# Feasibility Study on Bang Saphan Industrial Estate

(Final Report)

APPENDICES

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# APPENDIX A INVESTMENT DEMAND IN BANG SAPHAN

# INDUSTRIAL ESTATE

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# APPENDIX A INVESTMENT DEMAND IN BANG SAPHAN INDUSTRIAL ESTATE

## A.1 Results of Investment Demand Survey

## A.1.1 Questionnaire Survey Results

## (1) Methodology of Surveys

### i) Target Enterprises for Survey

The Study Team conducted the questionnaire survey of enterprises in Thailand, Japan, U.S.A, Taiwan, and South Korea.

The target industries were as follows.

- Industries related with iron and steel
- Industries related with regional resources

Target enterprises for survey were selected by using the following directories.

Thailand	- Factory in Industrial Estate 1995-1996
	- Manufactures and Exporters 1994-1994
	- Thai Industrial Machinery Equipment Directory
	- Directory of Thai Tool and Die Manufacturers 1993-1994
	- Investment Opportunities Study Automotive and Autoparts Industries in
	Thailand
	- Japanese Overseas Investment 1995
Japan	- Cosmos; Teikoku Data Bank Ltd.
grade in the second	- Japanese Company 2,000; Toyo Keizai Inc.
U.S.A	- Dun & Bradstreet Directory
Taiwan	- Taiwan Top 1,000 Manufacturing Industries
	- Taiwan Buyer's Guide
Korea	- Directory of Top 3,000 Korean Companies

As a result of selection, the number of enterprises for survey in each country is shown below.

e de la companya de					
Thailand	Japan	U.S.A	Taiwan	South Korea	Total
2,880	2,383	1,000	1,000	500	7,763

### ii) Preparation of Questionnaire Form

The questionnaire included the following items to assess the possibility to invest in the Bang Saphan Industrial Estate as well as the required supporting facilities in the vicinity of the industrial estate.

- Major products
- Number of employees
- Capital amount
- Annual shipments
- Factory area
- Electric power consumption
- Water consumption
- Investment plan
- Required location conditions in BSIE
- Interest in the Bang Saphan Industrial Estate

The distribution and collection of questionnaire form were made by mail. The questionnaire form was delivered together with a pamphlet to introduce the profile of the Bang Saphan Industrial Estate.

The date of distribution and collection in each country was as follows.

	Thailand Japan	Ù.S.A	Taiwan	South Korea
Distribution date	Dec.13, 95 Jan.10, 96	Jan.18, 96	Jan.10, 96	Jan.10, 96
Collection date	Jan.20, 96 Feb. 9, 96	Feb.29, 96	Feb.27, 96	Feb. 9, 96

### (2) Result of Survey

#### i) The Rate of Response

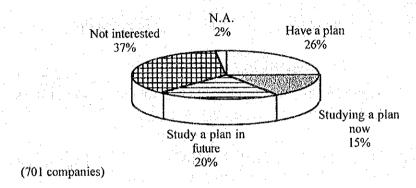
The rate of response is shown below. The average rate of the five countries was 11.6 %. The highest rate was that of Taiwan, 20.1 %, the lowest Thailand, 6.9 %.

	Thailand Japan U.S.A Taiwan South Korea Total
No. of response	200 200 200 201 201 901
Response rate (%)	6.9 8.4 20.0 20.1 20.0 11.6

#### ii) Investment plan

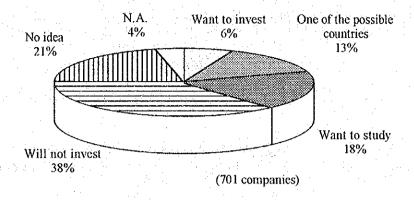
In the survey conducted in the four countries excluding Thailand, more than 60% of enterprises showed the possibility to invest in a foreign country, such as answering "Have a plan", "Studying a plan now" and "Study a plan in future". This result indicated that not a few companies in each country were interested in investment abroad.

# Plan to Invest Abroad in Near Future



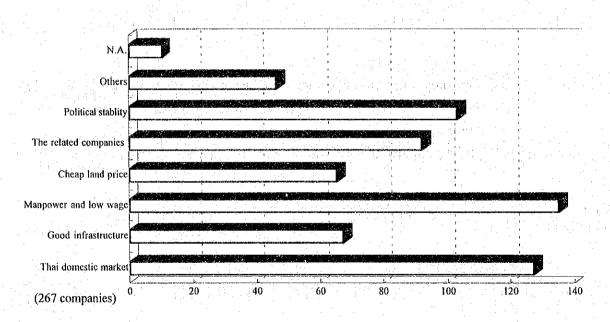
The Study Team asked the question "What do you think of Thailand as a foreign country?". 37% to the total replied "Want to invest", "One of the possible countries", or "Want to study". This means that one third of enterprises interested in investment abroad thought of Thailand as a promising country.

# What do you think about Thailand?



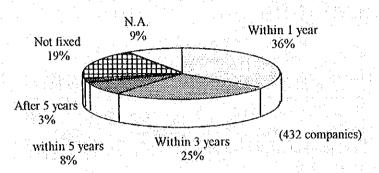
The major reasons for having an interest in Thailand were rich manpower, low wages, market scale of Thailand and political stability.

The Reason for Interest in Thailand



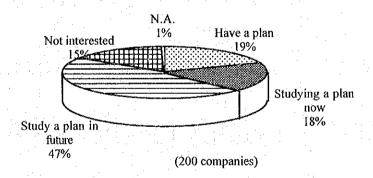
As for the investment schedule, 61 % of companies answered "Within one year" or "Within three years", that means a considerable number of enterprises wanted to invest in near future.

The time to invest



In the survey of the Thai companies, the rate of companies answering "Have a plan", "Studying a plan now" or "Study a plan in future", reached not less than 84%. The investment boom in Thailand is still growing as economy expands.

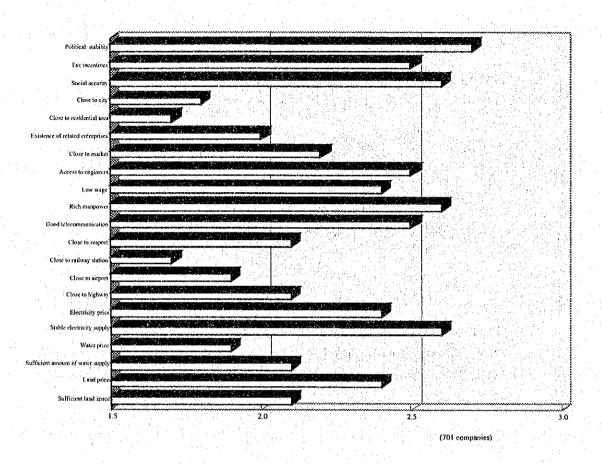
Plan to Invest in Near Future



### iii) Factors to decide factory location

In the survey except Thai companies, the Study Team asked how important enterprises thought of factors when selecting a site. The high ranked answers were "Political stability", "Tax incentives", "Social security", "Rich manpower", "Access to engineers", and "Stable electricity supply".

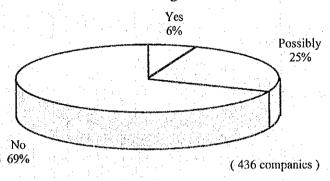
### Location Factor



## iv) The possibility of locating in the Bang Saphan Industrial Estate

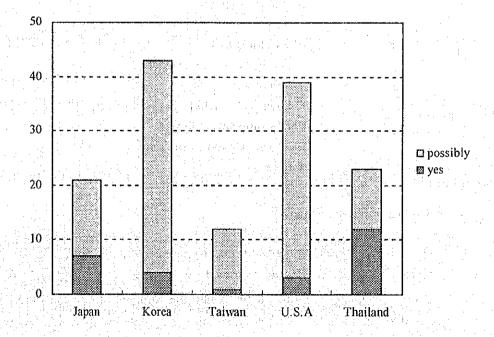
The number of companies answering "Yes" was 27 and the rate was 6%, the companies answering "Possibly" was 111 and 25%. Thus a total of 138 enterprises (31%) showed some interest in investment to the Bang Saphan Industrial Estate.

Interest in Locating in BSIE



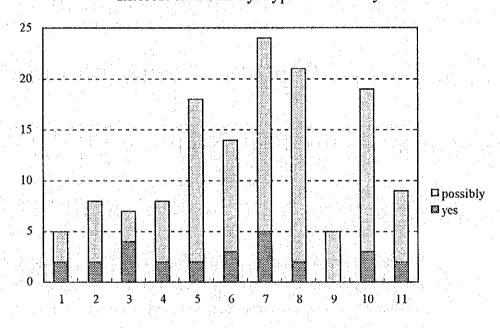
By country, Thailand had the largest number of companies answering "Yes", 12, followed by Japan with 7. If "Yes" with "Possibly" are combined, Korea had the largest number, 43 companies, followed by the U.S.A with 39.

# Interest in BSIE by Country



By type of industry, machinery had the most "Yes", 5, followed by rubber & plastic, 4. Combined "Yes" with "Possibly", the industries showing large number were machine industries such as machinery, electric machinery and transportation equipment and iron and steel industries such as basic metal and fabricated metal.

# Interest in BSIE by Type of Industry

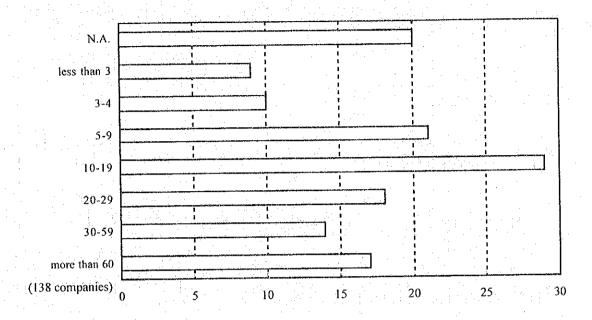


- 2 Petroleum & chemical
- 3 Rubber & plastic
- 4 Clay pot
- 5 Basic metal
- 6 Fabricated metal product
- 7 Machinery
- 8 Electrical machinery
- 9 Precision machinery
- 10 Transportation equipment
- 11 Others

### v) Outline of the investment

Most answers concerning land area for investment in Bang Saphan Industrial Estate indicated 10 - 19 rai, followed by 5 - 9 rai. Compared with the average present land area, 28 rai, in the Thai questionnaire, these answered numbers seem to be small. It is remarkable that 17 companies answered "more than 60 rai".

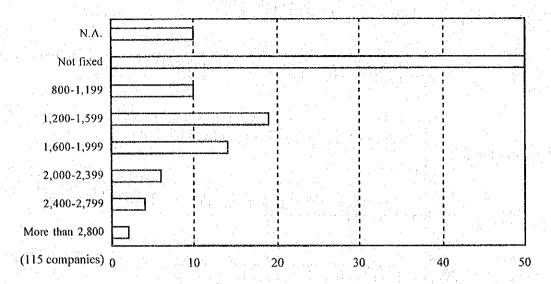
Land Area (rai)



To estimate the demand for land area, it is necessary to get the basic unit of land area. The Study Team calculated the average by means of the medium value of answers, for example 3.5 for 3-4. As a result, 25 rai (40,000m²) is the average of 138 companies. This is not included in the 10-19 range which is answered by 29 companies. The reason is that "more than 60 rai" includes considerably larger areas such as 70 rai.

As for land price, the most prominent answer was "not fixed". Excluding this answer, 1.2 million Baht / rai -1.6 million Baht / rai was the most selected answer. Considering that present land price in other industrial estates is 1.5 million Baht / rai - 2 million the Baht / rai, this answer was a little bit cheaper.

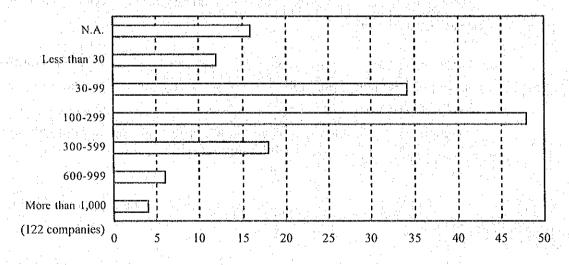
Land Price (1,000 Baht/rai)



The Study Team calculated the average of the 55 companies which gave the figures. The result was about 1,684,000 Baht / rai (1,050 Baht / m<sup>2</sup>).

The employee scale of a new factory in Bang Saphan was assumed at 100 - 299 persons by 34.8% of investors, followed by 30 - 99, 24.6%. "More than 1,000 employees" was indicated by 4 companies, including 2 Thai companies.

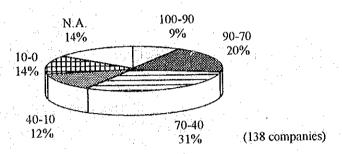
Number of Employees



The Study Team calculated the average of 122 companies. The result was 270 persons.

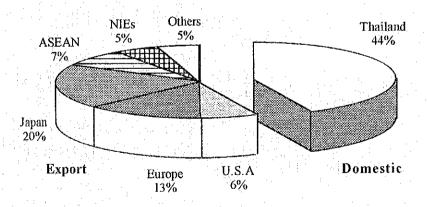
9 % of companies though that they will export almost all the products made in Bang Saphan. Adding 70-90 to this, a third of companies belong to the export-oriented industries. 14 % of companies answered that the major market for sale is Thailand.

The Ratio of Export



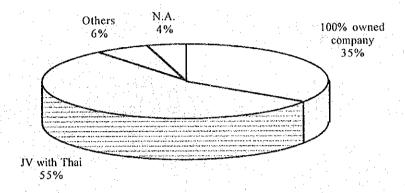
To know the market of an average company, the Study Team calculated the average of 138 companies. As a result, 44% of products produced in Bang Saphan will be sold in the Thai domestic market. The rest, or 56%, will be exported, mainly to Japan, 20%, and Europe, 13%. Many companies expected Bang Saphan will be an exporting base.

Target Countries for Sale



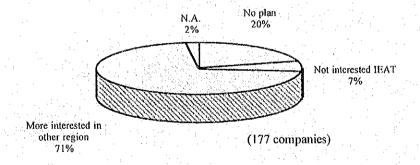
As for the type of capital, 55% foreign companies wanted to be a joint venture with a Thai company, 35% wanted to invest 100% of capital.

Type of Company by Capital



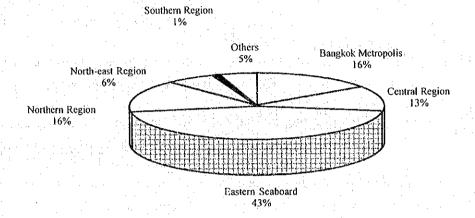
The Study Team asked Thai enterprises the reason for not showing interest in the Bang Saphan Industrial Estate. 70% of answers were "more interested in other regions".

The Reason for Not Interested in BSIE



The Study Team asked 124 companies about "more interested other region" and 43% indicated the Eastern Scaboard. This rate exceeds the combined rate of companies that preferred Bangkok Metropolis and Central Region.

# Region Except BSIE for Investment



# A.1.2 Interview Survey Results

# (1) Methodology of Interview Survey

## 1) Target Enterprises for Survey

To confirm the possibility of investment in the Bang Saphan Industrial Estate, the Study Team conducted interview surveys on the following three groups of companies.

- the companies which show interest in the Bang Saphan industrial estate in the questionnaire survey in Thailand (Group A: 23 companies)
- the companies locating in Thailand which show interest in the Bang Saphan industrial estate in the questionnaire survey in Japan (Group B: 3 companies)
- the companies belonging to the groups of industries selected by the theoretical approach explained in 4.2 (Group C: 38 companies)

Number of companies for interview survey

		Total		Group	Α	Group B	Group C
Food		3		2			1
Textile	100	1		1			
Furniture		3		. 1	1.		2
Chemical		7		6	and the second		1
Rubber		3,	1 .	3.			
Ceramics		. 11		1			
Iron and steel		11		3			8
Fabricated metal		12		1			11
Machinery		3		1		1	1
Electrical		10		1		1	8
machinery		Maria de la compansión de	100		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Motor vehicle		5	erit er e	. :			5
Auto Parts		4		2		1	1
Others		1.		1			
Total		64		23		3	38

## 2) Preparation for Interview Survey

The interview form includes the following items to verify the intention to invest in the Bang Saphan industrial estate as well as to know the more concrete requirements for the industrial estate.

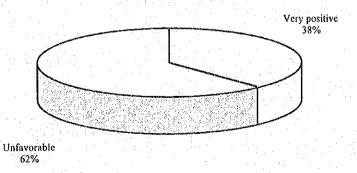
- Direction of products
- Procurement of materials
- Problems on running factories
- Possibility of interest in the Bang Saphan industrial estate
- Interest in FTZ, EPZ, and so on

#### (2) Result of Interview Survey

# 1) Possibility to Build a Factory in Bang Saphan Industrial Estate

The result of interview survey of 26 enterprises showing interest in the questionnaire survey is shown below. 10 companies, or 38%, showed strong interest. In detail, 7 of 12 companies replying "yes" approved the interview survey and 3 showed interest in investment. 11 of 14 companies approved and 7 showed interest.

### Interest in locating a factory in BSIE



Among these companies, those who might invest by 2001 numbered 7 (chemical 3, furniture 1, machinery 1, electric machinery 1, and auto parts 1).

The reasons for not showing interest were:

- The firm had already decided the location for new facility.
- The circumstances of management has changed after the questionnaire survey.
- The firm was no more interested in locating in the Bang Saphan Industrial Estate after reconsideration.

#### 2) Requirement for the Bang Saphan Industrial Estate

A majority of enterprises wanted the following condition.

- There should be a zone such as EPZ or FTZ which is useful for import and export. It takes too long time to refund the tax and the preparation for the tax which is unnecessary to pay is a heavy burden to the operation of the company.
- Sea access to Eastern Seaboard should be ensured. The Eastern Seaboard is the center of manufacturing now and the relation with it is indispensable.
- There should be facilities which encourage engineers to live in Bang Saphan. Engineers are likely to live in Bangkok because of lack of entertainment, school, hospital, and the like a the proposed project site.

