GHQ/SCAP Records (RG 331, National Archives and Records Service)

Description of contents

(1) Box no. 2894

(2) Folder title/number: (22)
Reparations Catalog

(3) Date: Sept. 1946 - Feb. 1947

(4) Subject:

Classification	Type of record
9230, 9612	e, 1

(5) Item description and comment:

Osaka and Tokyo

(6) Reproduction: Yes No

(7) Film no. Sheet no.

(Compiled by *National Diet Library*)

HEADQUARTERS I CORPS
APO 301 (Kyoto, Honshu)

EHN/ks

6 FEB 1947

AG 461 - BA

SUBJECT: Reparations Catalog

TO: Commanding Officer
Osaka Military Government Team
APO 660

1. Reference: Letter, Headquarters I Corps, AG 004 (Rep) - BA, subject: "Marking of Principal Units of Equipment of Steam-Electric Generating Plants Listed for Reparations", dated 4 February 1947.

2. Extracts from the preliminary Catalog of Thermal Electric Power Plants for the Interim Reparations Program (GHQ, SCAP, 16 December 1946) and the preliminary Catalog of Machine Tools Industry for the Interim Reparations Program (GHQ, SCAP, 26 December 1946) are forwarded herewith for your information.

3. Included are general introductory explanations of inventory of thermal-electric power plants and machine tools plants located in your area of jurisdiction. Copies of information sheets contained in the catalog covering reparations plants in these categories are likewise included.

BY COMMAND OF MAJOR GENERAL WOODRUFF:

O. H. Schmidt
O. H. SCHMIDT
MAJOR, AGD
ASST. ADJ. GEN.

4 Incls:
1. Explanation - Thermal Electric Power Plants (one)
2. Explanation - Machine Tool Plants (one)
3. Information Sheets - Thermal Electric Power Plants (dup)
4. Information Sheets - Machine Tool Plants (dup)

OSAKA M.G
RES-COM-IND
FILE 1388
34338

THERMAL ELECTRIC POWER PLANTS

These plants were taken into custody and inventoried in accordance with War Department radio from the Joint Chiefs of Staff to Supreme Commander for the Allied Powers, dated 16 June 1946.

This catalog contains data for the following plants:

Name of Plant	Authorized Capacity KW	Percent of estimated total for industry
Ajigawa	16,000	.8
Ebetsu	37,500	1.9
Kizugawa	63,000	3.2
Matsue	14,000	.7
Moiko	138,000	6.9
Miyazu	13,000	.7
Saijo	32,000	1.6
Shimizu	20,000	.1
Tokushima	10,000	.5
Toyama	10,000	.5
Ube-nishi	14,000	.7
**Tsurumi	178,500	9.0

Thermal electric power plants listed in this catalog are a part of the public utility system and use coal as the source of power. This list does not cover any electric generating plants using water or internal combustion engines as a source of power. Neither does it include thermal electric power plants known as "CAPTIVE" which are a part of a private manufacturing concern located either within or adjacent to the factory or in its near vicinity.

This catalog presents significant data on the thermal electric power plants that have been made available for interim reparations claim. Data

Incl 1

presented for individual plants are designed to supply engineers of the several claimant nations with general information which will serve as a guide in the preliminary selection of plants considered as suitable for reparations claims. Conversely it will serve as a basis for the elimination of plants that are of no interest.

It is believed that this catalog will effect economies in the expenses of the several claimant nations by reducing both the number of plants to be visited and the number of engineers required for examination of plants of probable interest.

The information presented combines statistical data supplied by the Imperial Japanese Government, and engineering data collected by officers assigned to General Headquarters, Supreme Commander for the Allied Powers. Every reasonable precaution has been taken to assure substantial accuracy.

Small items of equipment, such as motors under 50 HP, have been omitted from the data presented even though in the aggregate the total amount of such equipment is of considerable magnitude. They are, however, to be considered as a part of the plant.

Items of equipment listed under Auxiliary Equipment are integrated parts of the equipment to which they refer and are not to be considered as additions to it; i.e., motors shown with the notation "ball mill pulverizers" following the size description are a part of the stoker and puverizing equipment and not spare or additional motors.

Plant data are arranged by size of plant based on authorized capacity, beginning with the largest plant.

Transformers and switching equipment, both indoor and outdoor, which has been listed as plant equipment may be exempted from removal at the dis-

eration of Supreme Commander for the Allied Powers in order to maintain operation of the Japanese electric power transmission and distribution systems.

Additional authorized plant capacity of approximately 825,000 KW will be available for interim reparations as a supplement to this list.

Equipment listed that is not a part of plant equipment or that is the property of separate distribution companies is not available for reparations.

A definition of the terms and abbreviations used follow the data for the last plant included in this catalog.

** This plant is capable of division into two substantially equal parts.

THERMAL ELECTRIC POWER PLANTS

Authorized Capacity: This is the continuous rating of the plant.

Actual Capacity: The net power that can be generated after station power has been deducted under the following conditions:

a. If there are ten or less boilers one is considered a spare.

b. If there are more than ten boilers two are considered as spares.

c. If there is more than one steam pressure one boiler for each steam pressure is considered as a spare.

LIST OF ABBREVIATIONS

MANUFACTURERS

A.E.G. - Allgemeine Elektricitaets Gesellschaft
B.B.C. - Brown Boveri & Co.
B & W - Babcock & Wilcox, Ltd.
E.E. - English Electric Co.
G.E. - General Electric Co.
H. - Hitachi Mfg. Co.
I or I.S. - Ishikawajima-Shibaura Turbine Co., Ltd.
M. - Mitsubishi Electric Machine Co.
M.D. - Meidensha
M.K. - Mitsubishi Electric Machine Co., Kobe Works
M.V. - Metropolitan-Vickers Electrical Co., Ltd.
S.E.W. - Tokyo-Shibaura Electric Co., Ltd.
S.S. - Siemens-Schuckertwerke A.G.
W.H. - Westinghouse Electric & Mfg. Co.

TECHNICAL TERMS

Amp - Amperes
C° - Centigrade
Cal - Calories
C.G. - Chain grate stoker
Cm2 - Square centimeters
Combus - Combustion
Econ - Economizer
Evap - Evaporation
Freq - Frequency in cycles
Imp - Impulse
Kg - Kilograms
KV - Kilovolts
KVA - Kilovolt Amperes
KW - Kilowatts
Ljung - Ljungstroem
Mfg - Manufacturer
MG - Motor generator

MT/Hr	- Metric tons per hour
P.F.	- Pulverized fuel
Press	- Pressure
Reac	- Reaction
RPM	- Revolutions per minute
Sect	- Sectional
Temp	- Temperature
U.F.	- Underfed stoker
Vert	- Vertical

c o p y

MACHINE TOOL INDUSTRY

These plants were taken into custody and inventoried in accordance with War Department radio from the Joint Chiefs of Staff to Supreme Commander for the Allied Powers, dated 28 May 1946.

For the purposes of this catalog a machine tool plant is defined as "a plant primarily engaged in the manufacturing of non-portable, power driven machines designed to shape metal by progressive cutting away of stock in the form of chips or shavings or by abrasive action". This definition was used to determine what plants were to be classified as a part of the machine tool industry.

This catalog presents significant data on the machine tool plants that have been made available for interim reparations claims. Data presented for individual plants are designed to supply engineers of the several claimant nations with general information which will serve as a guide in the preliminary selection of plants considered as suitable for reparation claims. Conversely it will serve as a basis for the elimination of plants that are of no interest.

It is believed that this catalog will effect economies in the expenses of the several claimant nations by reducing both the number of plants to be visited and the number of engineers required for the examination of plants of probable interest.

The information presented combines statistical data supplied by the Japanese Government and engineering data collected by officers assigned to General Headquarters, Supreme Commander for the Allied Powers. Every reasonable precaution has been taken to assure substantial accuracy.

Inventories for additional plants will be published in a subsequent catalog.

The inventories are arranged by size as measured by the number of machine tools, beginning with the largest.

Incl 2

c o p y

DEFINITIONS OF TERMS AND ABBREVIATIONS

Abbreviations - The following abbreviations are used in this catalog:

kg.	=	Kilogram	HP.	=	Horsepower
M.T.	=	Metric Ton	KWH.	=	Kilowatt Hour
kg/d.	=	Kilogram per day	KVA.	=	Kilovolt Ampere
KL.	=	Kiloliter			

Plant - For the purpose of this catalog a plant is an establishment operating as a unit under one management and confined to one geographical location. It may utilize several buildings which need not be physically connected or located in a single enclosure.

Peak Month Data - When possible, the class, type and sub-type are shown in terms of the U.S. Standard Commodity Classification, Volume I, Technical Paper No. 26, U.S. Government Printing Office, Washington : 1943. Principal operating dimensions are shown when available.

Production - The products shown are end items or components produced as such and utilized elsewhere.

Units - The units shown are the number of end items or components produced during the peak month of production. Components shown in this section do not include components produced for use in this plant.

Input - Section I-B includes materials and purchased components entering into the end item which are considered significant in evaluating the overall potentialities of the plant.

Iron - The iron shown under Section I-B-1-a includes purchased castings and pig iron ingots.

Steel - The steel shown under Section I-B-1-a includes alloy steel, finished parts and forgings.

Labor - The number of workers shown under Section I-B-4-a includes maintenance workers, as well as those engaged in actual production, but excludes officials, technical personnel, and office workers. The number shown is the average of such workers employed during the month of peak production. The man-hours shown represent the total number of man-hours for the workers shown.

Subcontracting - The percent shown in Section I-C-1 represents the percent of the total output for the peak month of production which was subcontracted, the work being done outside of the plant.

c o p y

DEFINITIONS OF TERMS AND ABBREVIATIONS (Cont'd)

Damage - Damage suffered subsequent to the peak month of production as shown in Section II includes all types of damages to buildings and equipment as a result of war, natural catastrophies, and causes over which the owner had no control. The percent of damage suffered is measured in terms of the effect it would have had on the production if applied to the amount shown under Section I for the peak month.

Restored - This term is used to indicate all restoration of damages, as well as improvements, that may have been made which would offset the damage suffered by the plant, in terms of effect on production when applied to that shown under Section I for the peak month.

