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# China Report

PLANT AND INSTALLATION DATA

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8 March 1984

CHINA REPORT  
PLANT AND INSTALLATION DATA

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## I. METALLURGICAL INDUSTRY

Item: Wuhan Iron and Steel Company  
[2976 3352 6921 6993 0361 0674]

Location: Wuhan, Hebei, PRC

Data: By further tapping its hidden potentials and properly carrying out technical reforms, this company has been able to increase its output considerably. Its steel, iron, and rolled steel output quotas for 1984 have increased by 200,000 to 300,000 tons as compared to 1983. Its two steel mills have been steadily turning out over 10,000 tons of steel a day. By 10 January this year, the average daily output of pig iron and steel registered 10,463 tons and 10,715 tons respectively. Its goal is to reach an annual iron and steel output of 4 million tons.

Source: Wuhan HUBEI RIBAO in Chinese 15 Jan 84 p 1

Item: Xichang Plant No 410  
[6007 2490 0934 0001 7190 0617]

Location: Xichang Prefecture, Sichuan, PRC

Data: This numbered plant has recently undergone a complete reorganization and has passed the "up-to-standard" test. Source carries a photograph showing the workers smelting iron at the blast furnace workshop.

Source: Chengdu SICHUAN RIBAO in Chinese 30 Dec 83 p 2

Item: Shanghai Copper Plant  
[0006 3189 6894 0617]

Location: Shanghai, PRC

Data: A special plant employing 1,600 employees and workers, this enterprise, despite decreased copper bar output due to necessary technical equipment reforms, has exceeded by threefold the profit targets given by the City Metallurgical Bureau in 1983. They are now trying to realize a profit of 10,000 yuan per worker at the plant.

Source: Shanghai JIEFANG RIBAO in Chinese 2 Dec 83 p 1

Item: Xuzhou Iron and Steel Mill  
[1776 1558 6921 6993 0617]

Location: Xuzhou, Jiangsu, PRC

Data: Since the beginning of 1983, this steel mill, which has been operating at a loss for years, has achieved marked economic benefits by earnestly readjusting the enterprise and improving its management. By the end of September 1983, it has realized a profit of 150,000 yuan. Since its inception in 1958, the mill reported profits in only three years and incurred losses in 22 years. The mill attributed its recent success to, among other things, increased high-grade pig iron output and stringent control of non-production expenditures.

Source: Nanjing XINHUA RIBAO in Chinese 13 Nov 83 p 1

Item: Nanjing Iron and Steel Mill  
[0589 0079 6921 6993 0617]

Location: Nanjing, Jiangsu, PRC

Data: China's largest coke oven was put into operation here 29 November 1983. The 42-openings coke oven has an annual output capacity of 280,000 tons. In addition to producing coke, the large oven can supply other units with 69 million cubic meters of coal gas. This mill's current annual pig iron output is 280,000 tons.

Source: Nanjing XINHUA RIBAO in Chinese 30 Nov 83 p 1

Item: Anshan Iron and Steel Company  
[7254 1472 6921 6993 0361 0674]

Location: Anshan, Liaoning, PRC

Data: This enterprise, China's biggest iron and steel center, fulfilled its 1983 annual production plan six days ahead of schedule, company officials said. The company's output of iron ore and rolled steel was all-time high. Production of these and five other major products exceeded that of last year, officials said. The company has turned over to the state 960 million yuan in profit so far this year, more than last year's figure.

Source: Beijing XINHUA in English 1439 GMT 29 Dec 83

Item: Anshan Iron and Steel Company  
[7254 1472 6921 6993 0361 0674]

Location: Anshan, Shenyang, PRC

Data: This company, China's leading metallurgical complex, has tried out on its two converters a new steel making method, one of the latest now in use in industrially-developed countries. The new method is to blow oxygen and inert gas into the converter both from its top and bottom for oxidation instead of from one end only. It helps balance the chemical reactions of steel, slag and gas in the process of steel making. By this method, 1.5 cubic meters of oxygen is saved for making each ton of steel. More varieties of steel can be made, including some special steels with low phosphorus content, and output raised and quality improved. In seven months of experiments, the two 140-ton converters turned out 500,000 tons of steel, cutting costs by 2.3 yuan per ton. Officials of the Ministry of Metallurgical Industry said the new technique had passed technical appraisals and would be useful in upgrading China's large converters.

Source: Beijing XINHUA in English 1147 GMT 5 Jan 84 OW

## II. TRANSPORTATION EQUIPMENT INDUSTRY

Item: Zhenjiang Shipyard  
[6966 3068 5307 0617]

Location: Zhenjiang, Jiangsu, PRC

Data: The catamaran passenger ship, "Xinlong" [New Dragon], designed and built by this shipyard, left here 16 December 1983. Equipped with 1,000 seats, the twin-propeller-driven vessel will ply the shipping line between Nantong and Liuhe.  
[Photo available]

Source: Nanjing XINHUA RIBAO in Chinese 18 Dec 83 p 1

Item: Dalian Shipyard  
[2192 6647 5307 0617]

Location: Dalian, Liaoning, PRC

Data: A 69,000-ton tanker for refined oil, ordered by the Osco Company of Norway, will be built by this shipyard, according to the Dalian Shipbuilding Industry Corporation. To be built in accordance with the standards of the Det Norske Veritas, the tanker will be the largest ship ever built in China. It will be completed in the second half of 1986. This shipyard will also build two 7,200-ton roll-on roll-off ships for the Norwegian Paley Augustan Company. The first will be completed in 1985.

Source: Beijing XINHUA in English 1249 GMT 16 Jan 83 OW



### III. ELECTRONIC AND PRECISION EQUIPMENT INDUSTRIES

Item: Shanghai Radio Instrument Plant  
[0006 3189 3541 4848 7193 0308 0892 0617]

Location: Shanghai, PRC

Data: S814 frequency converter, which finds wide applications among satellite communications stations, microwave communications units, post and telecommunications departments, and electronic research institutes, has recently been developed by this plant. Its input sensitivity is better than 80 millivolts (effective value) and its maximum input (amplitude) is 300 millivolts (effective value). Its performance index approaches the level of similar products manufactured abroad. This plant has also successfully developed an S815 general-purpose electronic counter, which is a modified version of the PS45 general-purpose counter. The sensitivity of this modified counter is better than 10 millivolts and its direct detection frequency is greater than 850 megahertz. Based on actual applications, its performance is close to the level of similar products produced abroad.

Source: Shanghai XIANDAI TONGXIN [COMMUNICATIONS TODAY] in Chinese No 11, 1983 p 21

Item: Hongxing Radio Plant  
[4767 2502 3541 4848 7193 0617]

Location: Chengqing, Sichuan, PRC

Data: In collaboration with the Chongqing Coal Mine Institute, this plant, affiliated with the Radio Communications Technology School of the PLA General Staff Headquarters' Communications Department, has developed a radio adit prospective instrument to aid the coal mines in locating coal seams. It has also developed a frequency translator which extends the range of radio telephone communications in the fields. More than 70 of the frequency translators have been supplied to the electric power and forestry departments throughout the country.

Source: Chengdu SICHUAN RIBAO in Chinese 4 Jan 84 p 2

Item: State-owned Plant No 521  
[0948 3602 0063 0059 0001 0617]

Location: probably in Shaanxi Province, PRC

Data: This numbered plant produces principally instruments and meters for national defense and scientific research, diamond bearings, and electric testing components. During the 1979-1982 period, it won five prizes for high quality products from the Ministry of Aviation Industry, Shaanxi Province, and Base No 012. It also won silver prizes for its GYY-1 strain-type pressure sensor and BME series strain plate in 1980 and 1982 respectively. Today these products find extensive use among the military and civilian units.

Source: Beijing ZHILIANG GUANLI [QUALITY CONTROL] in Chinese No 11, 1983  
p 9

Item: Xi'an Radio Plant No 1  
[6007 1344 2477 4848 7193 0001 0617]

Location: Xi'an, Shaanxi, PRC

Data: An assembly line with an annual output of 100,000 XWX--I black and white television sets built by this plant was officially put into operation 16 December 1983 after 6 months of trial operations. The 12- to 22-inch black and white TV set production line has produced 65,800 television sets and all of them have been sold.

Source: Xi'an SHAANXI RIBAO in Chinese 17 Dec 83 p 1

Item: Hongguang Electronic Tube Plant  
[4767 0342 7193 1311 4619 0617]

Location: Sichuan Province, PRC

Data: The first black and white picture tube production line designed and built by Chinese engineers and technicians was officially put into operation here on 17 December 1983. This 14-inch and 17-inch black and white picture tube production line with an annual output of 500,000 tubes was designed and built by this plant and 10 other special equipment factories throughout the country.

Source: Beijing GONGREN RIBAO in Chinese 20 Dec 83 p 1

Item: Guangzhou Electronic Computer Plant  
[1684 1558 7193 1311 6060 4615 2623 0617]

Location: Guangzhou, Guangdong, PRC

Data: China's first modernized computer production line has been put into operation here. The primary equipment for the production line was supplied by France. It can turn out 400 HN--3000 series miniature computers annually and is the largest of its kind in the country. Its products are of the level of the late seventies.

Source: Yinchuan NINGXIA RIBAO in Chinese 1 Jan 84 p 2

Item: Nanjing General Semi-conductor Components Plant  
[0589 0079 0589 1418 7555 0892 0115 4920 0617]

Location: Nanjing, Jiangsu, PRC

Data: Employing the Hall effect and integration technologies, this plant has built a semi-conductor electromagnetic conversion component--Hall integrated circuit. Since its successful manufacture one year ago, the Hall integrated circuit has been installed on nearly 100 types of technical equipment of 310 users in 27 provinces, municipalities, and autonomous regions and has demonstrated its superiority in the fields of industry, agriculture, national defense, science and technology. A meeting was held in Nanjing during 14-16 November 1983 to assess the Hall integrated circuit and it was held that the sensitivity and reliability of the integrated circuit are excellent and the various electrical performances are up to the design requirements.

Source: Nanjing XINHUA RIBAO in Chinese 7 Dec 83 p 4

Item: Chengde City Automated Measuring Instruments Plant  
[2110 1795 1579 5261 0520 0553 6060 6852 0308 0892 0617]

Location: Chengde, Hebei, PRC

Data: The GGG-22 100-ton dynamic electronic [orbital] balance developed and built by this plant has recently passed the appraisal test at the Qinghe Power Plant. This is the first time that micro-computer technology is applied to the GGG-22 100-ton dynamic electronic [orbital] balance in the country. The dynamic measuring precision of the product can reach 0.21% when the speed of an overhead traveling crane is 5 to 10 kilometers per hour. The successful development of this product has opened up a new area in the development of large-scale industrial electron balance in China.