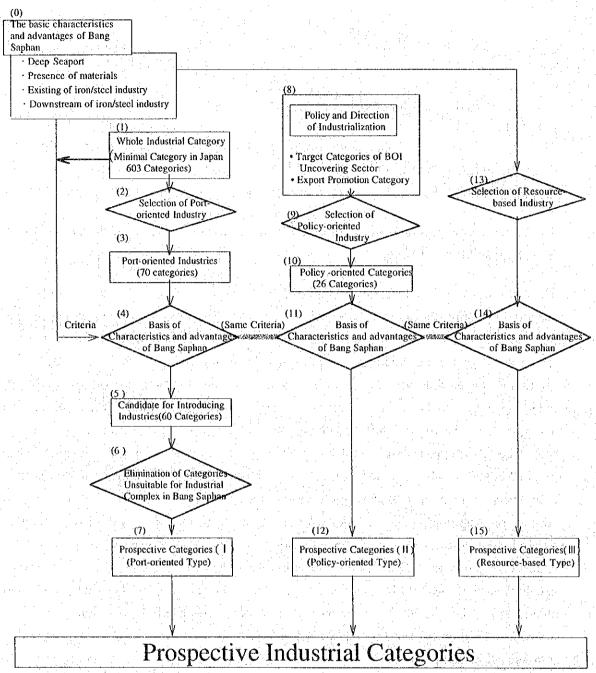
# A.2 Promising Industrial Categories for the Bang Saphan Industrial Estate

# A.2.1 Theoretical Selection of Industrial Categories

The Study Team selected target industries from the viewpoint of the industrial location theory by matching two factors, one is the location condition in Bang Saphan district, and the other is the location factors of industrial categories.

The Study Team identified the promising industrial categories based on the objectives of Bang Saphan I/E development.

The major advantage of location conditions in the Bang Saphan I/E is availability of a deep seaport. Therefore the industries which use large vessels to carry raw materials in and products in or out should be suitable for this condition. For example, the Iron & steel industries depending on the import of raw materials such as coal, iron ore, etc. consider the proximity to a deep seaport as one of the crucial conditions for site selection. Some export industries prefer to locate in a vicinity of the seaport. For example, when automobile assembly industries export their products by exclusive vessels, the proximity to a seaport would be advantageous. But in Thailand all assemblers locate in inland industrial zones except MMC (Mitsubishi Motor Corporation) in Laem Chabang. The major reason is that assemblers locating in Thailand aim at mainly the domestic market and that there is no seaport for exporting passenger cars except Bangkok Port which has insufficient hinterland to build large factories. In the near future automobile makers in Thailand should proceed to export cars and expand their factories. In this case some makers scrap the existing factory and build a new one (S&B), and others relocate to another site. In the latter case, they should select the site in the hinterland of a seaport. The Study Team identified those industries based on the seashore location condition. It is as shown in steps (0) - (7) in the following flow chart.



Work Flow for Selection of Prospective Industrial Categories for Bang Saphan

The next approach is examination of the industrial categories based on the Government Industrial Promotion Program. This is indicated in steps (8) - (12) in the following flow chart. Based on the List of Activities Eligible for Investment Promotion by BOI (the BOI List), the selection of industries was conducted. As mentioned before, the trend of FDI (Foreign Direct Investment) expanded to Zone 3, however enterprises tend to select the sites in the vicinity of Zones 1 and 2. Bang Saphan, locked from Bangkok, was felt 'far' from both markets by business men operating in the Bangkok Metropolitan area. So the Study

Team omitted the industries provided with incentives locating in Zones 1 and 2 and selected industries which 'Must be located in Zone 3' from the BOI List. Industries selected by this screen, corresponded to the location conditions such as seashore location, market-oriented location, etc. in order to eliminate the unsuitable industries.

The final approach is to select industries on the basis of the available materials. In Prachuap Khiri Khan, the major industries are in the agriculture and fishery sector, so industries based on these raw materials have a possibility of locating. This is the process of (13)-(15) in the previous flow chart. Thanks to the existence of iron & steel industries, the Bang Saphan area has potential to be the basic-metal-supply-base in Thailand. Some downstream industries prefer to locate near their material supplier. The promising industrial categories were selected by integrating the above three methods.

#### A.2.2 Selection of Port-Oriented Industries

#### (1) What Are Port-Oriented Industries?

The major advantage of location condition in Bang Saphan is availability of a deep seaport. The Study Team considered the industrial categories which enjoy the advantage of a seashore area as 'Port-oriented industrial categories'. Port-oriented industries consist of two types: the industries which need exclusive berths (narrow sense) and the industries which enjoy the advantage of locating in proximity to the port (broader sense). In addition, they include the industries which form 'complexes'; such as iron & steel complex, food complex, petrochemical complex, etc., and the industries which use ships as a means of transportation. In short, the Study Team considered port-oriented industries in the following 3 conditions.

- Industries which need exclusive berths (narrow sense)
- Industries which enjoy the advantage of locating in proximity to the port (broader sense)
- Industrial categories which take advantage of forming 'complexes'

## (2) First Selection Procedure (Reclaimed Land and Ship Cargo)

The selection was begun by targeting all industries by JISC (Japanese Industrial Static Category) 4-digit (603 industries) which is similar to TISC 5-digit (the reason for using JISC 4-digit is to avoid the possibility of missing potential categories which use a great deal of TISC code). The Study Team selected industrial categories which use a lot of port cargoes, according to experience in Japan.

#### Industries which Prefer to Locate in Reclaimed Land

The first selection was focused on current factories which located in seaside zones in Japan. A seaside zone is the area which faces waters in port districts and is used as one body.

A large-scale questionnaire survey had been conducted on many factories which occupied areas of more than 9,000 m<sup>2</sup> in these zones after 1980. The number of factories was 1,934. Using this result and the census of manufacture, the Study Team picked up industrial categories of which rate of using reclaimed land exceeded 10% of total land area in 1984 or 5% in 1980.

The reason why the Study Team used the old survey is that the number of industries with a seashore location in Japan peaked around 1975. The factory site area, during the period of 14 years from 1965 to 1978, was 826,350,000 m<sup>2</sup>, in which reclaimed land occupied about 17.2% or 142,260,000 m<sup>2</sup>. 165 industrial types are selected.

#### Selection by Volume of Ship Cargo

Next, the Study Team checked the amount of products and raw materials carried in/out by ships. Each factory carries products and raw materials by railway, truck, ship, or pipeline. The Study Team selected the industries from the following criteria.

- Industrial categories which use ship cargo more than 50% (©)
- Industrial categories which use ship cargo 25% 50% (O)
- Industrial categories which use ship cargo less than 25% ( $\triangle$ )

There were 14 industries of Otype. There were 52 in carrying in or out. Combining this result and the industrial categories which locate in reclaimed land, we selected 195 types of industries.

### (3) Selection of Prospective Categories for the Bang Saphan I/E

The Study Team selected prospective industrial categories from the above 194 industrial subsectors. The selection criteria are as follows.

- The industrial categories which have a high rate both in reclaimed area and in transport by ship.
- The industrial categories which are marked
- Some of the industrial categories which tend to locate in reclaimed areas but which don't use ships so often

As a result, 70 industrial categories were selected as the first prospective ones as shown in Table A.2.1 (industrial categories marked ) in the table).

### A.2.3 Selection by Characteristic of the Bang Saphan Area

The Study Team selected industries by matching the location factor with the characteristics of the Bang Saphan area. The considered items are as follows.

- Location far away from the mass-consumption area
- Possibility of using materials related with agriculture, fishery or iron and steel
- Less accumulation of the related or supporting industries

The major advantage of location in Bang Saphan is availability of a deep scaport. However, Bang Saphan is located far from Bangkok Metropolitan Area, about 400 km (location of remotest place). The commuting time between the area and the Metropolitan Area can be shortened by constructing a highway. City functions and infrastructure are steadily available. However, from the viewpoint of industrial location, we had to exclude or omit the industrial categories which need to be located in a large city or its outskirts, i.e. the so called large city-oriented industrial categories.

Generally speaking, industries are divided into two types; one is industries that enjoy locating in a large city or its outskirts, the other is industries that are affected by the other functions.

In the latter group, we selected industrial categories that prefer to locate in a portside area in a regional city. These usually have no land location factor or can locate far from large market. As a result, 10 out of 70 categories were omitted. The selected 60 prospective industrial categories are shown in Table A-2.2.

#### A.2.4 Policy-Oriented Industries

Policy-oriented industries include two types; one is in the BOI List and the other is export-oriented industries. The industrialization policy adopted by the Government was to promote export-oriented industries until the early 1990s. The Government continues this policy and adds the policy of nurturing or promoting supporting industries. These industries aim at the domestic market.

The Study Team identified the target industries from the BOI List which covers from agriculture to service sectors, but in this study the Team focused mainly on the manufacturing sector (123 industries).

The 1st step of selection was to eliminate industries that fall within the following categories:

- Industries provided with BOI incentives without condition anywhere
- Industries provided with BOI incentives in Zone '2 or 3'.

The remaining industries after exclusion were screened by the location condition in the Bang Saphan area. In this process electronic industries and market oriented industries were selected. The selected industries were mostly the same as export-oriented industries mentioned in Section 2.2. The selected 23 industries are shown below:

Selected Industries by Policy-Oriented Industries

Code	Industries	Code	Industries
32	Textiles, wearing apparel, leather and leather products	382	Machinery, except electrical
321	Textiles	38291	Household machinery and appliance
32113	Spinning of cotton and man-made fibers	38292	Air conditioners
32115	Weaving of cotton and man-made	383	Electrical machinery, apparatus,
	fibers		appliances and supplies
32119	Yarn spinning	38310	Electrical industrial machinery and apparatus
33	Wood and wood products, including	38320	Radio, television and communication
	furniture		equipment and apparatus
332	Furniture, fixtures and floorings,	38330	Electrical appliances and house
e i ser	except primary of metals		wares
34	Paper and paper products, printing and publishing	38392	Electric accumulators and batteries
341	Paper and paper products	384	Transport equipment
34111	Pulp, paper and paperboard by machine Paper Products	38431	Assembly of automobiles
		38432	Motor vehicle bodies
35	Chemicals & chemical, petroleum,	38439	Other motor vehicle industry
	coal, rubber & plastic products		
35299	Other chemical products Pesticides, Herbicides, Fungicides, or		
•	Insecticides		
35510	Tire and tube industries		
	Rubber sheets and block rubber		

Source: Study Team Estimates

# A.2.5 Selection of Resource-Oriented Industries (Composition of Groups by Prospective Categories)

One of the major industries in Prachuap Khiri Khan province is food processing as mentioned in Section 2.3. Industries using agricultural products as raw materials are thought to be prospective industries: Canning of fruit and seafood, coir fiber, coconut furniture.

These products are not considered as "resources". Downstream industries using iron and steel products are considered as resource-based industries. (Finished goods such as automobiles, refrigerators, steel furniture, etc. and construction materials are major users of iron and steel products, however, these industries are not apt to locate in the vicinity of iron and steel factories. Therefore resource-based industries using iron and steel are considered as first processing industries and others such as automobile industry are classified as secondary processing industries.

Iron and steel industries have already located in Bang Saphan. These industries will expand and form a complex of iron and steel industries in the future. We usually call this "Kombinat" as spatial location type. These industries will be linked up and apt to form a similar industrial category for effective productivity. Iron and steel industries which compose Kombinat are the first category of basic industries.

Considering the Bang Saphan I/E as an Energy Basement Area in the future, it is important to select industries broadly from this viewpoint. An Energy Basement usually locates in a seashore area and this forms a huge development area which uses various port functions. Industrial categories located in the Energy Basement Area compose a complex too.

#### A.2.6 Promising Industrial Categories

The target industries or promising industrial categories are selected through the above approach. The industries selected from the resource-based approach are included in those selected by the former two approaches. The result of selection is shown in Table A.2.2.

For study of the development concept of the Bang Saphan area, the Study Team tabulated a list of model factories from the above-mentioned selected industrial categories. According to Japanese Industrial Location Basic Unit we established the scale of a model factory by JISC 4-digit and estimated two location factory types: maximum and minimum cases for the year 2006 in scenario 1, and for 2011 in scenario 2, since we considered a lot of indefinite factors of factory location in these target years.

We considered these scales by referring to the average of Japanese factories, but in the case enormous products are to be to maintained in Thailand, we estimated a larger scale for Thai model factories than the average of Japanese factories. Thus we tried to prepare each scale of model factories in order to product activity in the future in Thailand. The results are shown in Table A.2.3.

# A.3 Industrial Development Demand in Bang Saphan

### A.3.1 Macroeconomic Point of View

The projection of the Thai economy for the year 2000 was conducted by NESDB to prepare for the 8th National Development Plan (Thailand 2000: A Guide to Sustainable Growth and Competitiveness, NESDB, 1994). The Thai Government also compiled a report on future perspective toward the year 2020 (this report does not present the economic frames for the year 2020).

Based on the economic performance of Thailand during the last few decades, the NESDB's study projected an average annual growth rate of 7.7% for Thai economy. By the year 2000, the GDP of Thailand is expected to be around US\$280 billion, a 3.3 times increase compared with that in 1990. The population estimated by NESDB is 64 million, therefore, the per capita GDP will be about US\$4,400 in 2000, which is the same level as that of Korea in 1988. The NESDB's study estimated the share of the industrial sector in GDP will be 32.6%. As for export, the industrial share in total export will increase from 75% in 1990 to 85% by the year 2000. The industrial export share in the total was 81% in 1994, therefore, it is possible to achieve the above share in 2000.

In the Western Seaboard Area (WSB region) including Bang Saphan District, NESDB in cooperation with the JICA Study Team (WSB Team) conducted the projection of the regional economy for the years 2001, 2006, and 2011. In this projection the GRP (Gross Regional Product) is estimated for three cases. The WSB estimates of the industry sector including mining, construction, electricity, and water supply are summarized in the following table.

Estimated of GRP by Industry in WSB Region; 2001, 2006, and 2011

unit: million Baht. %

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	1994	2001	2006	2011	95-01	02-06	07-11
Low Case	48,985	88,403	134,776	205,474	8.8	8.8	8.8
Middle Case	48,985	122,575	197,408	296,833	14.0	10.0	8.5
High Case	48,985	122,575	246,541	434,490	14.0	15.0	12.0
	Middle Case	Low Case         48,985           Middle Case         48,985	Low Case 48,985 88,403 Middle Case 48,985 122,575	Low Case         48,985         88,403         134,776           Middle Case         48,985         122,575         197,408	Low Case         48,985         88,403         134,776         205,474           Middle Case         48,985         122,575         197,408         296,833	1994         2001         2006         2011         95-01           Low Case         48,985         88,403         134,776         205,474         8,8           Middle Case         48,985         122,575         197,408         296,833         14.0	Low Case     48,985     88,403     134,776     205,474     8,8     8,8       Middle Case     48,985     122,575     197,408     296,833     14.0     10.0

Note: These figures are still under consideration. Therefore they will be subject to change. Source: Western Seaboard Regional Development Master Plan Study, Interim Report.

Based on these estimates, the Study Team conducted the projection of the GPP (Gross Provincial Products) of industrial origin for 2001, 2006, and 2011. Before the projection, the current situation of industrial activities in Prachuap Khiri Khan should be described taken into consideration. In 1994, GPP by industry in Prachuap Khiri Khan amounted to 9,594 million Baht or 19.6% of that of WSB Region. As for the manufacturing sector in Prachuap

Khiri Khan, GPP amounted to 6,661 million Bahat, corresponding to 69.4% of that of industry. The manufacturing sector's share in WSB Region accounted for 20.4%.

The Low Case in the WSB estimates is assumed as the trend case, therefore, the development of the Bang Saphan Industrial Estate as well as that of other industrial estates in WSB Region are excluded explicitly. As for the projection of the GPP in Purachuap Khiri Khan, the Study Team adopted the Middle Case and High Case in the WSB estimates. The assumptions in the projection are the following.

- i) The manufacture industry ratio in GPP is assumed to be 80% (in 1994 this ratio was 70%).
- ii) During the period from 1995 to 2001 the other provinces included in WSB Region have a slightly more rapid growth compared with Purachuap Khiri Khan.
- iii) During the period from 2002 to 2006 the growth of industries in Prachuap Khiri Khan is more rapid than in other provinces because of the development of the Bang Saphan Industrial Estate and Iron & Steel Industries.
- iv) During the period from 2007 to 2011 the manufacturing sector in the Bang Saphan New Industrial City is in full operation.

Based on the above assumptions and the WSB estimates, the Study Team conducted the projection of the GPP of manufacturing sectors in the target years as shown in the following table.

GPP of Manufacturing Sector in Prachuap Khiri Khan in 2001, 2006, and 2011

unit: million Baht, %

	1994a	2001	2006	2011	95-01	02-06	07-11
Scenario 1(Low)	6,661	18,162	37,400	67,314	18.2	15.5	12.5
Scenario 2(High)	6,661	18,162	42,485	87,182	18.2	18.5	15.5

Note: 1994a is an actual figure. In 2001, the estimates of both High and Low cases are same.

Source: The Study Team estimates.

Based on the above estimates and the promising industries described in the previous section, the value added derived from the Bang Saphan New Industrial City (including the manufacturers in the Bang Saphan Industrial Estate and Iron and Steel Complex) was calculated. The assumptions in the projection are that the value added is similar to the GPP and that the productivity of the manufacturing sub-sectors will increase at a certain rate. The results of the projection are shown in the following tables.

