by the Investor.**
- 2- The actual amount of Invested budget.**
- 3- Readiness of the Investor to install a 45 MW power generation Unit(s).**
- 4- Readiness of the Investor to keep the existing workforce of the plant paying their salaries and incentives connected to increase in production.**
- 5- The period planned to implement the rehabilitation activities to reach the target Capacity of the plant.**
- 6- The least period needed by the investor for the duration of the investment agreement.**
- 7- The Maximum production Capacity undertaken to be achieved by the Investor.**
- 8- The Investor Financial Capability to fulfill his under-taking to rehabilitate the plant supported by :-**
  - Financial statements for the last three years.**
  - Supporting letter from Banks and Financial houses to show the Investor Financial capabilities.**
  - Documents on the Financial Capabilities of the investor partners or the Supporting parties.**
  - Documents on Financial facilities that Banks may grant to the investor.**
- 9- The technical and managerial capacity of the investor and his Supporting partners to achieve the rehabilitation works ( Engineering Companies , Vendors, Site work Contractors) , and to operate, manage after completion of rehabilitation. Organizational structure of the Investor/group of Investors.**
- 10-Acumilated experience of the Investor and his supporting companies in similar works with documental reference.**

## **Requirement**

**First : The interested investor – before or after buying the Investment file – shall visit the plant to get detailed information on site condition , the prevailing condition of the plant equipment , machinery and facilities, look at any necessary drawings, and present any request for clarification and questions to the specialized team at the address mentioned below, on that basis and the information and terms contained in the "investment file" the investor shall present his investment proposal containing the details of the rehabilitation work that he shall perform, the procedure for implementing the work, the final and stages production capacity targeted, the investment (amount) intended, period of the investment Agreement, the share of the Ministry of the production that he offers and the procedure to operate and manage the plant after completion the rehabilitation work.**

**Second : The Investor shall pay special attention to the following according to the investment file terms .**

- 1- The proposal shall contain the undertaking to supply, install, and operate a 45 MW power generation Unit (s) sufficient to meet the plant needs.**
- 2- It is preferable for the interested investors to arrange seminar for the project team (of the project) and the related staff, to show his qualification experience and points of view for the Rehabilitation approach.**
- 3- The proposal shall contain the undertaking to keep the plant personnel, pay their salaries and allowances throughout the Agreement period.**
- 4- The scope of rehabilitation work shall cover all the production lines, Units services and supporting unit including the quarry Machinery and equipments.**

### **Further Steps:-**

- 1- The interested investors in this opportunity, should send their authorized representative to collect the investment file document from:**
  - a: Ministry of industry & Minerals/ Investment Department /IRAQ-Baghdad/ AL-NIDHAL Street.**
  - b: State company for southern Cement / AL-NAJAF Governorate / AL-Kufa/ IRAQ.**

**(Against a sum of 250\$ (only two hundred & fifty US. Dollars) starting from (15/4/2007) or equivalent in Iraqi Dinar.**
- 2- A specialized team from the Iraq side shall study all the proposals and select the best proposal .**
- 3- Negotiate the investor of the best proposal to finalize and sign the Agreement.**
- 4- The investor shall present his proposal( offer) on or before the day (5/6/2007) to the Ministry of Industry & Minerals .**
- 5- Please contact the following address for any information or clarifications:-**

**- Ministry of industry & Minerals/ Investment Department.**

**AL- Nidhal street.**

**Baghdad.**

**IRAQ.**

**Tel : 009641 8162006 / Ext. 3127, 3122**

**Mobile : 00964 7901371867**

**E-mail : invest@industry.gov.iq**

## **II- General Conditions:**

### **(For plants rehabilitation agreement)**

#### **1- Scope of rehabilitation works:**

The "contracting party" shall undertake, according to the Agreement, to rehabilitate and develop all production lines, facilities, and production vehicles, in a manner to guarantee achieving the targeted capacity in a certain period. He may reach the targeted capacity in stages. The "contracting party" shall in his proposal, specify the target capacity of each stage according to his action plan.

#### **2- The Agreement concept:**

The core concept of the "investment Agreement" is that the "contracting party" shall perform all rehabilitation works in accordance with the terms of the investment file, and to undertake management and operation of the plant through out the period of rehabilitation and afterwards, at the agreed upon capacity, including supply and transport of raw material, operational and auxiliary materials, cost of water, fuel, electricity etc, additionally to pay the salaries and allowances of plant employees working at the state company during the rehabilitation period, and afterwards, all at his own expense against having a share of the production.

#### **3- Action plan:**

The "contracting party" shall submit, in two months from signing the "Agreement" a detailed action plan and a detailed time schedule on the implementation of the rehabilitation works, taking into consideration stoppage of production units, for necessity only, for limited time in order to keep the continuity of production as much as possible through the rehabilitation period.

#### **4- Maximum use of Employee during rehabilitation:**

The "contracting party" shall, within two months from signing the Agreement, in coordination with the plant management, submit a plan on maximum utilization of the plant Employee in the rehabilitation works which he performs or in other projects he may establish in Iraq.

**5- Penalty on non-achieving production Guaranteed capacities:**

**A:** the contracting party undertake to supply the Ministry of industry /state company with its share of the targeted capacities, regardless of achieving or not that targeted capacity given in the data form enclosed (production capacities of the plant).

**B:** In case the contracting party did not achieve the guaranteed/stage capacities on the date specified in the Agreement, he shall be liable to supply the Ministry, as a penalty (in addition to A above), with quantity of cement of 2% of the weekly targeted stage production capacity on each week of delay in achieving the capacity on time specified in the data form enclosed in the investment file concerning the stage capacities and its timing; The quantity is to be supplied monthly.

**C:** The Penalty in (B) above shall continue for (eight) weeks only, starting from the contractual date for achieving that stage capacity. The contracting party shall be considered failed to complete the work if he couldn't achieve the contractual target capacity at the expiry of the above mentioned period.

In case the contracting party succeed in achieving the target capacity within this (grace) period, this period shall not be a reason or part of request to extend the timing of the succeeding target capacities. These dates should be kept and respected as given in the Agreement.

**D:** In case the contracting party failed to achieve the FINAL target capacity (at the end of the rehabilitation period), at a shortage not more than 10% of the targeted FINAL capacity, he shall be liable to supply- as a Penalty- a quantity of cement amounting to one ton of cement for each one ton shortage.

In case this shortage is more than the percentage above, the contracting party should take, within six month, any necessary measures to rectify the situation to reach the contractual target capacity on his account. The contracting party during this period (of



six month) shall continue to supply the Ministry with the quantity of cement mentioned above.

In case the contracting party fail at the end of this period to achieve the target production capacity, he shall be considered completely failed to fulfill his contractual obligations and the Agreement shall be considered terminated without any right to the contracting party to claim for any compensation on actual cost or expenses he has borne for his activities of this "Agreement"

**6- Insurance:**

The "contracting party" shall be obliged after signing the "investment Agreement" to get an "All risk insurance" policy for the plant and to insure all plant personnel against work accidents and risks.

**7- Abide to labor laws:**

The "contracting party" shall abide to all labor laws and the Iraqi instruction safety rules.

**8- Letter of Guarantee:**

The "contracting party" shall, on signing the "Agreement" submit an unconditional letter of Guarantee issued by a recognized Bank of an amount of (300) Million Iraqi Dinar, valid for one year, to be raised by another (300) Million each three months until it reaches (3) Billion Iraqi Dinar in 2.5 years. The LETTER OF Guarantee shall be released after the expiry of the "Agreement" and hand - over the plant.

The Ministry shall have the right to-without court warning or judgment-confiscate the amount of the letter of guarantee in case of regress or failure of fulfillment of the contracting party obligations.

**9- Electricity Generation unit:**

The "contracting party" shall undertake to supply and install an Electricity generation units of a capacity sufficient to meet plant and services requirement of electric power at full production capacity either in one or two stages. The contracting party shall undertake to supply at least 17 M.W generation capacity within a period not more than (9) months from the date of the agreement and to supply full generation capacity within 18 months from the date of agreement.

Failure to meet the requirement of this clause shall be subjected to the terms of clause (8).

**10- Plant Management:**

The "contracting party" shall present in his investment proposal his suggestions on the way he intend to manage the plant, technically and administratively to insure the smooth operation at the best performance to achieve the agreed upon production capacity in a continuous smooth way during the period of rehabilitation and afterwards.

**11- Property of executed rehabilitation works:**

All supplied and executed works of rehabilitation in accordance with the investment Agreement, shall remain the property of the Ministry of Industry and Minerals, including the technical equipment and vehicles of the quarry. This does not include personal materials used by the staff of the "contracting party" personnel, for which he can re-export after listing quantity and type.

**12- Continuous Maintenance during Agreement period:**

The contracting party, after completion of rehabilitation works shall continue to achieve agreed upon capacity by performing continuous necessary maintenance during the "Agreement" period and undertake to handover the plant on the expiry of the Agreement period in good technical condition able to produce at the rate of production rate agreed upon.

**13- Letting of Agreement:**

The "contracting party" shall not be allowed to letting the whole Agreement or part of it to a third party without a written approval of the Ministry of Industry & Minerals.

**14- Materials used in rehabilitation:**

All materials, equipment, machines and their parts to be used for rehabilitation should be Brand new, reliable and genuine.

**15- Monthly Report:**

The "contracting party" shall submit a monthly report to the Ministry of industry and Minerals/ technical committee, showing the progress of rehabilitation works and discuss the report to facilitate any obstacles he may meet.

**16- Exemption of custom duties:**

All equipment, materials, apparatus and their parts imported by the contracting party for the purpose of rehabilitation works which shall be part of permanent work and certified by the Ministry/ state company shall be exempted from custom duties. The contracting party may ask for other exemptions and privileges in accordance with prevailing laws, in his proposal.

**17- Inventory material at plant stores:**

All inventory materials owned by the state company should be listed and priced by the Ministry / state company. The contracting party have the option to buy all or part of these materials in case he needs them for the rehabilitation work.

**18- Quarry license:**

The Ministry under-takes to transfer the quarry license of the lime stone to the name of the contracting party in accordance with Minerals Investment law No 91 year 1988. The contracting party should abide to the State Company of Geological, Survey and Mining, regulations and instructions concerning work at quarries and plan of extraction.

The contracting party may agree with other suppliers of raw materials as he find it suitable.

**19- Explosives:**

In case the contracting party use explosives in his work at the quarry, he shall be responsible to abide to the prevailing regulations and rules of the relevant authorities.

**20- Guard:**

In due time, the contracting party shall coordinate with the state company management to organize the guard and security of the plant and the quarry in such a way that the security and safety inside the

plant lay on the contracting party responsibility, and out side the plant on the relevant Governmental authorities responsibility.

**21- Laws and regulation:**

The contracting party shall abide with terms of prevailing Iraqi laws and regulations when performing his obligations of the "Agreement" with out jeopardize to his privileges of the "Agreement".

**22- Agreement period:**

The contracting party, in his proposal, shall specify the minimum Agreement period he find it necessary. At the end of this period the Agreement shall be ended unless the two parties agree on extension.

**23- Entry/ exit visa and Residence permits:**

The Ministry/ state company shall support the contracting party to obtain Entry/ Exit visa and Residence permits for his Employees according to prevailing Rules and Regulations.

**24- Force Majors:**

The "Agreement" shall contain "Force Major" clause and the rights and obligations of each party. The prevailing condition at the time of signing the Agreement is not considered a force major case.

**25- Dispute settlement:**

The disputes between the parties shall be settled amicably. In case of failure to reach an amicable settlement the parties may apply the Arbitration procedures of the prevailing laws in Iraq.

The Iraqi courts, only, shall have the jurisdiction to look in disputes.

**26- Care of works:**

The contracting party, through out his work in rehabilitation and development shall take due care of the plant machines, equipment and facilities...etc., paying utmost care to the safety during the rehabilitation and the Agreement period in addition to apply all safety measures during with.

**27- Good Implementation:**

In case it appears to the Ministry of Industry/ technical committee, that a work is done inadequately, or using improper material or by unqualified labor or in a way endangering other equipment or facilities, the contracting party should agree to the Technical committee written request to stop the work and remedy the situation through an action to be agreed upon in a joint meeting.

**28- Product Marketing:**

The "contracting party" shall have the right to sell his share locally at the price he finds suitable and export the excess abroad, after consideration of article (35).

**29- Secrecy:**

The "contracting party" undertake to keep the information's contained in the "Investment Agreement" confidential. He has no right to disclose or transmit the information's to other parties (except his partners) before he gets a written approval from the Ministry of Industry & Minerals.

**30- The "contracting party" legal entity registration:**

The "contracting party" or the investing group shall establish a legal entity to perform his activities of the Agreement which should be registered at the Companies Registrar office in according with the Iraqi Ministry of Trade regulations and terms of companies law no 21 of the year 1997.

**31- Final Report:**

The contracting party, at the end of the "Investment period" shall hand over to the Ministry of Industry & Minerals/ state company a detailed report targeting to help the Ministry/ state company to keep the smooth efficient operation and maintenance of the plant (operation manual, maintenance manuals, inquiry and ordering manuals, and Inventory records etc).

**32- Common services:**

The contracting party and the Ministry / state company shall coordinate to control and run the facilities which serve other parties- such as water supply in away that such requirements of other parties shall be ensured.

**33- Previous liabilities & Obligations:**

The contracting party shall not be part or responsible of any liabilities and obligations on the Ministry/ state company before signing the Agreement concerning the activities of the state company/ Plant. The same applies on the other parties liabilities and obligations towards the Ministry or the Company or the Plant.

**34- Termination:**

In case this Agreement is Terminated by the Ministry of Industry and Minerals for No reason related to the failure of the contracting party to fulfill his contractual obligations, the Ministry shall compensate the "contracting party" for the actual expenses he spent to implement his activities according to this Agreement.

**35- Present Production:**

The "contracting party" undertake to sell to the Ministry at cost (to be negotiated and agreed upon before signing the Agreement) the present quantity produced during the period of running the plant parallel to the rehabilitation activities until the end of the first year from the Agreement date validity.

In Case the whole quantity at prevailing rate, is received by the Ministry before the end of the first year, then the sharing formula shall be applied according to the agreement.

**36- Site handover and effective dates:**

The periods agreed upon in the Agreement for achieving targeted production stages and final production capacities, shall be counted starting from the date of handing over the plant to the contracting party to be within three months from the date of signing the Agreement otherwise the terms of clause (8) of this Agreement shall be applied.

## ***General Conditions contents:***

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- 2- The Agreement concept:***
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- 5- Penalty on non-achieving production Guaranteed capacities:***
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- 34- Termination:***
- 35- Present Production:***
- 36- Site handover and effective dates:***

## **Part III**

### **Data and Scope of work**

#### **1- Introduction**

**Kerbala Cement plant is one of two cement plant run by the state Company of cement for the southern region ( one of the state companies belong to the Ministry of Industry and Minerals). The plant consists of two linker production lines.**

**The original contract of the plant was signed with the German Company (Krupp polysius) on 31/1/1981 and started up by the same Co. at 1985. The plant is designed on Dry process and produce sulphate resisting Cement at a design capacity of 1960 000 ton Clinker and 2000 000 ton cement /year. Plant operation is controlled by computer and provided with advanced quality control systems compared to other Iraqi cement plants.**

**Due to shortage of funds and the embargo imposed on Iraq in 1990, poor maintenance was performed with absence of standard spare parts, This situation prevailed until now. The result was low productivity of the plant. It needs, badly a large scale of rehabilitation and modernization work to bring the plant to up grade capacity according to modern development Technology in cement Industry.**

#### **2- The Required Investment**

**The aim is to rehabilitate the plant technically, operate it on economical basis, to reach its targeted production capacity, all at the "investor" expenses, against share of the product for certain period (to be agreed upon with Ministry of Industry & Minerals) taking in consideration the following conditions:**

**A: The "investor" shall undertake to perform all necessary rehabilitation works for all production lines of the plant including the quarry and other facilities to ensure that the plant shall work at the targeted capacity.**

**B: The "investor" in cooperation with his supporters, specialized in cement Industry, shall depute technical experts to visit the plant site to evaluate the technical requirements of rehabilitation & conclude detail investigation.**



The plant management shall provide all needed assistance to help the experts team to perform the technical investigation of the plant including providing technical data, and drawings.

**C:** The "Investor" shall present to the Ministry of Industry & Minerals, his technical and Investment proposal showing the share percentage of product he requires based on the budget he expects to invest in the rehabilitation works, agreement duration and plant management policy after rehabilitation.

**D:** The Ministry of Industry and Minerals and the state company, shall negotiate the candidate investor to conclude a final agreement .