Serviceable Equipment - The equipment shown under Section III includes both usable equipment and that which can be economically repaired. The proportion of each of these categories of equipment in the amount shown is unknown.

Cranes - The capacity shown for cranes under Section III-3-b represents the sum total of the rated horsepower of all motors installed on all units.

Unserviceable Equipment - For the purposes of this catalog unserviceable equipment has been defined as unusable equipment which cannot be economically repaired. Such equipment has not been included in this catalog.

LOC. VI-B-3

No. 62004-211

Name of Steam Electric Station
KIZUGAWA

Address
Osaka-shi, Suniyoshi-ku, Shibaya-cho 38

Authorized Capacity
63,000 KW

Actual Capacity, September 1946
40,000 KW

GENERAL

This plant has been well maintained and all equipment is in first class operating condition.

1. Steam Turbine Specifications.

Type	No. of Units	Capacity KW	Press Kg/Cm^2	Temp C°	RPM	Mfg	Year Mfg
Imp	2	31,500	24.6	385	1,800	G.E.	1927

Total Hours in Service

Period	No. 1	No. 2
1930-45	57,156	58,424

2. Generator Specifications.

Capacity KVA	No. of Units	Power Factor	Voltage	Freq	RPM	Mfg	Year Mfg
37,500	2	0.8	11 KV Y	60	1,800	G.E.	1927
2,140	2	0.7	3.3 KV	60	1,800	G.E.	1927

Generators same hours in service as turbines.

3. Boiler Specifications.

Type	No.of Units	Evap MT/Hr	Press Kg/Cm^2	Temp C°	Heating Surface M^2 Boiler	Super Heater	Econ	Pre-Heater	Com bus	Mfg	Year Mfg
Sect	4	60.8	26.5	366	1,424	438	809	1,340	U.F.	B&W	1927
Sect	4	74	26.5	366	1,378	404	480	1,340	P.F.	B&W	1938

Total Hours in Service

Period	No. 1	No. 2	No. 3	No. 4
1930-45	-	42,142	40,149	50,611

Period	No. 5	No. 6	No. 7	No. 8
1930-45	42,029	45,448	41,904	43,638

No. 1 boiler (underfed stoker) is dismantled. It was planned to use tubes at another plant. With seven boilers in service and one spare 40,000 KW can be generated. Actual capacity of the plant is limited by the wide difference between heat value of the coal obtainable and the heat value of the coal for which the boilers were designed. Boilers were designed for coal with a heat value of 6,800 Cal/Kg. With present coal (5,000 Cal/Kg.) the thermal efficiency is 5,400 Calories per KWH.

4. Coal Handling Equipment.

a. Luffing crane on a gantry crane, 150 MT/Hr.
b. Main horizontal conveyor, 77 M long.
c. Main inclined conveyor, 101 M long.
d. Horizontal conveyor, 64 M long.
e. Jib crane on same gantry crane, 100 MT/Hr.
f. Conveyor on same gantry crane, 70 M long.
g. Cantilever crane, 70 MT/Hr.
h. Horizontal conveyor, 14 M long.

Incl 3

5. Stoker and Pulverizing Equipment.

   a. Four - ball mill pulverizers, 70 MT/Hr each.
   b. Four - roller pulverizers, 70 MT/Hr each.
   c. Four - underfed stokers, one per boiler.

6. Outdoor Switchyard.

   a. Main power transformers.
      (1) Six - 46.3, 33.2 KV/12.5, 12, 11.5, 11, 10.5 KV, 12,500 KVA, single phase, 60 cycle, oil circulating-water cooled.
   b. Oil circuit breakers.
      (1) Four - 88 KV, 600 Amp.

7. Switchboard Room.

   a. Thirty-two panels.

8. Auxiliary Equipment.

   a. Motors, 3.3 KV, 3 phase.
      (1) Two - 600 HP MG sets.
      (2) One - 350 HP feed water pump.
      (3) Two - 320 HP feed water pumps.
      (4) Two - 300 HP condenser circulating water pumps.
      (5) Two - 280 HP condenser circulating water pumps.
      (6) Four - 210 HP forced draft fans.
      (7) Four - 160 HP ball mill pulverizers.
      (8) Four - 140 HP ball mill pulverizers.
      (9) Four - 120 HP primary air fans.
      (10) Twelve - 100 HP induced draft fans.
      (11) Three - 100 HP forced draft fans.
      (12) One - 75 HP air compressor.
      (13) Four - 60 HP ball mill exhausters.
      (14) Four - 60 HP condensate pumps.
   b. House transformers.
      (1) Four - 11 KV/3.45, 3.3, 3.15 KV, 1,500 KVA, 3 phase, 60 cycle, self cooled.

LOC. VI-B-2 No. 62009-211

Name of Steam Electric Station
AJIKAWA

Address
Osaka-shi, Fukushima-ku, Shimo-Fukushima, 5-7.

Authorized Capacity
16,000 KW

Actual Capacity, September 1946
10,000 KW

GENERAL

This plant has been well maintained and the equipment is in first class operating condition.

1. Steam Turbine Specifications.

Type	No. of Units	Capacity KW	Press Kg/Cm^2	Temp C	RPM	Mfg	Year Mfg
Imp	1	18,500	30	415	3,600	M	1938

Total Hours in Service

Period	No. 1
1938-45	7,479

2. Generator Specifications.

Capacity KVA	No. of Units	Power Factor	Voltage	Freq	RPM	Mfg	Year Mfg
18,750	1	0.8	11 KV	60	3,600	M	1938
1,430	1	0.8	3.3 KV	60	3,600	M	1938

Same hours in service as turbines.

3. Boiler Specifications.

Type	No.of Units	Evap MT/HR	Press Kg/Cm^2	Temp C°	Boiler	Super Heater	Econ	Pre-Heater	Com bus	Mfg	Year Mfg
CTM	2	48	33	430	1,036	386	208	936	C.G.	B&W	1938
Sect	1	48	33	430	1,070	370	175	1,210	C.G.	M	1938

Total Hours in Service

Period	No. 1	No. 2	No. 3
1938-45	6,430	6,620	4,083

Installed capacity of 15,000 KW can be generated with two boilers and one as a spare with good grade of coal. With present grade of coal actual capacity is 10,000 KW. Boilers designed for coal with heat value of 5,600 Cal/Kg. With present coal (5,000 Cal/Kg.) the thermal efficiency is 4,550 calories per KWH.

4. Coal Handling Equipment, 80 MT/Hr (by water).

a. Cantilever crane.
b. Main inclined conveyor 57 M long (3 sections).
c. Two horizontal conveyors 60 M long.
d. Gantry crane.
e. Horizontal conveyor, 54 M long.

5. Stoker Equipment.

a. Six - chain grate stokers, two to each boiler.

6. Indoor Transformer House.

a. Main power transformers.
(1) One - 23 KV/10.5 KV, 18,750 KVA, 3 phase, 60 cycle, oil circulating water cooled.

b. Oil Circuit Breakers.
(1) Three - 25 KV, 1,200 Amp.
(2) Two - 25 KV, 400 Amp.
(3) One - 15 KV, 400 Amp.
(4) One - 11 KV, 200 Amp.

7. Switchboard Room.

a. Six panels.

8. Auxiliary Equipment.

a. Motors, 3.3 KV, 3 phase.
(1) Two - 350 HP, feed water pumps.
(2) Two - 300 HP, condenser circulating water pumps.
(3) Two - 170 HP, induced draft fans.
(4) One - 160 HP, induced draft fans.
(5) One - 135 HP, spare exciter.
(6) Two - 110 HP, forced draft fans.
(7) One - 90 HP, forced draft fan.
(8) One - 60 HP, induced draft fan.
(9) Two - 60 HP, induced draft fan.
(10) Two - 55 HP, condensate pumps.

b. House transformers.
(1) One - 22 KV/3.45 KV, 2.000 KVA, 3 phase, 60 cycle, oil circulating-water cooled.
(2) Three - 13 KV/3.45, 3.3, 3.15 KV, 1,000 KVA, single phase, 60 cycle, oil circulating-water cooled.

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Period	No. 1	No. 2	No. 3	No. 4
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Period	No. 5	No. 6	No. 7	No. 8
1930-45	42,029	45,448	41,904	43,638

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4. Coal Handling Equipment.

a. Luffing crane on a gantry crane, 150 MT/Hr.
b. Main horizontal conveyor, 77 M long.
c. Main inclined conveyor, 101 M long.
d. Horizontal conveyor, 64 M long.
e. Jib crane on same gantry crane, 100 MT/Hr.
f. Conveyor on same gantry crane, 70 M long.
g. Cantilever crane, 70 MT/Hr.
h. Horizontal conveyor, 14 M long.

Incl 3^2

5. Stoker and Pulverizing Equipment.

   a. Four - ball mill pulverizers, 70 MT/Hr each.
   b. Four - roller pulverizers, 70 MT/Hr each.
   c. Four - underfed stokers, one per boiler.

6. Outdoor Switchyard.

   a. Main power transformers.
      (1) Six - 46.3, 33.2 KV/12.5, 12, 11.5, 11, 10.5 KV, 12,500 KVA, single phase, 60 cycle, oil circulating-water cooled.
   b. Oil circuit breakers.
      (1) Four - 88 KV, 600 Amp.

7. Switchboard Room.

   a. Thirty-two panels.

8. Auxiliary Equipment.

   a. Motors, 3.3 KV, 3 phase.
      (1) Two - 600 HP MG sets.
      (2) One - 350 HP feed water pump.
      (3) Two - 320 HP feed water pumps.
      (4) Two - 300 HP condenser circulating water pumps.
      (5) Two - 280 HP condenser circulating water pumps.
      (6) Four - 210 HP forced draft fans.
      (7) Four - 160 HP ball mill pulverizers.
      (8) Four - 140 HP ball mill pulverizers.
      (9) Four - 120 HP primary air fans.
      (10) Twelve - 100 HP induced draft fans.
      (11) Three - 100 HP forced draft fans.
      (12) One - 75 HP air compressor.
      (13) Four - 60 HP ball mill exhausters.
      (14) Four - 60 HP condensate pumps.
   b. House transformers.
      (1) Four - 11 KV/3.45, 3.3, 3.15 KV, 1,500 KVA, 3 phase, 60 cycle, self cooled.