YEAR 2001	Gross Output	Value Added	Area	No. of
NAME of INDUSTRIES	mill. Baht	mill. Baht	(m2)	employees
1 Food manufacture group	231.858	62.341	24,000	150
2 Wood and furniture manufacture group	179.067	78.467	73,500	230
3 Petroleum and coal (C1 chemical) group	595.144	232.157	50,000	90
4 Ceramic industry group	277.973	130.874	45,000	100
5 Steel manufacture (Basic product-line by furnace ) group	15,349.890	5,315.676	1,011,000	2,355
6 Steel processing industry (machinery products-line) group	2,983.134	1,033.054	181,500	865
7 Steel industry by processing line products group	6,145.688	4,120.074	104,000	980
General manufacture (except steel industry)	10,412.863	5,656.966	478,000	2,415
Steel industry	15,349.890	5,315.676	1,011,000	2,355
Total	25,762.753	10,972.642	1,489,000	4,77(

YEAR 2006 Maximum Case	Gross Output	Value Added	Area	No. of
NAME of INDUSTRIES	mill. Baht	mill. Baht	(m2)	employees
1 Food manufacture group	1,955.846	530.685	405,500	1,030
2 Textile manufacture group	333.187	126.910	143,000	410
3 Wooden and furniture manufacture group	328.105	148.208	142,000	370
4 Paper and pulp manufacture of group	209.823	58.867	20,500	150
5 Petroleum and coal (C1 chemicals)	5,744.154	2,335.440	376,000	1,190
6 Ceramic industry group	2,735.081	1,474.034	609,000	1,220
7 Steel manufacture (Basic product-line by furnace) group	25,474.395	8,821.809	1,438,000	2,785
8 Steel processing industry (machinery products-line)group	6,738.316	2,333.493	668,000	1,670
9 Steel industry by processing line products group	25,815.097	16,932.194	577,500	3,230
10 Shipbuilding and repairing group	608.120	407.139	74,000	190
General manufacture (except steel industry)	44,467.729	24,346.969	3,015,500	9,460
Steel industry	25,474.395	8,821.809	1,438,000	2,785
Total	69,942.124	33,168.777	4,453,500	12,245

YEAR 2006 Minimum Case	Gross Output	Value Added	Area	No. of
NAME of INDUSTRIES	mill. Baht	mill, Baht	(m2)	employees
I Food manufacture group	578.710	155.602	65,500	320
2 Wooden and furniture manufacture group	257.200	126.543	73,500	230
3 Petroleum and coal(C1 chemicals)	569.202	194.602	176,000	190
4 Ceramic industry group	1,430.990	673.714	469,000	440
5 Steel manufacture (Basic product-line by furnace) group	25,474.395	8,821.809	1,438,000	2,785
6 Steel processing industry (machinery products-line)group	6,738.316	2,333.493	668,000	1,670
7 Steel industry by processing line products group	22,084.761	14,805.649	564,000	3,010
8 Shipbuilding and repairing group	608.120	407.139	74,000	190
General manufacture (except steel industry)	32,267.300	18,696.742	2,090,000	6,050
Steel industry	25,474.395	8,821.809	1,438,000	2,785
Total	57,741.695	27,518.551	3,528,000	8,835

YEAR 2011 Maximum Case	Gross Output	Value Added	Area	No. of
NAME of INDUSTRIES	mill. Baht	mill. Baht	(m2)	employees
1 Food manufacture group	3,786.204	1,042.045	483,500	1,510
2 Textile manufacture group	404.990	154.260	143,000	410
3 Wooden and furniture manufacture group	687.135	317.304	242,000	650
4 Paper and pulp manufacture group	875.639	245.709	123,700	515
5 Petroleum and coal (C1 chemicals)	11,957.198	4,763.047	949,000	2,775
6 Ceramic industry group	5,581.674	3,080.905	824,000	2,170
7 Steel manufacture (Basic product-line by furnace) group	55,264.768	19,138.210	2,590,000	4,693
8 Steel processing industry (machinery products-line) group	17,754.181	6,148.278	1,167,000	3,620
9 Steel industry by processing line products group	61,959.190	40,084.726	1,486,000	8,530
10 Shipbuilding and repairing group	739.172	494.880	74,000	190
General manufacture (except steel industry)	103,745.383	56,331,153	5,492,200	20,370
Steel industry	55,264.768	19,138.210	2,590,000	4,693
TOTAL	159,010.151	75,469.362	8,082,200	25,063

Year 2011 Minimum Case	Gross Output	Value Added	Area	No. of
NAME of INDUSTRIES	Mill. Baht	Mill. Baht	(m2)	employee
1 Food manufacture group	2,490.530	681.302	405,500	1,030
2 Textile manufacture group	404.990	154.260	143,000	410
3 Wooden and furniture manufacture group	398.816	180.148	142,000	370
4 Paper and pulp manufacture group	255.041	71.553	20,500	150
5 Petroleum and coal (C1 chemicals)	9,193.914	3,698.556	676,000	1,800
6 Ceramic industry group	3,324.512	1,791.699	609,000	1,220
7 Steel manufacture (Basic product-line by furnace) group	55,264.768	19,138.210	2,590,000	4,693
8 Steel processing industry(machinery products-line) group	9,171.359	3,176.064	728,000	1,870
9 Steel industry by processing line products group	37,181.354	24,007.193	790,500	4,880
10 Shipbuilding and repairing group	739.172	494.880	74,000	190
General manufacture (except steel industry)	63,159.687	34,255.655	3,588,500	11,920
Steel industry	55,264.768	19,138.210	2,590,000	4,693
TOTAL	118,424.455	53,393.864	6,178,500	16,613

Source: The Study Team estimates.

Development frames of the Bang Saphan Industrial Estate are summarized below.

(Scenario 1 - Low Case)

Year	Gross Output (mill Baht)	Value-added (mill Baht)	Area (ha.)	Employee (person)
2001	25,763	10,973	148.9	4,770
2006	57,742	27,519	y - 352.8	8,835
2011	118,424	53,394	617.9	16,613

Source: The Study Team Estimates.

(Scenario 2 - High Case)

4	V= 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	z - mign case)			
	Year	Gross Output (mill Baht)	Value-added (mill Baht)	Area (ha.)	Employee (person)
Ì	2001	25,763	10,973	148.9	4,770
	2006	69,942	33,169	445.4	12,245
	2011	159,010	75,469	808.2	25,063

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# A.3.2 Results of Questionnaire Survey and Interview Survey

#### (1) Demand for Land Area in 2001

According to the interview survey, the Study Team identified that 10 of 63 companies might invest in the Bang Saphan Industrial Estate by 2001. The types of industry are as follows: Chemical 3, Iron & steel 3, Furniture 1, Machinery 1, Auto parts 1, and Electrical Machinery 1.

The demand of land area for one company is from 5 rai to 150 rai and the average is around 36 rai. The total area demand by 2001 would be 360 rai (58 ha) as shown below.

Type of industry	Need of	Major product	Reason for interest	Requirement to I/E		
	Land area		1 2 3 4 5 6 7	1 2 3 4 5		
Chemical	60 rai	Pharmaceutical bulk	0 0 0 0	000		
Chemical	150 rai	PX, PTA	0 0 0	0.0		
Chemical	5 rai	PVC, PP, ABS, PE	0 0 0	0		
Furniture	5 rai	Wooden furniture	0	0		
Machinery	30 rai	Pump	0 0	0 0 0		
Auto Parts	20 rai	Bearings	0	000		
Electrical Machinery	10 rai	Electrical equipment	0 0 0	000		
Machinery	20 rai	Hoist	0 0 0	0 0		
Iron & Steel	20 mi	Steel Service				
Fabricated metal	40 rai	Steel Structure	0.00	0 0		
Total	360 rai	(57.6ha)		te in a great treat title at		

The following are three major reasons for interest:

- Bang Saphan Industrial Estate is located near a deep seaport.
- Bang Saphan Industrial Estate is located in a Free Trade Area.
- Bang Saphan Industrial Estate is next to an iron & steel complex.

The main requirements for the industrial estate include the following three points.

- The industrial estate should be equipped with several facilities such as accommodation, hospital, school, amusement to enjoy city life.

- The industrial estate should be connected with the Eastern Seaboard.
- The industrial estate should be timely supplied with good and necessary raw materials from the iron & steel complex.

### (2) Demand for Land Area in 2011

The Study Team estimated the land area demand by 2011 based on the results of questionnaire survey and interview survey.

On the basis of the expansion coefficient, which is equivalent to the reciprocal of the sampling ratio, the number of companies saying "yes" is 178 and saying "possibly" is 829.

	No of Samples	Total Number	Expansion Coefficient	Replied I	Number	Expanded	Number
	a)	b) *	1/a)/b)	Yes	Possibly	Yes	Possibly
Taiwan	1,000	12,242	12.24	1	11	12	135
South Korea	500	3,926	7.85	4	39	31	306
USA	1,000	5,205	5.21	3	36	16	188
Japan	2,389	29,047	12.16	7	14	85	170
Subtotal	4,889	50,420		15	100	144	799
Thailand	2,888	7,999	2.77	12	11	33	30
Total	7,777	58,419		27	ÜI	177	829

Source: \*

1991 Taiwan-Fukien Census Report of Commerce and Service Industry, Republic of China

Taiwan: 1991 Taiwan-Fukien Census Report of Korea: Korea Business Consultancy
USA: Dun & Bradstreet Directory
Japan: 1991 Establishment Census of Japan

Thailand: 1992 Industrial Survey

As known from the result of interview survey, some enterprises had lost interest. The Study Team estimated the confirmation rate as follows.

The confirmation rate of Thailand was estimated from the result of interview survey conducted in Thailand. The reason why the confirmation rate of "yes" is lower than that of "possibly" is thought to be that not a few companies saying "yes" had already determined the location for a new facility. The confirmation rate of four countries except Thailand was estimated on the basis of the result of survey conducted in Japan.

Thail	and Other Countries
yes 25.0	% 34.3 %
possibly 36.4	% 5.5 %

source: The Study Team estimates

As the interview survey was not conducted in the U.S.A, South Korea, and Taiwan, the Study Team estimated two cases; one is the total (High case), the other is the total except the number of companies answering "possibly" (Low case).

	Thailand		Other co	ountries
	yes	possibly	yes	possibly
Low Case		0	0	X
High Case		0	O	$\circ$

70 - 115 companies are expected to locate in the Bang Saphan Industrial Estate in 2011 as shown in the following table.

	Thailand	Other Countries	Total
Low Case	20 companies	50 companies	70 companies
High Case	20 companies	95 companies	115 companies

33 companies  $\times$  25.0% + 30 companies x 36.4% = (19.2) = 20 companies

145 companies  $\times$  34.5% = (49.7) = 50 companies

799 companies  $\times$  5.5% = (43.9) = 45 companies

The average land area demand of a company was assumed to be 50,000 m<sup>2</sup> (31 rai) from the result of questionnaire survey and interview survey. As a result, the demand of land area in 2011 would be from 350 ha (2,188 rai) to 575 ha (3,594 rai).

	Companies	Land Area	
Low Case	70 companies	350 ha (2,188 rai)	
High Case	115 companies	575 ha (3,594 rai)	

70 companies  $\times$  50,000m<sup>2</sup> (31 rai) = 350 ha (2,188 rai) 115 companies  $\times$  50,000m<sup>2</sup> (31 rai) = 460 ha (3,594 rai)

# (3) Industrial Development Demand for the Bang Saphan Industrial Estate

In the estimates by the macroscopic approach, both land area and number of employees included those of existing and future expanding iron and steel industries. On the other hand, the estimates by the microscopic approach, or using questionnaire and interview survey approach, excluded the iron and steel industries. The difference of estimated figures between the macro and micro approaches results from the treatment of the iron and steel industries. The land area derived from the macroscopic approach except the iron and steel industries is 47.8 ha by 2001 and 259 ha by 2011

(in Low case). These calculated by the microscopic approach are 57.6 ha by 2001 and 280 - 460 ha by 2011.

Based on the comparison between macro- and micro-approach estimates, the Study Team estimated the demands in the Bang Saphan Area including iron and steel industries to be 620 ha of industrial land area and 16,600 workers.

Table A.2.1 Selection of Port-oriented Industrial Category(1/2)

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	Category			· ·	٠. م	. 2	<b>10</b>	, da,	0	=				21 :	n 2	t 2	3 1	s						8	o.	ę.				22	23		1					Ì		-		*	Š		Sy	36	32			
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		oduces	æ 6	58.0	20.1	24.9	25.6		-	36.4	24.6	-	88		3 5	·	702	t 00		·		-5	33.9	113	10.7		16.0		53.9	543	91.1	-	-	-+	401	+		173	-[		33	1.79	•	47			12.7	273		20.9
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Carry in Carry out 1	Thai Industrial Static Categoy by strip (%) (%)	Food, by	Food manufacturing	Cauning of fish 🛆 🖒 24.3	Fish sauce	Daines	Other meet products	Other mest products	Other canning, preserving and processing of fish,	Other canning and preserving of fruit vegetables	Soy sauce and soy curds	Soy source and soy cards	Other food products	Other food products	Other food products	Other food products	Sagar factories 🔘 🗅	Sugar refineries	Starches	Grain mill products other	Biscuits	Grain flour mills	Sand need not a low bear classified &	Food products not elsewhere elassified 0. \triangle 26.9	Grata Bour mills	Sarothes (9)	73 Noodles and similar products	Wood and wood products, including formittee	Builders' woodwark	Courmille and planing mills	Wood and wood and cork products, except form:   A 23.1	Venteer, plywood and wenteered panel	Builders' woodwork	Wood and cork products not elsewhere classified	Wood and cork products not elsewhere classified 🔝 🛆 13.0	Wooden and cane containers and small cane war	Wood and wood products, including furniture	Rattan furniture	Furniture, fixiures and floorings, except primary	Builders woodwork	Paper and paper products, printing and publishing	Paper and paper products	Pulp, paper and paperboard by machine 🔘 🔾 23.1	Futu paper and paperboard by machine	Paper and paper products	Pulp, paper and paperboard articles not elsewhere	Containers and boxes of paper and paperboard	Fibreboard	Printing publishing and allied industries	
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09 2653	Ö		- (	-:	90		204	61:2966 P	Plastic working machinery and accessories		Special industrial machinery and equipment except	poon.	and metal	Service.	4 4 4		
110 2644	Steel pipes and tubes	fron and steel basic industrics	<b>D</b>	>	8				- 0		Air-conditioning machines		0	3.5	Š	.=	
111 2645	Re-rolled steel products 37.1	Iron and steel basic industries	© -	() 	78.0			7	3	_		C			6	5	
	D (37)	Iron and steel basic industries	0	-	11.9	:		163 2974 C	Conveyors and conveying equipment	-	Other machinery except electrical			:	·		
117 704		_		· <		7	46	164 2975 N	Acchanical power transmission equipment exce 38240		Special industrial machinery and equipment exe-			_			
113 2648	Wire drawing 38192		٠.ر	1	;			7	The state of the state of the state of		Special industrial machinery and couroment exc		0	24.1	963		
114 2659	Miscellancous coated steel	Iron and steel basic industries	Ø)	Ŷ	2		64/	0 6			results from the second of the	- 7	and metal	- 5	25.3		
115.0661	I'm eaches exernicast iron pines and malle 37.	from and steel basic industries	4	0		36.6	<b>6</b> 48			•	ביום חוות חשות ליבושת הוא מיום בלכי ביום היום ביום ביום ביום ביום ביום ביום ביום ב	٤.	•		22 5 00.5	:	
11.7	The state of the s	The second secon		_		13.8		167 2978 C	Chemical machinery and its equipment	38240 Sp	Special industrial machinery and equipment exci-		_	·,-	_		
116 2662	Malleable iron castings	BOR AND STOCK DASKS HARDSHIES					•		res .v	38740 Sp.	Special industrial machinery and equipment exe	4	0	20.6	\$65	:2	
117 2663	Stock castings 371	Iron and steel basic industries	4	4	<u>.</u>		ì	_			second denomary man product of the latest the second	po o manage	diam'	. 0 91	٤3		
***	37)	Iron and steel basic industries		4	803	_	• •	V 28621691	Woolen yarn hand knitting machines	_	Special industrial machinery and equipment excep-	7	•				
1007 811	Comp.			_	3	٠.	٠.	170 2984	Refrienzators and air conditioning apparatus	38291 Ho	Household machinery and appliances			-	-		
119 2691	Iron powder 3/1		) ( -					2000	Standard Box and the manage of the standard and the standard 38740	_	Office computing and accounting machinery	4	4		27.9		
120 2692	from and steel shearing and slitting	Iron and steel busic industries	( <u>0</u> )	< -	177	87.7	000	_	אוצכבותקונסחם סיווכי פרן גרב וותחפוול שות המחו	-	C. I lotter bur books tours and an arrangement but a second secon	- Post ton	and metal				
		Trop and steel hasic industries			8 69			172 2992	Valves and fittings	38.24U	colar modelinas machinery and equipment exec		1		_		
121 20%				_	7	7 50		173 2993	Pabricated pipe and littings	38240 Spc	Special industrial machinery and equipment except wood and metal 35.1	poor Jos	and metal	35.1			
122 2699	fron and steel, n.e.e.	fron and siect basic industries.	1	+				3000			Special industrial machinery and equipment exc	4					
27	Manufacture of non-ferrous metals and pi 372	Non-ferrous metal basic industries						-			COOK TOWNS AND THE PARTY AND T	and wood	Ĉ	_	_	:	
1124 241	Primary smelting and refigure of copper 37200	Non-ferrous metal basic industries	©	•	2			175,2996	Molds and dres parts and accessories	2	COM INGESTIGATION OF COMPANY COM		ļ	+	1		
1	The second of th		0			•			Manufacture of electrical machinery, equipment[383]		Electrical machinery, apparatus, applicances and supplies	Suppacs		+			
124 2/18	·		:	•	_			176 3011	Generators motors and other rotating electrical ri38310	-	Electrical industrial machinery and apparatus	4	4		 8.6		
125 2715							-	•		_	Cleaners and universal machinery and apparetus	_	C		13.9		
126 2721		Non-ferrous metal basic industries		_:	31.4				Power and distribution transformers, except electronic		במוויבים וותחיבות ווייבים וויבים ווייבים וויבים וויב		).		74		
		Non-ferrous metal basic industries	0					178 3013	Relay switches, switchboards and electrical confidential	_	Electrical industrial macminery and apparatus	-	•	-			
777	DOCECT TO SECURITY OF STREET, LIBRARY	_		9				179 3014	Wingg devices and supplies		Insulated wire and cable				10.7		
128 2729	Miscellancous secondary smolung and relinis 127,200							-	Classics builts	32393 Ele	Electric lambs				10.2		
129 2731	Rolling and drawing of copper and copper at 37200	Non-ferrous metal basic industries			-	2	:		Coccust outros		Paris and apparent communication continued apparent	tand 2005	, and an	12.1			
120 7739	Politice of lend and allows including extendin 37200	Non-ferrous metal basic industries	۵.					181 3041	Communication equipment (wired)		1010, ICIEVISION AND COMMISSION CHAIRMAN		}	:	-	. •	
70.7	(A)CLE and the minimum of the contraction of the co		•	4	11.6		<b>©</b> 52	182 3049	Miscellancous communication equipment and re 38310.		Electrical industrial machinery and apparatus			11.8	-		
131 2735								(F) (S)	Musufacture of transportation equipment	384 Tr	Transport equipment			***			
132 2739	7	$\overline{}$							Meaning and advertise majorities	38431 Ac	Assembly of automobiles	4	ō	13,6	97.6	29	
133,2741	Electric wire and cable, except optical fiber 437200		<del>-</del>	4					Motor ventrales increamed motores care		or but he but to	٥	٥		2.5		
134 7754	Non-ferrous die eastings, except aluminium (37200	Non-ferrous metal basic industries			\$7.8				Motor vehicle parts and accessories	-	מופו גרוויבור מסונים			:			
136 7756		Non-ferrous metal basic industries	0	_	•			3122	Railroad car parts		Craer motor venice measury	(	(	- ;	_	a ye	
200	Manufacture of Japaneted metal products		d equips.	ien(					Seel shipbuilding and repaining		Building and repaining of sect saips	) (	· ·	1 0			
1000	Transaction of the Chief Chief Products   38199	-1-	200	0			<b>49</b> 53		Hull blocks	-	Other shipbuilding and repairing not discwhere of	_	1	000	•	60	
10000	,	_			22.2			138 31 43	Wooden shipbuilding and repairing	38412 Bu	Building and repaining of wooden boxts			5	-		
137 2821	(Tableware(occidental type)		ۇ بىرىن ب		É		25€	31.45	Maone coolbes	38439 Ot	Other motor vehicle industry	Э	Õ	14.1	•	0.20	
138 2825			_		1		5		The Company of the Co		Other materivehicle jedustry		4	13.2			
139 2827	Agricultural tools except agricultural machin 38220	Agricultural machinery and equipment			7		,	1515 061	וווים ווציווים ונתבעים שונס לישווים שמת שרבים ביוורים	$\Box$						000,000,000	
140 7841			_	4 .		483	655	32	Manufacture of precesson indirements and inachially		Office magnicaciunts undustries			*			
2	Table of the contract of the c	_	4	 مر	181			191 3211	Universal measures		Industries not elsewhere classified		:	2.0.2			
7007 161				<u>ا</u>	13.9	13.6	.656	192 3216	Precision measuring machines and instruments	39090	Industries not elsewhere classified		:		  -  -		
142 2843	Paoncated plate work and succe metal work		i nivecii	Ţ		00		193 3217	Analytical instruments	39090	industries not elsewhere classified		4				
143 2851	Stamped and pressed aluminium products an	_	100010	į		30.00	_	104 3236	Page 1	39090 10	Industries not elsewhere classified				87		
144 2861	Coating metal products			· 		2		7	- 13		Other weeks (softment porter feet	100			0.00	10000000	
145 2865	Heat treated motal			C		51.2		3	THE RECEIVED LIKE					è		Sec. 2000	
146 2869		Coating, engraving and allied services	7	4				19513399	Ordnance and accessones, a.e.c.	m Devee	IOUSINGS DOI CISCWIICIG UIASSILICO				-		•
147 7870	Missellaneous fabricated wire moducts			٥								٠			٠.		
			- except v	000													
148 2891	Sign		re classi		11.6	26.2											
149 7839	Capital production	٦.															