Source: Shijiazhuang HEBEI RIBAO in Chinese 5 Jan 84 p 1

Item: Shanghai General Camera Plant  
[0006 3189 3564 4161 2623 0617]

Location: Shanghai, PRC

Data: As of the end of November, this plant has turned out 330,000 cameras, surpassing the State quota of 320,000 cameras. Its output value, output volume, and profit norms showed an increase of 25% over the same 1982 period. The workers here are striving to produce 20,000 to 30,000 more cameras during the last month of 1983.

Source: Shanghai JIEFANG RIBAO in Chinese 2 Dec 83 p 1

Item: Jiangmen Radio Plant No 3  
[3068 7024 3541 4848 7193 0005 0617]

Location: Jiangmen, Guangdong, PRC

Data: As a result of "digesting imported advanced foreign technologies," this plant has successfully developed the "Penglai" [5570 5490] brand PJ821 and PJ822 desk model receiver/recorders, which have passed the evaluation tests. The PJ822 table model combination receiver/recorder is equipped with two loudspeakers and has four wavebands--medium wave, shortwave 1, shortwave 2, and modulation stereophonic sound--and other features. The PJ821 dual speaker and single sound track receiver/recorder is portable. It has four wavebands and has four separate controls to regulate the sound volume.

Source: Guangzhou NANFANG RIBAO in Chinese 16 Jan 84 p 2

#### IV. CHEMICAL INDUSTRY

Item: Kunming Sodium Tripolyphosphate Plant  
[2492 2494 0005 5112 4340 6808 6871 0617]

Location: Kunming, Yunnan, PRC

Data: The first phase of this key plant project has successfully undergone its trial operation on 27 December 1983, turning out up-to-standard sodium tripolyphosphate. From now on, China will no longer depend on the import of raw materials for making laundry powder. The main project is imported from the Federal Republic of Germany. It is equipped with advanced facilities and is highly automated.

Source: Beijing GONGREN RIBAO in Chinese 9 Jan 84 p 2

Item: Lianyungang Chemical Fertilizer Plant  
[6647 0061 3263 0553 5142 0617]

Location: Lianyungang, Jiangsu, PRC

Data: This plant has embarked on an extensive technical reform program to raise its output capacity of soda ash. Its gas producing workshop has undergone technical reforms and is ready to go into operation, and its synthesis workshop and combined soda workshop have completed the installation of 100 of the 151 pieces of equipment. Upon completion of this technical reform program, this plant will have an annual soda ash output capacity of 15,000 tons.

Source: Nanjing XINHUA RIBAO in Chinese 15 Nov 83 p 2

Item: Jinshan Petrochemical Plant  
[6855 1472 4258 1444 0553 1562 0617]

Location: Shanghai, PRC

Data: China has developed multi-jet spinning technology and equipment for producing polyester staple fibers, according to the State Science and Technology Commission. The project is one of China's 38 major scientific programs to be completed between 1983 and the end of the country's Sixth Five-Year Plan in 1985. A 2,210-jet spinning machine to produce 7,500 tons of polyester staple fibers a year was appraised by a national committee after several months of trial operation, the commission said. The machine was developed last May by the Dalian Synthetic Fiber Research Institute. Its technology is now being used in designing six production lines in this plant. Each of the lines has an annual capacity of 15,000 tons of polyester staple fibers. The Ministry of Textile Industry is also planning to use the technology to upgrade its old synthetic fiber enterprises.

Source: Beijing XINHUA in English 0204 GMT 8 Jan 84 OW

Item: Tianjin Petrochemical Corporation  
[1131 3160 4258 0553 0361 0674]

Location: Tianjin, PRC

Data: This corporation was inaugurated 28 December 1983 to streamline production and make still better use of available petroleum resources. Operating under the corporation are ten factories, including a refinery capable of processing an annual average of 2.5 million tons of crude oil and a chemical fiber plant producing 80,000 tons of polyester. The company, which is part of the China Petrochemical Corporation, is supplied by the Dagang oilfield in Tianjin, the Renqiu oilfield in the neighboring Hebei Province, as well as by an oilfield being developed in the Bohai Sea.

Source: Beijing XINHUA in English 1440 GMT 28 Dec 83 OW

## V. FUEL AND POWER INDUSTRIES

Item: Liaohe Oilfield  
[6697 3109 1444 3944]

Location: Liaoning, PRC

Data: The Ciyutuo New Oil Zone, one of the expansion projects of this oilfield, was officially put into operation on 26 December 1983. Sixty-five oil wells in the new zone are now in production. The annual crude oil output is 420,000 tons and natural gas output, 100 million cubic meters.

Source: Yinchuan NINGXIA RIBAO in Chinese 1 Jan 84 p 2

Item: Dongpang Mine Shaft  
[2639 7894 4349 0064]

Location: Neiqiu County, Xingtai Mining Zone, Hebei, PRC

Data: The largest of its kind in southern Hebei Province, this pair of mine shafts, commissioned on 26 December 1983, covers an area of 43.7 square kilometers. It has a design annual output capacity of 1.8 million tons. The first phase project, which began in February 1977 and completed at the end of December 1983, is equipped with advanced transport and hoisting equipment. The mine, which is close to the Beijing-Guangzhou Railway, will facilitate coal shipments and ease the shortage of coal supply in some localities.

Source: Shijiazhuang HEBEI RIBAO in Chinese 31 Dec 83 p 1



Item: Pudong Coal Gas Plant  
[3184 2639 3561 3049 0617]

Location: Shanghai, PRC

Data: Construction of this project, the largest urban coal gas supplier in the country at the present time, is under way. Upon completion, this plant can produce 2 million cubic meters of coal gas a day. The whole project is divided into two stages. The first stage is expected to go into partial operation in 1986, and the entire project is scheduled for completion by 1987.

Source: Shanghai WEN HUI BAO in Chinese 16 Dec 83 p 1

Item: Zhuxianzhuang Coal-dressing Plant  
[2612 0103 8369 3156 3561 0617]

Location: Huaibei, Anhui, PRC

Data: This large-sized plant, one of the State's key construction projects, was officially put into operation 29 December 1983. Designed and built by Chinese engineers and workers, this plant has an annual coal dressing capacity of 1.2 million tons.

Source: Beijing GONGREN RIBAO in Chinese 30 Dec 83 p 2

Item: Beizao Coal Mine  
[0554 4103 3561 4349]

Location: Longkou Zhen, Huang County, Shandong, PRC

Data: This pair of large-sized coal shafts was officially put into operation on 16 December 1983. Its design annual output capacity is 900,000 tons of brown coal and oil shales. The completion of this pair of coal shafts will ease the energy shortage in the Jiaodong area.

Source: Xi'an SHAANXI RIBAO in Chinese 19 Dec 83 p 4

Item: Maotou Power Plant  
[1456 7333 4099 7193 0617]

Location: Matou Zhen, Handan City, Hebei Province, PRC

Data: Another large-sized aerated concrete plant was completed here during mid-November 1983. This is a part of this power plant's expansion project. It turns out 200,000 cubic meters of aerated concrete annually, accounting for 50% of the amount of bricks used a year in Handan City.

Source: Shijiazhuang HEBEI RIBAO in Chinese 19 Nov 83 p 1

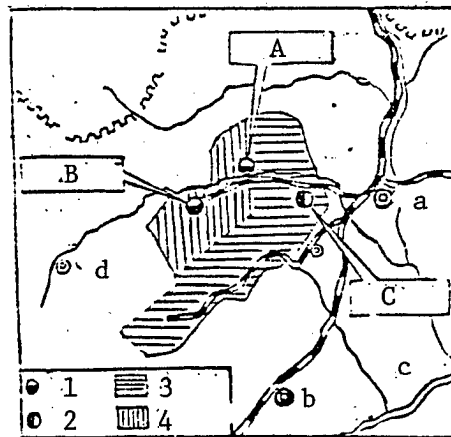
Item: Datong Mining Zone  
[2192 0681 4349 0575]

Location: Datong, Shanxi, PRC

Data: The largest of its kind in the country, this mining area produced 26 million tons of coal in 1982. The Yanshan Mine, construction of which began in 1980, has a design output capacity of 3 million tons and boasts an extractable reserve of 600 million tons. After 3 years of construction work, four of eight shafts have been completed. Preparations for the construction of the Sitagou Shaft with a design capacity of 4 million tons are under way. The Jinhuaogong Mine, which is being expanded, will increase its production capacity from 1.2 million tons to 3.15 million tons. Other shafts which will be expanded during the 6th Five-Year Plan include the Wangcun, Yungang, and Silaogou Mines. By 1985, the output of this mining area will reach 28 million tons and will reach 32.9 million tons by 1990.

Source: Xi'an SHAANXI RIBAO in Chinese 8 Nov 83 p 4

Location Map of Datong Mining Zone



A. Sitaigou Mine  
C. Jinhuaogong Mine

B. Yanzishan Mine

a. Datong City  
c. Sanggan River

b. Huairan  
d. Zuoyun

1. Newly built shaft  
3. Production area

2. Improved and expanded shaft  
4. Mine shaft field under construction

## VI. MACHINE-BUILDING INDUSTRY

Item: State-Operated Plant No 53  
[0948 3602 0063 0005 0617]

Location: Shenyang, Liaoning, PRC

Data: This plant is identified as a large plant of the national defense industry system. Yuan Yuanda [5193 6678 6671], who was recently elected as plant manager at a recent workers congress through a democratic process, has been approved by the Ministry of Ordinance Industry to guide this state-owned enterprise.

Source: Beijing GONGREN RIBAO in Chinese 19 Dec 83 p 1

Item: Xingguang Machinery Plant  
[5281 0342 2623 2750 0617]

Location: Chengdu, Sichuan, PRC

Data: By adopting advanced foreign technologies and carrying out its own innovative ideas, this state-owned plant has successfully developed a cam automatic feeding milling machine, the quality of which is up to the level of similar-type milling machine made abroad. For this accomplishment, it has won a second prize award from the Ministry of Ordinance Industry. Trial operation groups of several camera plants in [Huafushan] have used this milling machine to make the main components for model 135 cameras.