### **3-Plant description and production process:**

**A:** The plant is composed of the following units:-

- 1: Raw materials quarries (Limestone and clay).**
- 2: Crusher ate capacity of 1200 ton/hr.**
- 3: Raw materials stores 2 each 70 000 ton.**
- 4: Raw materials mills 2 each 308 ton Milled material.**
- 5: Raw materials silos (No.2) 3500 ton Milled material and (2silos) 7000 ton.**
- 6: Preheater System.**
- 7: Rotating Kiln 2 each 3200 ton Clinker /day.**
- 8: Cooler (11 chambers) for Clinker.**
- 9: Clinker store (two) 100 000 ton (each).**
- 10: Cement Mills 4 capacity 93 ton/ hr each sulfate resisting and 110 ton/hr ordinary cement.**
- 11: Cement silo (3) 10 000 ton cement each.**
- 12: Cement bags packing station 6 machines 100 ton/ hr each.**
- 13: Sample Stations.**
  - a: Crasher samples station.**
  - b: Mills samples stations.**
- 14: Water Treatment station with R.O Unit.**
- 15: Fuel heating Unit and Compressors.**
- 16: Heavy oil Stores (3) 5000 000 letter each.**
- 17: Chemical laboratory and X-ray Unit plus physical Analysis lab.**

## **B: General description of the plant.**

The plant can be described as follows:

### *1- Limestone and clay queries:*

The limestone is extracted through exploding the limestone layers by standard explosives at 24m depth to get pieces of different size up to 1.5m. The first step is to remove the overburden layer. The quarry is located 3-5km away from the plant site.

The (clay) sand is extracted from a quarry 40km away from the plant, and from (zarqa) quarry 70km away from the plant Iron sand is brought from steel and Iron plant/ Basrah Governorate.

### *2- Crushers:*

The lime stone, (clay, and (zarqa) clay when brought to the plant, enters a special hoppers for each kind, then crushed and mixed with sand at size up to 3 cm to form the raw materials mixture, then stored in two silos of 70000 ton capacity each.

### *3- Raw Mills:*

The mixture is transferred from the stores by means of belt conveyers to the Silo and Iron sand for correction, the quantities are controlled according to the percentages specified by the laboratory, according to the specification, then to the Raw Mill crusher to be crushed to fine size. The Blain of the output material is identified by a 90 micron and 212 micron mesh.

The crushed materials is transferred by air slide and spiral conveyors then to the silos by airlift then to the kiln through the feeding system.

### *4- Preheaters:*

The crushed materials are fed to the preheater system to burn the materials and the process of calcenization is performed inside the preheater.



The preheater consists of four stages. The material enters the first stage at temperature of 360-380C<sup>o</sup> . At the end of stage four, entering the kiln, the temp is 800-850 C<sup>o</sup> .

### *5- Kilns:*

The calcined material enters the rotary Kiln, passes a complicated chemical reactions to form the (clinker). The material pass further burning process inside the Kiln at several stages. The highest temp at the burning zone reach's 1450C<sup>o</sup> .

**6- Clinker cooler:**

The produced clinker in the kiln goes to the cooler system for cooling from 1200 C° to 150 C° then taken to the clinker stores of a capacity of 100000 ton of clinker for each line.

**7- Cement Mills:**

The clinker with gypsum at about (4% After mixing) feed the Cement Mills to be milled to small size of Blain 3200-2800 Cm<sup>2</sup>/gr.

**8- Cement Silos:**

Cement is Transferred to three Silos 10000 ton capacity each.

**9- Packing Unit:**

Cement is transferred to Packing unit for customer supply either Bagged or loose.

Bagging machine Capacity 100 ton/hr. (No of machines is six) Loose cement filling capacity is 150 ton/hr for each shut.

**4-Prevailing Condition of the Plant:**

**A: Lime stone quarry:**

The plant depends on supply of limestone from "Al-khadary" deposits where the total confirmed reserve of this site is 267million ton as follows:

- ( 5) Million ton category B. industrial reserves ready for investment.
- (86) Million ton category CI industrial reserves needs farther investigation.
- (176) Million ton category CI Geological reserve.
- (16) Million ton invested reserve (category C<sub>2</sub>).
- (251) Million ton Remaining reserve of all types.

**B: Limestone crusher:**

The crusher work at a low productivity for the reason of lack of sufficient raw materials, deterioration of certain equipment. And mainly the failure of the stacker system of the first line. The crusher produce now 650 ton/hr due to a defect in gear box.

**C: Raw Mills:**

The productivity of the Row Mills now is 200 ton/hr. The reason of this degraded capacity is the lack of spare parts. This affect negatively the continuity of kiln operation.

**D: Kilns:**

Kilns operate at less than one third of its design capacity due to severe lack of spare parts and stoppage of most of control system's on the operation process of the kiln and by-pass of several important links. Kilns now produce 50-60 ton clinker/hr while design capacity is 133.4 ton clinker/hr for each kiln.

**E: Cement Mills:**

Cement Mills work at 70% its design capacity the prevailing production capacity is 80 ton/hr due to many defects and shortcoming of control system and feeding system. Three out of four Mills operates while the fourth Mill needs complete rehabilitation.

**F: Packing unit:**

Loose Packing capacity is connected to working hours. As for Bagged cement, its capacity is 600 ton/hr, but actual capacity is much below that. Two of the packing machines were used as spare parts for the others.

**Note:** supplement no (1) and (2) include detailed description of the status of the machinery and Equipment, as well as the rehabilitation requirement for all production lines.

**5-Raw Materials**

**a: Raw materials used as given below**

	<b>Materials</b>	<b>Percentage</b>	<b>Supply Site</b>
<b>1</b>	<b>Lime stone</b>	<b>70%</b>	<b>Lime stone is extracted from the quarry 5 km away from factory.</b>
<b>2</b>	<b>clay</b>	<b>30%</b>	<b>Supplied from the quarry (40-70) km from factory.</b>
<b>3</b>	<b>Iron ore</b>	<b>2.5%</b>	<b>Black Iron ore supplied from State Company for Iron and Steel - Basrah</b>
<b>4</b>	<b>gypsum</b>	<b>2.5%</b>	<b>From HEET town</b>

**b-Fees of raw material extracted according to No. (19) of year 1988 Article (22) Organization of Mineral Investment:**

<b>Raw Mat.</b>	<b>Fees (I.D)/ m<sup>3</sup></b>
<b>Lime stone</b>	<b>1500</b>
<b>Gypsum</b>	<b>750</b>
<b>Sand</b>	<b>250</b>
<b>Sand glass</b>	<b>2000</b>
<b>clay</b>	<b>300</b>
<b>Iron</b>	

## 6-Quality of product

According to Iraqi Specification No.5 year 1984 as follows:-

Group code	Activity place	Material Name	Acceptance limit %	Rejection limit %	Notes
G6 Filling station	Cement Silo	Cement	LSF from 66-102	Less than 66 higher than 102	
			C3a less than 3.5	higher than 3.5	
			Mgo less than 5	higher than 5	
			Freeline less than 2	higher than 2	
			IR less than 1.5	higher than 1.5	
			LOI less than 4	higher than 4	
			OTI clave less than 0.8	higher than 0.8	
			So3 less than 2.5	higher than 2.5	
			Compressive strength after three days not less than 15 Newton/mm <sup>2</sup>	Less than 15 Newton /mm <sup>2</sup>	
			Compressive strength after 7 days not less than 23 new ton/mm <sup>2</sup>	Less than 23 Newton /mm <sup>2</sup>	
			Initial setting time not less than 45 min	Less than 45 min	
			Final setting time not more than 10 hrs	More than 10 hrs	
			Blain not less than 2500 cm <sup>2</sup> /gr	Less than 2500 cm <sup>2</sup> /gr	
Weight of filled cement bag 48.5-51.5 kg	Less than 48.5 or more than 51.5 kg	For bagged cement			

## **7- Plant site:**

The plant is situated at Karbala Governorate about 90 km away from the Kerbala city center, west side of the Governorate on road to (Maka) longitude 43 east and Horizon 32 North.

Enclosed map indicates the cement plant site.

## **8- Local Market demand:**

There are (17) established cement factories in Iraq. All of them are the property of the State. Its total design capacity 19000000 ton/year, however the actual production capacity currently is around 3000000 ton/year only.

The gap between demand and production is wide. Local demand is growing in large scale and quickly while production is not improving.

The prediction for cement consumption shows that the consumption may reach 27 million ton/year in the coming years, based on the wide program for reconstruction, infrastructure requirements and large scale housing scheme accordingly there is a strong investment opportunities in rehabilitation of existing cement plants and for new plants as well.

## **9- Human Resources:**

Iraq possess an accumulated technical experience in cement Industry, both in dry and wet process. The experience is represented in a number of Engineers, technician, skilled and semi-skilled labors working in operation and maintenance activities, in addition to other management and Accounting experienced personal. However, the investor may hire Experts and specialists from outside Iraq for supervising rehabilitation works and training Iraqi staff on new technologies if required.

## 10- Preliminary scope of work to achieve design capacity:-

The following steps are to be followed to upgrade the production capacity. Work needed is classified according to production units as follows:-

### **A: Limestone Quarry:-**

The following is recommendation on the requirement of the quarry to be able to supply 9000 ton of limestone/ day to meet the requirement of the plant at the design capacity. (Transport of materials now is assigned to transport contractor).

	<u>NO</u>
a: Bulldozer (Komatsu) 155D or equivalent.	3
b: Shovel (Kawasaki) 95 or equivalent.	4
c Shovel (Faun) F 500 or equivalent.	2
d: Crane.	2
e: Digging shovel 5m <sup>3</sup> .	3
f: Standard explosives.	-
g: Explosion igniter.	1
h: Compressor (Atlas) type 280 or equivalent.	
i: Drill (Atlas) type 340 ROC or equivalent.	
j: Grader (Mitsubishi) or equivalent.	
k: Water tanker 10000 liter.	
l: Gas oil (fuel) tanker 6000 liter.	

### **B: Limestone crusher:**

a: General overall and rehabilitation for the crusher parts which include limestone and clay feeds, changing the deteriorated rubber conveyors, changing the motors, and mechanical parts of the crusher.

b: to get the exact percentages of the clay and lime stone according to the technical formula, it is necessary to perform proper adjustment to lime stone and clay feeders and adjust the balances of the crusher. This point is necessary to ensure stable material feed and consequently stable kiln operation. Accordingly, it is suggested to renew the Balance (weighing) system of the crusher feeders.

c: Rehabilitate and operate the stacker of the first line being effective in getting a proper homogeneous mixture of raw materials entering the Mill.

d: Rehabilitate the crusher sampling station according to modern technology.

### **C: Raw Material Mills:**

a: Rehabilitate Mechanical and Electrical parts of the Mills including lining, standard Bach for the Mill, conveyors, and lubrication system.

b: Rehabilitate all Mill feeders including mixture feeder, Iron sand feeder lime stone feeder.



- c: Modernize the cooling towers of the main precipitators.**
- d: Rehabilitate and maintain all expansion joints of the Mill.**
- e: Rehabilitate the dedusting system of the Mills.**
- f: Rehabilitate all electrical gate of Mill parts.**

**D: *Kilns:***

- 1- Rehabilitate and maintain the preheated system including cyclones, feeding ducts, pendulum gates, rising, PC, and inlet chamber.**
- 2- Rehabilitate the Expansion joints.**
- 3- Rehabilitate the shock blaster system.**
- 4- Put into operation all electrical meters at the preheated including temp, pressures, gas analysis.**
- 5- Erect the front and rear seal of the kiln.**
- 6- Rehabilitate the By- Pass system.**
- 7- Maintain kiln hood, and the cooler.**
- 8- Maintain and re-operation of all deleted control system.**
- 9- Rehabilitate all kiln electric gates.**
- 10- Put into operation all non-operational and deleted electric meters.**
- 11- Rehabilitate and re-operate the Multi cyclone system and the waste air fan.**
- 12- Rehabilitate the x-Ray apparatus.**
- 13- Rehabilitation of fuel heating and air compressors.**
- 14- Clinker cooler recommended to be replaced by cross ban type with a discharge flab system.**
- 15- Rehabilitate the cyclones and its accessories.**

**E: *Cement Mills:***

- 1- Rehabilitate Mills lining.**
- 2- Maintain air slide and related parts.**
- 3- Rehabilitate lubrication system of the Mills components.**
- 4- Rehabilitate Mill cooling system.**
- 5- Rehabilitate Electric separator system.**
- 6- Rehabilitate cement Mill precipitator.**
- 7- Supply and install Mill's gear girth and pinuim (The Existing is worn).**
- 8- Rehabilitate and renew the first Mill, this Mill was out of operation for long time, its parts were used as spare parts for other Mills.**

**F: *Packing:***

- 1- Renew two packing machines and Rehabilitate the remaining machines.**
- 2- Renew Bagging and filling automatic systems.**

**G: Electrical works needed to rehabilitate the plant:-**

- 1- change electric feeders for cement Mill and accessories also meters.
- 2- Supply two motors for cement Mill no 1 according to spec. given in annexes.
- 3- Rehabilitate Fuel system of the kiln for the two lines.
- 4- Connect and operate all kiln gates, material Mills, cement Mills.
- 5- Rehabilitate and operate all overhead cranes starting from crusher till packing.
- 6- Renew kiln feeding system for the two Lines.

**H: Instruments:-**

- 1- Renew SO<sub>2</sub> and O<sub>2</sub> measuring and reading system at the inlet chamber for the first and second line.
- 2- Renew camera system (in all details) for line 1 and 2.
- 3- Renew sintering zone temp reading system.
- 4- To change the existing central automatic control system with a new system compatible with modern cement industry technology.
- 5- Renew temp. reading system (MDM 100).

**11- Achieved production from 1993 up to 2004:**

<b>Cement Ton/year</b>	<b>Clinker Ton/year</b>	<b>year</b>
46495	590406	1993
98777	133213	1994
80952	146228	1995
87260	166687	1996
173318	153864	1997
272213	229848	1998
257418	245026	1999
288030	161822	2000
429888	509197	2001
407738	510181	2002
11732	—	2003
119905	138523.493	2004

## **12-Environmental Requirements and standards:**

**A: The investor should undertake to apply ISO 14001 and 9001 code plus the European regulations for Environment.**

**B: It is important to note, also, the following points:-**

**The investor obliged to fulfill (ISO-14000),(ISO-9001) & European environmental restrictions, its also important to consider the following Environmental requirements:-**

**1- The investor must present an environmental impact assessment (EIA) certified by the ministry of Environment, and must include:**

**a- The environmental impact evaluation and the positive and negative effect of the project on environment.**

**b-To suggest methods to avoid pollution and control methods in which comply with the environmental enforcements and regulations.**

**c- The expected accidental pollutions and the precautions that must be taken.**

**d-The use of the alternative applicable cleaner technology and minimization use of resources.**

**e- Waste minimization and recycling or re -use.**

**f- Assessing the costs of merits and demerits resulting out of the project.**

**2- The factory must have dust precipitators at all chimneys for all the industrial processes and other methods to prevent the discharge of dust from the chimneys or other sources more than 150 mg /m<sup>3</sup> and must not exceed 0.2 mg /m<sup>3</sup> at the factory fence with the wind direction.**

**3- Treatment of the industrial waste water according to the Iraqi river regulation standard.**

**4- The solid waste must be transferred to special locations in coordination with the relevant authorities.**

**5- The availability of pollution monitoring instruments and providing the ministry of Environment with the pollution monitoring data. In case of the unavailability of the monitoring instrument the investor (factory) must do the monitoring by a reliable consultants and laboratories.**

**6- Construct and update an environmental database concerning environment protection in addition to the pollution concentration & level caused by the factory.**

**The implementation of the environmental requirements and standards mentioned above and others will not eliminate the task of the Ministry of Environment to make field inspection to check fulfillment of the environmental requirements and that the factory is applying the environmental law No.3 year 1997, issued by Iraqi Authorities.**

### **13- Legal Framework**

- a: Upon agreement between the "Ministry" and the "Investor", terms of the Iraqi "Investment law No 13 for the year 2006", can be adopted in the eventual rehabilitation "Agreement" between the two parties.**
- b: Iraqi law No. 22 of year 1997 for the state companies, will be applicable.**
- c: The Ministry of Industry & Minerals shall select the best proposal according to the criteria mentioned in the investment file.**
- d : The winner investor shall be notified in order to conclude investment agreement between both parties.**
- e : The signed contract shall include the rights and obligations of each party.**
- f : The contract shall come into force after approval of the concerned Iraqi Authorities.**

### **14- Privileges for Investor**

- 1- Right to establish trade representation offices and branches in Iraq, such offices and branches shall be registered with the Iraqi Registrar of companies office.**
- 2- Right to establish a business entity jointly with an Iraqi or foreign Investor.**
- 3- In case an agreement is concluded on basis of product sharing, the Investor shall have the right to sell his share in the market at the price he define.**
- 4- Investor may collaborate with Iraqi partners.**
- 5- Right to possess, use, dispose his invested money in Iraq in accordance with prevailing rules.**
- 6- Use freely convertible currencies or Iraqi legal currency, Right to transfer money into and out side Iraq in accordance with Central Bank regulations.**
- 7- The Ministry of Industry & Minerals shall put the plant site and an adequate storage space at disposal of the investor to enable him to fulfill his obligations, including existing equipment to implement Modifications & Rehabilitation.**
- 8- The imported fixed assets shall be exempted from custom duties provided they are brought to Iraq within three years from the date of Agreement . This period may be extended or reduced by the Establishment Authorized, if found necessary.**
- 9- Imported fixed assets necessary for extension or development of the plant shall be exempted from custom duties.**
- 10- Selling the plant product is not subjected to any price restriction.**