Table A.2.2 Selection of Industrial Group in Bang Saphan Industrial Estate(1/2)

3.11. Swed Manufacturing. 3.11. Swed Manufacturing. 3.11.41. Cainting Manufacturing. 3.11.42. Other canning, preserving and processing of fish. 3.11.42. Other canning, preserving and processing of fish. 3.11.42. Swe same and swy cands. 3.11.42. Swe same and swy cands. 3.11.43. Swe same and swy cands. 3.11.44. Food products and elsewhere classified. 3.11.45. Novelles and similar products. 3.11.45. Novelles and similar products. 3.11.45. Food products and elsewhere classified. 3.11.45. Novelles and similar products.	Manufacture of Footing Continues and man-made filess 3.2115 Weaving of cotton and man-made filess 3.2115 Weaving of cotton and man-made filess 3.2115 Weaving of cotton and nan-made filess 3.210 Footing of cotton and nan-made filess 3.210 Footing of source of performance of performand out. 3.5120 Footing was not positioned or a feet of the source of t	35200 Other chemicalproducts 35501 Rubber shouse and block rubber 35501 Tire and tube industries 35501 Tire and tube industries 35501 Tire and tube industries 3311 Noneer, Plywood and Suntime Group 33111 Noneer, Plywood and venerord panel 33111 Sawmills and planning; mills 3311 Builders' woodwork 33201 Furniture, fixtures and floorings except primary of metals or ration	A the paper and purp group  34111 Pulp paper and prochested by mechine  34120 Containers and boxes of paper and populoand  34120 Containers and boxes of paper and populoand  34120 Containers and populoand articles not cleewhere closeful and populoand  34120 Pulp, poper and populoand articles not cleewhere closeful and and articles not cleewhere closeful and and articles not closewhere closeful and and articles not closewhere closeful and articles not closewhere closeful and articles not closewhere closeful and articles and steel works and rolling mills  37110 Leon and steel works and rolling mills  3711 from and steel works and rolling mills
211 Mart Products   212 Dairy Products   212 Dairy Products   212 Massellaneous Livestock Products   212 Cannote serious and sealowed   222 Cannote serious and senious asserts and selfish smino acide.   222 Cannote serious productions serious productions serious productions serious productions   222 Massellaneous serious principles   223 Wageralole oil and fate   223 Wageralole oil and fate   223 Massellaneous measurement   223 Massellaneous   223 Massellaneous   223 Massellaneous   223 Massellaneous   223 Massellaneous   223 Massella	Dimmiscence of Testils General   1421   Spraining mills and centure   1431   Tovisting prince, except balky prims   1431   Tovisting prince, except balky prims   1431   Tovisting prince, except balky prims   1431   Educe mills and could CL Chemicale Certure   1431   Tovisting prince, and prosphate Certifices   2011   Nitrogenies and phosphate Certifices   2021   Inorganic pigenoms   2022   Inorganic pigenoms   2023   Recipies of and liquefied gasses   2023   Alphabacic intermediates, including alphabetic software   2023   Alchabacic intermediates, including alphabetic software   2023   Alchabacic intermediates including alphabetic software   2023   Alchabacic intermediates including alphabetic software   2024   Accessing industry   2025   Accessi	2312 Greass 231 The and turks for automobiles 2333 Mechanical rubber products 2393 Rubber sheets Mainfacture of Western of Formann Comp. 1617 [Bowing and planning mills, n.e.c., 1624 Particle based. 1711 Wooden furniture, except Japaness	Maintificities (Migrates) and Dubp grains  1821 Paperboard  1822 Paperboard  1822 Corrugated paper  1841 Office paper products  1841 Office paper products  1842 Corrugated paper  1852 Stock manufactured, with electric furnaces, including single electric furnaces, and 2641 liter onling  2642 Cold rolling  2652 Cold rolling  2653 Calvanized steel sheets (Flectrical zine sheet)

## Table A.2.2 Selection of Industrial Group in Bang Saphan Industrial Estate(2/2)

											•												d nytal working machinery	d metal working machinery		d metal working machinery	d metal working machinery	d netal working machinery					id metal working machinery	id metal working machinery		ltus						
ed processing industry groups (Alachmety processing inter-	A/1 alrea and sleet basic Industries	771 from and store basic industries	371 fron and steel basic industries	371 from and steel basic industries	371 from and steel basic industries	371 Iron and steel basic industries	27 TOWN and each basic industries	371. Iron and steel basic industries	371: Iron and steel basic industries	37 Fron and steel basic industries	371. Iron and steel basic industries	37.1 Iron, and steel basic industries	371. Iron and steel basic industries		Ceramics andustry group	36200 Glass and glass products	36200 (flass and glass products	36910 Structural cluy products	36999. Non-metallic mineral products not elsewhere classified	36999. Non-metallic mineral products not elsewhere classified		rocessing and Assembly industrial group	NACOS (Aner machinety categor electrical machinety and equipment except wood and motal working machinety	282.0 No. e.o.) included machinery and equipment except wood and metal working machinery	38292 Air-conditioning machines	38240. Special industrial machinery and equipment except wood and metal working machinery	38240 Special industrial machinery and equipment except wood and metal working machinery	38240. Special industrial machinery and equipment except wood and metal working machinery	38299 Other machinery except electrical machinery	38250 Office, computing and accounting machinery	382.50. Office, computing and accounting machinery	38292 Air-conditioning machines	38240 Special industrial machinery and equipment except wood and metal working machinery	38240, Special industrial machinery and equipment except wood and metal working machinery	38330 Electrical appliances and household	38320 Radio, refevision and communication equipment and apparatus	38392 Bleetric accumulators and batteries	Shipbuildin Shipbuilding and repairs	Shipbuildin Shipbuilding and repairs		Shiphailding and repairs	38411; Building and repairing of steel ships
818				100											3							46																\$	ž.		S .	
roduct-line					nd malicable from castings					ະກາດປະເທດ		oducts	concords surcial at the man											cheels		nd blowers		The second secon	A minimum bar managaran		ry and household machines	satzieda	on district machinery	2011 Centrature, inscels and construction in a second electronic appliances (fansformer)								
Steel processing industry group (Machinery p	2644 Steel pipes and tubes	2646 Cold finished steel bats	2648 Wire drawing	2653 Coated steel pipes	2654 Coated steet wire	2662 Malleable iron castings	2663 Steel eastings	2664 Secondary forgings	2692 Iron and steel shearing and shiting	2693 fron and steel scrap preparation for smelling	2694 Czst (con pipe	2841 Fabricated construction use metal products	2842; Papricated architectural metal faculticistics and cultural and shorts	2845 Fabricated plate work and sixed the	droug andustry enough	2512 Processed flat plays	2514 Glass containers	2551 (Gas Minks	Account of the Control of the Contro	2500 Miscellandous chay tendence	Special Constitution 1007	eversame and Assembly Industrial group	2911 Boilers	2912 Steam engines, turbines and water wheels	2971. Pumps and pumping equipment	2972 Air compressors, gas compressors and blowers	2974 Coveyers and conveying equipment	29771Oil hydraulic equipment	29/8 Chemical machinery and his equipment	2001 Office marchine	2002 Miscellamons office service industry and household machines	2083. Refrience and air conditioning appearables	2001 Change accorded other relating distributive	2017 Continues, incots and circumstant of the contract of the	2021 Hanshold alexand anothers	2017 Doubling County appropries	2000 States to refer the states	2112 More cobjets bodies and trailers	2112 Moor which parts and accessories		Shahmildian and rebails	
25	4		</td <td></td> <td>•</td> <td>1 1</td> <td>₫ •ੂ,</td> <td>4</td> <td></td> <td>∢i</td> <td>∢</td> <td>বা</td> <td>\$ 1.12= 2.12= 2.12= 2.12= 3.12</td> <td>1</td> <td>ð</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4A</td> <td>0</td> <td></td> <td>4 €</td> <td>•</td> <td>•</td> <td><b>3</b> 1</td> <td><b>8</b> •</td> <td>d <b>≫ €</b></td> <td><b>)</b> (</td> <td>•</td> <td><b>&gt;</b> •</td> <td><b>&gt;</b> (</td> <td>•</td> <td>1</td> <td>9 (</td> <td><b>≫</b> €</td> <td>•</td> <td>1</td> <td>Y</td> <td></td>		•	1 1	₫ •ੂ,	4		∢i	∢	বা	\$ 1.12= 2.12= 2.12= 2.12= 3.12	1	ð							4A	0		4 €	•	•	<b>3</b> 1	<b>8</b> •	d <b>≫ €</b>	<b>)</b> (	•	<b>&gt;</b> •	<b>&gt;</b> (	•	1	9 (	<b>≫</b> €	•	1	Y	

Regional resources, based industrial category
 Port-extented industrial category
 Policy-critical industrial category
 Industrial category, selected from tosult of demand survey

Table A.2.3 Selection of Industrial Category in Bang Saphan Industrial Estate (2001 year) (1/5)

		Scale of Mode	Factory in Bang S	aphan I/E
Japanese Industrial Category	Thai Industrial Category	Area	No. of	Water
(No. is Japanese industrial category's number)	(No. is That industrial category's number)	(m2)	Employee	Consumption
			1 1 1 1 1 1 1	
1211 Meat products	311 Food manufacturing	8,500	50	150
1212 Dairy products	31111 Slaughtering	11,000	. 50 .	380
1229 Miscellaneous livestock products	31119 Other meat products	4.500	50	100
	31121 Dairies	:		
	31122 Milk factories			
	31149 Other canning, preserving and processing			
	of fish and other sea foods		<u> </u>	
Manufacture of food group	Manufacture of food group	24,000	150	630
1624 Particleboard	33112 Veneer, plywood and veneered panel	43,500	70	130
1049 Tarreterana	33113. Bulkers woodwork			
4711 Wooden furmiture except Japanese	33201 Furniture, fixtures and floorings, except	30,000	160	60
1711 record in team on the experience	primary of metals and or rattans			
Manufacture of wooden and furniture group	Manufacture of wooden and furniture group	73,500	230	190
2121 Lubricating oils	354 Miscellaneous products of petroleum and coal	30,000	30	350
2122 Greases	35400 Miscellaneous products of petroleum and coal	20.000	60	45
Petroleum and coal products group	Petroleum and coal products group	50,000	90	395
2551 Fire blocks	36910 Structural clay products	45,000	100	80
Ceramics Industry group	Ceramics Industry group	45,000	100	80
2632 Steel manufactore, with electric furnaces.	371 Iron and steel basic industries	344,000	400	5.500
including single electric furnaces, and with			1	100
rolling facilities with rolling factors				
2641 Steel manufacture of hot rolling mill	37110 Iton and steel works and rolling mills	264,000	655	. 10,590
2642 Steel manufacture of cold rolling mill	37110 Iron and steel works and rolling mills	213,000	550	10,000
2641 Steel magnifacture of hot rolling mill(Bar mill)	37110 from and steel works and rolling mills	105,000	300	2.500
2652 Galvanized steel sheet(Electrical zinc sheet)	371 Iron and steel basic industries	88.000	320	2.500
2652 Canonized steel sheet(Fused zinc sheet)	371 Iron and steel basic industries	8.000	130	1.000
Ox Plant	Ox Plant		**	
Steel manufacture(Basic product-line by furnace)	Steel manufacture(Basic product-line by furnace)	1,011,000	2,355	32,000
group	Bronb		<del> </del>	<del></del>
2646 Cold finished steel bars	371 From and steel basic industries	45,000	250	40
	371 from and steel basic industries 371 Iron and steel basic industries	25.000	75	350
2648 Wire drawing		30.000	63	50
2692 Iron and steel sheering and shitting			80	50
2693 Iron and steel scraping	371 Iron and steel basic industries	25,000		130
2811 Tru cans and other plated sheet products	371 Iron and steel basic industries	15.000	110	
2841 Fabricated goods except structural hardware	371 Iron and steel basic industries	45,000	100	80
2843 Fabricated plate work and sheet metal work	371 Iron and steel basic industries	29,000	185	115
Steel processing industry(machinery products-line)	Steel processing industry(machinery products-line)	214,000	865	815
group	group		<del> </del>	<del></del>
2072 Air compressor, and gas compressors and blowers	38292 Au-conditioning machines	25,000	200	35
2980 Office machines	38250 Office, computing and accounting machinery	35,000	90	90
2984 Refrigerators and air conditioning apparatus	382 Machinery: except electrical	25,000	370	160
2989 Miscellaneous office, surface industry and household	382 Machinery, except electrical	30.000	320	240
machines	Sor salacinites, excels electrical	30.000	3.0	240
Steel industry by processing line products group	Steel industry by processing line products group	115,000	980	525
And the second s				
General manufacture(except steel industry)	General manufacture(except steel industry)	521,500	2,415	2,635
		1 4044600		
Steel industry	Steel industry Total	1,011,000	2,355 4,770	32,000 34,635

Table A.2.3 Selection of Industrial Category in Bung Suphan Industrial Estate(2006 year : Scenario-1 : Minimum-Case) (2/5)