Source: Chengdu SICHUAN RIBAO in Chinese 11 Jan 84 p 2

Item: Wenjiang Prefecture Electric Motor Plant  
[3306 3068 0966 0575 7193 2623 0617]

Location: Chengdu, Sichuan, PRC

Data: Because of the "merging of the prefecture and municipality," this plant has been renamed the Tianfu Electric Motor Plant [1131 1650 7193 2623 0617] effective 1 January 1984. Its principal products include single phase electric motor, single phase water pump, and "Tianfu" electric fan.

Source: Chengdu SICHUAN RIBAO in Chinese 11 Jan 84 p 3

Item: Xi'an Punching and Shearing Machine Tool Plant  
[6007 1344 0394 0477 2623 1643 0617]

Location: Xi'an, Shaanxi, PRC

Data: This plant, together with the Forging and Casting Machinery Research Institute of the Ministry of Machine-Building and the Jiaotong University in Xi'an, has successfully developed and built an AG11--1 x 1000A plate shearing machine. After appraising the machine tool, the experts are of the opinion that the quality of the machine is up to the State precision standards of West Germany.

Source: Xi'an SHAANXI RIBAO in Chinese 20 Dec 83 p

Item: Dalian Heavy-duty Machinery Plant  
[2192 6647 6850 0992 2623 0892 0617]

Location: Dalian, Liaoning, PRC

Data: This plant has completed the manufacture of four ship unloaders, two gantry-type stacker-reclaimers, and two shiploaders for the renovation project of the Tianjin Harbor. Five of the eight pieces of machinery--two gantry-type stacker-reclaimers, two shiploaders and an unloader--have recently been installed and tested at the salt shipping pier. The ship unloader can unload 350 tons of salt an hour, while the stacker-reclaimer is capable of stacking and reclaiming 1,000 tons of salt per hour.

Source: Tianjin TIANJIN RIBAO in Chinese 25 Oct 83 p 2

Item: Shaanxi Province Diesel Engine Plant  
[7104 6007 4164 2693 3444 2623 0617]

Location: Xi'an, Shaanxi, PRC

Data: A new-type single-cylinder diesel engine suitable for use on hand-guided tractor, four-wheel tractor, dump truck, drainage and irrigation machine, and farm produce processing machine--1100DN diesel engine--has been jointly developed by the Shanghai Internal Combustion Research Institute and this plant after two years of arduous work. This plant is currently making preparations for the regular production of the diesel engine.

Source: Xi'an SHAANXI RIBAO in Chinese 30 Dec 83 p 1

Item: Changcheng Machine Tool Plant  
[7022 1004 2623 1643 0617]

Location: Yinchuan, Ningxia, PRC

Data: Since 1978, personnel here have designed and manufactured 96 types in four major categories of new products, of which the CK7815 NC lathe is up to advanced international level in the eighties. In 1982, this plant developed 31 kinds of machine tool products sorely needed by the communications departments. In the course of developing new products, the workers here have improved their technical skills, and a large number of them can now independently design the spare parts and components.

Source: Yinchuan NINGXIA RIBAO in Chinese 9 Sep 83 p 2

Item: Xingtai Metallurgical Rollers Plant  
[6717 0669 0396 6855 6509 6547 0617]

Location: Xingtai, Hebei, PRC

Data: This plant's 30-ton electric arc steel smelting furnace has been put into operation. It is one of the key projects to provide China's large-scale steel rolling enterprises with high-grade rollers. This plant will become the largest roller production plant in the country. Its roller output accounts for one-third of the nation's total commodity roller production.

Source: Shijiazhuang HEBEI RIBAO in Chinese 7 Jan 84 p 2

Item: Baoding Transformer Plant  
[0202 1353 6239 1090 0892 0617]

Location: Baoding, Hebei, PRC

Data: After more than two years of hard work, this plant has successfully trial manufactured China's first 500,000-volt ultra-high voltage transformer, thus filling a gap in China's transformer industry. The 220,000-volt transformer has been an old product of this enterprise for many years. To prepare for the trial production of this ultra-high voltage transformer, the plant invested "only" 200,000 yuan, making more than 200 sets of tools and more than 10 pieces of special equipment. It took the engineers, technicians, and workers here less than three years to build the 500,000-volt transformer. Those who took part in this project include chief engineer Li Xingyou [2621 5281 3731] and engineer Zhang Yuanlu [1728 0337 6922] who was responsible for the design.

Source: Shijiazhuang HEBEI RIBAO in Chinese 5 Jan 84 p 1

Item: Kunming Coal Mining Machinery Plant  
[2492 2494 3561 2623 0617]

Location: Kunming, Yunnan, PRC

Data: The DZ series external injection single hydraulic prop trial produced by this plant in collaboration with the Beijing Mining Institute of the China Institute of Coal Science has recently passed the evaluation test. The Ministry of Coal Industry has designated this plant to mass produce the product. Many coal mines in the country are employing such single hydraulic props in line with the current drive to mechanize mining operations.

Source: Kunming YUNNAN RIBAO in Chinese 2 Jan 84 p 2



Item: Kunming Machine Tool Plant  
[2492 2494 2623 1643 0617]

Location: Kunming, Yunnan, PRC

Data: Chinese scientists have succeeded in producing a ring laser angulometer. Based on optical technology, the instrument reaches advanced world levels, according to a panel of specialists gathered here to appraise it. It is of great practical value for high precision dynamic angular measurement and for China's industry and defense, the panel said. The angulometer was made by scientists of the National Institute of Metrology and this plant.

Source: Beijing XINHUA in English 0725 GMT 21 Jan 84

VII. AGRICULTURAL MACHINERY INDUSTRY

Item: Hailun Xian Agricultural Machinery Repair and Manufacturing Plant  
[3189 0243 4905 6593 2623 0208 6644]

Location: Hailun County, Heilongjiang Province, PRC

Data: This plant has developed a small-sized tractor-drawn model 812 sower that can sow soybean, kaoliang, corn, grain, and sugarbeet crops. This piece of machinery is well received by users in Heilongjiang and other localities.  
[Photo available]

Source: Harbin HEILONGJIANG RIBAO in Chinese 20 Dec 83 p 1

Item: Qingxu Xian Agricultural Machinery Manufacturing Plant  
[3237 1776 4905 6593 2814 2623 2750 0455 6644 0617]

Location: Qingxu County, Shanxi, PRC

Data: Effective 1 October 1983, this plant will be known as Qingxu Xian Submersible Electric Pump Plant [3237 1776 4905 3383 3055 7193 3119 0617].

Source: Taiyuan SHANXI RIBAO in Chinese 18 Sep 83 p 3

VIII. MISCELLANEOUS INDUSTRIES

Item: Yinchuan Rubber Plant  
[6892 1557 2895 5231 0617]

Location: Yinchuan, Ningxia, PRC

Data: This plant realized a profit of 21.86 million yuan during the January-November 1983 period, showing an increase of 124% over the same 1982 period. This enterprise attributed its success to the promotion of new technologies, use of new materials, and development of new products. In the past few years, the sale of its principal product--automobile tire--has been sluggish and its tire production has taken a sharp downturn. New measures had to be taken in order to meet the new situation, including product quality improvement, development of new product variety, and promotion of new and advanced technologies. During the January-November 1983 period, the plant turned out 230,000 sets of tires, an increase of 47% over the same 1982 period.

Source: Yinchuan NINGXIA RIBAO in Chinese 19 Dec 83 p 1

Item: Harbin Cement Plant  
[5756 1422 3453 3055 3136 0617]

Location: Harbin, Heilongjiang, PRC

Data: As of 31 December 1983, this plant has hurdled the 900,000-ton annual output barrier by actually turning out 900,585 tons of cement. This plant accounts for 30% of the cement produced in Heilongjiang Province.

Source: Harbin HEILONGJIANG RIBAO in Chinese 3 Jan 84 p 1

Item: Qujiang Cement Plant  
[3255 3068 3055 3136 0617]

Location: Qujiang, Sichuan, PRC

Data: This plant, with an annual high-grade cement output of 460,000 tons, was recently completed and put into operation. All the equipment at the plant was built in China. Electronically controlled mechanisms have been installed on the kiln structure. This project will play a role in the rational distribution of cement production in Sichuan Province.

Source: Chengdu SICHUAN RIBAO in Chinese 30 Dec 83 p 1

Item: Nanping Glass Plant  
[0589 1627 3788 3863 0617]

Location: Nanping, Guangxi, PRC

Data: This plant project has now entered the finishing stage and preparations for trial operations are under way. Designed and built by Chinese engineers and workers, this modernized plant employs the advanced floating glass forming method and is capable of supplying the State with 1.2 million standard crates of glass annually.

Source: Beijing GONGREN RIBAO in Chinese 3 Jan 84 p 1

Item: Wuxi Bicycle Electroplating Plant  
[3541 6932 5261 5887 6508 7193 6947 0617]

Location: Wuxi, Jiangsu, PRC

Data: Jiangsu Province's largest loop-shaped electroplating line was officially put into operation here 22 June 1983. Designed, built, and installed by the Wuxi Bicycle Industry Company, this loop-shaped electroplating line is capable of electroplating 140,000 bicycle rims per month. The completion of this production line will insure higher output and better quality of electroplated parts for the Long March model 58 bicycles for agricultural use.

Source: Nanjing XINHUA RIBAO in Chinese 22 Jun 83 p 3

Item: Nanjing Paint Manufacturing Plant  
[0589 0079 6644 3344 0617]

Location: Nanjing, Jiangsu, PRC

Data: After three years' efforts, technical personnel here have built China's first workshop with an annual acrylic acid paint output capacity of 3,000 tons. It was officially put into full operation on 13 December 1983. The new workshop will provide this plant with favorable conditions for developing new products for the paint industry.

Source: Nanjing XINHUA RIBAO in Chinese 14 Dec 83 p 1

Item: Plant No 6015  
[0362 7190 0001 0063 0617]

Location: PRC

Data: From the beginning of 1982 to the end of June 1983, this PLA-operated plant had utilized 28,000 tons of mixed materials, including pulverized coal ash, furnace refuse, and coal stone, accounting about 1/3 of the plant's total amount of mixed materials. Its cement variety has increased from two to four, and the quality of its products has either reached or surpassed the state standards.