**11-The investor may in his proposal ask for any additional privileges to be specified in accordance with prevailing laws to be included in the final Agreement.**

**15-*Investor obligations:***

**In addition to the terms of the General conditions, the investor shall notice the following:**

**15-1: The Investor or his supporting technical entity should possess sufficient experience and qualifications to construct ( rehabilitate) such plants.**

**15-2: The Investor should obtain quality certificate (ISO 9000).**

**15-3: Agree to engage the present employee of the factory in all his activities and insure them against risks, supply safety equipment and requirement. He may engage foreign employees for leading technical positions.**

**15-4: Abide to Health and Safety Regulations and Instructions issued by world Health organization (WHO) and International labors organization (I.L.O) and abide to Emission standards criteria available at the Ministry of labors and social Affairs.**

**15-5: Shall Undertake to supply power generation Unit of 45 MW capacity to Cover the plant needs of electricity as the national grid is not reliable at the time being.**

**15-6: The investor shall undertake to produce Cement in accordance with Spec. European standard (EN96 TYPE 42.5Min).**

**15-7: The investor should fill-in, carefully, in details the Data Forms enclosed.**

**Ministry of Industry & Minerals**  
**Data Form**

- **Project Name:**
- **Interested Company Name :**
- **Company legal entity ( share holding Co., Limited,...etc), attach copy of establishment certificate & names of shareholders who have 30% share and above:**
- **Registered Capital :**
- **Company or Firm legal representative:**
- **Identification :**
- **Applicant address in Iraq:**
- **Contact details in Iraq and outside Iraq:**
- **Suggested Production Capacity \*:**
- **The Applicant must abide by the Technical, Financial and Legal terms stated in the Investment file, clarify how to fulfill\*:**
- **Technical Supporters with confirming documents\* :**
- **Name of Financing Group/s with his/ their reference/s , supported by latest financial report/s: \***
- **Technical References & Expertise \*:**
- **Similar Implemented and under construction projects (References) \*:**

**Signature:**

**Name:**

**Position in the company:**

**Stamp:**

*Note: Details for articles pointed by (\*) To be given in details separately according to the enclosed forms .*

- **Minimum suggested target capacity:  
(Karbala'a cement plant)**

**A: The investor shall explain here his plan to up grade the production of the plant to target production capacity, the stages of production up grading and the relevant timing.**

**B: The target final capacity for the purpose of this Agreement is (1800000) ton cement/year.**

**C: the investor should take into consideration (when specifying the final and stages target capacity and its timing) the following:-**

**(62500) ton cement/month on the Fifteen month from the starting date specified in clause (36) of the general conditions.**

**(125000) ton cement/month at the (30) thirtieth month from the starting date.**

**(150000) ton cement/month on the (36) thirty sixth month from the starting date.**

- **Technical Supporters with Confirming Documents.**



- **Name of Financing Group/s with his/their Reference/s, Supported by the latest financial report/s.**

- **Technical References & Expertise (Documented)**

**\* Similar Implemented & under construction projects (References).**

- **Undertaking to abide by the Technical, Financial & Legal terms stated in the Investment file, clarify how to fulfill**

## Part IV

# "ANNEXES"

# **Annex -1-**

## **Proposals for Equipments Rehabilitation**

## The Plant's Equipments Modernization's Form Karballa Cement Plant

Order	The Part Required to be Modernized	Technical Reasons for Modernization	Advantage Wished Technically and Proportion of its Effect Productively
1	<p><b>Clinker cooler of two lines, the first and the second.</b>                      Using the following new types that are designed by the international companies of high experience in producing of cement and as follows.</p> <p>1- The modern type used at the present time form KHD company type gyro step                      2- The modern type used at the Present time from F.L.Smith company type Ef cross -bar cooler.</p>	<p>1-The clinker cooler is as old as it was set in work since 1984.</p> <p>2- Because of this small part the productive lines stopped in a high proportion of the total stages.</p> <p>3- Convoing the best modern types of highly technical and the economic use that are appeared producing.</p>	<p>1- Increasing the work of the productive lines through decreasing the stoppages witch reached approximately %10 of the total stoppages.</p> <p>Used ones.</p> <p>2- Decreasing the production costs where castings used are of highly efficiency and working age in comparison with the used now.</p>
2	<p><b>Hydro thrust roller bracket. HDR50 compl with hydraulic control unit</b></p>	<p>1- Substituting the system that has the great importance in the hydro thrust roller bracket as it had been substituted since 1984.</p> <p>2- Consummating parts of the system completely especially the rollers pistons. And the hydraulic control unit.</p>	<p><b>It helps to operate the furnace in a streamlined way without subjecting the furnace body to the damages caused by the emergency hot convection</b></p>

## The Plant's Equipments Modernization's Form Karballa Cement Plant

Order	The Part Required to be Modernized	Technical Reasons for Modernization	Advantage Wished Technically and Proportion of its Effect Productively
<b>3</b>	<p><b>NO. 1 materials' feeders which contain:</b></p> <p><b>1- the mix feeder including the iron feeder</b></p> <p><b>2- Iron cement feeder</b></p> <p><b>3-modification stone feeder</b></p> <p><b>4- ordinary cement feeder</b></p> <p><b>5- returning mix feeder</b></p>	<p><b>The feeders mentioned were not economic where because of their oldness and unavailability of the spare part for them , they have become of little efficiency where of leads to fall a great amount of the materials out of the feeder , in addition, they need to continuous preservation and subsiding spoiled parts</b></p>	<p><b>Modernizing the feeders leads to cleaning the department, and abbreviating time in preservation, in addition to the measurements' accuracy which leads to control the productivity process.</b></p>
<b>4</b>	<p><b>Substituting the central control room (CCR) and changing them from physical keys and indexes to keys and indexes in the computer and the operation control would be achieved by computer</b></p>	<p><b>Because of the consumption of the keys and the breakdown of the measurement instruments due to environmental conditions and unavailability of spare for them</b></p>	<p><b>there is no measurement accuracy preservation consequently the productivity process go on well, in addition to writing productive report when required</b></p>



## The Plant's Equipments Modernization's Form Karballa Cement Plant

Order	The Part Required to be Modernized	Technical Reasons for Modernization	Advantage Wished Technically and Proportion of its Effect Productively
5	substituting the furnace feeding measurement system (1,2)	oldness of these instrument and their incompetence at the present time	oldness of these instrument and their incompetence at the present time
6	Type of operation computer is Pdp 11/23	oldness of these computers and their incompetence at the present time	decreasing the stops accrued

## **Annex -2-**

# **Description of Machines, Equipments and the factory requirements for Rehabilitation**

## Spear Part Required to Rehabilitation for Karballa Plant

### Crasher dep. /Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
1	Rotors	101.10.01	Crasher S-Rotor(primary rotor) K-Rotor(secondary rotor)	Importation	A	general	Germany	1- set 1-set
2	v-belt	101.10.01	V- belt 8V-4000-	Importation	B	general	Germany	100
3	Belt conveyor	Crasher	2600 EP 200/3/3+2 L=100 meter No. of layer=3	Importation	B	general	Germany	100meter

## Spear Part Required to Rehabilitation for Karballa Plant

### Crasher dep. /Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
4	Stacker sported Ball bearings	Crasher	<p>1-Ball bearing slewing Ring d=206g mm, D= 2411 mm</p> <p>2- Ball bearing slewing with Gear on outer Ring d= 1843 mm d=2208 mm no. of Gear teeth z= 138 Mod Pressure angle <math>\phi=20</math></p> <p>3- Ball bearing slewing Ring d=1468 mm D=169 mm</p>	Importation		general		
5	Hydraulic cylinder	101.10.10	<p>Hydraulic cylinder, special Design HDML 160/110-Hub-VDRM L=3535 mm Stroke=2208 Dia.oford=110mm Action pressure=100bar--- 200kn</p>				Germany	1

## Spear Part Required to Rehabilitation for Karballa Plant

### Crasher dep. /Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
6	Gear Box	101.12.03 Crasher	Gear Box kzn 280 N1=1410 r.p.m ,N2=57 r.p.m Power=110kw	Importation	A	general	Germany	4
7	Gear Box	101.11.03	Gear Box kzn 180 N1=1410 r.p.m,N2=57 r.p.m Power=18.5kw	Importation	A	general	Germany	2
8	Gear Box	Crasher	FD410 B5-90SC416-KBT200H Shaft mounted worm Gear unit kbt 200H , fitted spur gear motor, 90 sc 416 Kbt 200H SPUR GEAR WARM GEAR NI=1430 R.P.M ,N1=930 R.P.M N2= 930 R.PM N2=0.907/0.59 T=4650NM, P=0.38/0.65 KW	Importation	A	general	Germany	1
9	Gear Box	102.01.03	Gear Box kza200 N1=1410 r.pm,N2=57.7 r.pm Power=75kw with back stop	Importation	B	general	Germany	4

## Spear Part Required to Rehabilitation for Karballa Plant

### Crasher dep. /Electrical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
10	3ph motor	BM 210	Type: AM180 LR4 380V, 22KW,1465r.p.m 43Amp,B3 comp(AEG)	Importation	A	general	AEG	4
11	3ph motor	BM 011	Type : AU500M6B4RB Y6600v,50hz,1250kw, co2 φ:0.87,129AMP 1485r.p.m , Rotor: y2000V,380AMP,Ins.clif S.NO:2810250	Importation	A	general	AEG	1
12	3ph motor	BM 191	Type:AM160 LR4 380V,15 KW,31 AMP 1450 r.p.m,IP:54, B3(Trough belt conveyer)	Importation	A	general	AEG	3

## Spear Part Required to Rehabilitation for Karballa Plant

Crasher dep. /E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
13	3ph motor Gear motor	BM334	Type: DKf6407/163L 380V, 0.25W, 1330r.p.m ,50Hz,Bauer,V3,N2:56 r.p.m	Importation	A	monopolistic	Bauer	2
14	D.C motor	BM251	Type :g22.06 ,60kw ,245-1470r.p.m,440v,B3,IP:54 Field 220v dc(AEG)	Importation	A	general	AEG	2
15	D.C motor	BM253	Type:GLF20.04,45KW,(245-1470)r.p.m,440v,112AMP,B3 Field 220v dc(AEG)	Importation	A	general	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

Crasher dep. /E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
16	D.C motor	BM269	Type:GNZO-220/4,12.5KW,1500r.p.m,B3,440v (win kell mann) company,3103AMP,S.Nr131043	Importation	A	general	AEG	1
17	3ph Gear motor	BM501	Type :1LC3092-1AD42-Z,0.650.33KW,1500/1000r.p.m,1.85/1.35 B3(rotary gear) stacker	Importation	A	general	AEG	3
18	3ph motor	BM503	Type:B2805/4L360T 380V,7.5KW,1480 r.p.m,124AMP,B5 Company: Emod(P.I.V) (Boom belt) stacker	Importation	A	general	AEG	1
19	3ph motor	BA168	Over belt magnet: separator with belt discharge Type: EUS 12/12 L 8K1200mm With magnetic coil , voltaye:220V/set Complete with cell accessories	Importation	A	general	AEG	2



## Spear Part Required to Rehabilitation for Karballa Plant

Crasher dep. /E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
20	3ph motor	BM123	Type: KL/GM 3PH MOTOR TYPE: AM180 MR4,18.5KW 1460r.p.m, 380v,37A,IP54,B3	Importation	A	general	AEG	2
21	3ph motor	BM165	Type :AM315 SM4,110KW,1485r.p.m,380v,205A IP : 54 , B3	Importation	A	general	AEG	4
22	3ph motor	BM137	Type:am180mr4 ,1815kw,1460r.p.m 380v,ip:54,B5,cosφ:0.85	Importation	A	general	AEG	2
23	3ph Gear motor	BM322	Type: AM90 LY6,101KW,3.2A, n1=910r.p.m,n2=30 r.p.m 380v,IP: ,b5	Importation	A	general	AEG	4

## Spear Part Required to Rehabilitation for Karballa Plant

Crasher dep. /E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
24	3ph Gear motor	BM338	Type: DK64 SZ 3.2211/163,0.2KW.0.8A.380V . n1=1330 r.p.m,n2 =3.9 r.p.m Ip65,b5	Importation	A	monopolistic	Bauer	4
25	3ph motor	BM188	Type: Am 315 sm6,75kw,141a,380v,990 r.p.m,ip:54,B3 COS φ: 0.86	Importation	A	general	AEG	2
26	3ph motor	BM189	Type :AM 355RQ6 , 190KW,375A,380V,900r.p.m, IP44 B3,COSφ:0.86	Importation	A	general	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

Crasher dep. /E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Q.
				Import local Purchasing Or Manufacturing				
27	3ph motor	BM 186	Type :AM280 SV4,75KW,141A,380V, 1480 r.p.m, IP54,B3 COSφ:0.86	Importation	A	monopolistic	AEG	2
28	3ph motor	BM150	Type:TSV-3/MA78/130 7.5KW,3000 r.p.m, IP:54,B3	Importation	A	general	AEG	2
29	3ph motor	BM147	Type : TSV3/KD80A-6/F 0.37KW,1.25A,IP:54	Importation	A	general	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

### Raw mills Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
1	Lubrication pump	104.03.01.03 Raw miles	Gear pump type: 415-N-R-FCV30K Q=109l/min	Importation	A	monopolistic	Germany	4
2	Lubrication pump	104.02.11.09	Gear pump type:Tf4/70 RDG Q=7-08m <sup>3</sup> /hr N=1500 r.p.m P=3bar	Importation	A	monopolistic	Germany	4
3	Lubrication pump	104.02.11.07	Type ZPU 9GT Output 6L/m Max.working pressure 500 kp/cm <sup>2</sup>	Importation	A	general		4

## Spear Part Required to Rehabilitation for Karballa Plant

### Raw mills Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
4		104.02.01	Lifters	Importation	C	general	Germany	87
5		104.02.01	Lining	Importation	A	general	Germany	1SET
6		104.02.01	Diaphragm	Importation	A	general	Germany	1SET
7		104.02.01	Girth gear	Importation	A	monopolistic	Germany	1
8		104.02.01	Pinion	Importation	B	monopolistic	Germany	1

## Spear Part Required to Rehabilitation for Karballa Plant

### Raw mills Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
9		103.01.09 Raw miles Scriber	Gear box type KBLC 400-22-H T=75KN.M N1=1500V.P.M N2=1.2r.p.m	Importation	A	monopolistic	Germany	2
10		Raw miles Scriber	Gear box P=600t/hr v=0.1m/s Kst-58 ,I=65=1	Importation	A	monopolistic	Germany	2
11		102.09.03	Gear box Kzn 360, p=226,N1=990 r.p.m	Importation	A	monopolistic	Germany	2
12			Gear box Kzn 22S P=67KW N2=926 =N2=64.6 r.p.m	Importation	A	monopolistic	Germany	2

## Spear Part Required to Rehabilitation for Karballa Plant

Raw Mill Dep. Elec.