				of Model Fact	Water	
Japanese Industrial Category		That industrial category	Area	No. of		
(No. is Japanese industrial category's number)		(No. is That industrial category's number)	(m2)	Employee	Consumption(m3/e	
11 Meat products	311	Food manufacturing	8.500	50		1.
12 Dairy products	31111	Slaughtering	11.000	50		3
12 Dillet (Module)	31121	Dairies			10.0	
	31122	Milk factories				1
21 Canned seafood and seaweed		Other canning, preserving and	4,500	50	4	. 2
	/11.7/	processing of fish	4,500	50		1
29 Miscellaneous seafood products	21172	Say sauce and soy curds	37,000	120		
12 soy source "Sioux" and edible acids		Continue of food group	65,500	320		Lá
nufacture of food group	Mano	facture of food group	VALLEY			
		tr in the second	43,500	70		1
24 Particleboard		Veneer, nivwood and veneered panel	43,300	70		٠. '
	33113	Builders' woodwork	20.000	1.60		
11 Wooden furniture, except Japanese	33201		30.000	. 160		
		primary of metals and or ratians	<b>50</b> 500	220		
mufacture of wooden and furniture group	Manu	facture of wooden and furniture group	73,500	230		
					A CONTRACTOR OF THE CONTRACTOR	
	25200	Other chemical products	85,000	70		5.
34 Fermentation industry			65.000	60		
21 Lubricatine industry		Other chemical products	26,000	60.		
22 Greases		Otter chemical products	176,000	190		6.
mufacture of Petroleum and coal	Manu	facture of Petroleum and coal	1,000,000			ائد
		Occurred also markings	75,000	170		**
51 Fire blocks		Structural clay products	44,000	100		٠,
59 Miscellaneous clay refectories	36910	Structural clay products				4.
5! Carbonaceous electrodes	36999	Non-metallic mineral products not elsewhere	350,000	170		
ramics industry group	Cerar	nies industry group	469,000	440		_5
			950.000			21.
32 Steel manufactured, with electric furnaces.	371	Iron and steet basic industry	758.000	650		£1.
including single electric furnaces, and with	100					
facilities with rolling factories	100				a for a	
41 Steel manufacture of hot rolling mill	37110	From and steel works and rolling mills	264,000	655		10.
41 Steel Hamiliacture of anti-rolling mill	37110	Iron and steel works and rolling mills	213.000	730		9.
42 Steet manufacture of cold rolling mill		Land and steel works and colling mills	105.000	300	and the second	2
41 Steel manufacture of hot rolling mitt(Bar mi	III 37110	Iron and steel basic industry	88.000	320	the state of the s	. 2
52 Galvanized steel sheet/Electrical zinc sheet)			10.000	130		3.
552 Galvanized steel sheet/Fused zinc sheet)	371	Iron and steel basic industry	10.000	0		
				and the same of the same		
x Plant	Ox Pl					
		manufacture (Basic product-line by furnace)	1,438,000	2,785		50,
cel manufacture (Basic product-line by furnace)		manufacture (Basic product-line by furnace)	1,438,000	2,785		50,
cel manufacture (Basic product-line by furnace)	Steel	manufacture (Basic product-line by furnace)	1,438,000	2,785		50
eel manufacture (Basic product-line by furnace) oup	Steel group	manufacture (Basic product-line by furnace)				
eel manufacture (Basic product-line by furnace) oup 44 Steel pipes and tubes	Steel group 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000	180		
eel manufacture (Basic product-line by furnace) oup 44 Steel pipes and tubes	Steel group 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic industry	220,000 39,000	180 : 50		
eel manufacture (Basic product-line by furnace) oup 44 Steel pipes and tubes 46 Cold finished steel bars	371 371 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic industry Iron and steel basic industry	220,000 39,000 42,000	180 50 130		
eel manufacture (Basic product-line by furnace) oup 44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing	Steel group 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic industry	220,000 39,000 42,000 38,000	180 50 130 120		
eel manufacture (Basic product-line by furnace) oup 344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel	371 371 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic industry Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000	180 50 130 120		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooling	371 371 371 371 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000	180 : 50 130 120 110 300		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooline 61 Iron castings, except cast iron pipes and	371 371 371 371 371 371 371	Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000	180 50 130 120		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooling 61 Iron castings, except cast from pipes and 62 Malleable from castings	371 371 371 371 371 371 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000	180 : 50 130 120 110 300		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pines and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooline 61 Iron castings, except cast from pines and 62 Malleable from castings 64 Causation pine	371 371 371 371 371 371 371 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000 47,000	180 50 130 120 110 300		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooling 61 Iron castings, except cast from pipes and 62 Malleable iron castings 64 Causation pipe 692 Iron and steel shearing and stitting	Steel group 371 371 371 371 371 371 371 371 371	Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 46,000	180 50 130 120 110 300 150		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 66 Ferrous metal machine parts and tooling 661 Iron castines, except cast from pipes and 662 Maltable iron castings 994 Causation pipe 1093 Iron and steel shearing and slitting 1093 Iron and steel scrap preparation for snichting	Steel group 371 371 371 371 371 371 371 371 371 371	Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 46,000 20,000	180 50 130 120 110 300 150 170 200		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrons metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 594 Causation pipe 594 Causation pipe 595 Iron and steel shearing and stilling 596 from and steel seran preparation for smelting 5811 fin cans and other plated sheet products	371 371 371 371 371 371 371 371 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 46,000 20,000 15,000	180 50 130 120 110 300 150 170 200 80		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 694 Causation pipe 695 Iron and steel shearing and stitting 696 Iron and steel seran preparation for smelting 696 Iron and steel seran preparation for smelting 697 Iron and steel seran preparation for smelting 698 Iron and steel seran preparation for smelting 699 Iron and steel seran preparation for smelting 699 Iron and steel seran preparation for smelting 691 Itin cans and other plated sheet products 693 Fabricated plate work and sheet metal work	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 46,000 20,000 15,000	180 50 130 120 110 300 150 170 200 80 110		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 694 Causation pipe 695 Iron and steel shearing and stitting 696 Iron and steel seran preparation for smelting 696 Iron and steel seran preparation for smelting 697 Iron and steel seran preparation for smelting 698 Iron and steel seran preparation for smelting 699 Iron and steel seran preparation for smelting 699 Iron and steel seran preparation for smelting 691 Itin cans and other plated sheet products 693 Fabricated plate work and sheet metal work	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 46,000 20,000 15,000	180 50 130 120 110 300 150 170 200 80		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooling 61 Iron castines, except cast from pipes and 62 Maltable from castings 94 Causation pipe 193 Iron and steel shearing and shitting 193 Iron and steel scrap preparation for smelting 194 tin cans and other plated sheet products 195 Fabricated plate work and sheet nietal worl 196 processing industry(machinery products-	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 47,000 35,000 46,000 15,000 11,000	180 50 130 120 110 300 150 170 200 80 110 70		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrons metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 694 Causation pipe 192 Iron and steel shearing and stitting 193 Iron and steel seran preparation for smelting 11 tin cans and other plated sheet products 1343 Fabricated plate work and sheet metal work 100 processing industry(machinery products- 1011 Boilers	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 46,000 15,000 11,000 668,000	180 50 130 120 110 300 150 170 200 80 110 70		1 5
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrons metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 694 Causation pipe 692 Iron and steel shearing and stitting 693 Iron and steel seran preparation for smelting 693 Iron and steel seran preparation for smelting 694 It in cans and other plated sheet products 695 Fabricated plate work and sheet metal work 696 processing industry(machinery products- 697 Boiters 697 Steam engines, turbans and water wheels.	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry	220,000 39,000 42,000 38,000 35,000 47,000 35,000 46,000 15,000 11,000	180 50 130 120 110 300 150 170 200 80 110 70		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 94 Causation pipe 992 Iron and steel shearing and shifting 993 Iron and steel shearing and shifting 993 Iron and steel shearing and sheet products 43 Fabricated plate work and sheet metal work eel processing industry(machinery products- 911 Boiters 112 Steam engines, turbans and water wheels,	Steel group 371 371 371 371 371 371 371 371 371 371	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic	220,000 39,000 42,000 38,000 35,000 47,000 20,000 11,000 668,000	180 50 130 120 110 300 150 200 80 110 70 1,676		1 5
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrois metal machine parts and tooline 61 Iron castings, except cast iron pipes and 62 Malleable iron castings 994 Causation pipe 992 Iron and steel shearing and shifting 993 Iron and steel shearing and shifting 993 Iron and steel stran preparation for smelting 811 tin cans and other plated sheet products 43 Fabricated plate work and sheet nietal worl cel processing industry(machinery products- 911 Boiters 912 Steam engines, turbans and water wheels, except machine engines 972 Air compressors, eas compressors and blow	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 11,000 11,000 668,000 130,000 220,000	180 50 130 120 110 300 150 170 200 80 110 70 1,676 800		1 5
44 Steel pipes and tubes 44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrois metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 694 Causation pipe 695 Iron and steel shearing and slitting 696 Iron and steel shearing and slitting 697 Iron and steel seran preparation for smelting 698 Iron and steel seran preparation for smelting 699 Iron and steel seran preparation for smelting 699 Iron and steel shearing and sheet moducis 690 Ferrois and other plated sheet products 691 Fabricated plate work and sheet metal work 692 Iron services in the sheet products 693 Iron and steel seran preparation for smelting 694 Fabricated plate work and sheet metal work 695 Estam engines, turbans and water wheels 696 Estam engines, turbans and water wheels 697 Estam engines and conveying confirment	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 11,000 11,000 130,000 20,000 20,000 20,000 20,000 20,000 20,000	180 50 130 120 110 300 150 170 200 80 110 70 <b>1,676</b> 470 800		1 5
44 Steel pipes and tubes 44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrois metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 694 Causation pipe 695 Iron and steel shearing and slitting 696 Iron and steel shearing and slitting 697 Iron and steel seran preparation for smelting 698 Iron and steel seran preparation for smelting 699 Iron and steel seran preparation for smelting 699 Iron and steel shearing and sheet moducis 690 Ferrois and other plated sheet products 691 Fabricated plate work and sheet metal work 692 Iron services in the sheet products 693 Iron and steel seran preparation for smelting 694 Fabricated plate work and sheet metal work 695 Estam engines, turbans and water wheels 696 Estam engines, turbans and water wheels 697 Estam engines and conveying confirment	371 371 371 371 371 371 371 371 371 371	Iron and steel basic industry Iron a	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 15,000 11,000 668,000 220,000 25,000 27,000 25,000	180 50 130 120 110 300 150 200 110 70 1,670 470 800		1
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooling 61 Iron castings, except cast from pipes and 62 Malleable iron castings 94 Causation pipe 193 Iron and steel shearing and slitting 194 Iron and steel shearing and shifting 195 Iron and steel strap preparation for sniching 196 Itin cans and other plated sheet products 197 Earlie and Steel plate work and sheet nietal work 198 Processing industry(machinery products- 199 Boiters 197 Air compressors, gas compressors and blow 197 Conveyors and conveying comment 197 Chemical machinery and its equipment	Steel group  371 371 371 371 371 371 371 371 371 37	manufacture (Basic product-line by furnace)  Iron and steel basic industry Iron and steel basic	220,000 39,000 42,000 38,000 35,000 120,000 47,000 20,000 15,000 15,000 220,000 220,000 25,000 27,000 25,000 60,000	180 50 130 120 110 300 150 170 200 80 110 70 1,670 470 800 130 130 130 130 130 130 130 130 130 1		1 5
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrous metal machine parts and tooling 61 Iron castings, except cast from pipes and 62 Malleable iron castings 94 Causation pipe 193 Iron and steel shearing and slitting 193 Iron and steel shearing and sheet products 194 Fabricated plate work and sheet nietal work 195 Iron and steel shearing and sheet nietal work 196 Processing industry(machinery products- 197 Boiters 197 Air compressors, gas compressors and blow 1974 Convevors and conveying equipment 1981 Office machinery and its equipment 1981 Office machinery	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 11,000 11,000 668,000 20,000 27,000 27,000 25,000 60,000 60,000	180 500 130 120 110 300 150 170 200 80 110 70 1,670 470 800 131 120 133 134 120 135 136 136 137 138 138 138 138 138 138 138 138 138 138		1 1 3
eed manufacture (Basic product-line by furnace) oup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrois metal machine parts and tooline 361 Iron castings, except cast from pipes and 362 Malleable from castings 394 Causation pipe 393 Iron and steel shearing and slitting 393 Iron and steel shearing and slitting 393 Iron and steel shearing and sheet products 343 Fabricated plate work and sheet metal work 346 processing industry(machinery products- 371 Boiters 372 Air compressors, as compressors and blow 374 Convevors and conveying equipment 375 Chemical machinery and its equipment 376 Office machines 377 Microprofiles	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,000 38,000 35,000 120,000 47,000 20,000 15,000 15,000 220,000 220,000 25,000 27,000 25,000 60,000	180 500 130 120 110 300 150 170 200 80 110 70 1,670 470 800 131 120 133 134 120 135 136 136 137 138 138 138 138 138 138 138 138 138 138		1
eed manufacture (Basic product-line by furnace) oup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrons metal machine parts and tooline 361 Iron castings, except cast from pipes and 362 Malleable from castings 394 Causation pipe 395 Iron and steel shearing and slitting 396 Iron and steel shearing and slitting 397 Iron and steel seran preparation for smelting 381 Itin cans and other plated sheet products 384 Fabricated plate work and sheet metal work 386 processing industry(machinery products- 397 Steam engines, turbans and water wheels, 398 except machine engines 398 Chemical machinery and its equipment 398 Chemical machinery and its equipment 398 Miscellaneous office, service industry and	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 120,000 47,000 35,000 15,000 11,000 130,000 220,000 25,000 27,000 25,000 60,000 60,000 617,000	180 50 130 120 110 300 150 170 200 110 70 1,670 470 800 131 120 333 800 160		1 5
eel manufacture (Basic product-line by furnace) coup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrons metal machine parts and tooling 361 Fron castings, except cast fron pipes and 362 Malleable fron castings 394 Causation pipe 393 Iron and steel shearing and slitting 393 Iron and steel shearing and slitting 393 Iron and steel scrap preparation for smelting 384 Fabricated plate work and sheet netal work 385 februare plate work and sheet netal work 396 processing industry(machinery products- 397 Steam engines, turbans and water wheels, 398 except machine engines 398 Conveyors and conveying equipment 398 Office machinery and its equipment 398 Miscellaneous office, service industry and 398 briggehold machines	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,000 38,000 35,000 120,000 47,000 35,000 11,000 11,000 668,000 20,000 27,000 27,000 25,000 60,000 60,000	180 50 130 120 110 300 150 170 200 110 70 1,670 470 800 131 120 333 800 160		1 3
eel manufacture (Basic product-line by furnace) coup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrous metal machine parts and tooling 361 Fron castings, excent cast fron pipes and 362 Malleable fron castings 394 Causation pipe 393 Iron and steel shearing and slitting 393 Iron and steel scrap preparation for smelting 384 Fabricated plate work and sheet netal worl 365 team engines, turbans and water wheels, 367 except machine engines 378 Air compressors, gas compressors and blow 378 Conveyors and conveying equipment 378 Chemical machinery 389 Miscellaneous office, service industry and 380 household machines 381 refrigerators and air conditioning apparatus 383 Miscellaneous office, service industry and 384 household machines	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 47,000 35,000 46,000 11,000 130,000 220,000 27,000 27,000 25,000 60,000 60,000 17,000	180 50 130 120 110 300 150 170 200 80 110 70 1,670 470 800 200 131 120 333 800 160		1 5
eel manufacture (Basic product-line by furnace) coup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrois metal machine parts and tooline 361 Iron castings, except cast from pipes and 362 Malleable from castings 394 Causation pipe 395 Iron and steel shearing and slitting 396 Iron and steel shearing and slitting 397 Iron and steel scrap preparation for smelting 381 Itin cans and other plated sheet products 3843 Fabricated plate work and sheet metal work 3843 Fabricated plate work and sheet metal work 395 Iron and steel shearing and water wheels, 397 except machines, turbans and water wheels, 398 except machine engines 398 Air compressors, as compressors and blow 398 Refrigerators and air conditioning apparatus 398 Miscellaneous office, service industry and 388 Industry by processing line products ground 389 Industry by processing line products ground 381 Industry by processing line products ground 384 Steel shiphyilding and repairing	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 120,000 47,000 35,000 11,000 15,000 11,000 20,000 20,000 20,000 21,000 27,000 25,000 60,000 60,000 17,000 564,000 67,000	180 500 130 120 110 300 150 170 200 80 110 70 1,670 470 800 200 130 122 333 800 160 3,011		1 5
eed manufacture (Basic product-line by furnace) oup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrois metal machine parts and tooline 361 Iron castings, except cast from pipes and 362 Malleable from castings 394 Causation pipe 395 Iron and steel shearing and slitting 396 Iron and steel shearing and slitting 397 Iron and steel shearing and sheet products 343 Fabricated plate work and sheet metal work 346 processing industry(machinery products- 347 Boiters 348 Esteam engines, turbans and water wheels, 349 except machine engines 340 Convevors and conveying equipment 341 Convevors and conveying equipment 342 Conveyors and conveying equipment 343 Refrigerators and air conditioning apparatus 344 Refrigerators and air conditioning apparatus 345 Miscellaneous office, service industry and 346 Industry by processing line products ground 341 Steel shipbuilding and repairing	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 47,000 35,000 46,000 11,000 130,000 220,000 27,000 27,000 25,000 60,000 60,000 17,000	180 500 130 120 110 300 150 170 200 80 110 70 1,670 470 800 200 130 122 333 800 160 3,011		1 5
eed manufacture (Basic product-line by furnace) oup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrons metal machine parts and tooline 361 Iron castines, except cast from pipes and 362 Malteable from castings 394 Causation pipe 392 Iron and steel shearine and stitting 393 Iron and steel shearine and stitting 393 Iron and steel shearine and sheet products 343 Fabricated plate work and sheet metal worl 344 Fabricated plate work and sheet metal worl 345 Iron and steel shearines 347 Steam engines, turbans and water wheels, 348 except machine engines 349 Convevors and conveying comment 349 Convevors and conveying comment 340 Office machines 341 Office machines 342 Office machines 343 Iron machines 344 Conveyors and air conditioning apparatus 345 Miscellaneous office, service industry and 346 Industry by processing line products ground 347 Steel shiphuilding and repairing	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 47,000 35,000 46,000 15,000 11,000 668,000 220,000 27,000 25,000 60,000 60,000 67,000 7,000	180 50 130 120 110 300 150 170 200 110 70 1,670 800 110 3,33 800 160 3,011 144	) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	1 5
eed manufacture (Basic product-line by furnace) oup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrons metal machine parts and tooline 361 Iron castines, except cast from pipes and 362 Malteable from castings 394 Causation pipe 392 Iron and steel shearine and stitting 393 Iron and steel shearine and stitting 393 Iron and steel shearine and sheet products 343 Fabricated plate work and sheet metal worl 344 Fabricated plate work and sheet metal worl 345 Iron and steel shearines 347 Steam engines, turbans and water wheels, 348 except machine engines 349 Convevors and conveying comment 349 Convevors and conveying comment 340 Office machines 341 Office machines 342 Office machines 343 Iron machines 344 Conveyors and air conditioning apparatus 345 Miscellaneous office, service industry and 346 Industry by processing line products ground 347 Steel shiphuilding and repairing	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 120,000 47,000 35,000 11,000 15,000 11,000 20,000 20,000 20,000 21,000 27,000 25,000 60,000 60,000 17,000 564,000 67,000	180 50 130 120 110 300 150 170 200 110 70 1,670 800 110 3,33 800 160 3,011 144	) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	1 3
eel manufacture (Basic product-line by furnace) oup  44 Steel pipes and tubes 46 Cold finished steel bars 48 Wire drawing 50 Coated steel 60 Ferrois metal machine parts and tooline 61 Iron castings, except cast from pipes and 62 Malleable from castings 994 Causation pipe 992 Iron and steel shearing and slitting 993 Iron and steel shearing and slitting 993 Iron and steel scrap preparation for smelting 894 Fabricated plate work and sheet products 843 Fabricated plate work and sheet metal work 844 Fabricated plate work and sheet metal work 845 Processing industry(machinery products- 846 Processing industry(machinery products- 847 Convevors and conveying equipment 848 Office machines 849 Refrigerators and air conditioning apparatus 849 Miscellaneous office, service industry and 840 household machines 841 Itel industry by processing line products grou 842 Heff seed shiphyliding and repairing 843 Heffice shiphyliding and repairing	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 120,000 47,000 35,000 11,000 11,000 130,000 220,000 25,000 27,000 25,000 60,000 17,000 564,000 7,000 7,000	180 500 130 120 110 3000 150 170 200 80 110 70 1,670 470 800 200 130 130 130 140 3.011 144	0 0 0 0 0	1 1
eel manufacture (Basic product-line by furnace) coup  344 Steel pipes and tubes 346 Cold finished steel bars 348 Wire drawing 350 Coated steel 360 Ferrous metal machine parts and tooling 361 Fron castings, excent cast fron pipes and 362 Malleable fron castings 394 Causation pipe 393 Iron and steel shearing and slitting 393 Iron and steel scrap preparation for smelting 384 Fabricated plate work and sheet netal worl 365 team engines, turbans and water wheels, 367 except machine engines 378 Air compressors, gas compressors and blow 378 Conveyors and conveying equipment 378 Chemical machinery 389 Miscellaneous office, service industry and 380 household machines 381 refrigerators and air conditioning apparatus 383 Miscellaneous office, service industry and 384 household machines	Steel group  371 371 371 371 371 371 371 371 371 37	Iron and steel basic industry Iron a	220,000 39,000 42,090 38,000 35,000 47,000 35,000 46,000 15,000 11,000 668,000 220,000 27,000 25,000 60,000 60,000 67,000 7,000	180 50 130 120 110 300 150 170 200 80 110 70 1,676 470 806 131 121 333 806 161 3,011 144 50	0	1

Table A.2.3. Selection of Industrial Category in Bang Saphan Industrial Estate (2006 year: Scenario-2: Maximum-Case) (3/5)