Source: Beijing ZHONGGUO JIANCAI [CHINA BUILDING MATERIALS] in Chinese No 6, 1983 p 64

## IX. PHOTOGRAPHS OF INDUSTRIAL FACILITIES

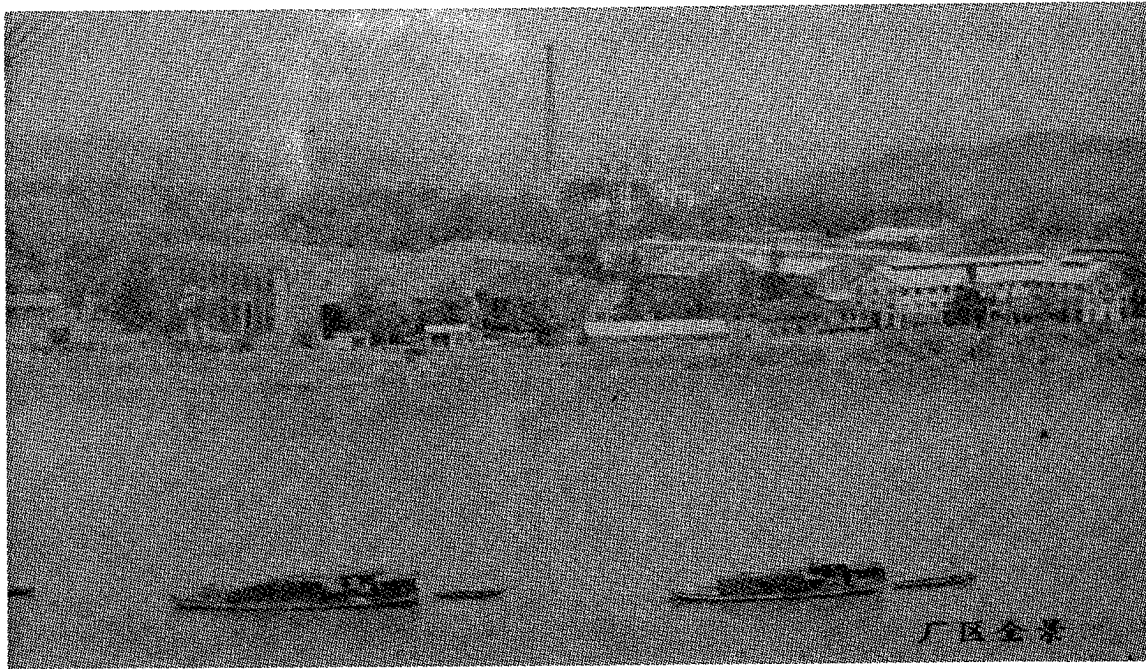


Fig. 1 Full view of the Wuzhou City Hosting Equipment and Machinery Plant in Guangxi. Built in 1956, this plant is equipped with more than 250 pieces of special processing machinery and machine tools. It also manufactures sugar refining equipment and iron frames for building construction.

[Source: Beijing QIZHONG YUNSHU JIXIE [HOISTS AND CONVEYANCES] in Chinese No 11, 1983, backcover]

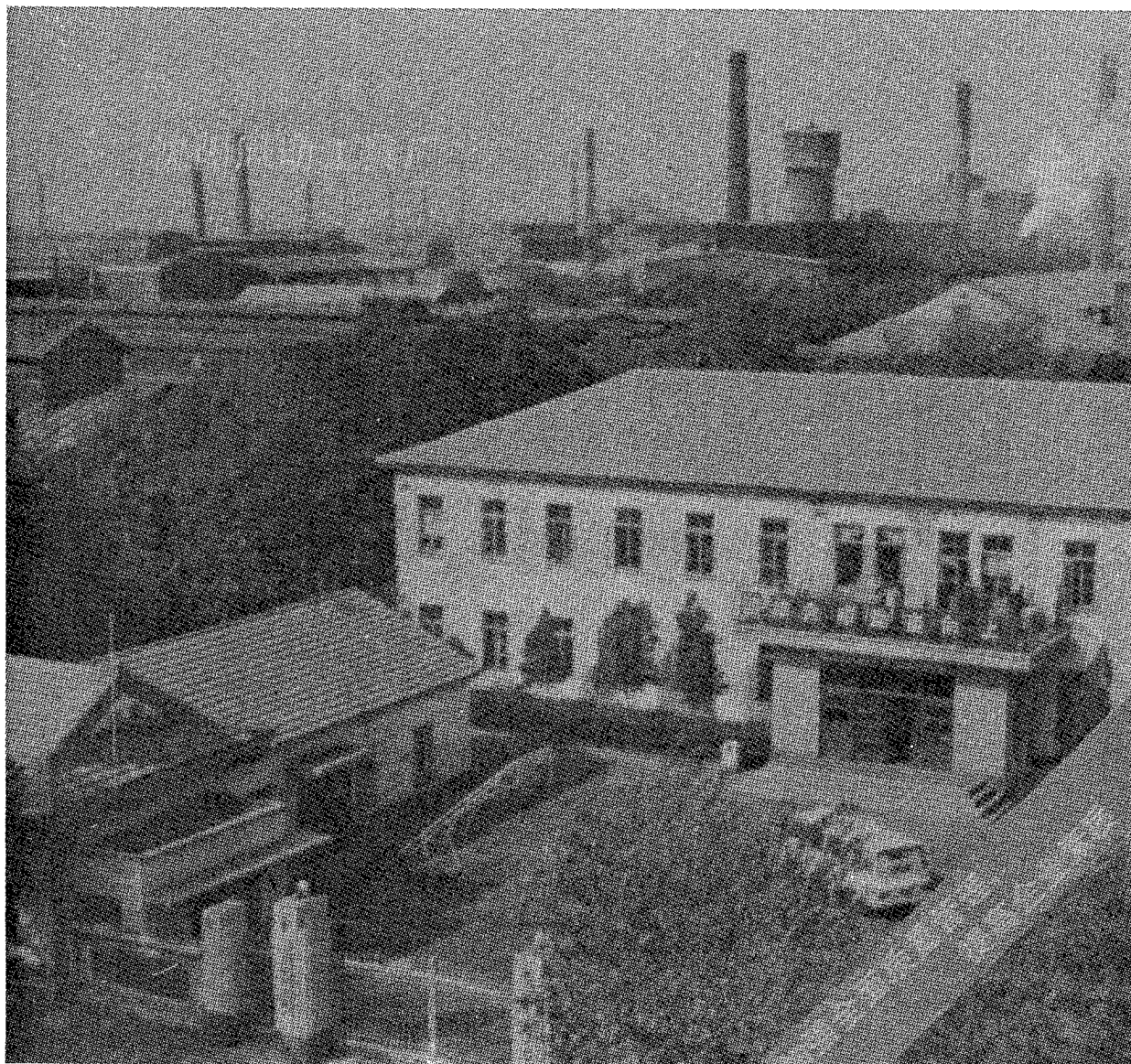


Fig. 2 View of the Shenyang Pneumatic Tool Plant. The first of its kind established in the country during the First Five-Year Plan, this plant manufactures all types of rock drills and pneumatic tools.

[Source: Beijing ZHONGGUO ZHILIANG GUANLI [CHINA QUALITY CONTROL] in Chinese No 12, 1983, frontcover]



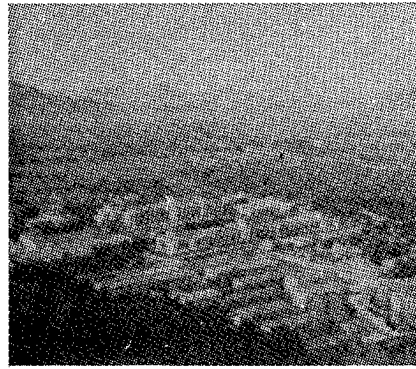


Fig. 3 A bird's-eye view of the Beijing Machine Tool Institute, a scientific and technological development center of China's machine tool industry.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI [CHINA MACHINERY & EQUIPMENT] in Chinese and English No 4, 1983 p 10]

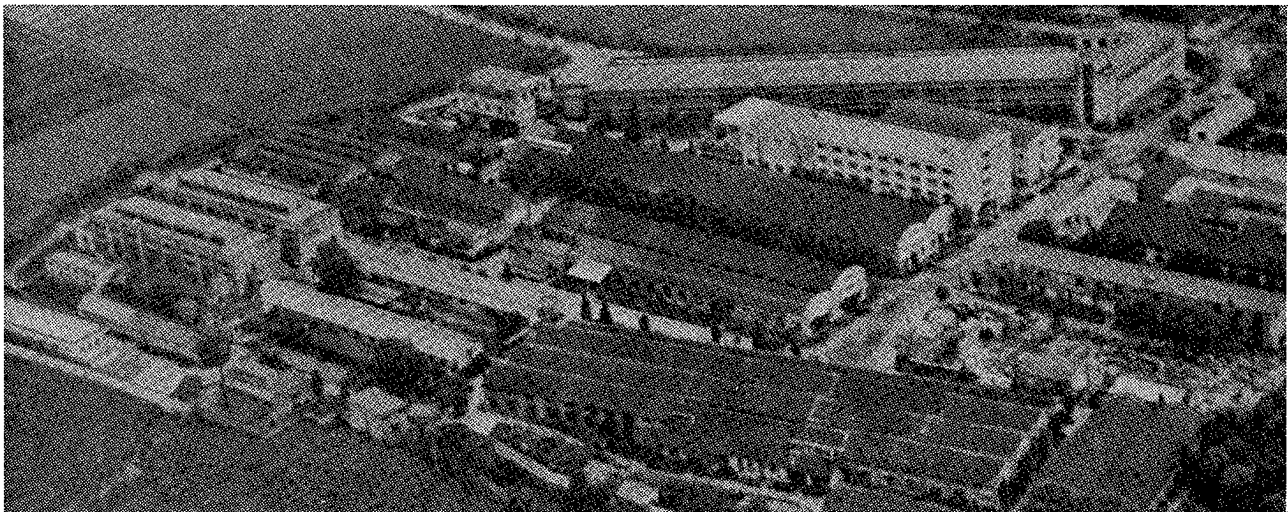


Fig. 4 View of the Shanghai Electric Tool Plant. In the past 20 years, this plant has produced nearly 2 million electric tools, making it the largest producer of electric tools in the country.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI [CHINA MACHINERY & EQUIPMENT] in Chinese and English No 4, 1983 p 82]