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
13	3ph Gear motor	KM525 108.14.04	TYPE: DSA69/379L,380V.9KW,1000 r.p.m, 50HZ, IP54,20.5A,B5 Gear type:DSA69/379L,B3, N2=50r.p.m	Importation	A	monopolistic	BAUER	2
14	motor	Km539 108.16.01.0 1	TYPE: AM132MR4, 380V,7.5KW,1445r.p.m,50hz,IP54 ,B5 GEAR TYPE:GT4C3- 132MR4,B3,N2=50r.p.m	Importation	A	monopolistic	AEG	2
15	3ph motor	EM112 104.01.01 Rotary air Lock feeder	Type:AM160MR4, 380V,11KW,1450r.p.m,b3,2205a	Importation	A	monopolistic	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

Raw Mill Dep. E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
16	3ph motor	EM192 Trough belt conveyor	TYPE: AM225 SV4,380V,37KW,1475 r.p.m,b3	Importation	A	monopolistic	AEG	2
17	3ph motor	B1M191 Trough belt conveyor	Type: AM160 LR4, 370V,15KW,1450 r.p.m, b3	Importation	A	monopolistic	AEG	2
18	3ph motor	B1M191 Trough belt conveyor	TYPE:AM180 LR4,380V,22KW,43AMP, 1465r.p.m,B3,50HZ, IP54	Importation	A	monopolistic	AEG	2



## Spear Part Required to Rehabilitation for Karballa Plant

Raw Mill Dep. E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
19	3ph Gear motor	EM108 Trough belt conveyor	Type:AM132 SR4,380V,5.5KW,12A,50HZ,1465r.p.m,B,IP54 Gear type: ge3c3-132 sr4,B3, N2=68r.p.m	Importation	A	monopolistic	AEG	2
20	D.C motor	EM253	Type : GNZ1310GL,1.25KW,1500r.p.m,b3 220v	Importation	A	monopolistic	AEG	2
21	3ph Gear motor	KM527	Type:dk942hz9241,380v,1.5kw,1460 r.p.m,50hz,IP54,3075A,B5 Gear type:DK942 HZ9241,B3,n 239r.p.m	Importation	A	monopolistic	Bauer	4
22	3ph Gear motor	BM206	Type:EDK840FG7-214/200ZWD 380V,0.55KW Gear type:EDK840FG7-214/200ZWD ,n2 =3.1r.p.m	Importation	A	monopolistic	Bauer	4

## Spear Part Required to Rehabilitation for Karballa Plant

Raw Mill Dep. E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
23	3ph Gear motor	Em156	TYPE: AM112MZ4,380V,4KW,1420r.p.m Gear type:GT3V-112MZ4,N2=50r.p.m	Importation	A	monopolistic	AEG	2
24	3ph gear motor	Bm209	Type:DK76575-2211/178, 380V,0.3KW,101A Gear type: DK76575-2211/178,N2=3r.p.m	Importation	A	monopolistic	Bauer	2
25	3ph Motor Chain scraper	Em501	Type:1LA4283-4AA617,380V,90KW,1480r.p.m,B5	Importation	A	monopolistic	siemens	2
26	3ph gear motor	Em115 Starting oil pump	Type:ILA3070 4-AB-Z, 380V,0.25KW,1400r.p.m,0.7AMP Gear type:T24,N2=7.1R.MM,B5	Importation	A	monopolistic	siemens	2

## Spear Part Required to Rehabilitation for Karballa Plant

### Raw Mill Dep. E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	Monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
27	3ph gear motor	EM115 bearing oil pump	Type:AM160LR6,380V,11KW,970r.p.m, 23AMP, B3/B5	Importation	A	monopolistic	AEG	2
28	3ph motor	EM502 TRAVEL CAR Scraper	TYPE:380V,30/20KW,1450/1000r.p.m 61/45amp,b5 With break	Importation	A	monopolistic	siemens	2
29	3ph gear motor	EM505 Drive of travel scraper	Type:1LA3073-6AA227,380V,Δ220V,0.25KW,860r.p.m, 0.88a,b14	Importation	A	monopolistic	siemens	4
30	3ph motor	EM144	Type:AM200 IV4,380V,30KW,1470r.p.m,b3	Importation	A	monopolistic	AEG	2
31	3ph motor	EM135 Trough belt conveyer	Type:AM132SR4,380V,5.5KW,1445R.P.M ,12AMP, GEAR TYPE:GT4C3-132SR4,N2=30r.p.m	Importation	A	monopolistic	AEG	4

## Spear Part Required to Rehabilitation for Karballa Plant

**Raw Mill Dep. E**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
32	3ph motor	EM503	Type:1LA3130-40C46-Z,380V,5.5KW,50HZ,1450r.p.m, 11.7A,IP54,B3/B5	Importation	A	monopolistic	siemens	2
33	3ph gear motor	EM188 Reclaiming belt	TYPE: DF5A47E/429,380V,1305KW, 1640r.p.m,29 amp,50hz,b5 Gear type:DF5A47E429,B5,N2=395	Importation	A	monopolistic	bauer	2
34	3ph motor	EM126 Separate fan	TYPE: AM112 MR4,380V,7.5KW,15A,50HZ,B5,1450 r.p.m	Importation	A	monopolistic	AEG	4
35	3ph motor	EM013 Waste air fan	TYPE: AU630M4 B6RB,Y6600V,2300KW, 991r.p.m,242A,COSφ:0.85,50HZ Rotor:y2230,630amp,ip54,ins.cl:h	Importation	A	monopolistic	AEG	1
36	3ph gear motor	EM134	Type:AM160LR4,380V,15KW,1450r.p.m,31AMP,B5B,IP54,50HZ Gear type: GT5C3-160LV4,B3,N2=52	Importation	A	monopolistic	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

Raw Mill Dep. E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
37	3ph motor	EM167 Fluid or fan	TYPE:AM132SP2 380V,5.5KW,2820,11AMP,B3,IP54,50HZ	Importation	A	monopolistic	AEG	4
38	3ph motor	EM168 Fluid or fan	TYPE: AM112 LS2 380V,4KW,2820,8.2A,IP54,B3,50HZ	Importation	A	monopolistic	AEG	10
39	3ph motor	EM172 Rotary blower	TYPE: AM315MQ4 380V,170KW,1485r.p.m,317 amp,ip54,b3,50hz	Importation	A	monopolistic	AEG	3
40	3ph motor	EM183 Fluid or fan	Type: AM90LX2 380V,2.2KW,2820r.p.m,4.9A,IP54,B3,50HZ	Importation	A	monopolistic	AEG	10
41	3ph motor	EM178 Fluid or fan	Type: AM180MR2 380V,22KW,2950r.p.m,42AMP,IP54,B3,50HZ	Importation	A	monopolistic	AEG	5

## Spear Part Required to Rehabilitation for Karballa Plant

Raw Mill Dep. E

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
42	3ph motor	EM219 Conveyer warm	TYPE:AM315MQ6 380V,160KW,990r.p.m,2961AMP,B3,IP54, 50HZ	Importation	A	monopolistic	AEG	2
43	3ph motor	EM181 Rotary air lock feeder	TYPE: DK840H200 380V,0.55KW,1450 r.p.m,1.71AMPA,IP54,B5,50HZ Gear type: DK840H200,B3,N259r.p.m	Importation	A	monopolistic	Bauer	5
44	3ph Gear motor	HM329	Type:D1A43H2-253 380V,2.2KW,1450r.p.m,5.3A,IP55,B5,50 HZ Gear type: D1A43HZ- 253,B3,N2=60r.p.m	Importation	A	monopolistic	Bauer	4
45	3ph motor	EM196	Type: AM160 LR2 380V,18.5KW,2930r.p.m,36AMP,IP54,B 3,50HZ	Importation	A	monopolistic	AEG	2

46	3ph Gear motor	EM163	TYPE: DK941AH216 380V,1.1KW,1420r.p.m,3.1AMP,IP54,B 5,50HZ. Gear type: DK941,AH216,B3,50HZ,N2=57	Importation	A	monopolistic	Bauer	2
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### Spear Part Required to Rehabilitation for Karbala Plant

#### Kilns Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
1	Gear box type kzn280	Kiln Feeding Conveyor	P=43 kw N1=1410 ,N2=22.1r.p.m with back stop	Importation	A	monopolistic	Flender	4
2	Gear box kdn 360	Clinker chain to line 2 first transmitter	P= 38kw,N1=1410 , N2= 7.9 r.p.m	Importation	A	monopolistic	Flender	2
3	Gear box type kdn 400	Clinker chain to line 1	P= 42kw , N1=1410,N2=6.9 r.p.m	Importation	A	monopolistic	Flender	2
4	Girth gear with pinion For kiln with Expansion	Kiln	NO. Of teeth Far pinion=35 Girth gear= 212 Modul=33 Width pinion =500 mm	Importation	A	monopolistic	Flender	1

	Bits and axial ring		Width gearth gear=450 mm					
5	Grate plate with holes	Cooler	Din 1.4848	Importation	A	general	Claudius peters	1000

### Spear Part Required to Rehabilitation for Karballa Plant

#### Kilns Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
6	Grate support Fixed	Cooler	M20*220 with spring+ 2 washer +2nut each (heat resistance)	Importation	A	general	claudis peter	100
7	Grate support Movable	Cooler		Importation	A	general	claudis peter	100
8	T-polt	Cooler		Importation	A	general	claudis peter	2000
9	Axial piston pump with stall valve	Cooler	Type: pAVZZ RKF1 DA315-350	Importation	A	monopolistic	parker	2
10	Axial piston pump with stall valve	Cooler	TYPE:PAV50 RKF1 DAZ50-315	Importation	A	monopolistic	parker	4
11	Hydraulic cylinder	Cooler	CHB-ZHRKC33 MC 127-125	Importation	A	monopolistic	parker	2



12	Hydraulic cylinder	Cooler	CHB-ZHRKC33 MC6-125	Importation	A	monopolistic	parker	4
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### Spear Part Required to Rehabilitation for Karballa Plant

#### Kilns Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
13	noze block	Kiln outlet	Din 1.4837	Importation	A	general	Claudius pet err	32
14	Grate cooler Radial fan type Evol/ 22-30	Cooler	Volume: 240000 m3/hr,T=260C P=23m bar, power consumption =200ku Power of motor= 250 kw, speed= 990 r.p.m	Importation	A	general		2

15	Radial position pump		Type RK1-6,5,0.3 12MIN P=320 bar	Importation	A	monopolistic	Parker	2
16	Lubrication system	Cooler	Lubrication system For grate cooler (complete)	Importation	A	general	parker	2

### Spear Part Required to Rehabilitation for Karballa Plant

#### Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
17	3ph M.V motor	LM011	Type: AR500 P4B6 RB 6600V,50HZ,250KW, COS φ:0.85 987r.p.m ,IP:44,29A,B3 Rotor : y,460v,330A	Importation	A	general	AEG	2

18	3ph M.V motor	KM011	Type : AV630 M4 B6 RB:47v/309k 6600v,50hz,2300kw, COS $\phi$ :0.87 989r.p.m , I.p: R44, 242A,B3 Rotor: y,2230v,630A	Importation	A	general	AEG	1
19	3ph motor	HM129	Type:AM180 LR2/4 380V,50HZ,23/17.5 KW, COS $\phi$ :0.88/0.8,45/37A 2955/1470 r.p.m,IP:54, B3	Importation	A	general	AEG	6

### Spear Part Required to Rehabilitation for Karballa Plant

#### Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
20	3ph M.V Gear motor	Discharge meals Gets under silo	Type: DK6806, SZ2211/1631W.ZWD 380V,50HZ,550W, COS $\phi$ :0.85 650r.p.m ,IP:54,0.4A,B5 Gear type:dk6806 ,	Importation	A	monopolistic	Bauer	8



23	3ph Gear motor	Kiln feed Gets	Type: DK7807, SZ5-21178W.ZWD 380V,50HZ,110W ,0.6A,B5 Gear type:S.0 ,H1	Importation	A	monopolistic	Bauer	4
24	3ph motor	Stimulation Blowers on Kiln feed Air slide	Type : AM112 MY2,380V, 50HZ,4KW COS $\phi$ :0.88 2820r.p.m , I.p: 54, 8.4A,B3	Importation	A	general	AEG	10
25	3ph motor	Air lock kiln compressor And cooler fans	Type:AM250 MV4 380V,50HZ,23/170 KW, COS $\phi$ :0.8,107A 1475 r.p.m,IP:54, B3	Importation	A	general	AEG	12
26	3ph motor	Auxiliary motor to kiln And cooler fan	Type:AM250 MV4 , 380V,50HZ, 55KW , COS $\phi$ :0.84 , 107A,B3 1475 r.p.m,Ip:54	Importation	A	general	AEG	6

### Spear Part Required to Rehabilitation for Karballa Plant

#### Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				

27	3ph Gear motor	Air lock to filters	Type: DK840,H200 380V,50HZ,550W, COS φ:0.74 1420r.p.m,IP:54,1071A,B5 Gear type :dk 840 , h200,b3 N259 r.p.m	Importation	A	general	Bauer	7
28	3ph M.V motor	Air slide Gets feeding to bellowers	Type : b 380v,50hz,250w, COS φ:0.75 1400r.p.m , I.p:54, 1.2A, Gear type :b N2:45r.p.m	Importation	A	monopolistic	devfra	8
29	3ph motor	Pay bass Gets	Type :bal 90/a-4/d32/h2b/190 380V,50HZ,1.5 KW, COS φ:0.82,3.6 A 1415r.p.m,IP:54, B5 Gear type :ib nr.301578,n2190r.p.m,b3	Importation	A	monopolistic	Loher gmbh	2

### Spear Part Required to Rehabilitation for Karballa Plant

#### Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance	monopolistic Or	Original Manufacture	Qua.
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				Import local Purchasing Or Manufacturing	Grade A,B,C	General		
30	3ph Gear motor	Pay bass Gets	Type : d4 , a460 , av/331 380v,50hz,5.5kw , COS φ:0.85 1400r.p.m, Ip:54,12A , B5 Gear type : d4, a460 , av/331 N2 25.5 r.p.m , b3	Importation	A	general	Bauer	2
31	3ph Gear motor	air lock to Pay bass	Type: dk86ez , 36/200L 380V,50HZ,500W, COSφ:0.75 930r.p.m, Ip:54,107a,b5 Gear type:dk86ez 36/200L N2:6 r.p.m ,b3	Importation	A	general	Bauer	2
32	3ph motor	The trebling to filter	Type : tsv22/kd 80a-6/f 380v,50hz,370w 960r.p.m ,Ip:54, 1.25a	Importation	A	general	AEG	8

### Spear Part Required to Rehabilitation for Karballa Plant

Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance	monopolistic Or	Original Manufacture	Qua.
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				Import local Purchasing Or Manufacturing	Grade A,B,C	General		
33	3ph Gear motor	Screw gets	Type : R40DT 80N 4BS 380v,50hz,750W , COS $\phi$ :0.7 1380r.p.m, Ip:54,2035A , B5 Gear type : R40 DT80N 4BS N2: 145r.p.m , b3	Importation	A	general	sew	6
34	3ph Gear motor	Pay bass to Screw	Type:D2 A47/309K 380V,50HZ,3.7KW,CO2:0.84 1400r.p.m, Ip:54,8.2A,b5 Gear type:D2 A47V /309K N2:26 r.p.m ,b3	Importation	A	general	Bauer	4
35	3ph motor	Cooler fans	Type : AM315 MM4 380v,50hz,132Kw COS $\phi$ :0.86 1485r.p.m ,Ip:54, 245A,B3	Importation	A	general	AEG	4

### Spear Part Required to Rehabilitation for Karballa Plant

Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance	monopolistic Or	Original Manufacture	Qua.
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				Import local Purchasing Or Manufacturing	Grade A,B,C	General		
36	3ph Gear motor	air lock to Pay bass	Type : DK942H/216 380v,50hz,1.1KW , COS $\phi$ :0.87 1400r.p.m, Ip:54,2.8A , B5 Gear type : DK942 H/216 N2: 39r.p.m , b3	Importation	A	general	Bauer	4
37	3ph Gear motor	Pay bass to Screw	Type:AM132SR4 380V,50HZ,5.5KW,CO2:0.8 1445r.p.m, Ip:54,12A,b5 Gear type:GT3C3-132SR4 N2:51 r.p.m ,b3	Importation	A	general	AEG	2
38	3ph Gear motor	Pay bass to Screw	Type : AM132 MR4 380v,50hz,7.5Kw COS $\phi$ :0.85 1445r.p.m ,Ip:54, 15.5A,B5 Gear type:GT4C3-132MR4 N2:50 r.p.m ,b3	Importation	A	general	AEG	2

### Spear Part Required to Rehabilitation for Karballa Plant

#### Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance	monopolistic Or	Original Manufacture	Qua.
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				<b>Import local Purchasing Or Manufacturing</b>	<b>Grade A,B,C</b>	<b>General</b>		
<b>39</b>	<b>3ph Gear motor</b>	<b>Elevator to pay bass</b>	<b>Type : AM132SR4 380v,50hz,5.5KW , COS φ:0.8 1445r.p.m, Ip:54,12A , B5 Gear type : GT3C3V-132SR4 N2: 47r.p.m , b3</b>	<b>Importation</b>	<b>A</b>	<b>general</b>	<b>AEG</b>	<b>2</b>
<b>40</b>	<b>3ph motor</b>	<b>Air condition fan to E.P motor</b>	<b>Type:TSV-22/150/165 380V,50HZ,7.5KW 1450r.p.m, Ip:54,12A,b5</b>	<b>Importation</b>	<b>A</b>	<b>general</b>	<b>AEG</b>	<b>4</b>
<b>41</b>	<b>3ph motor</b>	<b>The brick to auxiliary motor for kiln</b>	<b>Type : Ed30/5 380v,50hz,175Kw 2800r.p.m ,Ip:65, 0.42A,F:300N,S:60mm</b>	<b>Importation</b>	<b>A</b>	<b>monopolistic</b>	<b>EMG eldrogerat</b>	<b>2</b>
<b>42</b>	<b>d.c motor</b>	<b>Main motor to kiln</b>	<b>Type :g c 35- 12m,600vd.c,450kw,840a 480-1500r.p.m,ip:44,b3 Field: 220v,1305A</b>	<b>Importation</b>	<b>A</b>	<b>general</b>	<b>AEG</b>	<b>1</b>

### **Spear Part Required to Rehabilitation for Karballa Plant**

**Rotary Kilns Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
43	3ph Gear motor	Fans to Main motor for kiln	Type : TSV3/MA96/340 380v,50hz,11KW 2900r.p.m, B5	Importation	A	general	AEG	4
44	3ph motor	Nose ring fan	Type:AM160MP2 380V,50HZ,11KW, COS φ:0.84 2900r.p.m, Ip:54,22A,b3	Importation	A	general	AEG	2
45	3ph motor	Kiln shall fans	Type : AM100LT-4 380v,50hz,3Kw COS φ:0.8 1450r.p.m ,Ip:54, 7.3A,B3	Importation	A	general	AEG	40
46	d.c motor	Rotation pump in crane	Type:132S , 380V,50HZ.505KW,11.7A 1450r.p.m ,ip:54,b3/b5	Importation	A	general	ASEA	2
47	3ph motor	First greet pumps	Type : AM160LR4 380v,50hz,15Kw, CO2φ:0.84 1460r.p.m ,Ip:54, 31A,B5	Importation	A	general	AEG	4