			Sea	le of Model Facto	
Japanese Industrial Category	. 1	That Industrial Category	Area	No of	Water
(No. is Japanese industrial category's number)		(No. is That industrial category's number)	(m2)	Employee	Consumption(m.Vday)
1311 Meat products	311	Food manufacturing	8,500	50	150
		Slathering	1 0.500	- 50	1.00
1212 Dairy products		Dairies	11,000	50	380
		Milk factories			
1221 Canned seafood and seaweed 1229 Miscellaneous seafood products	31149	Other eauting, preserving and processing of fish	4,500	50	230
1242 soy source 'syoyu' and edible acids	31132	Say sauce and sey curds	4,500 37,000	50 120	100 700
1253 Glucose, starch syrup and high-fractose corn syrup		Starches	35,000	80	4,250
1263 Wheat flour milling	31163	Grain floor mills	20,000	70	100
		Grain mill products		1.1	1.
1281 Vegetable oil and fars		Oil and fats	45,000	100	1,800
1283 Edible oil and fats 1293 Noodles, macaroni and spaghetti		Oil and fats	40,000	180	900
1361 Balanced compound feeds		Novelles and similar products Prepared animal feeds	10,000	80 200	150
Manufacture of food group	Mami	acture of food group	405,500	1.030	350 9,310
			199 199	2.0.0	
1421 Spinning mills and cotton	32112	Cotton ginning	100.000	250	4,500
1431 Twisting yams, except bulky yams		Spinning of cotton and man-made fibbers	11.000	60	250
1411 Fabric mills, woven cotton, spain rayon		Textile not elsewhere classified	32,000	100	1.300
Manufacture of textile group	Manu	acture of textile group	143,000	410	6,050
1617 Flooring mills	33100	Wood and cork products not elsewhere classifies	30,000	100	160
1619 Sawing and planning mills	33111	Sawmills and planning mills	27,000	70	40
1624 Particleboard		Veneer, plywood and veneered panel	70,000	120	200
	33113				
1711 Wooden furniture, except Japanese	33201		15,000	80	. 40
	<del></del>	of metals and or ratians			<u> </u>
Manufacture of wooden and furniture group	Manul	acture of wooden and furniture group	142,000		440
1841 Office paper products	111111	Polo paper and paperboard articles not elsewhere cla	ا م دست		Section 1
1851 Sacks for heavy weight shipping		Containers and boxes of paper and paperboard	8,500 12,000	90	30 50
Manufacture of paper and pulp group	Mamil	acture of paper and pulp group	20,500	150	80
2033 Methano derivatives		Basic industrial chemicals, except charcoal	200,000	.900	2.700
2034 Fermentation industry	35299	Other chemical products	85,000	100	5.5(0)
2121 Eulerkating industry 2122 Greases		Other chemical products Other chemical products	65,000	100	700
Manufacture of Petroleum and coal(C, chemicals)		acture of Petroleum and coal(C, chemicals)	26,000 376,900	1,190	8,950
	11741100	perior of extention and consequencing	373,800	1,130	8,950
2512 Processed flat glass	36200	Glass and glass products	100,000	600	1.850
2514 Glass containers	36200		40,000	180	400
2551 Fire blocks	36910		75,000	170	150
2559 Miscellaneous clay refectories 2561 Carbonaceous electrodes	36999	Structural clay products  Non-metallic mineral products not elsewhere classified	44,000	100	1.000
Ceramics industry group		ies industry group	350 000 609,000	170 1,220	4.3330
		I I I I I I I I I I I I I I I I I I I	002,000	1,449	7,100
2632 Steel manufactured, with electric furnaces.	371	Iron and steel basic industry	758,000	650	21.800
including single electric furnaces, and with rolling				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
2641 Steel manufacture of hot rolling mill	37110		264,000	655	10,000
2642 Steel manufacture of cold rolling mill 2641 Steel manufacture of hot rolling mill(Bar mill)	37[10	from and steel works and rolling mills	213,000	730	0,900
2652 Galvanized steel sheetilElectrical zine sheet)	37110 371	from and steet works and rolling mills from and steet basic industry	105.000	300	2.5(X)
2652 Galvanized sleet shoet(Firsed zinc sheet)	371	from and steel basic industry	88,000 10,000	320 130	2,500 3,000
Ox Plant	Ox Pla				300
Steel mamifacture (Basic product-line by furnace) group	Steel n	nanufacture (Basic product-line by furnace) group	1.438,000	2,785	50,000
	90 a 10 a				
2644 Steel pipes and tubes	371	from and steel basic industry	220,000	180	1,300
2646 Cold finished steel bars	371	from and steel basic industry	39,000	. 50	40
2648 Wire drawing 2650 Coated steel	371	Iron and steel basic industry	42,000	1.30	650
the state of the s	371	from and steel basic industry	38,000	120	750
2660 Ferrous metal machine parts and tooling products	371	Iron and steel basic industry	35.000	110	400
2661 Iron castings, except cast iron pipes and malleable 2662 Malleable iron castings	371	Iron and steel basic industry	120,000	3(9)	1.360
2694 Causation pipe	371 371	tron and steel basic industry	47,000	150	650
2692 thon and steel shearing and slitting	171	from and steel basic industry	35,000	170	. 500.
2693 from and steel scrap preparation for smelling	371	Iron and steel basic industry Iron and steel basic industry	36 OO)	2(8)	120
2811 Tin cans and other plated sheet products	371	from and steel basic industry	20.000	80	10
2843 Fabricated plate work and sheet metal work	371	from and steel basic industry	15,000 11,000	110 70	140
Steel processing industry(machinery products-line)group		recessing industry(machinery products-line)group	668,000	1,670	20 2 tim
- Interest product interesting		A STATE OF THE PROPERTY OF THE	300,000	1.010	5,990
and the first of the second of the second	1-1			ja.	Fig. 3a sa
2911 Bouces	182	Machinery except electrical	130,000	470	180
2912 Steam engines, turbans and water wheels,	382	Machinery except electrical	220,000	800	3,200
except machine engines			220.000		550
2072 Air compressors gas compressors and blowers	38292	Air-conditioning machinery	25,000	200	30
3974 Conveyors and conveying equipment	382	Machinery except electrical	27,000	130	50
2978 Chemical machinery and its equipment	382	Machinery except electrical	25.000	120	100
2979 Miscellaneous general industry machinery and equip	me 382	Machinery except electrical	20,000	100	370
2984 Refrigerators and air conditioning apparatus	382	Machinery except electrical	60,000	800	120
3011 Generators, motors and other rotating electrical mac-			30,000	280	150
3041 Commendation equipment (wired)	38,320		5,500	70	25
3001 Storage batteries		Electric accumulators and batteries	35,000		450
Steel industry by processing line products group	Steel i	ndustry by processing line products group	577,500	3,230	4,675
			100 1 10		
That would administrate					
3141 Steel shipbuilding and repairing		Building and repairing of steel ships	67.000	149	180
3142 Hull blocks	38419	Other shipbuilding and repairing not elsewhere	7.000	- 5Ü	10
Chichallia		c lassified		ت بينات	<u> </u>
Shipbuilding and repairing group	Shiph	tilding and repairing group	74,000	150	190
General manufacture(except steel industry)	C	3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			1.81 11 Jan 19 11 11 11 11 11 11 11 11 11 11 11 11
Steel industry	Steel	al manufacture(except steel industry)	3,015,500	9,469	13,085
Tetat	Total	adustry	1,438,000	2.785	\$0,000
	- 111111	<del></del>	4,453,500	12,24	93.085

Table A.2.3 Selection of Industrial Category in Bang Saphan Industrial Estate(2011 year: Sechario-1: Minimum Case) (4/5)