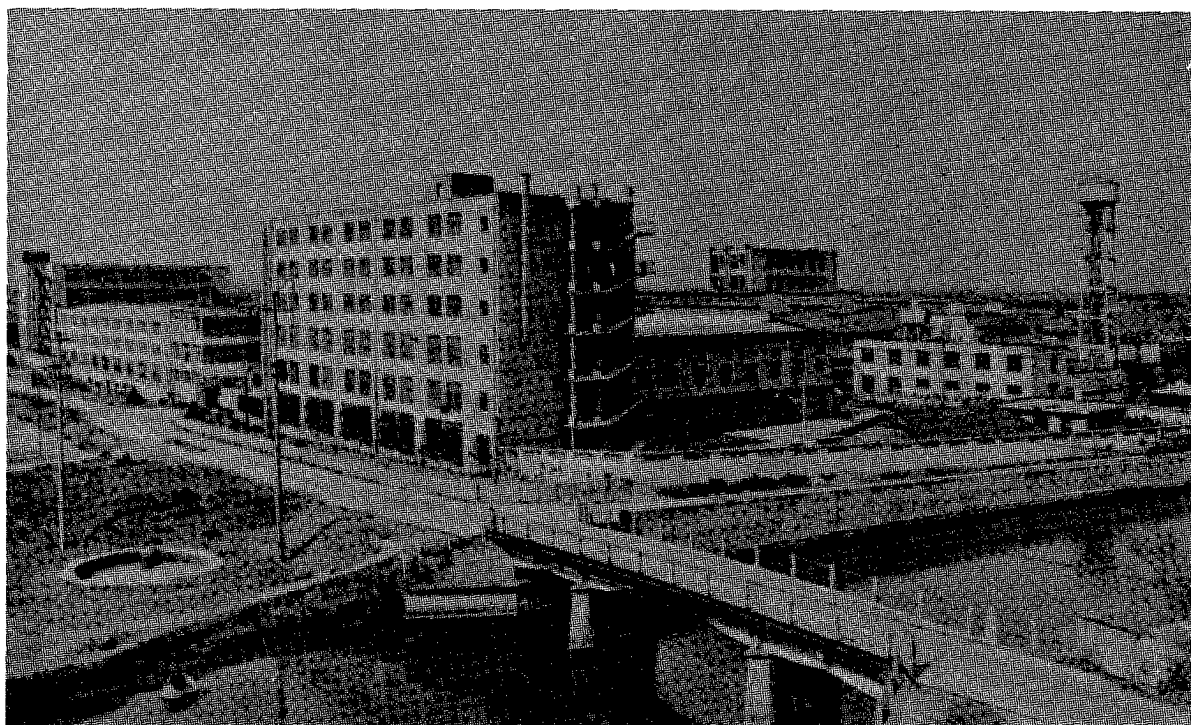


Fig. 5 Photograph of the Shanghai Storage Battery Plant

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI [CHINA MACHINERY & EQUIPMENT]  
in Chinese and English No 3, 1983 p 113]

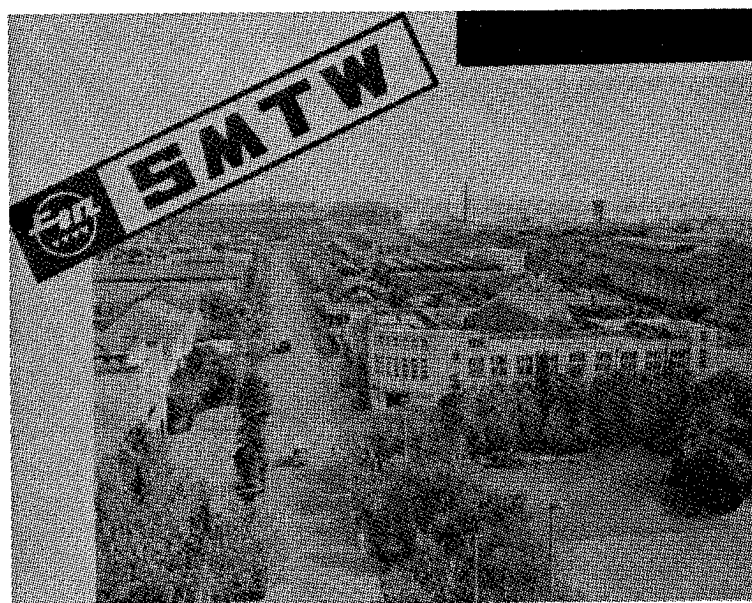


Fig. 6 Photo of the Shanghai Machine Tool Plant, the largest grinder manufacturer in the country. It covers an area of 340,000 square meters and employs 6,500 people, including 650 engineers and technicians.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI [CHINA MACHINERY & EQUIPMENT] in Chinese and English No 3, 1983 p 124]

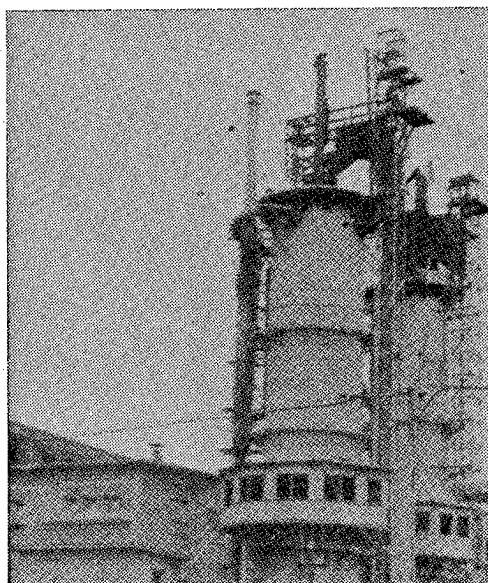


Fig. 7 A sectional view of the Siping Chemical Complex in northeast China.

[Source: Changchun JILIN HUABAO [JILIN PICTORIAL] in Chinese No 6, 1983, p 11]

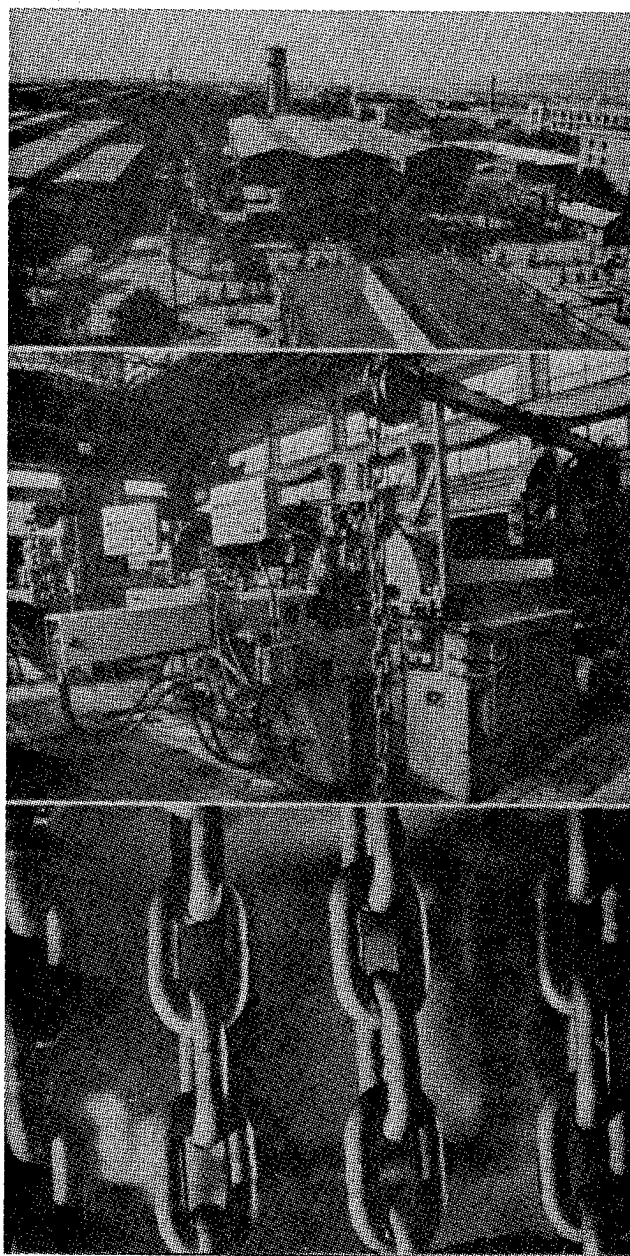


Fig. 8 View of the Zhangjiakou Coal-Mining Machinery Plant in Hebei Province. The plant specializes in manufacturing a variety of medium- and heavy-duty drag conveyers, load-transit conveyors and coal plows.

[Source: Hong Kong ZHONGGUO JIXIE [CHINA MACHINERY] in Chinese and English 15 Oct 83, inside frontcover]

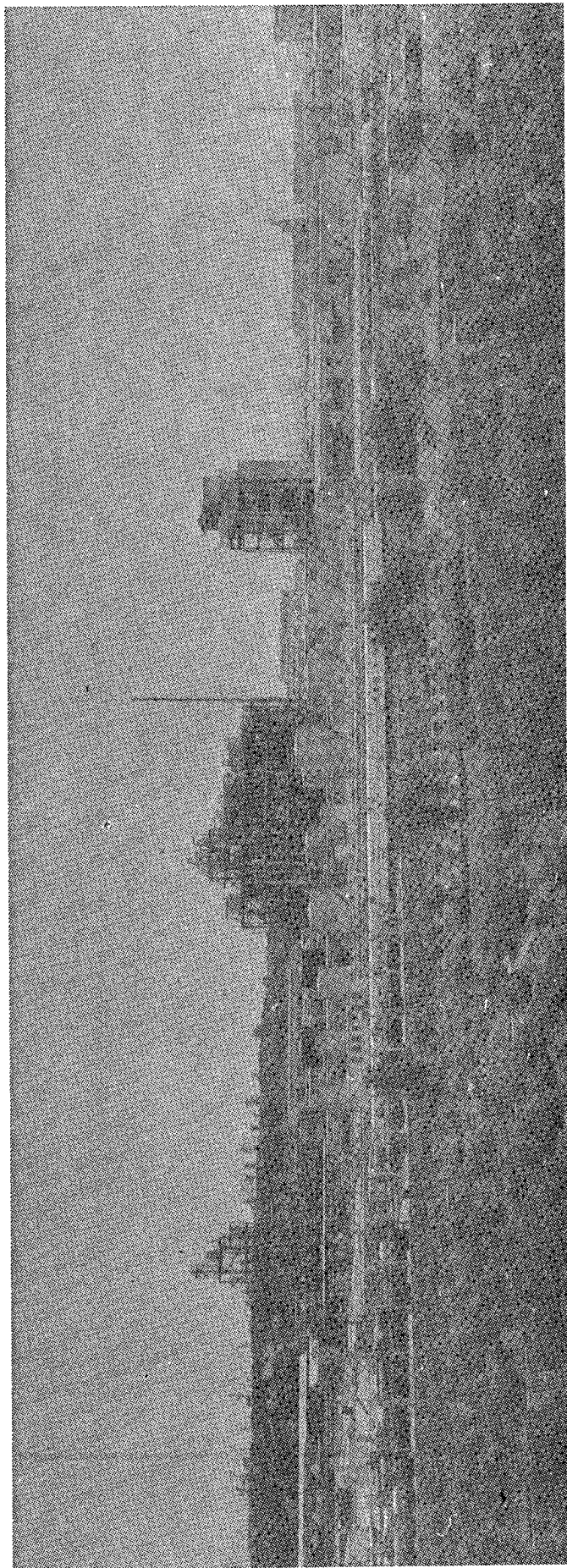


Fig. 9 Distant view of the MDI workshop of the Yantai Synthetic Leather Plant in Shandong Province  
[Source: Jinan SHANDONG HUABAO [SHANDONG PICTORIAL] in Chinese No 11, 1983 p 2]