LOC. VI-B-2 No. 62009-211

Name of Steam Electric Station
AJIKAWA

Address
Osaka-shi, Fukushima-ku, Shimo-Fukushima, 5-7.

Authorized Capacity
16,000 KW

Actual Capacity, September 1946
10,000 KW

GENERAL

This plant has been well maintained and the equipment is in first class operating condition.

1. Steam Turbine Specifications.

Type	No. of Units	Capacity KW	Press Kg/Cm^2	Temp C	RPM	Mfg	Year Mfg
Imp	1	18,500	30	415	3,600	M	1938

Total Hours in Service

Period	No. 1
1938-45	7,479

2. Generator Specifications.

Capacity KvA	No. of Units	Power Factor	Voltage	Freq	RPM	Mfg	Year Mfg
18,750	1	0.8	11 KV	60	3,600	M	1938
1,430	1	0.8	3.3 KV	60	3,600	M	1938

Same hours in service as turbines.

3. Boiler Specifications.

Type	No.of Units	Evap MT/HR	Press Kg/Cm^2	Temp C°	Boiler	Super Heater	Econ	Pre-Heater	Com bus	Mfg	Year Mfg
CTM	2	48	33	430	1,036	386	208	936	C.G.	B&W	1938
Sect	1	48	33	430	1,070	370	175	1,210	C.G.	M	1938

Total Hours in Service

Period	No. 1	No. 2	No. 3
1938-45	6,430	6,620	4,083

Installed capacity of 15,000 KW can be generated with two boilers and one as a spare with good grade of coal. With present grade of coal actual capacity is 10,000 KW. Boilers designed for coal with heat value of 5,600 Cal/Kg. With present coal (5,000 Cal/Kg.) the thermal efficiency is 4,550 calories per KWH.

4. Coal Handling Equipment, 80 MT/Hr (by water).

a. Cantilever crane.
b. Main inclined conveyor 57 M long (3 sections).
c. Two horizontal conveyors 60 M long.
d. Gantry crane.
e. Horizontal conveyor, 54 M long.

5. Stoker Equipment.

a. Six - chain grate stokers, two to each boiler.

6. Indoor Transformer House.

a. Main power transformers.
(1) One - 23 KV/10.5 KV, 18,750 KVA, 3 phase, 60 cycle, oil circulating water cooled.

b. Oil Circuit Breakers.
(1) Three - 25 KV, 1,200 Amp.
(2) Two - 25 KV, 400 Amp.
(3) One - 15 KV, 400 Amp.
(4) One - 11 KV, 200 Amp.

7. Switchboard Room.

a. Six panels.

8. Auxiliary Equipment.

a. Motors, 3.3 KV, 3 phase.
(1) Two - 350 HP, feed water pumps.
(2) Two - 300 HP, condenser circulating water pumps.
(3) Two - 170 HP, induced draft fans.
(4) One - 160 HP, induced draft fans.
(5) One - 135 HP, spare exciter.
(6) Two - 110 HP, forced draft fans.
(7) One - 90 HP, forced draft fan.
(8) One - 60 HP, induced draft fan.
(9) Two - 60 HP, induced draft fan.
(10) Two - 55 HP, condensate pumps.

b. House transformers.
(1) One - 22 KV/3.45 KV, 2.000 KVA, 3 phase, 60 cycle, oil circulating-water cooled.
(2) Three - 13 KV/3.45, 3.3, 3.15 KV, 1,000 KVA, single phase, 60 cycle, oil circulating-water cooled.

PLANT NO. 4

MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Dai Nihon Koki K.K.	118, Shinsaibashisuji, 1-chome, Minami-ku, Osaka-fu	Shinodayama	500, Hishiki, Fukuizumi-cho, Izukita-gun, Osaka	1938

SUMMARY

This is a large, well arranged factory that formerly manufactured plain, vertical and universal milling machines, radial drilling machines and turret lathes. About one third of the machine tools were damaged and are currently unserviceable. The machines listed are serviceable and in generally good condition. Current production is printing presses and textile machinery.

SECTION I-PEAK MONTH DATA (PEAK MONTH Nov. 1945)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Drilling Machine	Radial	Plain	Maximum distance, spindle center to column 1,000 mm	-	22
Lathe	Turret. Ram Type	Standard	Round Bar Capacity 47 mm	-	30
Lathe	Automatic Chucking Machine	Single Spindle	Maximum Chucking Capacity 40 mm	-	75

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	211,285 KG	a. PURCHASED	230,000 KWH	a. COAL	10.5 MT	a. NUMBER OF WORKERS (Av.)	2,008
b. STEEL	54,665 KG	b. GENERATED	- KWH	b. OIL	9.8 KL	b. MAN HOURS (TOTAL)	725,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 6%

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	3 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	45 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	36	6
2. Broaching Machines	1	-
3. Drilling Machines	40	7
4. Gear Cutting and Finishing Machines	15	8
5. Grinding Machines	14	9
6. Lathes	216	5
7. Milling Machines	20	10
8. Planers	12	2
9. Shaper & Slotters	12	1
10. Saws	7	-
11. Miscellaneous	5	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	2	
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	Kg/D
b. Other Cupolas		Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	10
b. Gas Furnaces	-
c. Other Furnaces	2

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	2	6 HP
b. Cranes	25	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	36	3,125 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

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PLANT NO. 7 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Matsushita Kinzoku K.K.	160, Takase, Sungo-cho, Kitakawachi-gun, Osaka-fu	Honsha	160, Takase, Sungo-cho, Kitakawachi-gun, Osaka-fu	1936

SUMMARY

This report covers the machine tool section of this factory, which constitutes only about 20% of the total facilities of the factory. The machine tools manufactured included lathes, shapers, tool grinders and universal tool and cutter grinders. The manufacture of these machine tools was abandoned near the end of 1944 and supplanted by the production of hot bulb engines and grid winding machines, the latter being used in the production of vacuum tools. The present machines in the gear cutting shop are ample and well maintained while the remainder are not in as good condition, but serviceable.

SECTION I - PEAK MONTH DATA (PEAK MONTH Oct. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Engine	Standard	Swing diameter 435 mm	-	20
Grinding Machines	Universal Tool and cutter		Maximum diameter of work 210 mm	-	10

Note: During peak month lathes and tool grinders were the only machine tools produced.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	76,165 KG	a. PURCHASED	20,000 KWH	a. COAL	MT	a. NUMBER OF WORKERS (Av.)	191
b. STEEL	8,944 KG	b. GENERATED	0 KWH	b. OIL	.4 KL	b. MAN HOURS (TOTAL)	51,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 44 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	2 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mf'g'd	Foreign Mf'g'd	B. OTHER METAL WORKING MACHINES	Japan Mf'g'd	Foreign Mf'g'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	4	1	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	1	-	2. Sheet Ffm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	19	1	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	12	6	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	-	- HP
5. Grinding Machines	13	3	6. Mechanical Hammers	2	-	b. Cranes	3	120HP
6. Lathes	112	1	7. Miscellaneous	1	-	4. Power Supply		
7. Milling Machines	26	2	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	-KVA
8. Planers	5	-				(1) Voltage ( )	-	-
9. Shaper & Slotters	11	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	6	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	2	200 KVA
11. Miscellaneous	9	-	b. Other Cupolas	-	- Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 9

MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Nakagawa Kikai K.K.	18, Naka, 3-chome, Takaida, Fuse-shi, Osaka-fu	Fuse	18, Naka, 3-chome, Takaida, Fuse-shi, Osaka-fu	1939

SUMMARY

This is a medium sized factory that manufactured shapers exclusively until the termination of the war. The plant is well arranged, partially in production line style which is possible due to the standardized production. At the end of the war the plant was idle for a short period but currently has begun to manufacture refrigerators. Present machines and equipment are of good quality and well maintained.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1943)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Miscellaneous Machine tools	Shapers and Slotters	Horizontal Shaper	Maximum stroke 600 mm	-	50

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	179,800 KG	a. PURCHASED	48,750 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	558
b. STEEL	33,150 KG	b. GENERATED	- KWH	b. OIL	- KL	b. MAN HOURS (TOTAL)	167,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 0 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	6	-
2. Broaching Machines	-	-
3. Drilling Machines	9	-
4. Gear Cutting and Finishing Machines	13	1
5. Grinding Machines	13	-
6. Lathes	26	-
7. Milling Machines	9	-
8. Planers	12	-
9. Shaper & Slotters	19	-
10. Saws	5	-
11. Miscellaneous	36	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		2
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	24	52 ton HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	11	635 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 20 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Showa Seiki Seizosho K.K.	13, Niitakaminami-dori, 1-chome, Higashiyodogawa-ku, Osaka-fu	Honsha	13, Niitakaminami-dori, 1-chome, Higashiyodogawa-ku, Osaka-fu	1925

SUMMARY

This is a medium sized factory established in 1925 for the purpose of manufacturing machine tools. Production was confined to universal cylindrical grinding machines, internal and surface grinders. Currently the manufacture of machine tools has been stopped and the factory is doing repair work on spinning equipment. Present machines and equipment are in fairly good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machines	External Cylindrical	Universal	Swing diameter 230 mm	-	8
Grinding Machines	Internal Cylindrical	Plain	Swing diameter 250 mm	-	5

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	27,400 KG	a. PURCHASED	13,943 KWH	a. COAL	5 MT	a. NUMBER OF WORKERS (Av.)	385
b. STEEL	6,500 KG	b. GENERATED	- KWH	b. OIL	0.18 KL	b. MAN HOURS (TOTAL)	133,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 24 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	30 %	RESTORED	18 %
B. EQUIPMENT	DAMAGED	10 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	1	-
2. Broaching Machines	1	-
3. Drilling Machines	29	-
4. Gear Cutting and Finishing Machines	6	-
5. Grinding Machines	9	-
6. Lathes	66	-
7. Milling Machines	24	-
8. Planers	-	-
9. Shaper & Slotters	3	-
10. Saws	2	-
11. Miscellaneous	10	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	2	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	1	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT		
1. Foundry	No of Units	Aggregate Capacity
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		1
b. Gas Furnaces		-
c. Other Furnaces		4
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	-	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	11	158 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 22 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Kawanishi Kokuki K.K.	1, Hamanouchi, Komatsu Naruo-mura, Muko-gun, Hyogo-ken	Koki-Kojo	21, Takaidanaka, 2-chome, Fuse-shi, Osaka-fu	1935

SUMMARY

This is a medium sized factory consisting of three sections, two of which have been idle and poorly maintained since the termination of the war. The third section now in operation is making woodworking machinery and repairing printing presses. The former products were lathes, milling, slotting and boring machines. Approximately 1/3 of the present equipment is in good condition and the remainder is serviceable but in poor condition.