(No. is Ispanese industrial category's number)	That Industrial Caregory (No. 18 That industrial Caregory's number)	Ana	of Model Factory No. of Employee Cor	Water
111 Mesa products	311 Posed manufacturing 31111 Stathering	8,500	50	150
12 Dairy products	31121 Daines 31122 Milk factories	H 000	50	380
21 Canned seafood and seaweed	31149 Other coming, preserving and processing of fish	4,500	50	230
29 Miscellaneous seafood products		4,500	50 . 120	100 700
42 Soy source "Sious" and edible acids 53 Glucose, statch syrup and high-fractore com syru	31132 Say source and say couls	35,000	:80	4,250
263. Wheat floor milling	31163 Crain flour nulls	20,000	70	100
	31169 Grain mills products	45,000	160	1,800
18) Vegetable oil and fais 183 Edible oil and fais	31151 Oil and face 31151 Oil and face	T()()()()	180	900
293 Noodles, macaroni and spagheni	31173 Noothes and similar products	10.680	. 80	159
61 Balanced compound feeds	Manufacture of food group	190,007 405,500	1,000	550 9,110
anefacture of food group	Standarder of their group			
121 Spinning mills and center	32112 Cotton gatituits	100,000	250	4,500
131 Twisting yarns, except bolky yarns	32113 Spluming of cotron and man-made libbers 32190 Textile not elsewhere classified	32,000	100	1,360
41) Fabric mills, woven conton rayon Innufacture of textife group	Menufacture of textile group	143,000	410	6,036
	and the second s	30,000	100	160
617 Flooring milk 619 Sawing and planning mills	33190 Wood and cork products not elsewhere classifies 33111 Samuills and planning mills	27,000	70	4
624 Particleboard	33112. Veneer, plywood and veneered panel	75,000	120	300
	33113 Bidders woodwork	16 00V	80	. 4
711 Wooden formitore, except Japanese	33261 Furniture, fixtures and floorings, except primary of metals and or fattans	15,000	AU	
lanufacture of wooden and furniture group	Manufacture of wooden and furniture group	142,000	370	1.0
			90	. 34
841 Office paper products	34100 Pule, namer and poperhand articles not elsewhere, 34120 Containers and boxes of paper and paperhand	8,500 12,500	90 60	4
851 Sacks for heavy weight shirping lunufacture of paper and pulp group	Manufacture of paper and pulp group	20,500	150	71
			٠.	
011 Nitrogenous and phosphotic fertilizers	35126 Ferningers and pesticides	160,000 65,000	80 80	4,50
912 Compound fertificers	35120 Femilizers and pesticides 35299 Other chemical products	70,000	140	7,00
023 Inorganic prements 024 Compressed and figurated gases	35299 Other chemical products	25,000	80	1.00
033 Methane derivatives	35111 Basic instustrial chemicals, except chargoal	7011,000	900	2.70 5.50
034 Fermentation industry	35209 Other chemical products 35299 Other chemical products	85.040 65.000	100	2.50
121 Lubricating industry 122 Greases	35299 Other chemical products	26,000	90	
210 Industrial places, burs and rods, pipes and tubes.	n 356 Plastic products elsewhere classified	29,000	149	54
230 Industrial plastic products	356 Mastic products elsewhere classified	11,000 676,000	1,800	15 25,81
Impufacture of Petroleum and coultC; chemicals)	Manufucture of Petroleum and coak (, chemicale)	11103501	I SANTO	
512 Processed flat glass	362(9) Glass and glass products	100,000	600	1,85
514 Glass containers	36200 Glass and glass products	46,600 23,000	180	40 15
1551 Fire blocks 1559 Miscellaneous' clay refectories	36910 Structural clay products 36910 Structural clay products	44,000	100	1.00
1559 Miscellaneous clay telectories 1561 Carbonaceous electrodes	16999 Non-metallic numeral psydnets not elsewhere classif.	350,000	176	4,1)
Ceromics industry group	Ceramics Industry group	609,900	1,220	7,40
2631 Steel manufactured, with electric furnices.	371 Iron and steel basic industry	1.134,000	2,468	21.80
including single electric fornaces, and with rolling		602,000		
faculties with rolling foctories 2644 Steel manufacture of hot rolling mili	37110 from and steel works and rolling mills	264,000	655	14.90
2642 Steel manufacture of cold rolling mill	37110 from and steel works and colling mills	\$61,000	800	9.90
2641 Steel manufacture of bot rolling milk Bar mill)	37110 from and steel works and rolling mills	88,000	300 320	25.0 3.3
2652 Galvanized steel sheet(Heetrical zinc sheet) 2652 Galvanized steel sheet(Hused zinc sheet)	371 Iron and steel basic industry 371 Iron and steel basic industry	18,000	150	3,0
es. Di	Ox Plant			- 7
Steel manufacture (Basic product-lior by furnace) gro	up Steet manufacture (Basic product-line by furnace) group	2,575,000	4.693	98.6
2644 Steel ripes and tubes	371 frem and steel basic industry	220,000	180	1.3
2646 Cold finished seedbars	371 Inni and steel basic industry	39,000		
	371 Iron and seed basic undustry	42,000 38,000	:130 120	. 5
	371 from and steel basic inflastry 371 from and steel basic inflastry	35,000		
2650' Coated steel				· 4
2650 Coated steel . 2660 Perrous metal machine pairs and tooling products		120,000		-1,3
2650 Coated steel. 2660 Perrous metal machine pairs and tooling products 2661 Iron castings, except cast from pipes, and malleabl	te 371 Iron and steel basic industry. 371 Iron and steel basic industry.	47,000	150	-1,3 6
2650 Coated steel.  2600 Perrous metal machine poins and tooling products  2601 Iron castings, except cast iron pipes and malleabl  2604 Cast tien pipe.  2602 Malleable iron casting.	le 37) from and steel basic industry. 371 from and steel basic industry. 371 from and steel basic industry.	47,000 35,000	150 170	4 1,3 6 3
2650 Coated steel.  2660 Perrous metal machine point and tooling products 2661 from castings, except cast from pipes and madleabl 2692 Cast from pipe 2662 Matheable from easting 2662 Indiand steel shearing and shirting	le 373 from and steel basic industry: 371 from and steel basic industry: 371 from and steel basic industry 371 from and steel basic industry 371 from and steel basic industry	47,000	150 170 200	1,5 6 5 1
2650 Coated steel.  2660 Perrow metal machine pours and tooling products 2661 from castings, except cast iron pipes and tradicable 2694 Cast tien pipe 2662 Malicable, iron casting. 2692 Iron and steel stearing and shirting 2693 from and steel stearing and shirting.	te 37) Iron and seed basic industry. 371 Iron and seed basic industry.	47,000 35,000 46,000 20,000 15,000	150 170 200 80 110	-1,3 -6 -3 -1 -1
2650 Coated steel.  2600 Perrous metal machine pours and tooding products 2601 froit castings, except cast from pipes and mathenbl 2604 Cast itien pipe 2602 Matheaber from casting. 2603 froit and steel steering and shirting. 2603 froit and steel steering and shirting. 2603 froit and steel steering preparation for smelting. 2811 Tit cans and other plated sheet products. 2814 Pabicitated consistration-use tileful products	le 37) Iron and steel basic industry. 371 Iron and steel hasic industry. 371 Iron and steel basic industry.	47,000 33,000 46,480 20,000 15,490 35,000	150 170 200 80 110 100	1,3 6 3 1
2650 Coated steel.  2660 Perrow metal machine pours and tooling products 2661 from castings, except cast from pipes and mattenbl 2694 Cast fifth pipe 2662 Matleable from casting. 2662 Iron and steel stearing and shitting 2603 from and steel stearing preparation for smelting 2803 from and steel steary preparation for smelting 2811 Tin cans and other platted sheet products 2814 Fabricated constructionsuse metal products 2812 Fabricated architectural metal products, except s	le 37) Iron and steel basic industry. 371 Iron and steel basic industry.	47,000 35,000 46,000 20,000 15,000	150 170 200 80 110 100	1,3 6 3 1
2650 Chaired steel.  2600 Penrous metal machine pairs and roofing products.  2601 Iron castings, except cast from pipes, and malleable.  2604 Cast from pipe.  2602 Malicable from casting.  2602 Iron and steel steaming and shifting.  2603 from and steel steamy and shifting.  2803 from and steel steamy preparation for smeltning.  2811 Tin cans, and other plated sheet products.  2841 Pabricated constitutionsus; queal products, except 8.  2842 Fabricated architectural metal products, except.  2843 Fabricated pales work and sheet metal work.	to 37) Iron and seed basic industry. 371 Iron and seed basic industry.	47,000 35,000 46,480 20,000 15,600 25,600 11,000	150 170 200 80 110 100 100	1,3
2650 Coated steel.  2660 Perrow metal machine pours and tooling products 2661 from eastings, except cast iron pipes and mattend 2694 Coast irón pipe 2662 Matleable iron usating. 2662 Iron and steel stranja and shitting 2603 from and steel stranja preparation for smelting 2811 Tin cans and other plated sheet products. 2811 Fabricated constructionsuse metal products. 2812 Fabricated architectural metal products except s 2813 Fabricated plate work and sheet inject work. 2814 processing industry/fromchinery products/line lag.	le 37) Iron and steel basic industry. 371 Iron and steel basic industry.	47,000 33,000 46,000 20,000 15,000 35,000 25,000 51,000	150 170 269 80 110 100 100 70 1,870	1,2 6 5 1
1660 Perrous metal machine pours and tooding products 2661 from castings, except cast iron pipes and matteral 2692 Cast right pipe 2692 Matterals iron easiting 2692 Iron and steel stearing and abitting 2693 from anasteel scrap preparation for smelting 2811 Tir cans and other plated sheet products 2841 Padricated construction-use tileful products 2841 Environment and architectural metal products except as 2842 Environment plate work and sheet intent work. Steel professing industriational fine products the professing industriation for products the construction of the professing industriation for products the large.	le 37) Iron and seed basic industry. 371 Iron and seed basic industry. 372 Iron and seed basic industry. 373 Iron and seed basic industry. 374 Iron and seed basic industry. 375 Iron and seed basic industry. 376 Iron and seed basic industry. 377 Iron and seed basic industry. 378 Iron and seed basic industry. 379 Iron and seed basic industry. 370 Iron and seed basic industry. 371 Iron and seed basic industry. 371 Iron and seed basic industry. 372 Iron and seed basic industry. 373 Iron and seed basic industry. 374 Iron and seed basic industry. 375 Iron and seed basic industry. 376 Iron and seed basic industry. 377 Iron and seed basic industry. 378 Iron and seed basic industry. 379 Iron and seed basic industry. 370 Iron and seed basic industry. 371 Iron and seed basic industry. 372 Iron and seed basic industry. 373 Iron and seed basic industry. 374 Iron and seed basic industry. 375 Iron and seed basic industry. 377 Iron and seed basic industry. 378 Iron and seed basic industry. 379 Iron and seed basic industry. 370 Iron and seed basic industry. 371 Iron and seed basic industry. 371 Iron and seed basic industry. 372 Iron and seed basic industry. 373 Iron and seed basic industry. 374 Iron and seed basic industry. 375 Iron and seed basic industry. 377 Iron and seed basic industry. 378 Iron and seed basic industry. 379 Iron and seed basic industry.	47,000 35,000 46,000 15,600 35,000 25,600 31,097 p 728,000	150 170 260 80 110 100 100 70 1,870	1,3 6 5 1 1 5 3,3
2650 Coated steel.  2600 Perrous metal machine poins and tooling products 2601 from castings, except cast iron pipes and matheabl 2604 Cast rich pipe 2602 Inoi and steel shearing and shirting 2603 Iron and steel shearing and shirting 2603 Iron and steel stearing preparation for smelting 2603 Iron and steel stearing preparation for smelting 2604 Products 2611 Tin cans and other plated sheet products 2614 Pabricated constriction-use tipeful products 2614 Pabricated architectural metal products, except s 2615 Pabricated plate work and sheet mytal work 2614 Profession industriction-thirery products-line far 2611 Bioliers 2612 Steam engines, torbans and water wheels, except machine engines.	le 37) Iron and steel backe industry.  371 Iron and steel haste industry.  371 Iron and steel haste industry.  371 Iron and steel haste industry.  371 Iron and steel backe industry.  371 Iron and steel backe industry.  371 Iron and steel back industry.  371 Iron and steel back industry.  371 Iron and steel backe industry.  372 Iron and steel backe industry.  373 Iron and steel backe industry.  374 Iron and steel back industry.  375 Iron and steel back industry.  376 Iron and steel back industry.  377 Iron and steel back industry.  378 Iron and steel back industry.  379 Iron and steel back industry.  370 Iron and steel back industry.  370 Iron and steel back industry.  370 Iron and steel back industry.  371 Iron and steel back industry.  371 Iron and steel back industry.  371 Iron and steel back industry.  372 Iron and steel back industry.  373 Iron and steel back industry.  374 Iron and steel back industry.  375 Iron and steel back industry.  376 Iron and steel back industry.  377 Iron and steel back industry.  378 Iron and steel back industry.  379 Iron and steel back industry.  370 Iron and steel back industry.  370 Iron and steel back industry.  370 Iron and steel back industry.  371 Iron and steel back industry.  371 Iron and steel back industry.  372 Iron and steel back industry.  373 Iron and steel back industry.  374 Iron and steel back industry.  375 Iron and steel back industry.  376 Iron and steel back industry.  377 Iron and steel back industry.  378 Iron and steel back industry.  378 Iron and steel back industry.  378 Iron and steel back industry.  379 Iron and steel back industry.  370 Iron and steel back industry.  370 Iron and steel back industry.  371 Iron and steel back industry.  371 Iron and steel back industry.  372 Iron and steel back industry.  373 Iron and steel back industry.  374 Iron and steel back industry.	47,000 35,000 46,000 15,900 35,000 25,600 27,800 11,97,000 220,000	150 170 200 80 110 106 100 70 1,870	1,3 6 5 1
2600 Chaired steel.  2600 Penrous metal machine poins and tooling products.  2601 Iron coatings, except cast iron pipes and malleoble.  2602 Malicable iron coating.  2602 Malicable iron coating.  2603 Iron and steel scrap preparation for smehnig.  2803 Iron and steel scrap preparation for smehnig.  2804 Iron and steel scrap preparation for smehnig.  2804 Pablicated constitutionses iteral products.  2804 Fabricated constitutionses iteral products, except as  2804 Fabricated pater work, and sheet instal work.  2816 Principles in the product products of the products of the product pater work in the product pater.  2817 Iron profession industriation colliers products believing.  2818 Pablicated pater work and sheet instal work.  2818 Pablicated pater work and sheet instal work.  2819 Pablicated pater work and water wheels.  2819 Pablicated pater work in the products believed to the products of the pro	le 37) Iron and steel basic industry. 371 Iron and steel hasic industry. 371 Iron and steel hasic industry. 371 Iron and steel basic industry. 372 Iron and steel basic industry. 373 Iron and steel basic industry. 374 Iron and steel basic industry. 375 Machinery except electrical. 376 Machinery except electrical. 377 Machinery except electrical.	47,000 35,000 46,000 15,600 35,000 25,600 31,097 p 728,000	150 176 200 80 110 100 100 70 1,870 470 500	1,3 6 5 1 1 1 5d
2650 Charled steel.  2661 Charled steel.  2661 Iron cavatigs, except cast iron pipes and mallicula  2694 Cast iron pipe  2602 Multicula iron casting.  2603 Multicula iron casting.  2604 Multicula iron casting.  2604 Iron and steel stearing and shiring  2605 Iron and steel stearing and shiring  2606 Iron and steel stearing and shiring  2607 Iron and steel stearing and shiring  2618 Iron cast and other plated steet products  2618 Fabricated constitutionave queind products  2618 Fabricated architectural metal stroducts except is  2618 Fabricated architectural metal stroducts except is  2618 Fabricated plate work said sheet instal work  2619 Fabricated industriationabilities products elimitar  2619 Budders  2619 Steam engines turbans and water wheels.  2619 Air compressors gas compressors and hlawers  2614 Conveyors and conveying equipment  2619 Metalinavous steelad lindustry machinery and	le 37) Iron and steel backe industry.  371 Iron and steel backe industry.  372 Iron and steel backe industry.  373 Iron and steel backe industry.  374 Iron and steel backe industry.  375 Machinery except electrical.  382 Machinery except electrical.  382 Machinery except electrical.  382 Machinery except electrical.	47,000 38,000 38,000 20,000 15,000 38,000 38,000 11,000 220,000 220,000 225,000 22,000 22,000 22,000 22,000 22,000 22,000 22,000	150 170 200 80 110 100 100 100 100 1,870 1,870 1 370 800 1 30 1 100 1 120 1 120	1,3 6 5 1 1 5 5 3
2650 Coated steel.  2660 Perroso metal machine pouts and tooling products 2661 from castings, except cast iron pipes and mallicole 2664 Cast rich pipe 2662 Mallicolds iron casting.  2662 Mallicolds iron casting.  2673 from and steel straing and shiring 2673 from and steel straing and shiring 2673 from and steel straing and shiring 2674 Fabricated constitutionsus ironducts except a 2674 Fabricated architectural metal groducts, except a 2674 Fabricated architectural metal groducts, except a 2674 Fabricated pipter work, and sheet metal work.  2674 Paricessing industrixtmachiners products little fact 2675 Steam engines, turbans and water wheels, 2676 except machine engines.  2677 Air compressors, gas compressors and blancis.  2678 Conveyors and conveying equipment  2678 Conveyors and conveying equipment  2679 Micellaneous sentend industry machinery and 2680 Office, service industry and household machiner and	le 37] Iron and seed basic industry.  371 from and steed basic industry.  371 Iron and steed basic industry.  372 Iron and steed basic industry.  373 Iron and steed basic industry.  374 Iron and steed basic industry.  375 Machinery except electrical.  382 Machinery except electrical.  382 Machinery except electrical.  383 Machinery except electrical.  384 Machinery except electrical.  385 Machinery except electrical.  387 Machinery except electrical.  388 Machinery except electrical.	47,000 35,000 35,000 46,444 20,000 15,000 35,000 35,000 11,072 728,000 11,072 220,000 23,000 23,000 23,000 25,000 25,000 25,000 25,000 20,000	150 170 200 80 110 100 100 70, 1870 200 130 120 100 100 330	1,3 6 5 1 1 1 5 5 3,3
2600 Coated steel.  2600 Perross metal machine pours and tooling products [260] From coatings, except cast iron pipes and malificable from coatings, except cast iron pipes and malificable from coating.  2602 Malificable from coating.  2603 Iron and steel stearing and shiring.  2603 Iron and steel stearing and shiring.  2604 Tool and steel stearing and shiring.  2605 Iron and steel stearing and shiring.  2606 The coat and other plated sheet products.  2614 Fabricated constructionase queind products.  2614 Fabricated architectural metal products except its analysis of the products.  2615 Fabricated plate work and sheet metal work.  2616 Fabricated plate work and sheet metal work.  2617 Fabricated plate work and sheet metal work.  2618 Fabricated industry machines and water wheels, except machine engines.  2619 Air compressors gas compressors and blowers.  2619 Chemical machinery and its equipment.  2610 Miccellaneous general industry machinest and 2030 Office, service industry and household machine.	le 372 Iron and seed basic industry 371 from and seed basic industry 372 from and seed basic industry 373 from and seed basic industry 374 from and seed basic industry 375 Machinery except electrical 376 Machinery except electrical 377 from and seed basic industry 378 Machinery except electrical 379 Machinery except electrical 370 Machinery except electrical 370 Machinery except electrical 371 Machinery except electrical 372 Machinery except electrical	47,000 \$5,000 \$5,000 20,000 15,000 25,000 25,000 111,979 728,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 25,000 26,000	150 170 200 80 110 100 70 1,870 370 370 100 110 110 110 110 110 110 110 110 1	1,3 6 5 1 1 5 5 3.0
2650 Coated steel.  2661 Coated steel.  2661 Iron cavings, except cast iron pipes and mallicolity  2692 Cast iron pipe  2662 Multicolite iron caving.  2693 Coated iron caving.  2693 Iron and steel stearing and shiring  2811 This cais and other plated steet products  2842 Eabstrated architectural metal steelures except as  2843 Eabstrated architectural metal steelures except as  2843 Eabstrated architectural metal steelures except as  2844 Eabstrated architectural metal steelures except as  2845 Eabstrated architectural metal steelures except as  2846 Eabstrated architectural metal steelures except as  2847 Eabstrated architectural metal steelures except metal metal except metal work.  2914 Budders.  2915 Steenm engines turbans and water wheels.  2914 Conveyors and conveying equipmen.  2918 Chemical machinery and its equipment.  2919 Micellureous steelured industry machinery and a  2930 Office, service industry and household machine.  2934 Micellureous office, service industry and household machine.	le 37) Iron and steel backe industry. 371 Iron and steel backe industry. 372 Iron and steel backe industry. 373 Iron and steel backe industry. 374 Iron and steel back industry. 375 Machinery except electrical. 382 Machinery except electrical. 382 Machinery except electrical. 383 Machinery except electrical. 384 Machinery except electrical. 385 Machinery except electrical. 386 Machinery except electrical. 387 Machinery except electrical. 388 Machinery except electrical. 389 Machinery except electrical.	47,000 \$5,000 \$5,000 25,000 25,000 25,000 27,000 21,000 22,000 23	150 170 200 80 110 100 100 70, 1870 200 130 130 130 130 130 130 130 130 130 1	1,3 6 5 1 1 1 5-d 3,3
2600 Coated steel.  2601 Periorus metal machine pours and tooling products  2601 Iron castings, except cast iron pipes and matheabt  2604 Coat iron pipe  2602 Matheabte iron vasting  2603 Iron and steel scraip preparation for smelting  2603 Iron and steel scraip preparation for smelting  2604 Iron and steel scraip preparation for smelting  2604 Iron and steel scraip preparation for smelting  2605 Iron and steel scraip preparation for smelting  2606 Iron and steel scraip preparation for smelting  2607 Iron and other plated sheet products  2614 Fabricated architectural metal products except it  2615 Fabricated architectural metal products except it  2616 Iron architectural metal products with pre-  2616 Iron architectural metal products with pre-  2617 Fabricated plate work and where wheels,  2618 Architectural metal including equipment  2619 Miccellancous general industry machinery and  2630 Office, service industry and household machinery  2618 Refineracy and consulting approximant	le 372 Iron and seed basic industry 371 Iron and seed basic industry 372 Iron and seed basic industry 373 Iron and seed basic industry 374 Iron and seed basic industry 375 Machinery except electrical 376 Machinery except electrical 377 Iron and seed basic industry 378 Iron and seed basic industry 389 Architectury except electrical 380 Machinery except electrical 381 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 384 Iron and seed basic industry 385 Iron and seed basic industry 386 Iron and seed basic industry 387 Iron and seed basic industry 388 Iron and seed basic industry 389 Iron and seed basic industry 3	47,000 3,000 4,000 15,000 15,000 35,000 11,000 27,000	150-170 170-17	1,2 6 5 1 1 2 3,0 3,0
2650 Coated steel.  2600 Perrous metal machine poins and tooling products 2601 froit castings, except cast iron pipes and matheoli 2604 Cast irón pipe  2602 Malleche iron casting.  2603 froit address theoring and shirting.  2603 froit and steel steering and shirting.  2603 froit and steel steering and shirting.  2603 froit and steel steering preparation for smelling.  2811 Tin cans and other plated sheet products.  2812 Eductioned constitution-use tipeful products.  2812 Eductioned constitution-use tipeful products.  2813 Eductioned constitution-use tipeful products.  2814 Padricated architectural metal products, except is  2815 Eductioned plate work and about inject work.  2816 Progressing industry/machinery products-line/gr.  2911 Boilers.  2912 Steam engines, torbans and water wheels,  2913 Air compressors, gas compressors and, blowers.  2914 Air compressors are conveying equipment.  2915 Miccollineous general industry unachinery and  2916 Miccollineous general industry unachinery and  2916 Miccollineous general industry unachinery and  2916 Miccollineous general industry unachinery and  2917 Generalors, indoors and other industing appearation.  2918 Orinnendation equipment (vired)	le 37) Iron and steel backe industry. 371 Iron and steel backe industry. 372 Iron and steel backe industry. 373 Iron and steel backe industry. 374 Iron and steel backe industry. 375 Machinery except electrical. 376 Machinery except electrical. 377 Machinery except electrical. 378 Machinery except electrical. 381 Machinery except electrical. 382 Machinery except electrical. 383 Machinery except electrical. 384 Machinery except electrical. 385 Machinery except electrical. 386 Machinery except electrical. 387 Machinery except electrical. 388 Machinery except electrical. 389 Machinery except electrical. 381 Machinery except electrical. 382 Machinery except electrical. 383 Machinery except electrical. 384 Machinery except electrical. 385 Machinery except electrical. 386 Machinery except electrical.	47,000 3,000 46,000 15,000 15,000 11,060 728,000 19,000 220,000 23,000 21,000 25,000 21,000 21,000 21,000 11,00	150 170 200, 80 110 100 100 100 1,870 1,870 1,870 1,30	5.0 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1
2609 Coarlet steel.  2600 Perross metal machine pours and tooling products  2601 Iron castings, except cast iron pipes and malifold  2604 Coart iron pipe  2602 Inoin and steel steeping and shiring  2603 Iron and steel steeping and shiring  2603 Iron and steel steeping and shiring  2604 Iron and steel steeping and shiring  2605 Iron and steel steeping preparation for smelting  2804 Fabricated constitutionable sheet products  2814 Fabricated architectural metal products except s  2812 Fabricated architectural metal products except s  2812 Fabricated plate work and sheet metal work  Steel professions industrystinachiters products-literize  2911 Builers  2912 Air compensors, is compressors and bitasets  2914 Air compensors, is compressors and bitasets  2915 Air compensors, is compressors and bitasets  2916 Office, service industry and household machine  2918 Refugerators and of condutioning appearation  2919 Mirecillaneous office, service industry and household machine  2914 Refugerators and of condutioning appearation  2915 Mirecillaneous office, service industry and household machine  2914 Commendation equipment (wheel)  3915 Orinsendation equipment (wheel)	le 37] Iron and seed basic industry.  371 Iron and seed basic industry.  372 Iron and seed basic industry.  373 Machinery except electrical.  382 Au-combinening machinery products limit become and seed basic industry.  382 Machinery except electrical.  383 Machinery except electrical.  384 Machinery except electrical.  385 Machinery except electrical.  385 Machinery except electrical.  386 Machinery except electrical.  387 Machinery except electrical.  388 Machinery except electrical.  389 Machinery except electrical.  381 Machinery except electrical.  382 Machinery except electrical.  383 Machinery except electrical.  384 Machinery except electrical.  385 Machinery except electrical.  386 Machinery except electrical.  387 Machinery except electrical.  388 Machinery except electrical.  389 Machinery except electrical.  381 Machinery except electrical.  381 Machinery except electrical.  382 Machinery except electrical.  383 Machinery except electrical.  384 Machinery except electrical.  385 Machinery except electrical.  386 Machinery except electrical.  387 Machinery except electrical.  388 Machinery except electrical.	47,000 3,000 4,000 15,000 15,000 35,000 11,000 27,000	150 170 200 80 110 100 70 1870 200 1 300 1 300 1 300 1 200 1 300 1 300 1 200 1 300 1 200 1 300 1 200 1 300 1	1,3 6 5 1 1 3,3
2659 Coated steel.  2609 Perrous metal machine poins and tooling products 2616 Froit castings, except cast iron pipes and matheabl 2694 Cast tiefn pipe 2602 Inoit and steel shearing and shirting 2603 Iron and steel shearing and shirting 2603 Iron and steel shearing and shirting 2603 Iron and steel shearing and shirting 2604 Iron and steel steary preparation for smelting 2604 Products 2604 Fabricated constitution-was inlead products 2605 Fabricated constitution-was inlead products 2604 Fabricated architectural metal products, except s 2604 Fabricated architectural metal products, except s 2605 From expired, turbans and water wheels, except machine engines, turbans and water wheels, except machine engines, turbans and water wheels, except machine engines of the products of	le 37) Iron and steel backe industry. 371 Iron and steel backe industry. 372 Iron and steel backe industry. 373 Iron and steel backe industry. 374 Iron and steel backe industry. 375 Machinery except electrical. 376 Machinery except electrical. 377 Machinery except electrical. 378 Machinery except electrical. 381 Machinery except electrical. 382 Machinery except electrical. 383 Machinery except electrical. 384 Machinery except electrical. 385 Machinery except electrical. 386 Machinery except electrical. 387 Machinery except electrical. 388 Machinery except electrical. 389 Machinery except electrical. 381 Machinery except electrical. 382 Machinery except electrical. 383 Machinery except electrical. 384 Machinery except electrical. 385 Machinery except electrical. 386 Machinery except electrical.	47,000 \$5,000 \$5,000 25,000 25,000 25,000 25,000 27,000 21,000 22,000 23	150 170 200, 80 110 100 100 100 100 1,870 1,870 1,870 1,870 1,870 1,970	1.3 6 6 5 1 1 2 1 2 1 2 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
2650 Coated steel.  2660 Perrous metal machine poirs and tooling products.  2661 Iron castings, except cast iron pipes and matheolity.  2662 Malleable iron existing.  2662 Malleable iron existing.  2669 Iron and steel steering and shirting.  2669 Iron and steel steering and shirting.  2660 Iron and steel steering preparation for smelting.  2661 Iron and steel steering preparation for smelting.  2661 Fabricated construction-use metal products.  2662 Fabricated construction-use metal products except s.  2662 Fabricated plate week and sheet inject work.  2662 Professing industry/machinery products-line/ge.  2671 Steam engines, turbans and water wheeks.  2672 Air compressors, six compressors and hitswers.  2673 Christian deadlinery and its equipment.  2674 Conveyors and conveying equipment.  2675 Office, estrole industry and household machiner.  2676 Office, estrole industry and household machiner.  2677 Reminded machinery and our conditioning appearation.  2678 Refrigerators and our conditioning appearation.  2679 Office estrole industry and household machiner.  2671 Iron products industry and household electrical.  2671 Iron products industry and household electrical.  2671 Iron products in appliances.	le 372 Iron and seed basic industry 371 Iron and seed basic industry 372 Iron and seed basic industry 373 Iron and seed basic industry 374 Iron and seed basic industry 375 Iron and seed basic industry 376 Iron and seed basic industry 377 Iron and seed basic industry 378 Iron and seed basic industry 379 Iron and seed basic industry 370 Iron and seed basic industry 370 Iron and seed basic industry 370 Iron and seed basic industry 371 Iron and seed basic industry 372 Iron and seed basic industry 373 Iron and seed basic industry 374 Iron and seed basic industry 375 Iron and seed basic industry 375 Iron and seed basic industry 376 Iron and seed basic industry 377 Iron and seed basic industry 377 Iron and seed basic industry 378 Iron and seed basic industry 378 Iron and seed basic industry 378 Iron and seed basic industrial 378 Iron and seed basic industry 379 Iron and seed basic industry 379 Iron and s	47,000 3,000 3,000 10,000 10,000 15,000 15,000 17,000 220,000 25,000 27,000 27,000 27,000 20,000 47,000 47,000 55,500 55,500 55,500 55,500 55,500 55,500 55,500 55,500 55,500 55,500 55,500	150 170 200, 80 110 100 100 1,870 1,870 1,870 1,370 1,20 1,10 1,10 1,10 1,10 1,10 1,10 1,1	-1,3 6 5
1650 Coated steel.  1660 Persons metal machine pours and tooling products 2661 Iron castings, except cast iron pipes and matheol 2694 Cast tien pipe 1662 Malleoble from coating. 1662 Iron and steel steering and shirting 1693 from and steel steering and shirting 1893 from and steel steering preparation for smelting. 1891 Tir cans and other plated sheet products 1894 Padeicated constitution-use tileful products 1894 Padeicated constitution-use tileful products 1894 Padeicated constitution-use tileful products 1894 Padeicated architectural metal products except s 1894 Padeicated inplate work and sheet inject work s 1894 Padeicated inplate work and sheet inject work s 1894 Padeicated inplate work and sheet inject work s 1894 Padeicated injects for the products line fgr 1994 Boilers 1994 Steam engines, torbans and water wheels, 1995 Air compressors, as a compressors and hlowers 1996 Air compressors, as a compressors and hlowers 1997 Air compressors, as a compressor and hlowers 1997 Miccillaneous senteal industry unachinery and 1998 Refrigerators and air conditioning apportation 1998 Miscellaneous office, service industry and hous 1991 Georgaedurion equipment (wheel) 1992 Household electric applaances 1993 Commendation equipment (wheel) 1993 Storage butteries 1993 Miscellaneous office, service industry and hous 1994 Refrigerators, unders and other totatine electrical 1995 Storage butteries 1994 Morei vehicle boiles and trailers 1995 Miscellaneous effice, service industry and hous 1996 Miscellaneous office, service industry and hous 1997 Miscellaneous office, service industry and hous 1998 Miscellaneous office, service industry and hous 1998 Miscellaneous office, service industry and hous 1997 Miscellaneous office, service industry and hous 1998 Miscellaneou	le 37) Iron and seed basic industry 371 from and seed basic industry 372 from and seed basic industry 373 from and seed basic industry 374 from and seed basic industry 375 from and seed basic industry 376 from and seed basic industry 377 from and seed basic industry 378 from and seed basic industry 379 from and seed basic industry 370 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 385 Machinery except electrical 386 Machinery except electrical 387 Machinery except electrical 388 Machinery except electrical 389 Machinery except electrical 380 Machinery except electrical 3810 Electrical industrial machinery and apparatus 3830 Electric accomplations and batteries 38312 Machinery except electrical 383132 Machinery except electrical 383132 Machinery except electrical 3832 Machinery except electrical 38341 Electrical industrial machinery and apparatus 3832 Machinery except electrical 38341 Chief mater with the except of the electrical 38341 Chief mater with the except of the electrical 38342 Chief mater with the except of the electrical 38343 Chief material machinery and apparatus 38344 Chief mater with the electrical industry 3844 Chief mater with the electrical industry	47,000 3,000 46,000 15,000 15,000 11,060 728,000 19,000 220,000 23,000 21,000 23,000 21,00	150 170 200 80 110 100 100 100 1,870 1,870 1,870 1,180	1.3 6 6 5 1 1 2 1 2 1 2 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
2650 Coated steel.  2660 Persons metal machine poirs and tooling products 2661 from castings, except cast iron pipes and matheol 2694 Cast irón pipe 2662 Malfeoble iron casting.  2693 from and steel steraing and shirting 2693 from and steel steraing and shirting 2893 from and steel steraing and shirting 2893 from and steel steraing preparation for smelting 2893 from and steel steraing preparation for smelting 2893 from and steel steraing preparation for smelting 2894 Fabricated constitution-tought ipiedayets 2894 Fabricated constitution-tought ipiedayets 2894 Fabricated constitution-tought sheet products. 2893 Fabricated plate work and about mytal work 2894 Preparessing industry/troubfluery products/line/gr 2991 Boilers.  2992 Air compressors, six compressors and howers 2994 Conveyors and conveying equipment 2995 Miscellaneous effects (acquipment) 2994 Mechineous senteral industry machinery and 2980 Office, service industry and household machine 2994 Mechineous office, service industry and hous 3901 (Generators, motors and other totatine electrical 3904 Storage batteries 3914 Continendation equipment (whed) 3994 Storage batteries 3113 Metal vehicle paths and accessories 3114 Metal vehicle paths and accessories	le 37] Iron and seed basic industry 371 from and seed basic industry 372 Machinery except electrical 382 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 385 Machinery except electrical 386 Machinery except electrical 387 Machinery except electrical 388 Machinery except electrical 389 Machinery except electrical 3810 Electrical industrial machinery and apparatus 3890 Electrical industrial machinery and apparatus 3890 Electrical industrial machinery and apparatus 3891 Electrical industrial machinery and apparatus 3892 Electrical industrial machinery 3891 Electrical	27,000 3,000 3,000 20,000 35,000 35,000 25,000 27,0	150 170 200 80 110 100 100 100 100 100 100 130 130 13	1.3
2650 Coated steel.  2600 Perrous metal machine pours and tooding products 2601 froit castings, except cast iron pipes and matheology 2604 Cast irón pipe 2602 Mallechle iron casting.  2603 froit addition casting.  2603 froit and steel steering and shirting.  2603 froit and steel steering and shirting.  2603 froit and steel steering and shirting.  2613 Iro cans and other plated sheet products.  2614 Fabricated constitution-use tipical products.  2614 Fabricated constitution-use tipical products.  2615 Fabricated architectural metal freshorts, except as  2616 Fabricated niphte work and about mystal work.  2616 Perrossing industry/froit/bluery products-line/gr.  2611 Boilets.  2612 Air compressors, gas compressors and, blowers.  2614 Conveyors and conveying equipment.  2616 Michineous general industry machinery and 2616 Michineous electrical industry machinery and 2616 Michineous feelers industry and broughold machine.  2617 Michineous feelers industry and broughold machine.  2618 Michineous feelers industry and broughold machine.  2619 Michineous feelers industry and broughold machine.  2610 Michineous feelers industry machinery and and the foliating appearance.  2611 Contracendation equipment (wired).  2612 More vehicle bodies and trailers.  2613 More vehicle bodies and trailers.  2614 Steel shipbuilding and repairing.  2614 Steel shipbuilding and repairing.	le 37] Iron and seed basic industry 371 from and seed basic industry 372 from and seed basic industry 373 from and seed basic industry 374 from and seed basic industry 375 Machinery except electrical 376 Machinery except electrical 377 Machinery except electrical 378 Machinery except electrical 379 Machinery except electrical 381 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 384 Machinery except electrical 385 Machinery except electrical 386 machiners 387 Machinery except electrical 387 Machinery except electrical 388 Machinery except electrical 389 Machinery except electrical 381 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 384 Machinery except electrical 385 Machinery except electrical 387 Machinery except electrical 388 Machinery except electrical 389 Machinery except electrical 381 Machinery except electrical	17,000 3,000 3,000 15,000 15,000 11,055 220,000 25,000 27,000 25,000 27,000 25,000 27,000	150 170 200 80 80 110 100 100 100 100 1, 1810	1.3
2660 Partors metal machine pours and tooling products 2661 From castings, except cast iron pipes and malifold 2642 from castings, except cast iron pipes and malifold 2642 Malifolds iron casting. 2662 Malifolds iron casting 2662 Malifolds iron casting 2663 from and steel steaming and shiring 2664 Fabricated consinction-use metal products 2642 Fabricated architectural metal products except 8244 Fabricated architectural metal products except 8243 Fabricated pible work and sheet metal work Steel proteocomy industrixtinachinest products-libring 2671 Fabricated pible work and sheet metal work Steel proteocomy industrixtinachinest products-libring 2671 Arc compensators, as compressors and blawets 2671 Conveyors and conveying equipment 2671 Arc compensators and conveying equipment 2671 Miccillaneous centeral industry machinest and 3671 Office, service industry and household machine 2671 Miccillaneous office, service industry and proteotics 3671 Miccillaneous office, service industry and household machine 2671 Miccillaneous office, service industry and conveying equipment 3671 Miccillaneous office, service industry and bour 3671 Miccillaneous office, service industry and colored architectural 3671 Microbiol deferric appliances 3671 Microbiol deferric appliances 3711 More vehicle bodies and trailers 3712 More vehicle bodies and trailers 3713 More vehicle bodies and trailers 3714 More vehicle bodies and trailers 3715 More vehicle bodies and trailers 3	le 37] Iron and seed basic industry 371 from and seed basic industry 372 Machinery except electrical 382 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 385 Machinery except electrical 386 Machinery except electrical 387 Machinery except electrical 388 Machinery except electrical 389 Machinery except electrical 3810 Electrical industrial machinery and apparatus 3890 Electrical industrial machinery and apparatus 3890 Electrical industrial machinery and apparatus 3891 Electrical industrial machinery and apparatus 3892 Electrical industrial machinery 3891 Electrical	#1,000 \$7,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$2	150 170 200 80 110 100 100 100 1,870 1,870 1,870 1,970	1.3
2600 Coated steel.  2601 Periorus metal machine points and tooling products  2601 Iron castings, except cast iron pipes and malleoble  2602 Malleoble iron casting.  2603 Malleoble iron casting.  2603 Iron and steel shearing and shiring  2603 fron and steel shearing and shiring  2603 fron and steel sceap preparation for smelting.  2811 Thi casts and other platted sheet products  2812 Eabstrated constitutions as queed products  2814 Eabstrated architectural metal stroducts except is  2815 Eabstrated architectural metal stroducts except in  2816 Eabstrated industriational/hiery products-line/gr  2911 Biolites  2912 Stream engines turbans and water wheels.  2913 Conveyors and conveying equipment  2914 Air compressors, sax compressors and hassets  2915 Microlanous stream dindusty machines and  2916 Microlanous stream dindusty machines and  2917 Microlanous office, service industry and hous  3911 Gerierators and our conditioning apporatus  3911 Gerierators indoors and other istating electrical  392 Houle blockers and statilets  3111 More vehicle bodies and italiers  3111 More vehicle bodies and italiers  3111 More vehicle bodies and replaining.  3112 Houle blocks  3113 Steel shipbuilding and replaining.	le 37] Iron and seed basic industry 371 from and seed basic industry 372 from and seed basic industry 373 from and seed basic industry 374 from and seed basic industry 375 Machinery except electrical 376 Machinery except electrical 377 Machinery except electrical 378 Machinery except electrical 379 Machinery except electrical 381 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 384 Machinery except electrical 385 Machinery except electrical 386 machiners 387 Machinery except electrical 387 Machinery except electrical 388 Machinery except electrical 389 Machinery except electrical 381 Machinery except electrical 382 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 383 Machinery except electrical 384 Machinery except electrical 384 Machinery except electrical 385 Machinery except electrical 387 Machinery except electrical 388 Machinery except electrical 389 Machinery except electrical 381 Machinery except electrical	17,000 3,000 3,000 15,000 15,000 11,055 220,000 25,000 27,000 25,000 27,000 25,000 27,000	150 170 200 80 80 110 100 100 100 100 100 100 100	1.3

