PROFILE OF PANYAM CEMENTS & MINERAL INDUSTRIES LTD.,

BRIEF HISTORY

Panyam Cements & Mineral Industries Limited was incorporated on 23rd June, 1955 with the object of establishing and starting basic heavy industrial unit in the industrially and economically backward region of Rayalaseema. The Company has acquired 268 Acres of Patta lands for Factory and Colony and Mining Lease for limestone over an extent of 3479 Acres adjacent to the Factory.

The limestone deposits in Kurnool-Cuddapah region were surveyed by Dr. King of Geological Survey of India in 1850s. He had declared that the deposits in the area in which our factory is located are capable of sustaining a cement factory with a capacity of 1000 tonnes per day for 1000 years.

Attempts were made by many eminent industrialists as detailed below to start a cement factory by acquiring mining leases:

1. M/s. Sir Lailubhai Shamaldas, Narotham Morarji, Narayanji Kesavji and A. Ghose in 1920;
2. M/s. Associated Cement Companies Ltd., in 1932;
3. Sri Rao Bahadur B.P. Sesha Reddi in 1946 and

They all gave up their attempts at one stage or the other due to certain difficulties. The infrastructural
facilities were very poor, the area being in the heart of reserve forest away from towns and villages, that too on the metregauge line with transhipment both at Guntakal and Guntur, for inward movement of raw materials like Coal and outward movement of Cement. The marketing was difficult as the area around for a hundred miles was economically underdeveloped hinterland. There was difficulty in mustering the share capital due to the economic backwardness of the area.

A team of pioneering industrialists under the leadership of Madmashri M. Somappa who were interested in the economic emancipation of the people of Rayalaseema had at last the good fortune to start a heavy industrial undertaking here and develop it under very heavy odds by producing high quality cement and able marketing. Thus this factory became the harbinger of industrialisation of Rayalaseema. Its success created confidence in other entrepreneurs to start industries in this area and today it can be confidently stated that erelong the Kurnool-Cuddapah region of Rayalaseema will become an Industrial Belt.

The First Cement Plant of 200 TPD on Wet Process imported supplied by M/s. GHH West Germany was commissioned in January, 1959 with the financial assistance of ICICI.
The plant achieved a rated capacity of about 112% within 2 years and high quality cement attracting good market in the States of Andhra Pradesh, Maharashtra and Karnataka. With the success of working of this plant, the Company took up the first expansion by setting up another unit of 300 TPD Wet Process the first indigenous plant supplied by M/s ACC Babcock Limited in the same location viz., Cementnagar and it was commissioned in 1964. Having achieved from this plant also higher rated capacity continuously, and substantial generation of funds the Company again put up and commissioned another expansion unit of 600 TPD the first indigenous Dry Process Plant supplied by M/s ACC Babcock Ltd., in the year 1968. With these achievements in Cement Division, the Company in order to achieve updating the Conversion of 300 TPD Wet process plant into 550 TPD Dry Process in the year 1974, the first of its kind in the country with its own Technical Staff and its own technology. It also diversified in the same year 1974 by establishing a Calcium Carbide Unit of 14,850 tonnes per annum at Hagari, Bellary Dist, Karnataka. The performance of the Carbide Division also has been good with high profitability as it maintained very good quality of more than 280 litres of gas yield and very sound market.
Process of Manufacture of Cement

The main raw material is limestone. It occurs in nature as sheet rock in hillocks about 2 Kms from the factory. The rock is blasted and the boulders are loaded by heavy duty shovels into heavy duty dumper trucks which carry them from the quarry face to the crushers located in the quarry itself. The Crusher reduces the boulders into chips of less than 3/4" size which are carried by a bicable aerial ropeway to the factory. At the factory, limestone and small percentage of Bauxite and Iron Ore are ground to a fine powder in Tube mills loaded with grinding steel balls. The ground material is fed to a kiln through a four stage suspension pre-heater. The kiln is fired with pulverised coal. The material undergoes incipient fusion in the burning zone of the kiln and chemical reactions take place. Silicates, Aluminates and Alumino ferrites of Calcium are produced. The material called Clinker is passed through a Cooler for recuperation of the heat and the cooling of the out-going material. The cooled material is ground with a small percentage of Gypsum in Tube Mills to a fine powder and that is cement. Cement is stored in silos and extracted through packing machines and packed and despatched through wagons and lorries.
In order to keep abreast with the trend in Cement Technology, the Kiln No. I of 200 TPD Wet Process was also converted into 400 TPD Dry Process Unit in the year 1978. The total capacity of Cement works was thus expanded from 200 TPD in 1958 to 1550 TPD or 5,31,000 TPA within a course of 20 years i.e., about eight fold increase. All these expansions and diversifications were completed with the financial assistance of Central Financial Institutions.