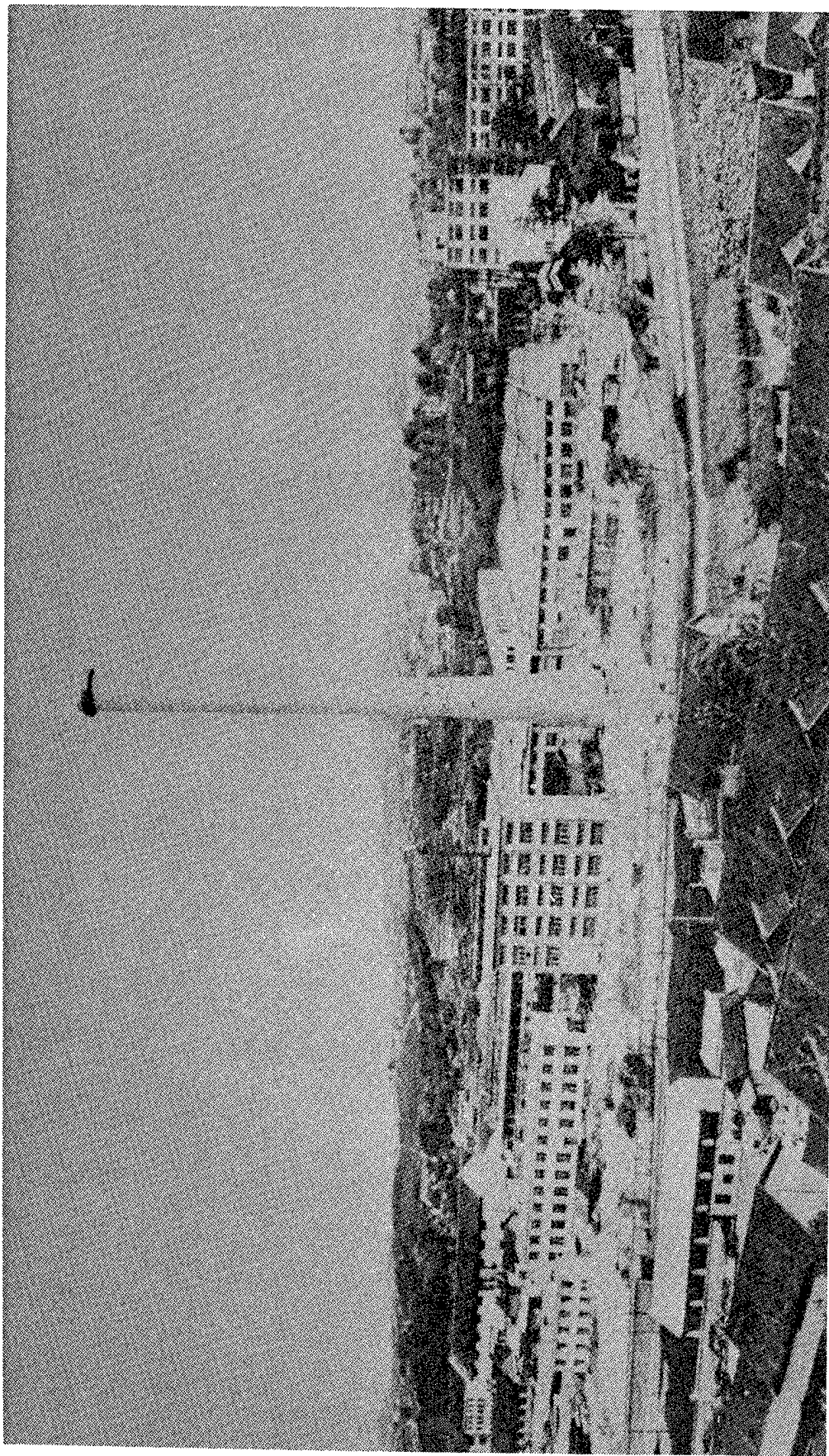


Fig. 10 Photograph of the Zhaoyang City Chemical Fiber Plant, Hunan, which is under construction. This plant has a design annual viscose filament yarn output capacity of 2,000 tons. Total cost of the project is 58.68 million yuan.

[Source: Changsha HUNAN HUABAO [HUNAN PICTORIAL] in Chinese No 11, 1983 p 14]

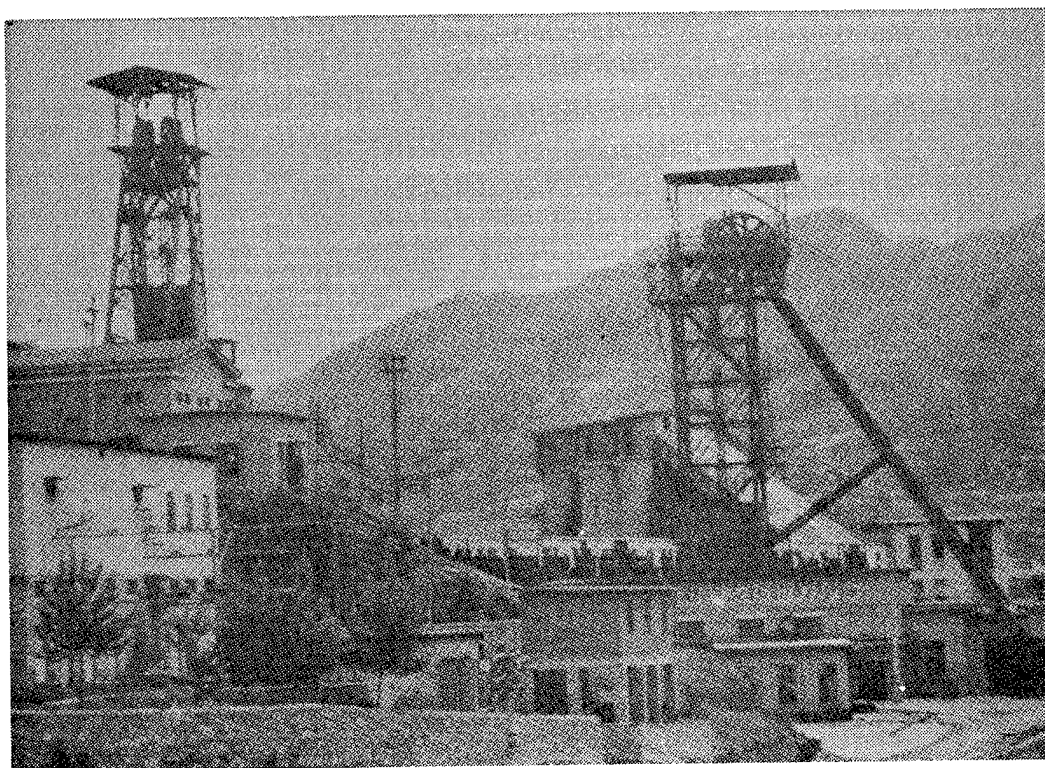


Fig. 11 Photograph of the Laowuji coal mine shaft under the Panjiang Mining Bureau in Guizhou Province

[Source: Guiyang GUIZHOU HUABAO [GUIZHOU PICTORIAL] in Chinese No 5, 1983 p 3]

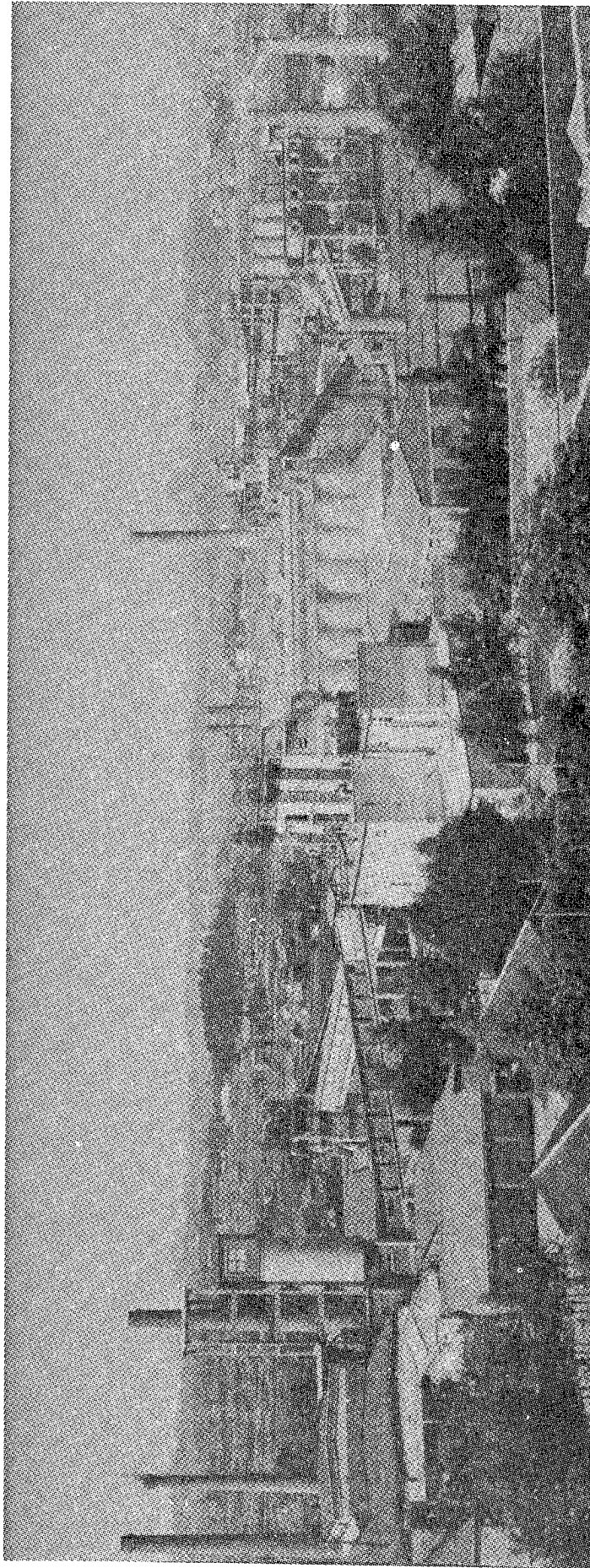


Fig. 12 View of the Guiyang Refractory Material Plant in Guizhou Province. This plant's principal product, aluminum oxide with an aluminum content of 97 percent, is extensively used in the national defense, metallurgical, machine-building, chemicals, and radio industries.