SECTION I-PEAK MONTH DATA (PEAK MONTH Dec. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Milling Machine	Knee Type Horizontal	N.E.C.		-	5
Milling Machine	Knee Type Horizontal	N.E.C.	-	-	5
Lathe	N.E.C.	-	Swing Diameter 1,500 mm	-	5
Miscellaneous Machine Tools	Shapers and Slotters	Vertical Slotter	Maximum Stroke 400 mm	-	2

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL			4. LABOR	
a. IRON	159,005 KG	a. PURCHASED	35,000 KWH	a. COAL	-	MT	a. NUMBER OF WORKERS (Av.)	438
b. STEEL	22,660 KG	b. GENERATED	- KWH	b. OIL	1.57	KL	b. MAN HOURS (TOTAL)	132,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 7 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	35 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	19 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	2	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	10	-	3. Forging Presses	-	-	c. Other Furnaces		3
4. Gear Cutting and Finishing Machines	12	2	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	-	- HP
5. Grinding Machines	8	2	6. Mechanical Hammers	-	-	b. Cranes	11	150 HP
6. Lathes	[illegible]	-	7. Miscellaneous	2	-	4. Power Supply		
7. Milling Machines	10	1	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	- KVA
8. Planers	3	-				(1) Voltage ( )	-	-
9. Shaper & Slotters	7	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	3	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	8	500 KVA
11. Miscellaneous	-	-	b. Other Cupolas	-	- Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 30 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Toyo Jukogyo K.K.	16, 2-chome, Dojimahama-dori, Kita-ku, Osaka-fu	Juso	16, 5-chome, Moto Imaza-to, Kita-dori, Higashi, Yodogawa-ku, Osaka	1933

SUMMARY

This factory was established in 1933 for the purpose of manufacturing textile equipment, but in 1939 was converted to machine tool production. This production was confined to one type of lathe. During the war, in addition to machine tool production, various torpedo parts were also manufactured in this plant. Currently the facilities of this factory are being used to repair textile machinery. The plant's machines and equipment are of second quality but are well maintained.

SECTION I - PEAK MONTH DATA (PEAK MONTH Dec. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathes	Engine	Standard	Swing diameter 460 mm	-	20

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	40,000 KG	a. PURCHASED	20,000 KWH	a. COAL	10 MT	a. NUMBER OF WORKERS (Av.)	147
b. STEEL	9,000 KG	b. GENERATED	- KWH	b. OIL	0.01 KL	b. MAN HOURS (TOTAL)	40,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 15 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	5	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	2	2	b. Gas Furnaces		-
3. Drilling Machines	9	-	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	4	-	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	2	35 HP
5. Grinding Machines	4	-	6. Mechanical Hammers	-	-	b. Cranes	4	44 HP
6. Lathes	45	-	7. Miscellaneous	-	-	4. Power Supply	-	-
7. Milling Machines	11	-	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	-KVA
8. Planers	5	1				(1) Voltage ( )	-	-
9. Shaper & Slotters	7	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	2	-	a. Electric Cupolas	1	2,000 Kg/D	b. Transformers	9	1,040 KVA
11. Miscellaneous	-	-	b. Other Cupolas	2	4,500 Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 32 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Minoura Jukogyo K.K. (Now: Futaba Kikai K.K.)	34, Naka, 2-chome, Takaida, Fuse-shi, Osaka-fu	Minoura Jukogyo K.K. (Now: Futaba Kikai K.K.)	34, Naka, 2-chome, Takaida, Fuse-shi, Osaka-fu	1937

SUMMARY

This is a small factory with limited equipment and from 1937 to 1945 manufactured radial drilling machines and vertical milling machines. Current production is in parts for electrical equipment which is being done on a sub-contract basis. Present machines and equipment are in fairly good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Aug. 1942)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Drilling Machines	Radial	Plain	Maximum distance spindle center to column 1,050 mm	-	6
Drilling Machines	Radial	Plain	Maximum distance spindle center to column 1,660 mm	-	4

Note: During peak month only radial drilling machines were produced.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL			4. LABOR	
a. IRON	61,050 KG	a. PURCHASED	15,000 KWH	a. COAL	-	MT	a. NUMBER OF WORKERS (Av.)	230
b. STEEL	9,500 KG	b. GENERATED	- KWH	b. OIL	0.03	KL	b. MAN HOURS (TOTAL)	70,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 15 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	19 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	-
2. Broaching Machines	1	-
3. Drilling Machines	6	-
4. Gear Cutting and Finishing Machines	7	-
5. Grinding Machines	10	1
6. Lathes	35	1
7. Milling Machines	6	-
8. Planers	9	-
9. Shaper & Slotters	3	-
10. Saws	2	-
11. Miscellaneous	2	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	4	-
3. Forging Presses	1	-
4. Steam Hammers	-	-
5. Pneumatic Hammers		-
6. Mechanical Hammers		
7. Miscellaneous		-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Othe. Cupolas	2	5,000 Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		3
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	5	105 HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b Transformers	4	180 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 35 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Otsuka Tekkosho K.K.	38, Mitejima-cho, Higashi, 2-chome, Nishi-yodogawa-ku, Osaka-fu	Otsuka Tekkosho K.K.	38, Mitemima-cho Higashi, 2-chome, Nishi-yodogawa-ku, Osaka-fu	1901

SUMMARY

This is a medium sized factory engaged in the manufacturing of heavy duty lathes, planers, boring machines and special propeller milling machines since 1941. Prior to that time knitting looms and textile equipment were manufactured. After the termination of the war machine tool production was replaced by the manufacturing of printing machines and textile equipment. The general condition of machines and equipment is poor as a result of a flood which occurred in September 1945.

SECTION I - PEAK MONTH DATA (PEAK MONTH Feb 1945)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathes	Engine	Standard	Swing diameter 1040 mm	-	9

Note: During peak month only lathes were produced.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	98,000 KG	a. PURCHASED	25,000 KWH	a. COAL	12 MT	a. NUMBER OF WORKERS (Av.)	319
b. STEEL	6,500 KG	b. GENERATED	- KWH	b. OIL	0.9 KL	b. MAN HOURS (TOTAL)	115,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 60 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	22 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	10 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	1
2. Broaching Machines	-	-
3. Drilling Machines	7	2
4. Gear Cutting and Finishing Machines	-	2
5. Grinding Machines	2	-
6. Lathes	42	2
7. Milling Machines	6	3
8. Planers	5	-
9. Shaper & Slotters	5	1
10. Saws	2	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	1	-
2. Sheet F'rm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		3
b. Gas Furnaces		-
c. Other Furnaces		-
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	3	41 HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	10	238 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 36 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Dai Ni Kubota K.K.	549, Wakae-mura, Naka-kawachi-gun, Osaka-fu	Wakae, Machine Tool Shop	549, Wakae-mura, Naka-kawachi-gun, Osaka-fu	1927

SUMMARY

This is a large plant that manufactured heavy duty lathes and marine diesel engines. The general condition of equipment is poor due to lack of maintenance and neglect rather than war damage. Current production is in marine diesel engines.

SECTION I-PEAK MONTH DATA (PEAK MONTH Dec. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Engine	Standard	Swing Diameter 1220 mm	-	2
Lathe	Engine	Standard	Swing Diameter 350 mm	-	20
Lathe	Engine	Standard	Swing diameter 650 mm	-	17

B. INPUT

1. PURCHASED MATERIALS			2. ELECTRIC ENERGY AC/DC (60 Cycles)			3. FUEL			4. LABOR	
a. IRON	119,210	KG	a. PURCHASED	30,000	KWH	a. COAL	-	MT	a. NUMBER OF WORKERS (Av.)	1,004
b. STEEL	34,156	KG	b. GENERATED	-	KWH	b. OIL	-	KL	b. MAN HOURS (TOTAL)	300,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 6 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	46 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	4	-
2. Broaching Machines	-	-
3. Drilling Machines	6	-
4. Gear Cutting and Finishing Machines	-	-
5. Grinding Machines	2	-
6. Lathes	61	-
7. Milling Machines	-	-
8. Planers	7	-
9. Shaper & Slotters	3	-
10. Saws	-	-
11. Miscellaneous	-	-

B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		-
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	8 manual	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	5	360 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 40 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Asahi Kogyo K.K.	171, Minami, 1-chome, Shinmori-shoji, Asahi-ku, Osaka-fu	Honsha	171, Minami, 1-chome, Shinmori-shoji, Asahi-ku, Osaka-fu	1939

SUMMARY

This plant is small and poorly equipped; the machines are serviceable but are no longer suitable for precision work. At present the plant is manufacturing agricultural and woodworking machinery.