In the year 1980, at the instance of Financial Institutions the erstwhile Deccan Wires Limited, a Wire drawing unit of 10,000 tonnes capacity set up in 1976 at Bangalore by the same promoters as that of Panyam Cements was amalgamated with Panyam Cements & Mineral Industries Ltd. The said Deccan Wires Limited was a sick unit in the very first year of its operation. Panyam Cements & Mineral Industries Limited derived from the Amalgamation carried forward loss tax benefits approved under Sec. 72-A of the Income Tax Act. The Wire Division - the amalgamated erstwhile Deccan Wires Limited - after taken over by the Company is being stabilised and is expected to break even in the year i.e., 1985-86. The company has invested a sum of Rs.500 lakhs in the Wire Division for meeting cash losses and capital improvements.
Acetylene Black Project, a further diversification of capacity 1800 TPA at Hagari at a cost of Rs. 600 lakhs was commissioned during August/September 1983.

The means of finances for the establishment and expansion projects are given as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>Project Description</th>
<th>Share Capital</th>
<th>Term Loans</th>
<th>Internal Resources</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>200 TPD Wet Process</td>
<td>53.51</td>
<td>46.00</td>
<td>10.69</td>
<td>110.20</td>
</tr>
<tr>
<td>1964</td>
<td>300 TPD &quot;M&quot;</td>
<td>46.36</td>
<td>75.00</td>
<td>32.64</td>
<td>154.00</td>
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<tr>
<td>1968</td>
<td>600 TPD Dry Process</td>
<td>75.00</td>
<td>190.00</td>
<td>102.00</td>
<td>367.00</td>
</tr>
<tr>
<td>1974</td>
<td>Conversion I 300 TPD to 550 TPD</td>
<td>--</td>
<td>368.00</td>
<td>222.00</td>
<td>590.00</td>
</tr>
<tr>
<td></td>
<td>Calcium Carbide</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1978</td>
<td>Conversion II 200 TPD to 400 TPD</td>
<td>--</td>
<td>80.00</td>
<td>46.00</td>
<td>128.00</td>
</tr>
<tr>
<td></td>
<td>Cement Mill</td>
<td></td>
<td>40.00</td>
<td>40.00</td>
<td>80.00</td>
</tr>
<tr>
<td>1983</td>
<td>Acetylene Black</td>
<td>--</td>
<td>370.00</td>
<td>228.00</td>
<td>598.00</td>
</tr>
<tr>
<td>1978</td>
<td>Wire Division (DWL)</td>
<td>--</td>
<td>--</td>
<td>500.00</td>
<td>385.00</td>
</tr>
<tr>
<td>1980</td>
<td>To meet cash losses after amalgamation</td>
<td>--</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>Modernisation Phase I</td>
<td>--</td>
<td>200.00</td>
<td>80.00</td>
<td>280.00</td>
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<tr>
<td>1984</td>
<td>Modernisation Phase II (under implementation)</td>
<td>--</td>
<td>600.00</td>
<td>284.00</td>
<td>884.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>174.87</td>
<td>1969.00</td>
<td>1547.33</td>
<td>3576.20</td>
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</table>

The Company is prompt in payment of the term loans, instalments to the Central Financial Institutions without any default at any time.

As stated above, the conversion of Kiln Nos. I & II from Wet to Dry Process yielded substantial expansion but, they were not able to attain the rated capacity of 400 TPD and 550 TPD due to several bottlenecks and ancillary equipment not having
been considered at the time of their conversion.

The Company made an application to the Central Government to derate the capacity from 5,31,000 TPA Cement to 4,72,000 TPA mainly due to the non-attainment of the rated capacity from the converted Kilns and Government has pleased to refix the Cement capacity at 4,88,000 TPA. Due to the aged plant and Conversion bottlenecks, the company had drawn up a scheme of modernising the cement plant under Phase I & Phase II. Under Phase I of the Modernisation of Cement Plant Scheme, the aim was to arrest the declining trend in production and meet the immediate requirements in partially re-equipping the Limestone quarries, putting up Electrostatic Precipitators for Cement Mills and Kilns I & II as a measure of pollution control stipulated by the Government, material handling equipments namely, the strengthening of ropeway systems and providing for overhead travelling crane for pre-blending and feeding the proper grade of limestone to the Raw Mills. The Scheme was taken up in the year 1980 with the Financial assistance under the Soft Loan Scheme.