### Spear Part Required to Rehabilitation for Karballa Plant

#### Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance	monopolistic Or	Original Manufacture	Qua.
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				<b>Import local Purchasing Or Manufacturing</b>	<b>Grade A,B,C</b>	<b>General</b>		
48	3ph motor	Second and third greet pumps	Type : AM180 LR4 380v,50hz,22KW , COS $\phi$ :0.84 1465r.p.m, B5,43A,IP:54	Importation	A	general	SEW	8
49	3ph Gear motor	Drake chain	Type:R140.80 LT21D 132M2 380V,50HZ,7.5KW, COS $\phi$ :0.92 2900r.p.m, Ip:54,12.6A,b5 Gear type:R140.80LT21D132M2 N2 : 14.7r.p.m, B3/B5	Importation	A	general	Lincoln Helios	2
50	3ph Gear motor	Crane lubrication pump	Type : ZPU10M70-30XN- FV2-380 380v,50hz,290w, B14 3000r.p.m ,Ip:54 Gear type:ZPU10M70-30-XN- FV-380 , B14/V18	Importation	A	general	AEG	2
51	3ph motor	Greet Cooler fans	Type:AM315 SM4 380V,50HZ.110KW,205A 1485r.p.m ,ip:54,b3/b3, COS $\phi$ :0.86	Importation	A	general	AEG	2
52	3ph motor	Fans and chains the clinker	Type : AM225 MV4 380v,50hz,45Kw, COS $\phi$ :0.86 1475r.p.m ,Ip:54, 86A,B3	Importation	A	general	AEG	12

### Spear Part Required to Rehabilitation for Karballa Plant

Rotary Kilns Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
53	3ph motor	Greet Cooler fans	Type : AM225 SV4 380v,50hz,37KW , COS φ:0.86 1475r.p.m, B3,71A,IP:54	Importation	A	general	AEG	2
54	3ph Gear motor	Cooler cyclone fans	Type:RF60 DT 80K4 380V,50HZ,550W, COS φ:0.7 1380r.p.m, Ip:54,1.85A,b5 Gear type:RF60DT80K4 N2 : 50r.p.m, B3	Importation	A	general	SEW	16
55	3ph motor	Main flame fans	Type : AM280 MV4 380v,50hz,90Kw, B3 1480r.p.m ,Ip:54,169A, COS φ:0.86	Importation	A	general	AEG	2
56	3ph motor	Air condition fan to E.P motor	Type: TSV2MA75/150 380V, 50HZ. Ip:54,B5	Importation	A	general	AEG	4
57	3ph motor	Main precipitator Escrow conveyer	Type : AM160LR4 380v,50hz,15Kw, COS φ:0.84 1460r.p.m ,Ip:54, 31A,B5 Gear type:GT5C3160LV4,N2 52r.p.m, b3	Importation	A	general	AEG	4

**Spear Part Required to Rehabilitation for Karbala Plant**

**Rotary Kilns Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
58	3ph motor	Clinker chain	Type : AM280 SV4 380v,50hz,45KW , COS φ:0.86 1480r.p.m, B3,141A,IP:54	Importation	A	general	AEG	4
59	3ph Gear motor	Chain gats and nitro column	Type:D1A42 VZ/283 380V,50HZ,3KW, COS φ:0.79 1420r.p.m, Ip:65,7.1A Gear type: D1A42 VZ/283 N2 : 94r.p.m, B3	Importation	A	general	Baver	6
60	3ph Gear motor	Filter air lock above Clinker storage	Type : DK941 AH216 380v,50hz,1.1Kw, B5 1420r.p.m ,Ip:54,3.1A, COS φ:0.85 Gear type: DK941 AH216 N2:57r.p.m , B3	Importation	A	general	Baver	2
61	3ph Gear motor	Kiln sampling motor	Type:DO54 SZ2 380V,50HZ.,250W 1350 r.p.m , 0.8A,N2:23r.p.m	Importation	A	monopolistic		2
62	3ph motor	Bucket elevator to feed the poll dowse	Type : AM200LV4 380v,50hz,30Kw, COS φ:0.85 1470r.p.m ,Ip:54, 58A,B3	Importation	A	general	AEG	4

**Spear Part Required to Rehabilitation for Karballa Plant**

**Rotary Kilns Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
63	3ph motor	Cooling pump to Maine drive gear box	Type : ILA5096-4AA21 380v,50hz,1.5KW , COS φ:0.82 1405r.p.m, B5,3.7A,IP:54	Importation	A	general	Siemens	2
64	3ph Gear motor	Fumble vehicle kiln shell temp.	Type :DO 385 380V,50HZ,60W, B5 680r.p.m, Ip:54,0.3A Gear type: BM N2 : 1r.p.m, B8	Importation	A	monopolistic	Desch	2

**Spear Part Required to Rehabilitation for Karballa Plant**

## Cement mills Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
1	Gear Box	Cement mills	Type kzn 160, p=20kw N1=1410 r.p.m,N2=57r.p.m	Importation	A	monopolistic	Flander	2
2	Gear Box	Cement mills	Type kzn 280, p=61kw N1=1410 r.p.m,N2=32.1r.p.m	Importation	A	monopolistic	Flander	2
3	Gear Box	Cement mills	Type kzn 200, p=25kw N1=1410 r.p.m,N2=33.6r.p.m	Importation	A	monopolistic	Flander	1
4	Gear Box	Cement mills & packing	Type kzn 280, p=42kw N1=1410 r.p.m,N2=22.2r.p.m	Importation	A	monopolistic	Flander	10

**Spear Part Required to Rehabilitation for Karballa Plant**



**Cement mills Dep.: Mechanical**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
5	Gear Box	Cement mills & packing	Type Cms 6D 1325 P=5.59 KW N1=1410 r.p.m ,n2=31.8 r.p.m	Importation	A	monopolistic	Flander	8
6	Gear Box	Cement mills	Type KELS 280 P=(42.7-160)KW N1=(400-1500)r.p.m, n2=59-222)r.p.m	Importation	A	monopolistic	Flander	2
7	Gear Box	Cement& Raw mills	Type SZN 630 P=1950 KW N1=990 r.p.m,N2=137 r.p.m	Importation	A	monopolistic	Flander	12

**Spear Part Required to Rehabilitation for Karballa Plant**

## Cement mills Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
8	Oil pump	Cement mills	Type zpu 9 Gt Output 6 l/h Max working pressure 500 kp/cm2	Importation	A	monopolistic	Germany	8
9	Gearth Gear	Cement mills	Module 30 No of teeth 216 Width 650 mm Material GS 34 GrMo 4 v75	Importation	A	monopolistic	Germany	2
10	Bearing	Cement mills	Rod End Bearing GE 140	Importation	A	monopolistic	Germany	12

**Spear Part Required to Rehabilitation for Karballa Plant**

## Cement mills Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
11	Gear Box	Cement mills	Type kzn 140,p=11kw N1=1410 r.p.m N2=42.4r.p.m	Importation	B	monopolistic	Flender	1
12	Gear Box	Cement mills	Type kzn 160,p=15kw N1=1410 r.p.m,N2=44.4 r.p.m	Importation	B	monopolistic	Flender	2
13	Oil pump	Cement mills	Type 410-N-R-FCV-30K Q=68 L/min	Importation	A	monopolistic	Germany	8
14	Hollow shaft	202 02 .01	Out dia. =558.8mm In dia.=515.8mm Length =6773.5mm With lamella set thickness=12 mm	Importation	A	monopolistic	Flender-bocholt	4

**Spear Part Required to Rehabilitation for Karballa Plant**

## Cement mills Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
15	Oil pump	202 06 04 01	Type: ef-n-1 P=3 bar Q=15 m <sup>3</sup> / min Power=0.55 kw Oil type: vg 320	Importation	A	monopolistic	Flender	4
16	Filter cooler	202 06 04 02	Type :3 fks 1-21N	Importation	A	monopolistic	Flender	4
17	Filter cooler	202 01 07 03	Type : FK 21725	Importation	A	monopolistic	Flender	4
18	Gear pump	202 02 01 02	Type : TF 4170 N=1500 r.p.m Head=7m Temp.max=80c <sup>o</sup>	Importation	A	monopolistic	Flender	4

**Spear Part Required to Rehabilitation for Karballa Plant**

**Cement mills Dep.: Mechanical**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
19	Lubrication Device	202 01 66	complete	Importation	A	monopolistic	Lincoln or vogel (mica fluid)	4
20	Bucket elevator	202 04 01	a- chain roller rim half 202 04 005 b- chain wheel centre (head) 202 04 004 c- chain end 202 04 001 d- chain clip with spacer shakle and locking plate 202 04 002	Importation	A	general		

**Spear Part Required to Rehabilitation for Karballa Plant**

## Cement Mills Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
21	3ph motor	NM011	Type: AV630S6B RB,Y6600V 213AMP,2000KW,COSφ:0.85 992r.p.m , 50hz, rotor:y2140v 570amp,Ins cl:f	Importation	A	general	AEG	2
22	D.C motor	NM251	Type : G25.12 (200-25) KW,)1500-400)r.p.m 494Amp,470v,B3 Field: 220vcomp( AEG)	Importation	A	general	AEG	2
23	3ph Gear motor	NM124	Type:DR80 a14a,380v,0.55kw 1390r.p.m, 1.75amp,(B3/B14) Company: Dietz-motors (geardil pump)	Importation	A	monopolistic	AEG	2

**Spear Part Required to Rehabilitation for Karballa Plant**

**Cement Mills Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
24	3ph motor	NM164	Type: AM180AM 380V, 22kw,180MR2 2930r.p.m 42AMP , B3 comp(AEG)	Importation	A	general	AEG	
25	D.C motor	NM277	Type :GNFZ108/4 ,0.35KW 1500r.p.m,220v,B5,2.9AMP Gear type:SA70R40A N2=1.34r.p.m,(winkel mann)	Importation	A	general	Winkel mann	
26	D.C motor	NM276	Type:Gnfz131515 1500r.p.m,220v,9.4AMP,B5,1.2 5kw Gear type:sa40A, N2= 20.2r.m.p (winkel mann)	Importation	A	general	Winkel mann	

## Spear Part Required to Rehabilitation for Karballa Plant

**Cement Mills Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
27	3ph Gear motor	NM143	Type:AM112MZ4 380V,4KW,9.3AMP,B5,1420r.p.m,n2: 57r.p.m Gear type:GT3-112MZ4 Screw conveyer, comp(AEG)	Importation	A	general	AEG	3
28	3ph Gear motor	NM178	Type :KL/GM D4A47V/331 ,B5 1500R.P.M , 5.5KW GEAR TYPE: D4A47V/331 B3,n242min-1	Importation	A	general	bauer	3
29	3ph Gear motor	NM179	Type:DK94ZH/241 ,B5,1450r.p.m,1.5kw Gear type:dk94zhz/241,b3,n2=39min-1	Importation	A	general	bauer	3

**Spear Part Required to Rehabilitation for Karballa Plant**



## Cement Mills Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
30	3ph Gear motor	Nm103 Starting oil pump	Type:1LA3070 4-AB-Z ,0.25KW,0.7AMP 1400r.p.m, 380v Gear type:-t24,b5,n2=71 r.p.m	Importation	A	monopolistic	siemens	8
31	3ph motor	Nm103 Bearing oil pump	Type :1LA3134-6AA 5.5KW,960r.p.m,380v 13.1AMP , B3/B5	Importation	A	monopolistic	siemens	4
32	3ph Gear motor	L1M346	Type:am160mr4 ,1815kw,1450r.p.m 380v, B5,n2=63r.p.m,22.5AMP Gear type:GT4C3-160MR4	Importation	A	general	AEG	2
33	3ph motor	LM344	Type: AM280 SV4, 1480r.p.m,75KW,380V,B3		A	monopolistic	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

### Cement Mills Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
34	3ph Motor	LM335 قايش الكلنكر ( الإنفاق )	Type :Am 160LR4 15kw,380v,1450 r.p.m,B3,31A	Importation	A	monopolistic	AEG	2
35	3ph motor	LM336 قايش الكلنكر النفق الوسطي	Type :Am 180LR4 22kw,380v,1460 r.p.m,B3	Importation	A	monopolistic	AEG	4
36	3ph motor	LM345 قايش الهوبرات	Type : 15KW, 380V,1500r.p.m, N2=60r.p.m	Importation	A	monopolistic		2
37		MCC N2921 N2911	Motor control center(MCC) For cement mill (no.2)complete L.V.& H.V	Importation	A	general	polysuis	2 panel
38		MCC N1A921 N1A911	Motor control center(MCC) For cement mill (no.1)complete L.V.& H.V	Importation	A	general		2 panel

## Spear Part Required to Rehabilitation for Karballa Plant

### Cement Mills Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
39	3ph motor	NM141 EP .fan	Type :Am 315sm4, 110kw,380v,1485 min-1,B5,205amp	Importation	A	monopolistic	AEG	2
40	3ph gear motor	NM155	Type: KL/GM, 0.09kw,380v,1450 r.p.m,N2=23	Importation	A	monopolistic	AEG	4
41	3ph motor	NM157	Type :AM315 MM4 132KW, 380V,1485r.p.m,245amp	Importation	A	monopolistic	AEG	2
42	3ph motor	Nm160 M149,m150, M151,m1	Type:380v,2.2kw,2450r.p.m	Importation	A	general	AEG	20
43	3ph motor	LM370	TYPE: 380V,45KW,1475 min-1	Importation	A	general	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

## Cement Mills Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
44	3ph motor	LM340	Type:380v,45kw,1475 min-1	Importation	A	general	AEG	2
45	3ph motor	NM181	Type:380v,7.5kw,TSV22/MA 150/165	Importation	A	general	AEG	8
46	3ph motor	NM187	Type:380v,4kw,TSV2/MA 54/250	Importation	A	general	AEG	6
47	3ph motor	NM183	TYPE: 380V,0.37KW,910 min-1	Importation	A	general	AEG	8
48	3ph motor	NM123	TYPE:AM132 SP2 380V,5.5KW,2820 min-1,B3	Importation	A	general	AEG	8

**Spear Part Required to Rehabilitation for Karballa Plant**

## Cement Mills Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
49	3ph motor	NM123	TYPE:AM132 SR2 380V,7.5KW,2820 min-1,B3	Importation	A	general	AEG	8
50	3ph motor	NM129	Type:M100L-2A 380v,3kw,2800min-1,B3	Importation	A	general	AEG	15
51	3ph motor	NM128	Type:M100L-2A 380v,4kw,2800min-1,B3	Importation	A	general	AEG	15
52	3ph motor	NM122	TYPE: 3 ph motor	Importation	A	monopolistic	AEG	4
53	3ph Gear motor	NM208	TYPE:A 380V,0.14KW,2800 min-1 Gear type: A Type of construction: H1, N2=54	Importation	A	monopolistic	AEG	4

**Spear Part Required to Rehabilitation for Karballa Plant**

## Cement Mills Dep.: Electric

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
54	3ph Gear motor	NM161	TYPE:DK74 SZ4-2211/178 380V,0.55KW,1330 min-1,B5,1.28A Gear type: DK74SZ4-2211/78,H1,N2=3,6min-1	Importation	A	monopolistic	bauer	8
55	3ph motor	NM115	Type: AM355RQ6R1 380V,190KW,990r.p.m,375A	Importation	A	general	AEG	2
56	3ph motor	NM109	Type: 1LA3113-4AA70-Z 4KW,1435min-1,9.2amp,380v,b3	Importation	A	monopolistic	siemens	6
57	Overbite Magnetic separator	LA943	Type:EUS12/12 LOK Tech .data :magnetic coil, voltage:220v/set Electric consume ption:48a Resistance:4.6 ohm p.c:10.48kw, length=7040mm	Importation	A	monopolistic	AEG	2

**Spear Part Required to Rehabilitation for Karballa Plant**

**Packing Dep.: Mechanical**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
1	Gear Motor-1	Packing	0.75KW ' 1400 r.p.m	Importation	A	general	Lenze	6
2	Air Cylinder KNORR	Packing	35 vm 60/60/30 1/54496 /311 10/81	Importation	A	general	HAUER AND BOECKER	36
3	Clamping Cylinder KNORR Pneumatic	Packing	SDA 20/20 1/39721/10	Importation	A	general	HAUER AND BOECKER	36
4	Air Cylinder	Packing	Whv-1 1/30053 R 1/4" 10/18	Importation	A	general	HAUER AND BOECKER	36

## Spear Part Required to Rehabilitation for Karballa Plant

**Packing Dep.: Mechanical**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
5	Air Cylinder KNORR Pneumatic	Packing	SDA 30/30 113973/01	Importation	A	general	HAUER AND BOECKER	36
6	Air Cylinder	Packing	80-100 DNX-80/100 L8002500100	Importation	A	general	HAUER AND BOECKER	6
7	Air Cylinder	Packing	32-125 , Pmax=10bar DNX 51-32/125 L80021/51125	Importation	A	general	HAUER AND BOECKER	36
8	SHUTTLE VALUE	Packing	WV/01/3 1/69211 , 6/84	Importation	A	general	HAUER AND BOECKER	100