SECTION I-PEAK MONTH DATA (PEAK MONTH Nov. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machine	Internal Cylindrical	Plain	Swing Diameter 25 mm	-	8
Lathe	Automatic Chucking	Single Spindle	Swing Diameter 23 mm	-	7

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	14,000 KG	a. PURCHASED	12,000 KWH	a. COAL	9 MT	a. NUMBER OF WORKERS (Av.)	138
b. STEEL	6,350 KG	b. GENERATED	- KWH	b. OIL	0.35 KL	b. MAN HOURS (TOTAL)	41,400

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 22 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	20 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	30 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	-	-	1. Punching & Shearing	1	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	6	1	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines		-	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	1	7.5 HP
5. Grinding Machines	7	12	6. Mechanical Hammers	-	-	b. Cranes	2 manual	- HP
6. Lathes	37	1	7. Miscellaneous	2	-	4. Power Supply		
7. Milling Machines	3		C. MISCELLANEOUS EQUIPMENT			a. Generators	-	- KVA
8. Planers	3	-				(1) Voltage ( )	-	-
9. Shaper & Slotters	3	1	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	3	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	-	- KVA
11. Miscellaneous	-	-	b. Other Cupolas	-	- Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 50 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Handa Jukogyo K.K.	50, Aza Zennoyama, Handa-shi, Aichi-ken	Osaka	26, 1-chome, Harami-cho, Ikuno-ku, Osaka-fu	1930

SUMMARY

This is a small branch factory engaged in manufacturing machine tools, including plain, universal and internal grinding machines. During the war machine gun parts were also produced. Present machines and equipment are in good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Sept. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machine	External Cylindrical	Plain	Swing diameter, 300 mm	-	5

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/~~DC~~ (60Cycles)		3. FUEL		4. LABOR	
a. IRON	22,500 KG	a. PURCHASED	14,500 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	215
b. STEEL	7,500 KG	b. GENERATED	- KWH	b. OIL	0.27 KL	b. MAN HOURS (TOTAL)	65,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 9 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	3	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	5	-	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	1	-	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	1	3 HP
5. Grinding Machines	9	-	6. Mechanical Hammers	-	-	b. Cranes	1	5 tons HP
6. Lathes	32	-	7. Miscellaneous	-	-	4. Power Supply		
7. Milling Machines	6	-	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	- KVA
8. Planers	4	-				(1) Voltage ( )	-	-
9. Shaper & Slotters	2	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	1	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	9	90 KVA
11. Miscellaneous	2	-	b. Other Cupolas	-	- Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 51 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Hamada Seiki Tetsukosho K.K.	2, 1-chome, Kaji-cho, Kanda-ku, Tokyo-to	Osaka	153, Mitejima-cho, Nishi-yodogawa-ku, Osaka-fu	1933

SUMMARY

This factory was established in 1933 for the purpose of manufacturing various types of printing machines. The production of printing machines continued until 1941 when a surface grinder, reciprocating table type, was added. This latter product supplanted the manufacture of printing machines so that during the peak month only repairing of printing machinery was done. This grinding machine was made only during the war. Currently this factory has converted to the manufacture and repair of printing machines. Present equipment is in poor condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machine	Surface	Reciprocating table			18

NOTE: During peak month the repair of printing presses represents approximately 10% of the total production output.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	18,000 KG	a. PURCHASED	10,720 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	169
b. STEEL	4,860 KG	b. GENERATED	- KWH	b. OIL	0.45 KL	b. MAN HOURS (TOTAL)	53,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 10.5 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	15.6%	RESTORED	0 %
B. EQUIPMENT	DAMAGED	13 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	-
2. Broaching Machines	-	-
3. Drilling Machines	7	-
4. Gear Cutting and Finishing Machines	2	1
5. Grinding Machines	6	-
6. Lathes	28	-
7. Milling Machines	4	2
8. Planers	3	-
9. Shaper & Slotters	4	-
10. Saws	2	-
11. Miscellaneous	1	-

B. OTHER METAL WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	-
b. Gas Furnaces	-
c. Other Furnaces	-

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	-	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 53 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Shinko Kikai Seisakusho K.K.	24, Nonakaminami-dori, 2-chome, Higashiyodogawa-ku, Osaka-fu	Shinko Kikai Seisakusho K.K.	24, Nonakaminami-dori, 2-chome, Higashiyodogawa-ku, Osaka-fu	1935

SUMMARY

This is a medium sized factory which was established in 1935 for the purpose of manufacturing milling machines and ring spinning roller parts. In 1942 a universal tool milling machine was added to the list of products manufactured. This production continued until the end of the war. Currently this plant has begun production of ensilage cutters and straw rope making machines. Present machines and equipment are serviceable but due to wear and age can only be used for non-precision manufacturing.

SECTION I - PEAK MONTH DATA (PEAK MONTH May 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Milling Machine	Miscellaneous	Tool-Milling, N.E.C.	-	-	10

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	10,300 KG	a. PURCHASED	7,140 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	205
b. STEEL	3,660 KG	b. GENERATED	- KWH	b. OIL	0.3 KL	b. MAN HOURS (TOTAL)	68,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 10.5 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	10 %	RESTORED	* 15%
B. EQUIPMENT	DAMAGED	0 %	RESTORED	* 8%

* These percentages represent improvements made subsequent to the peak month.

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	2	-
2. Broaching Machines	-	-
3. Drilling Machines	3	1
4. Gear Cutting and Finishing Machines	2	-
5. Grinding Machines	5	-
6. Lathes	28	-
7. Milling Machines	11	-
8. Planers	3	-
9. Shaper & Slotters	3	-
10. Saws	1	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	-
b. Gas Furnaces	-
c. Other Furnaces	- -

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	-	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	3	60 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 55 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Makita Kinzoku K.K.	750, Iwata, Oazu, Tamagawa-cho, Nakakawachi-gun, Osaka-fu	Makita Kinzoku K.K.	750, Iwata, Oazu, Tamagawa-cho, Nakakawachi-gun, Osaka-fu	1897

SUMMARY

This is a small, simply equipped factory, that formerly manufactured horizontal and vertical milling machines, horizontal boring machines, and engine and turret lathes. Current production is in machinery used in fish net manufacture and textile machinery accessories. Present machinery and equipment is in fairly good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Sept. 1943)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Engine	Standard	Swing diameter 1,420 mm	-	3
Milling Machine	Knee Type Horizontal	Plain	-	-	3

NOTE: During peak month this factory manufactured only lathes and milling machines.

B. INPUT

1. PURCHASED MATERIALS			2. ELECTRIC ENERGY AC/DC (60 Cycles)			3. FUEL			4. LABOR	
a. IRON	12,000	KG	a. PURCHASED	7,340	KWH	a. COAL	-	MT	a. NUMBER OF WORKERS (Av.)	359
b. STEEL	6,000	KG	b. GENERATED	-	KWH	b. OIL	1.4	KL	b. MAN HOURS (TOTAL)	96,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 10 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	12%	RESTORED	0 %
B. EQUIPMENT	DAMAGED	10%	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	-
2. Broaching Machines	-	-
3. Drilling Machines	5	-
4. Gear Cutting and Finishing Machines	15	-
5. Grinding Machines	3	-
6. Lathes	17	-
7. Milling Machines	4	-
8. Planers	4	-
9. Shaper & Slotters	3	-
10. Saws	1	-
11. Miscellaneous	3	-

B. OTHER METAL WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	2	3,000 Kg/D
b. Other Cupolas	1	1,750 Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		-
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	1	3 HP
b. Cranes	6	18 tonHP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	4	175 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 60 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Mitsubishi Jukogyo K.K.	4, 2-chome, Marunouchi, Kojimachi-ku, Tokyo-to	Mikuni	137, Mikunihon-machi, Higashiyodogawa-ku, Osaka-fu	1938

SUMMARY

This factory formerly manufactured upright drilling machines. Currently this factory is formulating plans for the manufacture of separators for oil and milk. Present machines and equipment are in good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH April 1945)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Drilling Machine	Upright	Hand feed	Distance, Spindle center to column 350 mm	-	20

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	7,000 KG	a. PURCHASED	5,500 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	75
b. STEEL	2,300 KG	b. GENERATED	- KWH	b. OIL	0.1 KL	b. MAN HOURS (TOTAL)	25,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 31 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	10 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	5 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	1	-
2. Broaching Machines	-	-
3. Drilling Machines	13	-
4. Gear Cutting and Finishing Machines	2	-
5. Grinding Machines	2	-
6. Lathes	20	-
7. Milling Machines	4	-
8. Planers	1	-
9. Shaper & Slotters	2	-
10. Saws	1	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		-
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	1	0.5 HP
b. Cranes	3	5 ton HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	5	70 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 63 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Mitsubishi Jukogyo K.K.	4, 2-chome, Marunouchi, Kojimachi-ku. Tokyo-to	Tsuruhara	2110, Tsuruhara, Sano-cho, Sennan-gun, Osaka-Fu	1944

SUMMARY

This is an unimportant factory engaged in the production of simplified engine lathes during the wartime emergency. The machines and equipment as listed herein are in good serviceable condition.

SECTION I-PEAK MONTH DATA (PEAK MONTH May 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Bench and Light Duty	Standard	Swing Diameter 25 mm	-	40

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	11,300 KG	a. PURCHASED	39,500 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	253
b. STEEL	3,680 KG	b. GENERATED	- KWH	b. OIL	- KL	b. MAN HOURS (TOTAL)	76,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 25 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	1	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	6	-	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	-	2	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	2	70 HP
5. Grinding Machines	3	-	6. Mechanical Hammers	-	-	b. Cranes	-	- HP
6. Lathes	13	2	7. Miscellaneous	-	-	4. Power Supply	-	-
7. Milling Machines	2	-	C MISCELLANEOUS EQUIPMENT			a. Generators	-	- KVA
8. Planers	1	-				(1) Voltage ( )	-	
9. Shaper & Slotters	2	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	2	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	21	315KVA
11. Miscellaneous	3	-	b. Other Cupolas	2	1,000 Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

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GROUP 3

Name of Company	Plant Name	Plant Address
Osaka Seiko K.K. (Osaka Steel Mfg. Co.)	Nishijima	91, Nishijima-cho, Nishiyodogawa-ku
Daido Seiko K.K. (Daido Steel Mfg. Co.)	Osaka	453, Nakajima-cho, Nishiyodogawa-ku
Mitsubishi Kasei Kogyo K.K. (Yodogawa)	Osaka	Higashiyodogawa-ku
Amatsuji Kokyu K.K.	Owada	Owada-mura, Kitakawachi-gun
Amatsuji Kokyu K.K.	Maruyama	Shijonawate-mura, Kitakawachi-gun
Amatsuji Kokyu K.K.	Juso	12,5-chome, Kita-dori, Higashiyodogawa-ku
Nakanishi Jiku-uke K.K.	Kawachi	Neyagawa-machi, Kitakawachi-gun
Teikoku Kako	Owada	Owada
Hamada Seiki (Hamada Precision Machinery Works K.K.)	Osaka	153, Mitsea-machi, Nishiyodogawa-ku
Matsushita Kinzoku (Matsushita Metal & Machine Co.)	Honshiya	160, Kuseiki, Sangyo-machi, Kitakawachi-gun
Mitsubishi Jukogyo (Mitsubishi Heavy Industry Co.)	Mikuni	137, Mikunihon-machi, Higashiyodogawa-ku
Nakajima Kikai		Mikunihonmachi, Higashiyodogawa-ku
Nobuhara Seisaku	Honsha	Chito, Hon-machi, Oyodo-ku
Osaka Kikai Seisakusho K.K. (Osaka Machine Mfg. Works Ltd.)	Osaka	214, 2-chome, Tsukuda-cho, Nishiyodogawa-ku
Otsuka Tekko (Otsuka Iron Works Ltd.)		38, 2-chome, Higashi, Goheijima-cho, Nishiyodogawa-ku
Shinko Kikai Seisakusho K.K. (Shinko Machine Mfg. Co., Ltd.)		24, 20-chome, Nonakaminami-dori, Higashiyodogawa-ku
Showa Seiki (Showa Precision Machinery Co.)		13, 1-chome, Shintakaminamidori, Higashiyodogawa-ku