[Source: Guiyang GUIZHOU HUABAO [GUIZHOU PICTORIAL] in Chinese No 5, 1983, backcover]



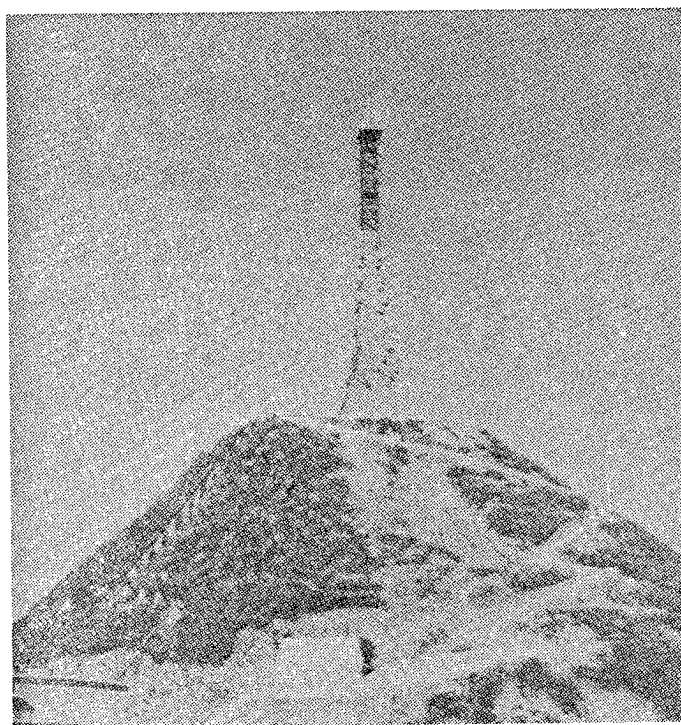


Fig. 13 One of largest television relay stations in China--Liuzhi Frequency Modulation Television Relay Station in Guizhou

[Source: Guiyang GUIZHOU HUABAO [GUIZHOU PICTORIAL] in Chinese No 5, 1983 p 5]

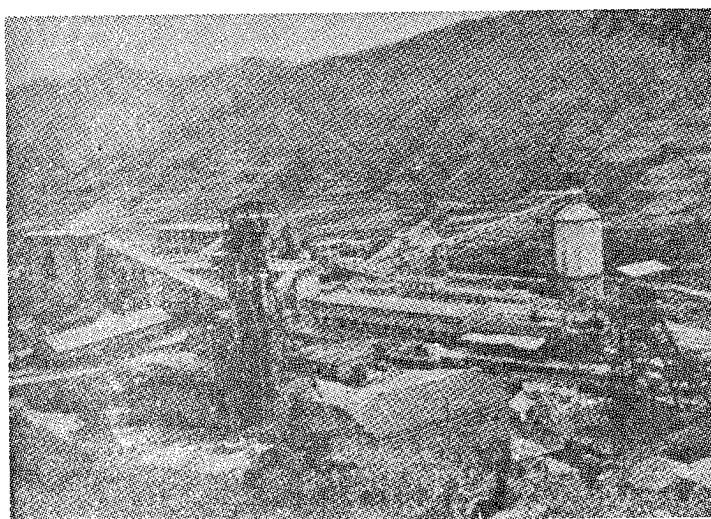


Fig. 14 View of the Panxian coal-mining area in Guizhou Province, where many small coal pits are in operation and "producing well."

[Source: Beijing RENMIN HUABAO [CHINA PICTORIAL] in English No 11, 1983, p 33]

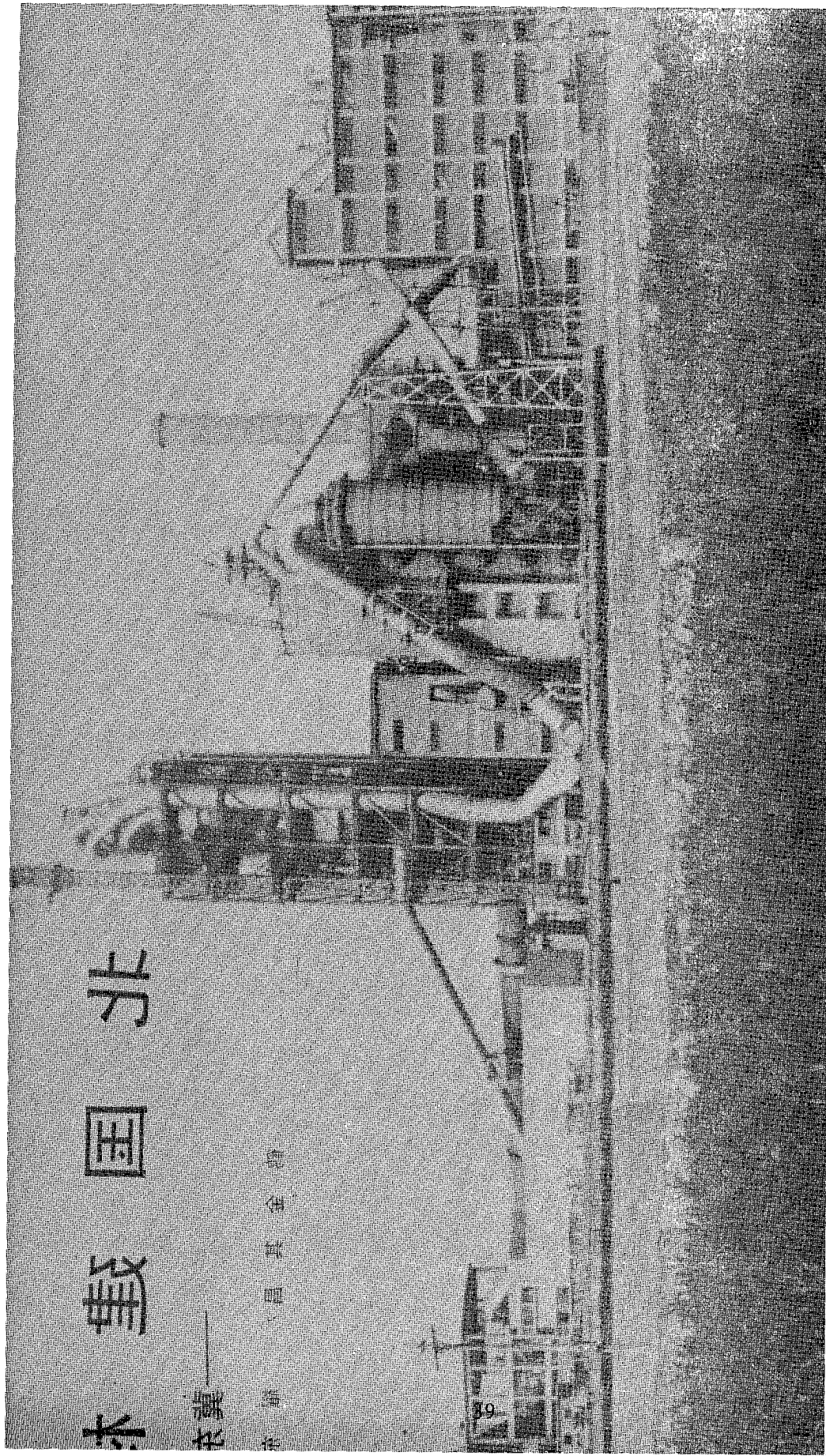


Fig. 15 External view of the Jidong Cement Plant in Tangshan City, Hebei. This plant has an annual high-grade cement output of 1.55 million tons, making it the largest cement producer in the country at the present time. The project is scheduled for completion at the end of 1983.

[Source: Shijiazhuang HEBEI HUABAO [HEBEI PICTORIAL] in Chinese No 5, 1983 p 2]