**Modernisation Phase II**

The production of Clinker and Cement during the last 5 years has been about 75% of the rated capacity as the plants have become aged. As explained above, the actual and reali-
Stic achievable capacity of the Cement Division consisting of the 3 units, is about 4,72,000 TPA for which the company had applied for derating against the licenced capacity of 5,31,000 TPA. Under Phase II Scheme, it envisages to achieve this realistic rated capacity of increasing the production by about 70,000 TPA by completely overhauling the systems from limestone quarry to the Packing House. The Scheme provides for equipping the quarries with further additional needs for drilling, overburden removal by Bull-dozer, transport of high grade limestone materials, from other leasehold mines in the same area, material handling namely, ropeway strengthening and overhead travelling crane. It may be seen that from this development of Quarry, the Company will be providing for pre-blending system of limestone for getting proper quality of raw meal. Homogenising and blending the raw meal is also provided to get the uniform and proper grade feed to the kilns to achieve the kiln efficiency also. The rotary kilns are to be modified with proper feed system and especially overhauling of the coolers to reduce the down time due to frequent break-downs. The pre-heater fans and F.K.Pumps both in raw meal transport and cement mills are to be replaced with a simpler material handling equip-
ment like belt conveyor, air lift and bucket elevator. The overall power consumption will also come down because of the change in material handling system. To have steady and smooth running of the plant, provision is made for introducing the secondary firing in the pre-heater which will reduce the thermal load in the burning zone of the kilns and help for the increased life of brick-lining. The existing pre-heater fans will be replaced with slow speed fans of sturdier construction with increased capacity to take care of the extra production whatever the company may get because of the secondary firing. The existing pre-heater fans are somewhere in the first or second floor of raw meal building causing lot of vibration due to high speed running which will be brought down to the ground floor when these new pre-heater fans are installed.

A new Coal Mill of 10 to 12 tonnes/hour has been provided to take care of the short fall in grinding capacity of the existing old mills due to inferior quality of coal and increased needs of kilns due to high ash content in the coal.

The Company is having 3 packers out of which 2 are 2-Spout, 3-Spout stationary type where human element plays
an important role in the accuracy of the weights of the bag. They are about 20 years old. These 2 old machines are being phased out by replacement of new 12-Spout Rotary Packer for quick packing and loading. It may be thus, seen that modernisation Phase II Scheme for which the company has been sanctioned financial assistance by IDBI and others will not only rehabilitate, modernise and renovate the entire processing system from Quarry to Packing House but also increase the productivity of its Cement Division on a sustained basis. This will help in achieving better results i.e., higher production.

WELFARE MEASURES:

Cementnagar the industrial township is located near Bugganipalli R.S. in the Guntur-Guntakal Metre-gauge link of South Central Railway. It is connected to the Kurnool-Cuddapah-Madras Highway through a link road.

Cementnagar has got a population of 15,000. Almost all the employees are provided with housing accommodation. All houses have got facilities like electricity, protected water supply, water closets etc.

The Company is running a Junior College, a High School and two Elementary Schools. In these educational
institutions the media of instruction are both English and Telugu. St. Anne P.C. Convent is running an English Medium School for which the Company has provided building, furniture and all facilities. The total student strength is about 2000.

The Company is having fullfledged dispensary with three qualified doctors and compounders and midwives. An ambulance is provided for taking patients to the District Headquarters Hospital in Kurnool in cases of emergency.

The Company is subsidising the Recreation Club which has all facilities like playgrounds, auditorium etc.

The employees of Cement Industry are covered by the Central Wage Board. They are awarded a need based wage which is linked to All India Consumer Price General Index. The minimum wages an unskilled worker gets about ₹1,000/- p.m. They are also eligible for PF, Gratuity, LTC, Dust allowance, uniforms etc. The company has provided land and other facilities for a temple mosque and churches. The total number of employees on roll is about 1200.

The co-operative Stores assisted by the Company is a mineature super bazar providing all domestic necessities. Its turnover is about ₹5 lakhs p.m. The Co-operative
Credit Society also assisted by the Company by providing short term loans at 13% p.a. interest has eliminated usurious lenders completely. Its lending capacity is about Rs.2 lakhs p.m. The Credit Society has built up its own deposits and reserves.

All the permanent employees of the Company are the members of the Co-operative Stores and the Credit Society.