Name of Company	Plant Name	Plant Address
Toyo Jukogyo (Toyo Heavy Industrial Co. Ltd.)	Juso	16, 5-chome, Moborimazatokitadori, Higashiyodogawa-ku
Chuo Kogyo K.K. 43	Kashima	#1220, Kashima-cho, Higashiyodogawa-ku
Daido Kogyo K.K. 44	Katano	Katano-cho, Aza Kisabe, Kitakawachi-gun
Hatsudoki Seizo K.K. 47	Ikeda	Momozono-machi, Ikeda-shi
Hinode Kogyo K.K. 50	Main	#139 Oaza Tsuboi, Nashita-mura, Mishima-gun
Matsushita Electric Ind. K.K. 59	Home	Kadoma-cho, Kitakawachi-gun
Osaka Gijitsu Kogyo K.K. 63	Ibaraki Special	Kasuga-mura
Osaka Kiko K.K. 64	Kajima Seisakusho	Kajima-cho, Higashiyodogawa-ku
Osaka Meter Co. K.K. 67		Neyagawa-machi, Kitakawachi-gun
Osaka Seisa Zoki K.K. 69	Ibaraki Tokushu	#210 Oaza Shimohozumi, Kasuga-mura
Owada Industrial Co. K.K. 70 (?)		Owada-mura, Kitakawachi-gun
Dainihon Fire Arms Co. K.K. 70 (?) (Owada Industrial Co.)		Owada-mura, Kitakawachi-gun
Sekisan Seiko K.K. 74	Owada	1487 Owada-cho, Nishiyodogawa-ku

PLANT NO. 4 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Dai Nihon Koki K.K.	118, Shinsaibashisuji, 1-chome, Minami-ku, Osaka-fu	Shinodayama	500, Hishiki, Fukuizumi-cho, Izukita-gun, Osaka	1938

SUMMARY

This is a large, well arranged factory that formerly manufactured plain, vertical and universal milling machines, radial drilling machines and turret lathes. About one third of the machine tools were damaged and are currently unserviceable. The machines listed are serviceable and in generally good condition. Current production is printing presses and textile machinery.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1945)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Drilling Machine	Radial	Plain	Maximum distance, spindle center to column 1,000 mm	-	22
Lathe	Turret, Ram Type	Standard	Round Bar Capacity 47 mm	-	30
Lathe	Automatic Chucking Machine	Single Spindle	Maximum Chucking Capacity 40 mm	-	75

B. INPUT

1. PURCHASED MATERIALS	2. ELECTRIC ENERGY AC/DC (60 Cycles)	3. FUEL	4. LABOR
a. IRON 2,1,285 KG	a. PURCHASED 230,000 KWH	a. COAL 10.5 MT	a. NUMBER OF WORKERS (Av.) 2,008
b. STEEL 54,665 KG	b. GENERATED - KWH	b. OIL 9.8 KL	b. MAN HOURS (TOTAL) 725,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 6%

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	3 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	45 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	36	6
2. Broaching Machines	1	-
3. Drilling Machines	40	7
4. Gear Cutting and Finishing Machines	15	8
5. Grinding Machines	14	9
6. Lathes	216	5
7. Milling Machines	30	10
8. Planers	12	2
9. Shaper & Slotters	12	1
10. Saws	7	-
11. Miscellaneous	5	-

B. OTHER METAL WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frmg Presses	-	-
3. Forging Presses	-	
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	2	
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	Kg/D
b. Other Cupolas		Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	10
b. Gas Furnaces	-
c. Other Furnaces	2

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	2	6 HP
b. Cranes	25	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	36	3,125 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

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PLANT NO. 7 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Mitsushita Kinzoku K.K.	160, Takase, Sango-cho, Kitakawachi-gun, Osaka-fu	Honsha	160, Takase, Sango-cho, Kitakawachi-gun, Osaka-fu	1936

SUMMARY

This report covers the machine tool section of this factory, which constitutes only about 20% of the total facilities of the factory. The machine tools manufactured included lathes, shapers, tool grinders and universal tool and cutter grinders. The manufacture of these machine tools was abandoned near the end of 1944 and supplanted by the production of hot bulb engines and grid winding machines, the latter being used in the production of vacuum tools. The present machines in the gear cutting shop are ample and well maintained while the remainder are not in as good condition, but serviceable.

SECTION I - PEAK MONTH DATA (PEAK MONTH Oct. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Engine	Standard	Swing diameter 435 mm	-	20
Grinding Machines	Universal Tool and cutter		Maximum diameter of work 210 mm	-	10

Note: During peak month lathes and tool grinders were the only machine tools produced.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	76,165 KG	a. PURCHASED	20,000 KWH	a. COAL	MT	a. NUMBER OF WORKERS (Av.)	191
b. STEEL	8,944 KG	b. GENERATED	- KWH	b. OIL	.4 KL	b. MAN HOURS (TOTAL)	51,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 44 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	2 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	B. OTHER METAL WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	4	1	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	1	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	19	1	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	12	6	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	-	- HP
5. Grinding Machines	13	3	6. Mechanical Hammers	2	-	b. Cranes	3	120HP
6. Lathes	112	1	7. Miscellaneous	1	-	4. Power Supply		
7. Milling Machines	26	2	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	-KVA
8. Planers	5	-				(1) Voltage ( )	-	-
9. Shaper & Slotters	11	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	6	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	2	200 KVA
11. Miscellaneous	9	-	b. Other Cupolas	-	- Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 9 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Nakagawa Kikai K.K.	18, Naka, 3-chome, Takaida, Fuse-shi, Osaka-fu	Fuse	18, Naka, 3-chome, Takaida, Fuse-shi, Osaka-fu	1939

SUMMARY

This is a medium sized factory that manufactured shapers exclusively until the termination of the war. The plant is well arranged, partially in production line style which is possible due to the standardized production. At the end of the war the plant was idle for a short period but currently has begun to manufacture refrigerators. Present machines and equipment are of good quality and well maintained.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1943)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Miscellaneous Machine tools	Shapers and Slotters	Horizontal Shaper	Maximum stroke 600 mm	-	50

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	179,800 KG	a. PURCHASED	48,750 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	558
b. STEEL	33,150 KG	b. GENERATED	- KWH	b. OIL	- KL	b. MAN HOURS (TOTAL)	167,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 0 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	6	-
2. Broaching Machines	-	-
3. Drilling Machines	9	-
4. Gear Cutting and Finishing Machines	13	1
5. Grinding Machines	15	-
6. Lathes	26	-
7. Milling Machines	9	-
8. Planers	12	-
9. Shaper & Slotters	19	-
10. Saws	5	-
11. Miscellaneous	36	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		2
3. Auxiliaries	**No of Units**	**Aggregate Capacity**
a. Compressors	-	- HP
b. Cranes	24	52 tonHP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	11	635 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 20 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Showa Seiki Seizosho K.K.	13, Niitakaminami-dori, 1-chome, Higashiyodogawa-ku, Osaka-fu	Honsha	13, Niitakaminami-dori, 1-chome, Higashiyodogawa-ku, Osaka-fu	1925

SUMMARY

This is a medium sized factory established in 1925 for the purpose of manufacturing machine tools. Production was confined to universal cylindrical grinding machines, internal and surface grinders. Currently the manufacture of machine tools has been stopped and the factory is doing repair work on spinning equipment. Present machines and equipment are in fairly good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machines	External Cylindrical	Universal	Swing diameter 230 mm	-	8
Grinding Machines	Internal Cylindrical	Plain	Swing diameter 250 mm	-	5

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	27,400 KG	a. PURCHASED	13,941 KWH	a. COAL	5 MT	a. NUMBER OF WORKERS (Av.)	385
b. STEEL	6,500 KG	b. GENERATED	- KWH	b. OIL	0.18 KL	b. MAN HOURS (TOTAL)	133,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 24 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	30 %	RESTORED	18 %
B. EQUIPMENT	DAMAGED	10 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	1	-
2. Broaching Machines	1	-
3. Drilling Machines	39	-
4. Gear Cutting and Finishing Machines	6	-
5. Grinding Machines	9	-
6. Lathes	66	-
7. Milling Machines	24	-
8. Planers	-	-
9. Shaper & Slotters	3	-
10. Saws	2	-
11. Miscellaneous	10	-

B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	2	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	1	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	1
b. Gas Furnaces	-
c. Other Furnaces	4

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	-	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	11	158 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 22

MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Kawanishi Kokuki K.K.	1, Hamanouchi, Komatsu Nario-mura, Muko-gun, Hyogo-ken	Koki-Kojo	21, Takaidenaka, 2-chome, Fuse-shi, Osaka-fu	1935

SUMMARY

This is a medium sized factory consisting of three sections, two of which have been idle and poorly maintained since the termination of the war. The third section now in operation is making woodworking machinery and repairing printing presses. The former products were lathes, milling, slotting and boring machines. Approximately 1/3 of the present equipment is in good condition and the remainder is serviceable but in poor condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Dec. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Milling Machine	Knee Type Horizontal	N.E.C.		-	5
Milling Machine	Knee Type Horizontal	N.E.C.	-	-	5
Lathe	N.E.C.	-	Swing Diameter 1,500 mm	-	5
Miscellaneous Machine Tools	Shapers and Slotters	Vertical Slotter	Maximum Stroke 400 mm	-	2