**Spear Part Required to Rehabilitation for Karballa Plant**



**Packing Dep.: Mechanical**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
9	Pulse Value sing	Packing	5/1 1/70731 2/82	Importation	A	general	HAUER AND BOECKER	72
10	Weight+ Monitor	Packing	1/69202 10/81	Importation	A	general	HAUER AND BOECKER	100
11	Switching LUG Bosch	Packing	0820 403022	Importation	A	general	HAUER AND BOECKER	36
12	Compressed Air Hose	Packing	1/73042 2/82	Importation	A	general	HAUER AND BOECKER	36
13	IMPELLER	Packing	30106019 7.10 936 00032	Importation	A	general		72

## Spear Part Required to Rehabilitation for Karballa Plant

### Packing Dep.: Mechanical

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
14	HAND Operation Valve	Packing	Wkv-1 1/30091 R 1/4 " 2/85	Importation	A	general	HAUER AND BOECKER	36
15	LEVEL Monitor	Packing	10A-125,250V AC 1/2 HP 125 VAC (1LS19-4PG)	Importation	A	general	Germany	6
16	Regulator Tradation	Packing		Importation	A	general	Germany	36
17	VALUE PLATE	Packing	3705040404 H	Importation	A	general	Germany	36

## Spear Part Required to Rehabilitation for Karballa Plant

**Packing Dep.: Mechanical**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
18	Roller Level Value	Packing	WSVS-001-1 1/81259 83/89	Importation	A	general	Germany	60
19	Bag Air charge belt	Packing	800mm * 2700mm	Importation	A	general	Germany	6
20	Solenoid Valve	Packing	Druk berich (1-10)bar Type 9062 Einges tell tan F 4.5 bar IP65(250V/3A) (250=0.5A)	Importation	A	general	Germany	36

## Spear Part Required to Rehabilitation for Karballa Plant

**Packing Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
21	3ph Gear motor	RM166	TYPE: 1LC3 130-4AC71 380V,5.5KW,1450r.p.m,11.7A,B5 GEAR TYPE: GMS60 132 SU N 2=31.8min-1,B3	Importation	A	monopolistic	siemens	3
22	3ph motor	RM262	TYPE: KA1-1325 BB 5.5KW,1450r.p.m,11.7 amp,B3	Importation	A	monopolistic	sihorch	10
23	3ph motor	RM188	TYPE: R1, 514-72,90L 1.5kw,1450min-1 ,B3	Importation	A	monopolistic	sew	8

**Spear Part Required to Rehabilitation for Karballa Plant**

**Packing Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
24	3ph gear motor	R2 261 Rotary drive	Type: 11242 16 10.1 8/81 0.75kw,1500r.p.m,M21-45-211 NMN2:136-26 Gear type: ZNA1S	Importation	A	monopolistic	Lenz	4
25	3ph gear motor	RM195	Type :AM132 SR4 5.5KW,145r.p.m,12amp,b5 Gear type: GT3C3-132-SA4 N2=59r.p.m	Importation	A	monopolistic	AEG	3
26	3ph motor	RM168	Type:AM160 MR4 11KW,1450min-1,22.5A,B3	Importation	A	monopolistic	AEG	2

## Spear Part Required to Rehabilitation for Karballa Plant

**Packing Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
27	3ph Gear motor	RM793	Type:AM100LT4 380V,2.2KW,7.3A,B5,1450r.p.m Gear type:GT2-100LT4 N 2=69 min,b3	Importation	A	monopolistic	AEG	4
28	3ph Gear motor	R790	Type :R80 DT90S4 380V,1.1KW,1400r.p.m GEAR TYPE: R80 ,N2=19 min,B3	Importation	A	monopolistic	SEW	4
29	3ph Gear motor	R2M3 87	Type:R60 DT90S4Z 380V,1.1KW,1400r.p.m, 2.85A ,B5 Gear type:R60,B3,N2=106min	Importation	A	monopolistic	SEW	6

**Spear Part Required to Rehabilitation for Karballa Plant**

**Packing Dep.: Electric**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
30	3ph motor	Drum motor	Type:DT242/67 1.5KW, 380v	Importation	A	monopolistic	beumer	3
31	3ph motor	Drum motor	Type :DT343- V3002 380V,2.2 KW	Importation	A	monopolistic	beumer	3
32	3ph Gear motor	R177	Type ,0.25KW,1400r.p.m Gear type: H1,N20.34 min-1	Importation	A	monopolistic	Deatra	10
33	3ph Gear motor	R137	Type 5607SZ42211/143-LW-ZWD, 0.037 KW,B5,380V Rotary dosing slider	Importation	A	monopolistic	bamer	10
34	3ph gear motor	R2M192	Type: H, N2=0.34min , belt conveyer 380v, type: R60 DT90S4B 1.1KW,1400r.p.m Gear type: R60,B3,N2=162 min	Importation	A	monopolistic	SEW	6

## Spear Part Required to Rehabilitation for Karballa Plant

### Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
1		High tension motor	Carbon brush Type: k14z3 , size : (40*20*50)mm	Importation	A	general	Schunck Germany	1000
2		Electrical Stations	Approximate switch Type: MP-10H-UZ3 20-250VAC,5-500MA( NO+NC)	Importation	A	general	Multi prox Turck	50
3		Electrical Stations	Approximate switch TYPE: BI10-P30SR-VP4X/85 10-65vdc,150ma( no-nc)	Importation	A	general	turck	80
4		Electrical Stations	Speed monitor type: SWE001 220VAC,40-600min-1	Importation	A	monopolistic	KEIPE	50
5		Electrical Stations	Electronic over load rely type: 3ub10 Setting range: 25-100a	Importation	A	monopolistic	siemens	70



## Spear Part Required to Rehabilitation for Karballa Plant

### Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
6		Electrical Stations	Speed monitor type: SWE005 220VAC,8-120min-1	Importation	A	monopolistic	KEIPE	50
7		Electrical Stations	Taco generator type: TDP0.2 + TDP 0.2+2 2*40VDC,2*250MA( tachometer-dynamo) ( 0- 1000r.p.m), 6000r.p.m	Importation	A	monopolistic	AEG	20
8		Electrical Stations	Electronic over load relay type: -3UB1241-1H Setting range: 160-630	Importation	A	general	SIEMENS	20
9		Electrical Stations	Speed monitor type: swe010,220vac,4-60 min-1	Importation	A	general	KEIPE	60
10		Electrical Stations	Pull rope switch emergency Switch cast clad with rope Level type: E11HTE	Importation	A	general	KEIPE	80

## Spear Part Required to Rehabilitation for Karballa Plant

## Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
11		High tension motor	Over current time lag relay Type: RSZ3 NKVa,RS:275-2883 IN:1A,50HZ,UH: 24-220VDC	Importation	A	general	AEG	30
12		High tension motor	Relay time type: SZBN-52-S U: 220VAC,50HZ,T: (0.35-60h) 500w,250vac,6a	Importation	A	general	Schleicher	30
13		High tension motor	Electronic speed monitor Type: JMNC:220VAC,8-12000Imp/min With sensor type: DG10	Importation	A	general	kiepe	40
14			Spare parts for H.V circuit Break type: E125 40/12-2 UI: 75KV, UN: 12KV IN:3000AMP,F 50/60HZ,I:50KA ITH:50KA,IDYN:125KA 0-3min- co-3 min -co	Importation	A	monopolistic	AEG	15 set

## Spear Part Required to Rehabilitation for Karballa Plant

### Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
15			Spare parts for H.V circuit Break type: E6316/36-2 UI: 170KV, UN: 36KV IN:1600A,F: 50HZ, ITH:31.5KA,IDYN:80KA	Importation	A	monopolistic	AEG	15 set
16		Electrical Stations	Auxiliary relay with 3 change over switch type: HP3-220VAC AW513804 with plug base	Importation	A	general	matsushita	120
17		Electrical Stations	Auxiliary relay with 3 change over switch type: HP4-48VDC AW59255 with plug	Importation	A	general	matsushita	200
18			Oil pressure switch range: 7 bar 125/250 VAC,15A	Importation	A	general	ashcret	30

## Spear Part Required to Rehabilitation for Karballa Plant

### Electrical Stations

No.	Item	Situation	Description According To Superior Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
19		Electrical Stations	Over current inverse time lag relay Type: micom 121, v:130-250 vdc/250vac for high voltage motors	Importation	A	monopolistic	Elstom	40
20		Electrical Stations	Local switch one direction Type: 3LB3 700-6Z-D51 VDE0660, IEC408, 25A	Importation	A	monopolistic	siemens	600
21		Electrical Stations	Local switch tow direction Type: 3LB3 701-2Z-D55 VDE0660, IEC408, 25A	Importation	A	monopolistic	siemens	300
22			Current Transformer type: SYE300 600/1A,VA:10 36/75/ 170KV, 120KA, M5	Importation	A	monopolistic	AEG	10

## Spear Part Required to Rehabilitation for Karballa Plant

### Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
23		Electrical Stations	Electronic over load relay Type: 3ub10 01-1b setting range : 2.5-25a	Importation	A	general	siemens	100
24		Electrical Stations	Electronic over load relay Type: 3ub12 11-1d setting rang: 20-80a	Importation	A	general	siemens	60
25		Electrical Stations	Electronic over load relay Type: 3ub12321 1f setting rang: 50-200a	Importation	A	general	siemens	30
26		Electrical Stations	spare parts for oil starter Type(wda09516,wda0336wda0213) 1-oil circulating pump 2- contact stud 3- drum 4- auxiliary switch E-U 5- pilot motor 6- central contact finger 7- drum segment 8- contact spring 9- insulating bushing 10-resistor 11- disconnection bushing	Importation	A	general	BEA Germany	2 20 3 10 4 25 4 4 4 3 set each type 4

## Spear Part Required to Rehabilitation for Karballa Plant

## Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
27		Electrical Stations	Contactora type: 3TB4717-0A Coil: 220vac, ith=90a	Importation	A	general	siemens	60
28		Electrical Stations	Contactora type: 3TB4817-0A Coil: 220vac, ith=100a	Importation	A	general	siemens	60
29		Electrical Stations	Coil: 220vac, ith=160a Contactora type: 3TB5017-0A	Importation	A	general	siemens	20
30		Electrical Stations	Contactora type: 3TB5217-0A Coil: 220vac, ith=200a	Importation	A	general	siemens	25
31		المحطات	Coil: 220vac, ith=300a Contactora type: 3TB5417-0A	Importation	A	general	siemens	25
32		Electrical Stations	Contactora type: 3TB4317-0A Coil: 220vac, ith=35a 2no+2nc( 2no+2nc)	Importation	A	general	siemens	200

**Spear Part Required to Rehabilitation for Karballa Plant**

## Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua,
				Import local Purchasing Or Manufacturing				
33		Electrical Stations	3 PH CAPACITOR BAND Type: PHEP4/181/1, FN:50HZ QN:118KVAR, UN: 6930V	Importation	A	general	ESTA	4
34		Electrical Stations	Disk thyristor type: T670N1800  SOC61-15Ng,Itrmsm: 1500 amp	Importation	A	general	AEG	30
35		Electrical Stations	Air flow switch type: ISL-1E IP=65,15(8)A,220VAC	Importation	A	general	Ascroft	30
36		Electrical Stations	3PH liquid starter for high voltage motor type: DAFA70H,1000/800A Nominal out put: 22*2000kw with attach short- circuit contactor complete	Importation	A	monopolistic	BEA	3 set
37		Electrical Stations	3PH liquid starter for high voltage motor type: AFA70,1000/800A JP42/53 Nominal out put: 2300kw with attach short- circuit contactor complete	Importation	A	monopolistic	BEA	2 set

**Spear Part Required to Rehabilitation for Karballa Plant**

## Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
38		Electrical Stations	PH failure protection relay Type: A1911 N001,3PH,380V,dold	Importation	A	general	DOLD	250
39		Electrical Stations	Oil flow switch type: HNMS11PN10,220V,4A,0-30BAR	Importation	A	general	siemens	10
40		Electrical Stations	CONTACTOR TYPE: 3TB4617-0A,IE/AC1,80A,coil:220vac	Importation	A	general	siemens	90
41		Circuit breaker	Spare parts kit for circuit breaker type: 3wn6,in:630a,ue:500v	Importation	A	general	Siemens	30 set
42			Voltage transformer type: ZY3010,33KV/110V,450VA,36/75/170KV	Importation	A	general	AEG	9
43			SPARE PARTS FOR h.v. circuit breaker Type: MC806/12-2, UN:12KV,IN:630A I:31.5KA,T:2sec,U:75KV,F:50/60HZ	Importation	A	general	AEG	30 set

**Spear Part Required to Rehabilitation for Karballa Plant**



## Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
44		Electrical Motors	<p>SPEAR PARTS FOR three ph liquid starter type: DAFA70H, DAFA 50N</p> <p>1-container frame for type:DAFA70H</p> <p>2- container frame for type:DAFA50H</p> <p>3-set electrode type:514 2106-2/AR1</p> <p>4- bushing cp.l type:514.1-2/AR1</p> <p>5-earthenwar pot type 515.1003-3/a</p> <p>6- thermostat type: 261-501/g</p> <p>7-set main contact type:G500vol,2pol.800a</p> <p>8- auxiliary switch block</p> <p>9- magnetic coil type: n125,220vac.50hz</p> <p>10-rectifier type: b1000/900 101a</p> <p>11-auxiliary contact G500VO/65</p> <p>12- motor regulation drive type: OIV71a-4</p>	Importation	A	general	BEA	<p>6</p> <p>4</p> <p>3</p> <p>8</p> <p>8</p> <p>15</p> <p>12</p> <p>20</p> <p>12</p> <p>12</p> <p>10</p> <p>6</p>

**Spear Part Required to Rehabilitation for Karballa Plant**

## Electrical Stations

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
45		Electrical Motors	Bearing for high voltage motor	Importation	A	general	FAG SKF	
			1-bearing no .NU219MC3					30
			2- Bearing no. 629C3					30
			3- Bearing no. NU224MC3					30
			4- Bearing no. 6224C3					30
			5- Bearing no. NU 234 MC3					30
			6- Bearing no. 6234C3					30
			7- Bearing no. NU226 MC3					30
			8- Bearing no . 6226C3					30
			9- Bearing no. NU221MC3					30
			10- Bearing no. 6221C3					30
			11- Bearing no. NU216MC3					30
			12- Bearing no. 6216C3					30
			13- Bearing no. 632C3					30
			14- Bearing no. NU212MC3					30
			15-Bearing no. NU220MC3					30
16- Bearing no. NU213	30							

# Computer & Instrumentations

**Spear Part Required to Rehabilitation for Karballa Plant**

## Industrial Computer:

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
1	I/O device	Motor Control Center (MCC)	I/O device cabinet consist of: a-cpu card type bpu3b b- I/O card 48 bio3q c-I/O card 48bi034 d- data transmitter card 12tk33b e- data receiver card RT34b f-power monitor card zplozh g- de multiplayer card DT9E h- buffer card GK185	Importation	A	monopolistic	Germany	10
2	Platforms operation BACK UP& KEY BOARD	CCR CONTROL CENTER ROOM	a-key-board with wiring type poll takt 11 b-cpu card type bpu3e c- whatch dog zs44b d- power supply unit INT-9E E- Inter face card BIK2K	Importation	A	monopolistic	Germany	10

**Spear Part Required to Rehabilitation for Karballa Plant**

**Industrial Computer:**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
3	Central Computer Type Pdp11/23	CCR& poltakt	MDM100Consist of the flouting card: a- group card 021654 b- A/D convector 021647 c- mux.& relay for RTD008990 d- central processor unit 021600 e- prom- ram memory 002211616 f- floating power supply 025421 g- mux- driver & a/d convert or counter 021601 h- main power supply 025420 i- plarn – relay output 025526 REV	Importation	A	monopolistic	Dec/USA Digital Equipment Corp ration Comp.	8

**Spear Part Required to Rehabilitation for Karballa Plant**

## Industrial Computer:

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
4	Control system on temp. Instrumentations MDM100	All the plan and the location in the electrical stations Ncc	<p>MMD100 consist of the flowing card:</p> <p>a- group card 021654</p> <p>b- A/D CONVERTOR 021647</p> <p>c- mux.&amp;. relay for rtd008990</p> <p>d- central processor unit 021600</p> <p>e- prom- ram memory 0211616</p> <p>f- floating power supply 025421</p> <p>g- mux- driver &amp; a/d converter counter 021601</p> <p>h- main power supply 025420</p> <p>i- alarm&amp; relay output 025526 rev.</p>	Importation	A	monopolistic	Leads& North rop Company Italy	3

**Spear Part Required to Rehabilitation for Karballa Plant**

## Instruments Dep.: Crasher

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
1	MDM20	Crasher	Multi-detecting monitoring 20 measuring temp. point compatible with RTD pt100,3wire, monitoring& output ready alarm,122ax.mmax	Importation	A	general		2
2	Controller	B1SO1 B2SO1 B2EO1- B1EO1	Controller siemens Type sipart DR22 P.S 24V AC,I/P 0-20MA DUAL INPUT	Importation	A	monopolistic	siemens	8
3	Vibro. control	B1S11 B2S11	Vibro control type: CV110,P.S 220VAC,Alarm, max, Max max 0/p : 0-20 ma,0-10vdc.luith sensor Type T68HF,0/P:0-3VAC,RI15KR	Importation	B	monopolistic	shend Genay	2