Table A.2.3 Selection of Industrial Category in Bang Saphan Industrial Estate (2011 year (Secaurio-2 (Maximum-Case) (5/5)

(No. is Japanese industrial carryon a member)		That Industrial Category (No. ). This industrial category's numbers	Area (m2)	of Model Factors  No. of W  Employee Consumpts	(ates on/m3/day)
11 Mear products	311	Food transferrence	8,300	50	1:
		Staughering Dungs	(1,606	50	3
12 Dury products		Milk Lichtones	. 11,965		
9 Miscellaneous live stock products	9119	Other meal products	10.000	49	1
1) Coined seafood and servered	31149	Other canturing, preserving and processing of fish	13,500	159	6
9 Miscellmeant seal red products			13,599	159 126	. 3
12 sep source "spaya" and enhalte ands 53. Glucose, search strain and high-discusse com-	31132	Signature and say cited . Stateber	47,560 45,600	89 89	4.3
53 Wheat floor milling		Gran from unli-	\$9,500	140	. 2:
13 Edible oil and fats 13 Novelles, macaroni and specificiti		Oil and fats Noodles and simile products	45,060 46,660	180	1.8 9
53 Glucose, starch strop and high-frectose com		Statebes	\$0,650	250	4
up	uros:	Daniel mond feet	190,590	200	
6) Batimeed compound feeds anufacture of food group		Prepared animal feed- acture of food group	(83,500	1.510	10.5
21 Spinning mills and conon	32112	Cotton gauning	199.000	250	
11 Twisting yarus except belky yarus		Spraning of cotton and man-time fibbers	11,000	10	2
41 Fabric mills, wosen conton and spun rayon	32190	fewile not elsewhere classified	32,600	100	1.3
mulacture of textile group	Manul	scture of testile group	143,000	410	6.0
17 Flooring mills		Wood and earl products not obewhere	10.000	100	ŧ
<ol> <li>Sawing and planning mills</li> <li>Particleboard</li> </ol>		Veneet, plywood and veneeted panel .	27,000 149,000	70 240	3
Fundereckung	33/113	Bidders weedwork			
11 Wooden furniture, except languese	33201	Familiate, frenice and floorings, except outlines of metals and or rusins	45.000	249	
anufacture of wooden and furniture group		acture of wooden and farniture group	242,000	650	: 1.56
21 Paper		Pulp paper and paperboard by machine Pulp paper and paperboard articles not	\$0.000 30.000	45 110	13.6
31 Coded paper 32 Corrugated board	.4190	Pulp paper and paperboard articles not	30,000	70	2
41. Office paper products	cleewh	rre classified. Pulp paper and paperboard articles not.	1.709	180	
	clicyb	ere classified			
51 Sacks for heavy weight shipping		Containers and boxes of paper and paperboard	12,990	60 518	14.6
anufacture of paper and pulp group		acture of paper and pulp group	123,760	218	. 14.5
11 Nitrogeneus and phosphate feridings		Fernderers and re-nicides	100,000	. A0	4.5
17 Compound fertiliters 23 Inorganic pigments		Femiliers and pesticides Other chemical products	64,632	×0 2×0	3.7 14.0
23 Inorganic pictients 24 Compressed and liquefied gases	35299	Other chemical products	50,993	159	2.0
33 Methane denivatives	33111	Basic industrial chemicals except charcoal	290,900	1,000	3.7
34 Ferment mon malastry 21 Lubricaring industry	35299 35299		75,000 65,000	,15 69	33
22 Greares	35299	Other chemical products	26,650	60	
10 Industrial pister, has and rode, pipes and tubes.	356	Priorie producto elsewhere classified	58.000	280	1.3
re fittings and profile extrusions  11 Tites and infer for automobiles	35510	The and take industries	179,000	750	2.8
anufacture of Petroleum and conf(C; chemicals)	Manu	lacture of Petroleum and conf(C, chemicah)	917,000	2.775	37.2
12 Processed flat glass	16200	Other and glass products	200,900	1,200	2.7
14 Glass containers	36100	Olass and glass products	159,909 159,909	369 340	
59 Miscellaneous clay references	(6916) (6916)		44,650	100	,
561 Carbonascous electrodes	561493		350,007	179	4.0
eranics lodosity group	Ceran	ed nics Industry group	824400	2,570	8,7
633 Steel manufactured, with electric furnaces metadary single electric fornaces, and web rolling	971	Iron, and steed basic industry	(02,900)	2.468	21.8
facilities with rolling factories					
[41 Seed manufacture of hot rolling mili		from and steel works and rolling mills	264,000	655 869	34.5
542 Seed manufacture of cold colling milli 541 Seed manufacture of bot rolling millibut milli	37110		195,000	399	25.0
652 Gavanized seet sheetiflectrical zinc sleets	37)	from and steet basic industry	88,000	329	3,5
552 Galvariand steel sheetiFn-edrine sheet) n Mant	. 371 Os Pi	Iron and steel basic industry	18.000	150	
teel manufacture (flaste product-line by furnace) grou	p Sterl	nanufacture (Basic product-line by furnace)	2,5753000	4,69,1	98,
44 Steel pipes and tinbes	\$700P	Iron and seed basic industry	239,000	189	<u> </u>
545 Cold finished steel bats	571	from and steel being industry	18,000	100	21 E
648. Wire drawing	375 371	Iron and steel Kude industry	.84.930 1)5.990	260 360	ι.
650 Coated steel		from and steel basic industry from and steel basic industry			
50 Perrops metal trachine toris and molino produces:			35,900	110	
(8) Perrossimental machine thank and moling products (8) Iron custings, except cost from pipes, and molteable	371	Iten and steel basic industry	35.000 120.000		
661 from custings, except cust from pipes, and malleable	371	Item and steel basic indistry			1.
661 Iron castings except east tron pipes and malteable 692 Cast tron pipe 602 Malteable iron casting	371	Item and steel basic industry  Item and steel basic industry  Item and steel basic industry	120,600 47,000 35,000	110 300 150 : 170	1.1
861 Iron castings, except east non pipes, and malteable 194 Cast iron pipe 802 Malleable iron casting 192 Iron and seet shearing and strong	371 371	Item and steet boose industry from and steet boose industry from and steet boose industry from and steet basic industry	120,000 47,000 35,000 92,000	110 300 150 170 400	1.
661 from cashings except eastation pages and malteable 696 Cash from page 662 Malteable from cashing 692 from and prechaborating and alphang 693 from and beech scrap preparation for ameliang	371	ten and steet beste industry ten and steet beste industry ten and steet beste industry ten and steet basic industry ten and steet basic industry	120,600 47,000 35,000	110 300 150 : 170	1.
661 from castings, except cost from paper, and malterable 994 Cliest from pape. 605 Milderable from cashing 907 from and except securing and administ 908 from and except scapp preparation for fine-thing 818. The costs and other elasted these products. 918 Fabricable consuprocessive good products.	371 371 371 371 371 371	Item and steel besie industy Item and steel/besie industry Item and steel/besie industry Item and steel basic industry Item and steel basic industry Item and steel basic industry Item and steel besic industry Item and steel besic industry	120,500 47,506 35,009 92,500 60,000 45,600 79,650	110 300 150 170 400 240 330 260	
Sci. Iron custings, except cast from pages, and multi-abilities. Multi-abilities from casting.  192 Iron and rect shearing and aptrong.  193 Iron and sket samp preparation for anothing.  111 Tim criss and other plants their products.  141 Fatherack excepturesses are fail products.  142 Fatherack architectural metal products.	371 371 371 371	Item and steel besie industy Item and steel besie industry Item and steel besie industry Item and steel basic industry Item and steel basic industry Item and steel basic industry Item and steel besie industry	120,000 47,000 35,000 92,000 60,000 45,500 70,000	110 300 150 170 400 240 330	
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