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL			4. LABOR	
a. IRON	159,005 KG	a. PURCHASED	35,000 KWH	a. COAL	-	MT	a. NUMBER OF WORKERS (Av.)	438
b. STEEL	22,660 KG	b. GENERATED	- KWH	b. OIL	1.57	KL	b. MAN HOURS (TOTAL)	132,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 7 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	35 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	19 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	2	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	10	-	3. Forging Presses	-	-	c. Other Furnaces		3
4. Gear Cutting and Finishing Machines	12	2	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	-	- HP
5. Grinding Machines	8	2	6. Mechanical Hammers	-	-	b. Cranes	11	150 HP
6. Lathes	[illegible]	-	7. Miscellaneous	[illegible]	-	4. Power Supply		
7. Milling Machines	10	1	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	- KVA
8. Planers	[illegible]	-				(1) Voltage ( )	-	-
9. Shaper & Slotters	7	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	[illegible]	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	8	500 KVA
11. Miscellaneous	-	-	b. Other Cupolas	-	- Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 30 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Toyo Jukogyo K.K.	16, 2-chome, Dojimahama-dori, Kita-ku, Osaka-fu	Juso	16, 5-chome, Moto Imaza-to, Kita-dori, Higashi, Yodogawa-ku, Osaka	1933

SUMMARY

This factory was established in 1933 for the purpose of manufacturing textile equipment, but in 1939 was converted to machine tool production. This production was confined to one type of lathe. During the war, in addition to machine tool production, various torpedo parts were also manufactured in this plant. Currently the facilities of this factory are being used to repair textile machinery. The plant's machines and equipment are of second quality but are well maintained.

SECTION I - PEAK MONTH DATA (PEAK MONTH Dec. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathes	Engine	Standard	Swing diameter 460 mm	-	20

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	40,000 KG	a. PURCHASED	20,000 KWH	a. COAL	10 MT	a. NUMBER OF WORKERS (Av.)	147
b. STEEL	9,000 KG	b. GENERATED	- KWH	b. OIL	0.01 KL	b. MAN HOURS (TOTAL)	40,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 15 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	5	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	2	2	b. Gas Furnaces		-
3. Drilling Machines	9	-	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	4	-	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	2	35 HP
5. Grinding Machines	4	-	6. Mechanical Hammers	-	-	b. Cranes	4	44 HP
6. Lathes	45	-	7. Miscellaneous	-	-	4. Power Supply	-	-
7. Milling Machines	11	-	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	-KVA
8. Planers	5	1				(1) Voltage ( )	-	-
9. Shaper & Slotters	7	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	2	-	a. Electric Cupolas	1	2,000 Kg/D	b. Transformers	9	1,040KVA
11. Miscellaneous	-	-	b. Other Cupolas	2	4,500 Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 32

MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Minoura Jukogyo K.K. (Now: Futaba Kikai K.K.)	34, Naka, 2-chome, Takaida, Fuse-shi, Osaka-fu	Minoura Jukogyo K.K. (Now: Futaba Kikai K.K.)	34, Naka, 2-chome, Takaida, Fuse-shi, Osaka-fu	1937

SUMMARY

This is a small factory with limited equipment and from 1937 to 1945 manufactured radial drilling machines and vertical milling machines. Current production is in parts for electrical equipment which is being done on a sub-contract basis. Present machines and equipment are in fairly good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Aug. 1942)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Drilling Machines	Radial	Plain	Maximum distance spindle center to column 1,050 mm	-	6
Drilling Machines	Radial	Plain	Maximum distance spindle center to column 1,660 mm	-	4

Note: During peak month only radial drilling machines were produced.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	61,050 KG	a. PURCHASED	15,000 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	230
b. STEEL	9,500 KG	b. GENERATED	- KWH	b. OIL	0.03 KL	b. MAN HOURS (TOTAL)	70,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 15 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	19 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	-
2. Broaching Machines	1	-
3. Drilling Machines	6	-
4. Gear Cutting and Finishing Machines	7	-
5. Grinding Machines	10	1
6. Lathes	35	1
7. Milling Machines	6	-
8. Planers	3	-
9. Shaper & Slotters	3	-
10. Saws	2	-
11. Miscellaneous	2	-

B. OTHER METAL WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frmg Presses	4	-
3. Forging Presses	1	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers		
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Othe. Cupolas	2	5,000 Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	-
b. Gas Furnaces	-
c Other Furnaces	3

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	5	105 HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b Transformers	4	180 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 35

MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Otsuka Tekkosho K.K.	38, Mitejima-cho, Higashi, 2-chome, Nishi-yodogawa-ku, Osaka-fu	Otsuka Tekkosho K.K.	38, Mitemima-cho Higashi, 2-chome, Nishi-yodogawa-ku, Osaka-fu	1901

SUMMARY

This is a medium sized factory engaged in the manufacturing of heavy duty lathes, planers, boring machines and special propeller milling machines since 1941. Prior to that time knitting looms and textile equipment were manufactured. After the termination of the war machine tool production was replaced by the manufacturing of printing machines and textile equipment. The general condition of machines and equipment is poor as a result of a flood which occurred in September 1945.

SECTION I - PEAK MONTH DATA (PEAK MONTH Feb 1945)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathes	Engine	Standard	Swing diameter 1040 mm	-	9

Note: During peak month only lathes were produced.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	98,000 KG	a. PURCHASED	25,000 KWH	a. COAL	12 MT	a. NUMBER OF WORKERS (Av.)	319
b. STEEL	6,500 KG	b. GENERATED	- KWH	b. OIL	0.9 KL	b. MAN HOURS (TOTAL)	115,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 60 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	22 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	10 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	1
2. Broaching Machines	-	-
3. Drilling Machines	7	2
4. Gear Cutting and Finishing Machines	-	2
5. Grinding Machines	2	-
6. Lathes	42	2
7. Milling Machines	6	3
8. Planers	5	-
9. Shaper & Slotters	5	1
10. Saws	2	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	1	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	3
b. Gas Furnaces	-
c. Other Furnaces	-

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	3	41 HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	10	238 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 36

MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Dai Ni Kubota K.K.	549, Wakae-mura, Naka-kawachi-gun, Osaka-fu	Wakae, Machine Tool Shop	549, Wakae-mura, Naka-kawachi-gun, Osaka-fu	1927

SUMMARY

This is a large plant that manufactured heavy duty lathes and marine diesel engines. The general condition of equipment is poor due to lack of maintenance and neglect rather than war damage. Current production is in marine diesel engines.

SECTION I - PEAK MONTH DATA (PEAK MONTH Dec. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Engine	Standard	Swing Diameter 1220 mm	-	2
Lathe	Engine	Standard	Swing Diameter 350 mm	-	20
Lathe	Engine	Standard	Swing diameter 650 mm	-	17

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	119,210 KG	a. PURCHASED	30,000 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	1,004
b. STEEL	34,156 KG	b. GENERATED	- KWH	b. OIL	- KL	b. MAN HOURS (TOTAL)	300,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 6 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	46 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	4	-
2. Broaching Machines	-	-
3. Drilling Machines	6	-
4. Gear Cutting and Finishing Machines	-	-
5. Grinding Machines	2	-
6. Lathes	61	-
7. Milling Machines	-	-
8. Planers	7	-
9. Shaper & Slotters	3	-
10. Saws	-	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		-
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	8 manual	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	5	360 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 40

MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Asahi Kogyo K.K.	171, Minami, 1-chome, Shinmori-shoji, Asahi-ku, Osaka-fu	Honsha	171, Minami, 1-chome, Shinmori-shoji, Asahi-ku, Osaka-fu	1939

SUMMARY

This plant is small and poorly equipped; the machines are serviceable but are no longer suitable for precision work. At present the plant is manufacturing agricultural and woodworking machinery.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machine	Internal Cylindrical	Plain	Swing Diameter 25 mm	-	8
Lathe	Automatic Chucking	Single Spindle	Swing Diameter 23 mm	-	7

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	14,000 KG	a. PURCHASED	12,000 KWH	a. COAL	9 MT	a. NUMBER OF WORKERS (Av.)	138
b. STEEL	6,350 KG	b. GENERATED	- KWH	b. OIL	0.35 KL	b. MAN HOURS (TOTAL)	41,400

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 22 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	20 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	30 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	-	-
2. Broaching Machines	-	-
3. Drilling Machines	6	1
4. Gear Cutting and Finishing Machines		-
5. Grinding Machines	7	12
6. Lathes	37	1
7. Milling Machines	3	
8. Planers	3	-
9. Shaper & Slotters	3	1
10. Saws	3	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	1	-
2. Sheet F'rm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	2	-

C. MISCELLANEOUS EQUIPMENT		
1. Foundry	No of Units	Aggregate Capacity
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		-
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	1	7.5 HP
b. Cranes	2 manual	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 50 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Handa Jukogyo K.K.	50, Aza Zemoyama, Handa-shi, Aichi-ken	Osaka	26, 1-chome, Harai-cho, Ikuno-ku, Osaka-fu	1930

SUMMARY

This is a small branch factory engaged in manufacturing machine tools, including plain, universal and internal grinding machines. During the war machine gun parts were also produced. Present machines and equipment are in good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Sept. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machine	External Cylindrical	Plain	Swing diameter, 300 mm	-	5

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60Cycles)		3. FUEL		4. LABOR	
a. IRON	22,500 KG	a. PURCHASED	14,500 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	215
b. STEEL	7,500 KG	b. GENERATED	- KWH	b. OIL	0.27 KL	b. MAN HOURS (TOTAL)	65,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 9 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	-
2. Broaching Machines	-	-
3. Drilling Machines	5	-
4. Gear Cutting and Finishing Machines	1	-
5. Grinding Machines	9	-
6. Lathes	32	-
7. Milling Machines	6	-
8. Planers	4	-
9. Shaper & Slotters	2	-
10. Saws	1	-
11. Miscellaneous	2	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	-
b. Gas Furnaces	-
c. Other Furnaces	-