**Spear Part Required to Rehabilitation for Karballa Plant**

**Instruments Dep.: Crasher**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
4	Video Monitoring system	B1XO1 B2XO2 Crasher	Modification of video monitoring system for mixture storages	Importation	C	general	Grundiy Germany	2
5	Weigh feeder & Belt feeder system	Crasher	Modification of control system panel for weigh feeders & belt feeder	Importation	B	monopolistic	Shench Germany & AE6 Germany	6

**Spear Part Required to Rehabilitation for Karballa Plant**



**Instruments Dep.: Kiln**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
6	Primary air- flap Transmitter	L1G2O L2G2O	Type: pk615-m4l 0-20 ma 0-270 O.S 20-30 VDC	Importation	A	monopolistic		2
7	Oil transmit	L1F14 L1F21 L2F14 L2F21	Electra mechanical system oil transmit 0-10000 L/H 0/P 0-20 MA	Importation	A	monopolistic	BOPP & Reuthe gmbt Germany	4

## Spear Part Required to Rehabilitation for Karballa Plant

**Instruments Dep.: Kiln**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
8	Weigh-feeder	Kiln	Modification of weigh feed system with the modification of sensing method	Importation	A	monopolistic	Shench Germany	2
9	Direct current control	Kiln	Modification of control panel of direct current motor of the main drive motor of the kill,450kw	Importation	A	monopolistic	AEG	

**Spear Part Required to Rehabilitation for Karballa Plant**

**Instruments Dep.: Kiln**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
10	Vibro Control	K12S11 K12S12 K12S13	Type: CV110 P.S 220VAC,alarm max Max max, o/p : 0-20ma 0-10vdc , with sensor Type: T68HF 0/P: 0- SVAC Ri:15kr	Importation	A	monopolistic	shench	6
11	Gate Transmitter	Kiln	Type: D4K, P.S 24 VDC 0/P: 0-20 MA at 0-270	Importation	B	monopolistic	H&B	6
12	scanner	L1T10 L2T10	Modification of scan temp of kill shell 0-600	Importation	A	monopolistic	FLS	2

**Spear Part Required to Rehabilitation for Karballa Plant**

**Instruments Dep.: Cooler**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
13	Pyro-metter & Transmitter	L1T19- L1T20 L2T19- L2T20 COOLER	Ardonox ,type C70285-A511-A6 O/P 30-200C O/4-20MA , P.S 220AC	Importation	A	monopolistic	siemens	4
14	Grate-speed transmitter	L1S04- S05S06 L2S04- S05S06 COOLER	P.S:220V,50HZ,I/P 0-25 push/min o/p 0-20 MA	Importation	A	monopolistic	Claudius patter	6
15	Pressure transmitter	L1 P12 L1 P12 COOLER	Type: T15240 p.s 24VAC Rany- 1..-0...+1mb o/p 0-20MA	Importation	A	monopolistic	H&B Genay	2

**Spear Part Required to Rehabilitation for Karballa Plant**

**Instruments Dep.: Raw miles**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
16	Vibro Control	E1SO2 E2SO2	TYPE:CV110,P.S 220VAC,ALARM,max,maxmax o/p:0-20ma,0-10 v d.c with sensor type:T68HF O/P: 0-3 VAC,R15KR	Importation	A	monopolistic	Shench Germany	2
17	Weigh belt feeder	Raw miles	Modification of control system panel For weigh bolt fades	Importation	A	monopolistic	Shench Germany	2
18	Level Transmitter	E1LO9 E2LO9	Raw mill level transmitter Type: MLC-100,p.s 220vac, 0/p:0-20 ma with sensor Type fully phone Ri 500R	Importation	A	monopolistic	Polysius Germany	4

**Spear Part Required to Rehabilitation for Karballa Plant**

**Instruments Dep.: Raw miles**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
19	Gate Transmitter	Raw miles	TYPE: D4K,P.S 24VDC 0/P:0-20MA at 0-270	Importation	B	monopolistic	H&B Germany	4
20	Servo motor	E1G07 E1G08	Type:D4K,M163L V:220VAC,F:50HZ,N:670/770min-1 I:0.4/0.4 AMP,P=18W,C:3/2.5 MF Brake:u:220VAC, 0.06AMP	Importation	A	monopolistic	Schoppe& Faesergmbh Germany	2
21	Oil transmitter	E1F12 E2F12	Electro- mechanical system Oil transmitter 0-10000 L/H 0/P:0-20 MA	Importation	A	monopolistic	Bop & Reuther GM BH Germany	2

**Spear Part Required to Rehabilitation for Karballa Plant**

**Instruments Dep.: Raw miles**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
22	SERVO motor	E1GO7 E2GO8	Servo motor of gate type p4k Type: M403L,V:230-245VAC,50HZ N1:680/815 min-1,I=0.6/0.54 AMP C: 4/3MF,Brake:230vac60ma	Importation	B	monopolistic	Schoppe & Faesergmbh Germany	5
23	Silo pilot	Raw miles and Cement	Type: FMM760,RNNG 70M Counter stp1 pus/decameter p.s 3ph motor, control voltage 24 v a.c	Importation	A	monopolistic	ETH Germany	3
24	Control panels	general	Modification of CCR for 1- cement mill n1,n2,n3,n4 2- raw mill E1,E2 3- KILN K1,K2 4- - packing					

# Electrostatic Precipitators



## Spear Part Required to Rehabilitation for Karballa Plant

### Electrostatic precipitators Dep.

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing	A,B,C			
1		Electrostatic precipitator	<p style="text-align: center;">Pumps                      Type: MB65.9- STUF. D                      Q= 5.6-7.8 L/SEC                      H=344-324 M                      N= 33.2-39.1 KW                      n = 2950 r.p.m                      N motor= 45 k w</p>	Importation	A	general		4

## Spear Part Required to Rehabilitation for Karballa Plant

### Electrostatic precipitators Dep.

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	Monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
2		Electro. static precipitator	<p><b>Pumps Type: 141380,8 - STUF.D</b>  <b>Q= 9.42-13.2 L/SEC</b>  <b>H=366-34 AM</b>  <b>N= 53.9-60 KW</b>  <b>n = 2950 r.p.m</b>  <b>N motor= 75 k w</b></p>	Importation	A	general		4
3		Electro. static precipitator	<p><b>Motor CLOBF VAIVE( motorize)</b>  <b>Type: A184 k-600</b>  <b>Force 600 k g f</b>  <b>LIFT height 600mm,220v,50HZ</b>  <b>Detection meters(100,200,1600) OHM</b></p>	Importation	A	general		8
4		Electro. static precipitator	<p><b>Gear motor : n1=700 r.p.m ,</b>  <b>n2=3.7 r.p.m,</b>  <b>kw=0.15,380v,0.73A</b></p>	Importation	A	general		30

## Spear Part Required to Rehabilitation for Karballa Plant

## Electrostatic precipitators Dep.

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
5		Electro. static precipitator	Gear motor: n1= 1380 r.p.m n 2= 1.25 r.p.m , 0.15kw,380v,0.72A	Importation	A	general		30
6		Electro. static precipitator	LE Carbon Lorraine 981sil ohm- type 500 hm+ 10%	Importation	A	general		30
7		Electro. static precipitator	Pulls trans former Min vohage trigger \ v Max vohaga trigzr sv	Importation	A	general		50
8		Electro. static precipitator	Nozzle Don't effecting salt	Importation	A	general		200

## Spear Part Required to Rehabilitation for Karballa Plant

### Electrostatic precipitators Dep.

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
9		Electro. static precipitator	Thyristor 81RK120A 171 RK120A 71 RCG 10 8920S	Importation	A	general		50 50 50
10		Electro. static precipitator	Slot stat relay Input 3-32 Vd.c Output 220avc , amp25a	Importation	A	general		50
11		Electro. static precipitator	MICRO SWITCH 6A,250,VAC	Importation	A	general		50
12		Electro. static precipitator	Unit cart ELEX E008-008	Importation	A	monopolistic	ELEX	30

# Industrial Services

**Spear Part Required to Rehabilitation for Karballa Plant**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade	monopolistic Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing	A,B,C			
1	114.01.01	Main Computer station	Screw compressor Type VMX 236LG Q=15 BAR, N=2975 r/min complete	Manufacturing	A	monopolistic	Arezener	8
2	114.01.01	Main Computer station	Oil separator Type ZU47, P=14 bar t=100co capacity	Manufacturing	A	monopolistic	Arezener	8
3	106.04.01	Main Computer station	Heat exchanger Type LK40/160 Pin=6 bar, Pout=bar Tin=80co,tout=22co	Importation	A	General	Arezener	6

**Spear Part Required to Rehabilitation for Karballa Plant**

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
4	111.01.12	Boiler station	burner (complete) Burner .perform.370kg/h Type : MK 70RS Fuel Temp.140c0 Fuel pressure 25 bar	Manufacturing	B	monopolistic	pillard	2
5	112.01.01	Boiler station	Screw pump Type: SNH440R46E6-W2 P=40 bar, power=33kw Q=410 L/min, N=1450r/min N=(75.380)mm2/s (complete)	Manufacturing	A	monopolistic	pillard	4
6			Thermo oil pump Type : NTT65-200 U4A-W4 P=5-4bar,Q=1416 L/min Power = 13.6kw, N=2900 r/min complete	Importation	A	General	pillard	2

## Spear Part Required to Rehabilitation for Karballa Plant

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	monopolistic Or General	Original Manufacture	Qua.
				Import local Purchasing Or Manufacturing				
7		Boiler station	Flow meter Type: O4P50 AG 19 E/D 2050 Size 50,p=40 bar Q: Max. =300L/min Min=30 L/min NO =619964	Manufacturing	A	monopolistic	pillard	6
8		Boiler station	Valve for heavy Fuel Oil (Normal close) Type MK NC 220V AC or DC T=(0-160)2 P=(0-40) bar R(3/4)	Manufacturing	A	monopolistic	Gottfr Muller Forchtenbery wurtt	6
9		Boiler station	Valve for heavy Fuel Oil (Normal open) Type 45/A/NO 220 V HC or DC T= (0-160) co,p= (0-40)bar R=(3/4)	Importation	A	monopolistic	Gottfr Muller Forchtenbery wurtt	3



## Spear Part Required to Rehabilitation for Karballa Plant

No.	Item	Situation	Description According To Supplier Manuals	Source	Importance Grade A,B,C	Special Or General	Original Manufacture	Quantity
				Import local Purchasing Or Manufacturing				
10	106.04.01	Main Compressor station	Screw compressor Type VM 410-3 Q=87.5m <sup>3</sup> /min P1=1 bar	Manufacturing	B	General	Arezner	6

## **Annex - No.( 3)**

**Investment Law No. (13) of 2006.**

# Unofficial translation

**In the name of people**

**Presidency Counsel**

Pursuant to what was approved by the Council of Representatives in accordance with provisions of Para (first) of Article (61) of the constitution and elapse of the legal period given in Para 5/A of Article 138 of the constitution ,the following law is promulgated

**No. (13) of 2006  
The Investment Law**

## **Chapter One**

### **Definitions**

#### **Article (1)**

The following terms, wherever mentioned in this Law, shall have the following specific meanings unless the context indicates otherwise:

**A: The Council :**the Council of Ministers

**B: National Commission for Investment:** the commission established in accordance with this law responsible for drawing up the national policy and laying out its guidelines and monitoring the implementation of these guidelines and instructions in investment. It shall specialize in investment projects of a federal nature exclusively.

**C: Region's Commission:** The investment commission of the region responsible for investment planning and granting investment licenses in the region.

**D: Governorate Commission :** The investment commission of the governorate not organized in a region responsible for investment planning and granting investment licenses in the governorate.

**E: The commission:** The National commission for Investment or the Region's commission or the Governorate Commission as the case.

**F: Chairman of the Commission:** the Chairman of the National Commission for Investment.

**G: The Project:** the economic activity subject to the provision of this law.

**H: The Assets:** the tools, apparatuses, equipments, machineries, transportation means and office furnishings and appliances to be used for the project exclusively and the furniture and appliances of the hotels, tourist cities, hospitals, schools and colleges.

**I: The foreign Investor:** is the investor who does not hold the Iraqi nationality in the case of real person, and is registered in a foreign country in the case of a juridical or legal person.

**J: The Iraqi investor:** is the investor who holds Iraqi Nationality in case of real person, and registered in Iraq in case of a juridical or legal person.

**K: Taxes and duties:** all kinds of taxes and duties imposed according to applicable laws.

**L: The designed production capacity:** is the production capacity designed within a specific unit of the time (hour, day.....etc) in accordance to what is fixed in the documents incoming with the machine of the supplier and the feasibility study of the project.

**M: Investment Portfolio:** A collection of investments in shares and bonds.

**N: Investment:** is the investment of capital in any economic activity or project that results in a legitimate benefit for the country.

## **Goals and Means**

### **Article(2)**

This law aims at the following:-

**First:** To promote investment and transfer modern technologies in order to contribute to the process of the developing and enhancing Iraq, and expanding and diversifying its production and service base.

**Second:** To encourage the Iraqi and foreign private sector to invest in Iraq by providing the required facilities for establishing investment projects and enhancing its competitive capacities in the local and foreign markets for projects covered by this law.

**Third:** To develop human resources based on market demands and provide work opportunities for the Iraqis.

**Fourth:** To protect the rights and properties of investors.

**Fifth:** To expand exports and improve the balance of payments and balance of trade of Iraq.

### **Article 3**

The following means shall be adopted to realize the objectives of this law:

**First:** To grant projects covered by provision of this law the necessary privileges and guarantees for its continuation and development by providing support in a way that enhances the competitive capacities of these projects in the local and foreign markets.

**Second:** To grant projects that obtained an investment license from the Commission, additional facilities and exemptions from taxes and duties in accordance with the stipulations of this law.

## Chapter Two

### The National Commission for Investment and the Investment Commission in the Regions and Governorates

#### Article 4

**First:** A Commission shall be established and called the “The National Commission for Investment”.it shall enjoy a juridical personality and shall be represented by the Chairman of the Commission or the person authorized by him. It shall be responsible for drawing up the national policies for investment and drawing up it's Plans, regulations as well as monitoring the implementation of these guidelines and instructions in investment. It shall specialize in strategic investment projects of a federal nature exclusively.

**Second:** The National Commission for Investment shall be managed by Board of Director comprised of nine member who must be competent, specialized, and hold a college degree that suits the specialty of the Commission. They must not have been sentenced for a felony or misdemeanor of moral turpitude or have declared their bankruptcy.

#### Third:

- A. Upon a request by the prime Minister, the Council of Ministers shall nominate a Chairman of the Commission at a grade of Minister and a Deputy Chairman at a grade of Deputy – Ministry for a period of five years and present them to the Council of Representative for approval.
- B. The prime Minister shall appoint four member for a period of five years at a Grade of Director General.
- C. The Prime Minister shall select three members from the private sector for five years after their nomination by Chairman of the Commission and specifying their compensations according to the bylaws.
- D. At the conclusion of the membership of any member of the Commission referred to in Paragraph (A and B) of this Article in cases not involving dismissal and resignation, the Prime Minister shall assign them to any governmental entity at the same grade. Those mentioned in (A) of this article shall be retired on pension when not assigned to a government position equivalent to their grade.
- E. The Council of Representatives may directly dismiss the Chairman of the National Commission for Investment and his Deputy, or upon a request by the Prime Minister for compelling reasons.
- F. The Council of Ministers may dismiss or replace any member of the Commission or replace him with others in case he does not adhere to the standards and regulations of the Commission.
- G. The Board of Directors of the National Commission for Investment shall meet at the invitation of its Chairman. The quorum of convening and adopting resolutions and recommendation shall be determined by absolute majority. The conduct of work shall be organized by by- laws issued by the commission.
- H. The National commission for Investment shall be connected to the prime Minister.
- I. The salary scale and entitlements of the Commissions employees shall be determined by a decision of the Prime Minister based on a proposal from the Chairman of the National Commission for Investment.

#### Fourth:

The Commissions headquarters shall be in Baghdad and it may appoint representatives in the regions and governorates.

### **Fifth:**

The National Commission for investment shall draw up an overall national strategic policy for investment identifying the more important sectors and shall prepare a map of investment projects in Iraq in the light of the information it receives from the regions and governorates. It shall also prepare lists of investment opportunities in strategic and federal investment projects with initial information about these projects and making it available to those wishing to invest.

## **Article 5**

**First:** The regions and governorates not organized in a region may form investment commissions in their areas. The latter shall enjoy the powers of granting the investment licenses, investment planning ,promoting investment and opening branches in their areas within the provisions of this law in consultation with National Commission for Investment to guarantee the availability of the legal conditions.

**Second:** The Investment Commission of the regions and governorate shall be composed of at least seven members including the chairman and the vice chairman of at least seven years of experience and competence and with a university degree appropriate to the specialization of the commission and not convicted in a felony or a misdemeanor involving turpitude or has declared his bankruptcy.

**Third:** The regions and governorates not organized in a region shall establish a mechanism of forming the investment commission of the region and the governorate and dismissing the Commission member in case of not adherence to the Commission regulations and standards.