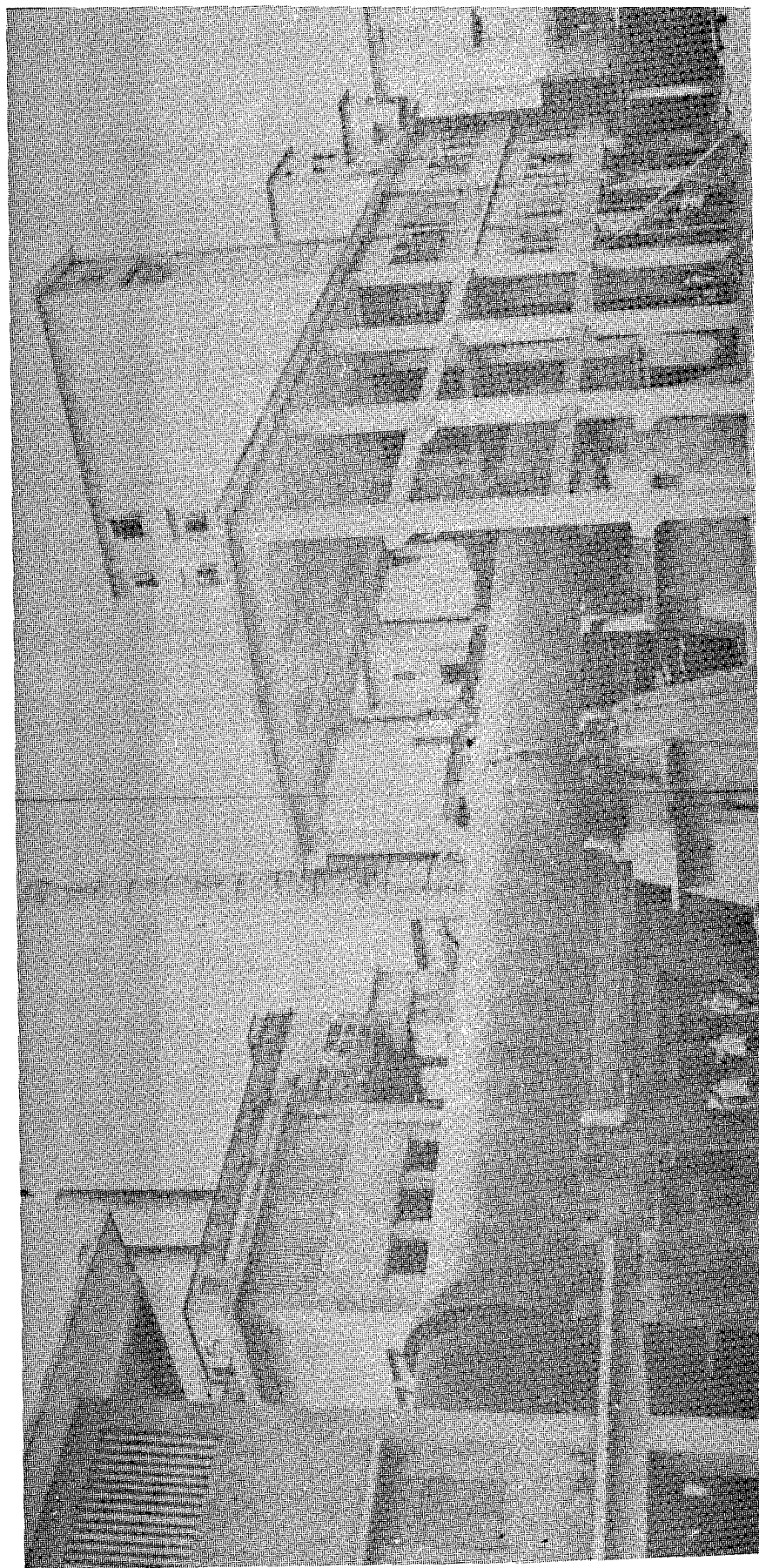


Fig. 16 Photo of the 50,000 tons annual output rotary kiln of the newly expanded Enping Xian Cement Plant in Guangdong Province

[Source: Guangzhou GUANGDONG HUABAO [GUANGDONG PICTORIAL] in Chinese No 12, 1983 p 4]

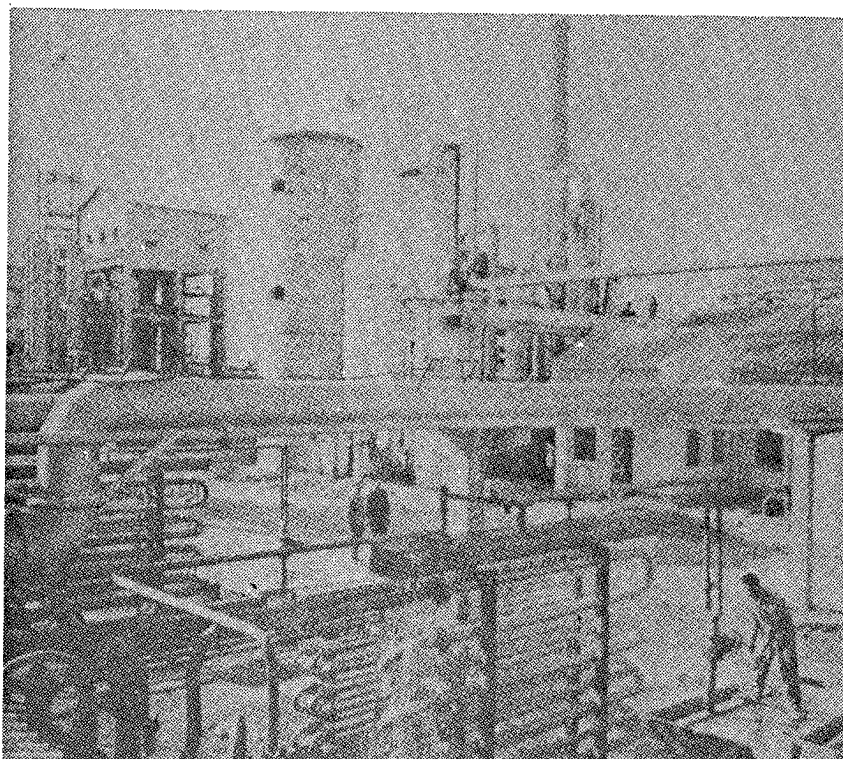


Fig. 17 View of the Enping Nitrogenous Fertilizer Plant in Guangdong Province. The small-scale enterprise has been named a "Red Banner Unit" by the Ministry of Chemical Industry for its outstanding achievements in production.

[Source: Guangzhou GUANGDONG HUABAO [GUANGDONG PICTORIAL] in Chinese No 12, 1983 p 4]

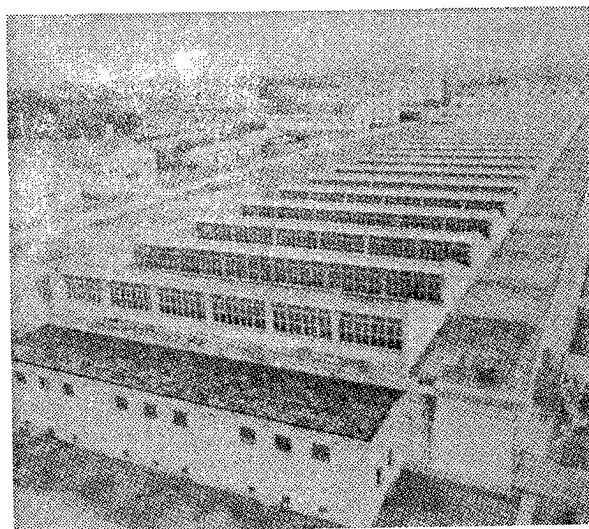


Fig. 18 Photograph of the newly built Dongguan Hemp Textile Mill in Dongguan County, Guangdong Province

[Source: Guangzhou GUANGDONG HUABAO [GUANGDONG PICTORIAL] in Chinese No 1, 1984 p 4]

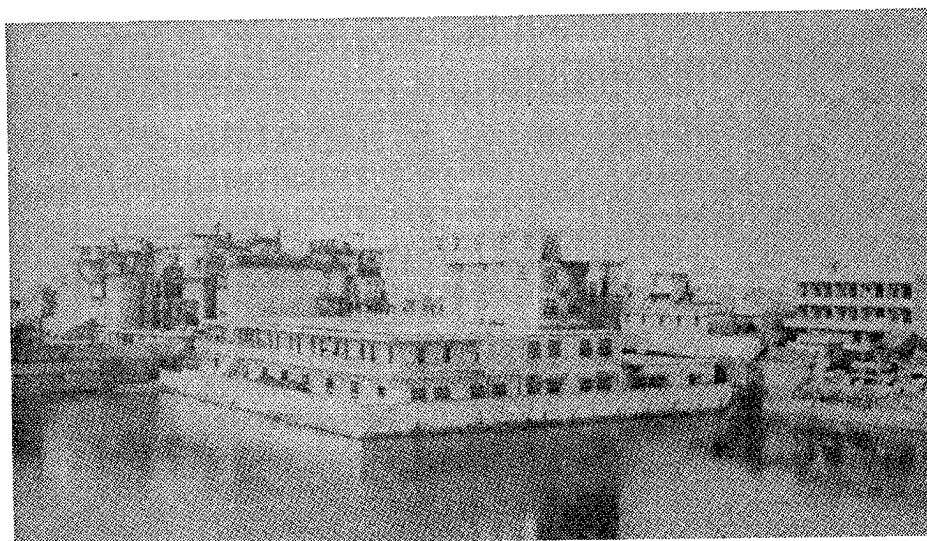


Fig. 19 View of the Dongguan Cement Plant in Guangdong Province

[Source: Guangzhou GUANGDONG HUABAO [GUANGDONG PICTORIAL] in Chinese No 1, 1984 p 5]

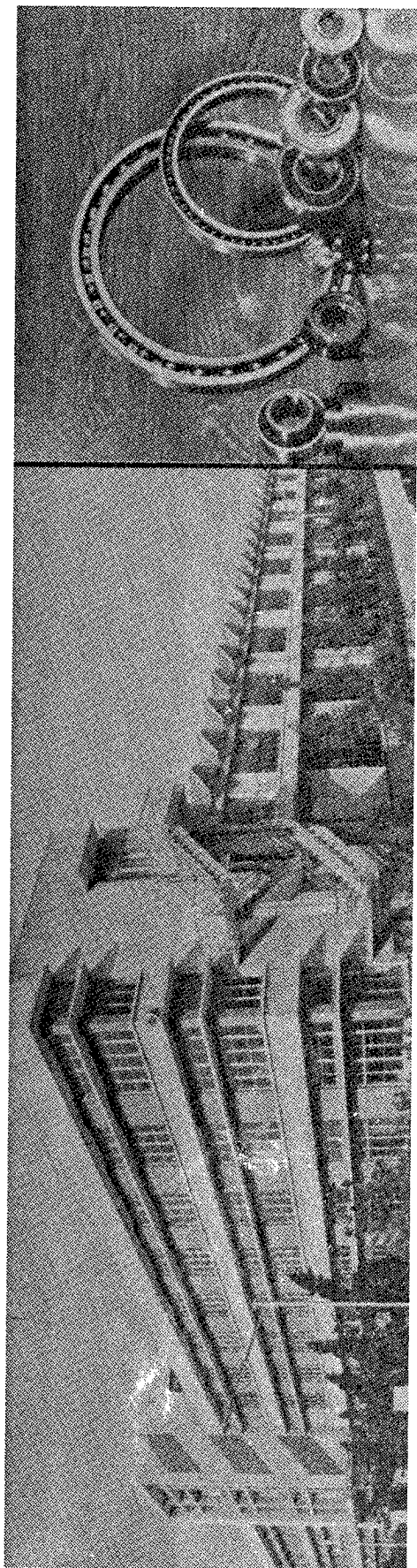


Fig. 20 Photograph of the Changshu Bearing Plant in Yushan Town, Changshu County, Jiangsu Province. Its principal products are 0 Type bearings for electric motors, agricultural machinery, precision machine tools, cloth guiding bearings, for printing and dyeing machinery, and LZ Series special bearings for wool, cotton, chemical fiber machinery.

[Source: Hong Kong ZHONGGUO JIXIE [CHINA MACHINERY] in Chinese and English No 6, 1983 p 34]