**Fourth:** The Investment Commissions of the regions and governorate shall coordinate their work with the National Commission for Investment, and shall coordinate and consult with local governments regarding investment plans and facilities.

**Fifth:** The regions and governorates Commissions shall draw up their investment plan in a way that dose not contradict with the federal investment policy and shall prepare list of the investment opportunities in the areas that are subject thereto, with initial data about these projects and offer it to those wishing to invest.

**Sixth:** The regions Commissions shall be connected to the prime Minister of the region and is subject to the scrutiny of the regions Council. The governorate commission shall be connected to the Governor and is subject to the scrutiny of the governorate council in a way that does not contradict with the provisions of this law.

**Seventh:** Regions and Governorates Commissions board of directors shall convene upon an invitation from their chairman . The quorum of convening and adopting resolutions and recommendations shall be determined by absolute majority. The conduct of work shall be organized by by – laws issued by the Commission.

## **Article 6 :**

In addition to ordinary correspondence, the Commission may adopt electronic mail with the official entities connected with the work and activity of the Commission through local networks or the Internet according to guidelines set by the Commission.

## **Article 7 :**

- A- The Commission shall accept investment license requests for projects whose capital is not less than the minimum amount determined by the Council of Ministers or the Council of Ministers of region as the case, by a regulation issued based on a proposal by the Commission.

- B- The Commission must obtain the approval of the Council of Ministers before granting the license if the value of the investment project is more than two hundred and fifty million dollars.
- C- The Commission shall make its final decision concerning the requests of investment license within a period not exceeding (45) forty five days from the date of filing a request.
- D- The decisions of the Commission regarding the approved investments projects shall be obligatory for the purposes of this law.

## **Article 8 :**

The Commission shall have an independent annual budget whose revenues shall be made up of its allocated amount in the State General Budget.

## **Article 9 :**

The Commission shall promote investment through the following:-

**First:** Building confidence in the investment environment, identifying investment opportunities, and promoting and stimulating investment in them.

**Second:** Simplifying the procedures for registration, issuing of investment projects licenses, and following up existing projects and giving them priority in processing with the official entities. Completing the procedures of answering investor requests and obtaining the required approvals for the investor and the project.

**Third:** Establishing one window at the National Commission for investment and the Regions and Governorates Commissions, which includes authorized representatives from the ministries, and members nominated by the Councils of the regions and governorates as the case and the concerned authorities to undertake issuing licenses and obtain the approvals of other authorities in accordance with the law.

**Fourth:** Providing advice, information, and data to investors and issuing special manuals in this regard.

**Fifth:** Setting forth and implementing programs to promote investment in different areas of Iraq in order to attract investors.

**Sixth:** Facilitating the allocation of the needed lands and renting them out for establishing projects for a sum to be determined by the Commission in coordination with the concerned authorities.

**Seventh:** Establishing secure and free investment areas with the agreement of the Council of Ministers.

**Eighth:** Encouraging Iraqi investors through providing them with easy loans and financial facilities in coordination with the Ministry of Finance and with the assistance of Banking Institutions, provided that the investor obtaining the loan shall employ a number of unemployed Iraqis proportional with the volume of the loan.

**Ninth:** Any other tasks related to its work and assigned by the Council of Ministers.

## Chapter Three

### Privileges and guarantees

#### **Article 10:**

The Investor irrespective of his /her nationality shall enjoy all privileges, facilitations and guarantees and shall be subject to the obligations stated in this law. The Iraqi and foreign investor shall have the right for the purposes of housing projects, the use of the land for a sum to be determined between him and the land owner without land speculation according to conditions set forth by the National Commission of investment and the approval of the Council of Ministers. The Commission shall facilitate the allocation of the required lands for the housing projects. The housing units shall be allocated for ownership by the Iraqis after the completion of the project.

#### **Article 11:**

The investor shall enjoy the following benefits:-

**First:** the investor shall have the right to take out the capital he brought into Iraq and its proceeds in accordance with the provision of this law and pursuant to the instructions of the Central Bank of Iraq in an exchangeable currency after paying all his taxes and debts to the Iraqi Government and all other authorities.

**Second:** The foreign investor shall have the right to :

- A. Exchange shares and bonds listed in the Iraqi Stock Exchange
- B. Form investment portfolios in shares and bonds

**Third:** Renting or leasing land needed for the project for the term of the investment project, provided that it does not exceed 50 years renewable with the agreement of the Commission, and provided that the nature of the project and its benefit for the national economy is taken into consideration when determining the period.

**Fourth:** Insuring the investment project with any foreign or national insurance company it deems suitable.

**Fifth:** Opening accounts in Iraqi or foreign currency or both at a bank inside or outside Iraq for the licensed project.

#### **Article 12:**

This law shall guarantee the following for the investor:-

**First:** The right to employ and use non- Iraqi workers in case it is not possible to employ an Iraqi with the required qualifications and capable of performing the same task in accordance with guidelines issued by the Commission.

**Second:** Granting the foreign investor and non –Iraqis working in the investment projects the right for residence in Iraq and facilitate inter and departure from Iraq.

**Third:** Non- seizure or nationalization of the investment project covered by the provisions of this law in whole or in part, except for projects on which a final judicial judgment was issued.



**Fourth:** Non Iraq technicians and administration employees working in any project shall have the right to transfer their salaries and compensations outside Iraq in accordance with the law after paying their dues and debts to the Iraqi government and all other entities.

### **Article 13:**

Any amendment to this Law shall not have any retroactive affect regarding the guarantees, exemptions, and rights recognized by this Law.

## **Chapter four**

### **Investor Obligations**

### **Article 14:**

The Investor shall observe the following:-

**First:** To notify the National Commission for Investment , the Region or Governorate Commission in writing immediately after the installation and equipping of the fixed assets for the purposes of the project and the date of the beginning of commercial activity.

**Second:** To keep proper records audited by a certified accountant in Iraq in accordance with the law.

**Third:** To provide an economic and technical feasibility study for the project and any information, data or documents required by the Commission or other competent authorities regarding the budget of the project and the progress made in its execution.

**Fourth:** To keep records of the projects duty- free imported materials in accordance with the provisions of this Law and specifying the depreciation periods of these materials.

**Fifth:** To protect the safety of the environment and to adhere to the valid quality control norms in Iraq and International regulations in this field also adhere to laws connected to security and health and to public order and Iraqi social ethics.

**Sixth:** To adhere to the valid Iraqi laws regarding salaries, vacations, work hours, work conditions and others as a minimum.

**Seventh:** Commitment to the correspondence of the work progress schedule submitted by the investor with reality provided that the time difference shall not exceed six months, the National Commission for Investment shall set forth punitive conditions in case of exceeding the six –month period and the Commission shall have the right to withdraw the license.

**Eighth:** To train and rehabilitate its Iraqi employees as well as raising their efficiency, skill and capabilities. Priority in employment and recruitment shall be given to the Iraqis.

## **Chapter Five**

### **Exemptions**

### **Article 15:**

**First:** The project that has obtained an investment license from the Commission shall enjoy exemption from taxes and duties for a period of (10) ten years as of the date of commencing commercial operations in accordance with the areas of development defined by the Council of Ministers at the suggestion of the National Commission for Investment based on the degree of economic development and the nature of the investment project.

**Second:** To Council of Ministers shall have the right to propose draft laws to extend or grant exemptions in addition to the exemptions stipulated in paragraph (First) of this Article, or provide incentives, guarantees or other benefits to any project or sector or region and for the periods and percentages it deems appropriate in accordance with the nature of the activity, its geographical location and its contribution to manpower employment and its effect on driving the economic development, for considerations of national interest.

**Third:** The National Commission for Investment has the right to increase the years of tax and duties exemption in a way directly proportional to the increase in the Iraqi Investor share in the project to reach fifteen years if the Iraqi Investor share in the project was more than 50% .

## **Article 16:**

In case the project is moved from one development area to another during the exemption period, the project – for the purpose of exemption stipulated in ( First) of Article 15- shall be treated during the remaining term the treatment of the project in the development areas it is moving to, provided that the Commission is informed of such move.

## **Article 17:**

The project that obtains an investment license shall also enjoy the following:-

**First:** Assets imported for the purposes of the investment project shall be exempted from duties provided that their entry to Iraq is made within(3) three years from the date of granting the investment license.

**Second:** The imported assets required for the expansion, development or modernization of the project shall be exempted from duties in case they led to an increase in the designed capacity, provided they are brought in within three years from the date of notifying the Commission of the expansion or development. Expansion, for the purposes of this law, shall mean adding fixed capital assets aimed at increasing the designed capacity of the project in commodities or services or materials by a percentage exceeding (15%)fifteen percent. Development, for the purposes of this law, shall mean replacing project machines with more developed ones, totally or partially or making a development on the standing devices and equipments of the project by adding new machines and devices or parts thereof with the aim of raising the productive efficiency or improving and developing the quality of the products and services.

**Third:** Spare parts imported for the purposes of the project shall be exempted from duties if the value of these parts does not exceeded(20%) twenty percent of the fixed assets value, provided that they are not be used for any other purpose.

**Fourth:** Hotels, tourist institutions, hospitals, health institutions, rehabilitation centers and educational and scientific organizations project shall be granted additional exemptions from duties and taxes on their imports of furniture, furnishings and requisites for renewing and updating purposes at least once every four years, provided that these items are brought into Iraq or used in the project within (3) three years from the date of the approval decision of the Commission on the import lists and their quantities, and provided that these items are not used for purposes other than the imported purposes.

## **Article 18:**

In case it is found that the project assets totally or partially exempted from customs and duties, are sold, in contrary to the provisions at this law or used not for the project, or used not for the declared purpose then the investor must pay the taxes and fines incurred pursuant to the law.

## **Chapter Six**

### **Procedures for Granting investment and project Establishment License**

## **Article 19:**

**First:** The investor shall obtain the license in addition to obtaining the rest of the licenses for the purpose of enjoying the privileges and exemptions provided by the Commission.

**Second:** To Commission shall grant the license for investment or project establishment based on a request submitted by the investor according to conditions facilitated and prepared by the Commission. The request submitted by the investor shall include the following:-

- A- Filling a request form prepared by the Commission.
- B- Financial competency from an accredited bank.
- C- Projects performed by the investor inside or outside Iraq.
- D- Details of the project intended to invest in and its economic feasibility.
- E- A timetable for completing the project.

## **Article 20:**

**First:** The Commission must issue the establishing license through establishing one window in the region or the governorate not organized in a region that includes authorized representatives of the ministries and relevant bodies. The Commission shall grant project establishment license and obtain approvals from the entities in accordance with the law.

**Second:** To Commission must help the investor to obtain licenses by approaching the competent authorities and exploring the opinions of the entities concerning the issuance of the establishment license. These entities must issue the decision to reject, approve or request amendment within 15 days from the date of being notified. The failure to reply from the entity from which the opinion is solicited shall be deemed as an approval and in case of a rejection there must be cause for it.

**Third:** In case of disagreement between the National Commission for Investment decision and the other entity related to granting establishment license other than the region commission the dispute shall be raised to prime Minister for settlement.

**Fourth:** In case the request for registration in rejected, the applicant may file a complaint to the Chairman of the region or the governorate Commission concerned within(15) fifteen days after receiving notification of the rejection decision. The Chairman of the Commission concerned shall take a decision concerning the complaint in question within a period of seven days. The petitioner may appeal the decision of the Chairman of the Commission concerned rejecting his complaint to the authority to which the Commission concerned is connected to within 15 days from the date the complaints rejection and its decision is deemed final.

# Chapter Seven

## General Provisions

### Article 21:

The project capital subject to the provisions of this law shall be made up of the following:-

**First:** Cash transferred to Iraq through banks and financial companies or any other legal means with the aim of investing it for the purposes of this law.

**Second:** The in – kind assets and incorporeal rights imported to Iraq or purchased from the local markets by the cash transferred into Iraq:-

A- In- kind assets related to the project.

B- The machinery, tools, equipment, building , construction, transportation means, furniture and offices appliances required for establishing the project.

C- The incorporeal rights that include patents, registered trade marks, technical know- how, engineering services, administrative and marketing services and the similar.

**Third:** Profits, proceeds and reserves resulting from the capital invested in Iraq in the project if the capital of such a project was increased or was invested in another project covered by the provisions of this law.

### Article 22:

The foreign investor shall enjoy additional privileges in accordance with international agreements signed between Iraq and his country or multilateral international agreements which Iraq has joined.

### Article 23:

In case the property of the project during the exemption term is transferred to another investor the project shall continue to enjoy granted exemption facilities and guarantees until the end of that period provided that the new investor continue to work on the project in the same specialization or in another, with the approval of the Commission. The new investor must take the place of the former investor in the rights and obligations consequent to the provisions of this law.

### Article 24:

**First:** The investor, with the approval of the Commission, may sell exempted fixed assets or relinquish it to another investor benefiting from the provisions of this law, provided that he uses them in his project.

**Second:** The investor, after informing the Commission, may sell the exempted fixed assets to any person or other project not subject to the provisions of this law after paying the outstanding duties and taxes.

**Third:** The investor, with the approval of the Committee, may re-export the exempted fixed assets.

## **Article 25:**

In the event two or more companies or enterprises merge, the new company or entity resulting from the merger must set up separate accounts for each project before the merger in order to register and apply exemptions and facilitations stipulated in this law during the remaining period of the exemption.

## **Article 26:**

Any project approved in accordance with the provisions of the previous applicable laws shall continue to benefit from all exemptions granted to it pursuant to that law and until the expiration of the exemption period and under the same terms.

## **Article 27:**

Disputes arising between parties who are subject to the provisions of this law shall be subject to the Iraqi law unless otherwise agreed, save to the cases that are subject to the provisions of the Iraq law exclusively or the jurisdiction of Iraqi courts.

- 1- Disputes arising from the labor contract shall exclusively be subject to the provisions of the Iraqi law and the jurisdiction of the Iraq courts. Non –Iraqi labor shall be exempted if the work contract stipulated otherwise.
- 2- If parties to a dispute are non – Iraqis and in disputes not arising from a crime, the opponents may agree on the law to be applied, the competent court or any other agreement to resolve their dispute.
- 3- In case of dispute between partners or between the owner of a project subjected to the provisions of this law, and others that result stoppage of work for a period of more than three months, the Commission may withdraw the license and ask the owners of the project to settle the dispute within a period not exceeding three months. If such period elapsed without settling the dispute between the partners or between the owner of the project and others, the Commission may take legal measures to liquidate the project and notify the owner of the project or one of the partners of such action. The liquidation money shall be deposited in one of the banks after paying the dues of the State or any other dues after final judgment of their entitlement is rendered.
- 4- If the parties to a dispute are subject to the provisions of this law, they may, at the time of signing the agreement, agree on a mechanism to resolve disputes including arbitration pursuant to the Iraqi law or any other internationally recognized entity.
- 5- Disputes arising between the Commission or any governmental entity and any of those subject to the provisions of this law on matters not related to violations of one of the provisions of this law shall be subject to Iraqi law and courts on civil matters. As for commercial disputes, parties may resort to arbitration provided that such an arrangement is stipulated in the contract organizing the relationship between parties.

## **Article 28:**

In case the investor violates any of the provisions of this law, the Commission shall have the right to warn the investor in writing to remove the violation within a specific period.

In case the investor dose not remove the violation within the specified period, the Commission shall summon the investor or who represent him to state his position and grant him other respite

to settle the issue. Upon repeating or not removing the violation, the Commission shall have the right to withdraw the investors license it issued and order stoppage of work on the project and retain the state's right to deny the investor the granted exemptions and privileges from the date of the violation and allow other to retain their rights to demand compensation for the damage caused by this violation, without breaching any punishments or other compensations stipulated in the applicable laws.

### **Article 29:**

All fields of investments shall be subject to the provisions of this law except:-

**First:** Investment in Oil and Gas extraction and production.

**Second:** Investment in banks and insurance companies sectors.

### **Article 30:**

The council of Ministers may.

**First:** Issue regulations to facilitate the implementation of the provisions of this law.

**Second:** Issue bylaws defining the Commissions formations, divisions tasks, process of its work, its authorities, financial affairs, employee affairs and any others matters.

### **Article 31:**

The Committee may issue instructions to facilitate the implementation of regulations issued by the Council of Ministers pursuant to the provisions of this law.

### **Article 32:**

The Provisions of this law shall be applied to the existing and operating projects of the mixed and private sectors which have commenced before the issuance of this law and upon a request from its management and the approval of the Commission with no retroactive effect.

### **Article 33:**

No text shall be valid which contradicts the provisions of this law.

### **Article 34:**

The (dissolved) CPA Order No. 39 of 2003 shall be revoked.

### **Article 35:**

The Arab Investment law No(62) of 2002 issued by the dissolved Revolution Command Council shall be annulled.

### **Article 36:**

This law shall enter into force from the date of its publication in the Official Gazette.

## **Justifying Reasons**

**For the purpose of driving the process of economic and social development and bringing technical and scientific experience and developing human resources, and for creating work opportunities for the Iraqis by encouraging investments and supporting the process of establishing investment projects in Iraq and their expansion and development at various economic levels and by granting privileges and exemptions for these projects, this law is legislated.**