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	1	3 HP
b. Cranes	1	5 tonHP
4. Power Supply		
a. Generators	-	-KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	9	90 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 51 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Hamada Seiki Tetsukosho K.K.	2, 1-chome, Kaji-cho, Kanda-ku, Tokyo-to	Osaka	153, Mitejima-cho, Nishi-yodogawa-ku, Osaka-fu	1933

SUMMARY

This factory was established in 1933 for the purpose of manufacturing various types of printing machines. The production of printing machines continued until 1941 when a surface grinder, reciprocating table type, was added. This latter product supplanted the manufacture of printing machines so that during the peak month only repairing of printing machinery was done. This grinding machine was made only during the war. Currently this factory has converted to the manufacture and repair of printing machines. Present equipment is in poor condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH Nov. 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Grinding Machine	Surface	Reciprocating table			18

NOTE: During peak month the repair of printing presses represents approximately 10% of the total production output.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	18,000 KG	a. PURCHASED	10,720 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	169
b. STEEL	4,860 KG	b. GENERATED	- KWH	b. OIL	0.45 KL	b. MAN HOURS (TOTAL)	53,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 10.5 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	15.6%	RESTORED	0 %
B. EQUIPMENT	DAMAGED	13 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	3	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	7	-	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	2	1	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	-	- HP
5. Grinding Machines	6	-	6. Mechanical Hammers	-	-	b. Cranes	-	- HP
6. Lathes	28	-	7. Miscellaneous	-	-	4. Power Supply		
7. Milling Machines	4	2	C. MISCELLANEOUS EQUIPMENT			a. Generators	-	- KVA
8. Planers	3	-				(1) Voltage ( )	-	-
9. Shaper & Slotters	4	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	2	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	-	- KVA
11. Miscellaneous	1	-	b. Other Cupolas	-	- Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-

PLANT NO. 53 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Shinko Kikai Seisakusho K.K.	24, Nonakaminami-dori, 2-chome, Higashiyodogawa-ku, Osaka-fu	Shinko Kikai Seisakusho K.K.	24, Nonakaminami-dori, 2-chome, Higashiyodogawa-ku, Osaka-fu	1935

SUMMARY

This is a medium sized factory which was established in 1935 for the purpose of manufacturing milling machines and ring spinning roller parts. In 1942 a universal tool milling machine was added to the list of products manufactured. This production continued until the end of the war. Currently this plant has begun production of ensilage cutters and straw rope making machines. Present machines and equipment are serviceable but due to wear and age can only be used for non-precision manufacturing.

SECTION I - PEAK MONTH DATA (PEAK MONTH May 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Milling Machine	Miscellaneous	Tool-Milling, N.E.C.	-	-	10

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	10,300 KG	a. PURCHASED	7,140 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	205
b. STEEL	3,660 KG	b. GENERATED	- KWH	b. OIL	0.3 KL	b. MAN HOURS (TOTAL)	68,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 10.5 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	10 %	RESTORED	* 15%
B. EQUIPMENT	DAMAGED	0 %	RESTORED	* 8%

* These percentages represent improvements made subsequent to the peak month.

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	2	-
2. Broaching Machines	-	-
3. Drilling Machines	3	1
4. Gear Cutting and Finishing Machines	2	-
5. Grinding Machines	5	-
6. Lathes	28	-
7. Milling Machines	11	-
8. Planers	3	-
9. Shaper & Slotters	3	-
10. Saws	1	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT		
1. Foundry	No of Units	Aggregate Capacity
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment		
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		- -
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	-	- HP
b. Cranes	-	- HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	3	68 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 55 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Makita Kinzoku K.K.	750, Iwata, Oaza, Tamagawa-cho, Nakakawachi-gun, Osaka-fu	Makita Kinzoku K.K.	750, Iwata, Oaza, Tamagawa-cho, Nakakawachi-gun, Osaka-fu	1897

SUMMARY

This is a small, simply equipped factory, that formerly manufactured horizontal and vertical milling machines, horizontal boring machines, and engine and turret lathes. Current production is in machinery used in fish net manufacture and textile machinery accessories. Present machinery and equipment is in fairly good condition.

SECTION I-PEAK MONTH DATA (PEAK MONTH Sept. 1943)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Engine	Standard	Swing diameter 1,420 mm	-	3
Milling Machine	Knee Type Horizontal	Plain	-	-	3

NOTE: During peak month this factory manufactured only lathes and milling machines.

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	12,000 KG	a. PURCHASED	7,940 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	359
b. STEEL	6,000 KG	b. GENERATED	- KWH	b. OIL	1.4 KL	b. MAN HOURS (TOTAL)	96,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 10 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	12%	RESTORED	0 %
B. EQUIPMENT	DAMAGED	10%	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	3	-
2. Broaching Machines	-	-
3. Drilling Machines	5	-
4. Gear Cutting and Finishing Machines	15	-
5. Grinding Machines	3	-
6. Lathes	17	-
7. Milling Machines	4	-
8. Planers	4	-
9. Shaper & Slotters	3	-
10. Saws	1	-
11. Miscellaneous	3	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frmg Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	2	3,000 Kg/D
b. Other Cupolas	1	1,750 Kg/D

2. Heat Treating Equipment		No of Units
a. Electric Furnaces		-
b. Gas Furnaces		-
c. Other Furnaces		-
3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	1	3 HP
b. Cranes	6	18 tons HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	4	175 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 60 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Mitsubishi Jukogyo K.K.	4, 2-chome, Marunouchi, Kojimachi-ku, Tokyo-to	Mikuni	137, Mikunihon-machi, Higashiyodogawa-ku, Osaka-fu	1938

SUMMARY

This factory formerly manufactured upright drilling machines. Currently this factory is formulating plans for the manufacture of separators for oil and milk. Present machines and equipment are in good condition.

SECTION I - PEAK MONTH DATA (PEAK MONTH April 1945)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Drilling Machine	Upright	Hand feed	Distance, Spindle center to column 350 mm	-	20

B. INPUT

1. PURCHASED MATERIALS			2. ELECTRIC ENERGY AC/DC (60 Cycles)			3. FUEL			4. LABOR	
a. IRON	7,000	KG	a. PURCHASED	5,500	KWH	a. COAL	-	MT	a. NUMBER OF WORKERS (Av.)	75
b. STEEL	2,300	KG	b. GENERATED	-	KWH	b. OIL	0.1	KL	b. MAN HOURS (TOTAL)	25,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 31 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	10 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	5 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd
1. Boring Machines	1	-
2. Broaching Machines	-	-
3. Drilling Machines	13	-
4. Gear Cutting and Finishing Machines	2	-
5. Grinding Machines	2	-
6. Lathes	20	-
7. Milling Machines	4	-
8. Planers	1	-
9. Shaper & Slotters	2	-
10. Saws	1	-
11. Miscellaneous	-	-

OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd
1. Punching & Shearing	-	-
2. Sheet Frm'g Presses	-	-
3. Forging Presses	-	-
4. Steam Hammers	-	-
5. Pneumatic Hammers	-	-
6. Mechanical Hammers	-	-
7. Miscellaneous	-	-

C. MISCELLANEOUS EQUIPMENT	No of Units	Aggregate Capacity
1. Foundry		
a. Electric Cupolas	-	- Kg/D
b. Other Cupolas	-	- Kg/D

2. Heat Treating Equipment	No of Units
a. Electric Furnaces	-
b. Gas Furnaces	-
c. Other Furnaces	-

3. Auxiliaries	No of Units	Aggregate Capacity
a. Compressors	1	0.5 HP
b. Cranes	3	5 ton HP
4. Power Supply		
a. Generators	-	- KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-
b. Transformers	5	70 KVA
(1) Voltage ( )	-	-
(2) Cycles ( )	-	-

PLANT NO. 63 MACHINE TOOL INDUSTRY

NAME OF COMPANY	ADDRESS OF COMPANY	NAME OF PLANT	ADDRESS OF PLANT	YEAR FIRST OPERATED
Mitsubishi Jukogyo K.K.	4, 2-chome, Marunouchi, Kojimachi-ku. Tokyo-to	Tsuruhara	2110, Tsuruhara, Suno-cho, Sennan-gun, Osaka-Fu	1944

SUMMARY

This is an unimportant factory engaged in the production of simplified engine lathes during the wartime emergency. The machines and equipment as listed herein are in good serviceable condition.

SECTION I-PEAK MONTH DATA (PEAK MONTH May 1944)

A. PRODUCTION

CLASS	TYPE	SUB-TYPE	PRINCIPAL OPERATING DIMENSIONS	QUALITY	UNITS
Lathe	Bench and Light Duty	Standard	Swing Diameter 25 mm	-	40

B. INPUT

1. PURCHASED MATERIALS		2. ELECTRIC ENERGY AC/DC (60 Cycles)		3. FUEL		4. LABOR	
a. IRON	11,300 KG	a. PURCHASED	39,500 KWH	a. COAL	- MT	a. NUMBER OF WORKERS (Av.)	253
b. STEEL	3,680 KG	b. GENERATED	- KWH	b. OIL	- KL	b. MAN HOURS (TOTAL)	76,000

C. SUBCONTRACTING

1. PERCENT OF TOTAL PLANT OUTPUT SUBCONTRACTED 25 %

SECTION II - DAMAGE SUFFERED AND/OR RESTORED SINCE PEAK MONTH

A. BUILDINGS	DAMAGED	0 %	RESTORED	0 %
B. EQUIPMENT	DAMAGED	0 %	RESTORED	0 %

SECTION III - PRESENT SERVICEABLE EQUIPMENT (NUMBER OF UNITS)

A. MACHINE TOOLS	Japan Mfg'd	Foreign Mfg'd	OTHER METAL B. WORKING MACHINES	Japan Mfg'd	Foreign Mfg'd	2. Heat Treating Equipment		No of Units
1. Boring Machines	1	-	1. Punching & Shearing	-	-	a. Electric Furnaces		-
2. Broaching Machines	-	-	2. Sheet Frm'g Presses	-	-	b. Gas Furnaces		-
3. Drilling Machines	6	-	3. Forging Presses	-	-	c. Other Furnaces		-
4. Gear Cutting and Finishing Machines	-	2	4. Steam Hammers	-	-	3. Auxiliaries	No of Units	Aggregate Capacity
			5. Pneumatic Hammers	-	-	a. Compressors	2	70 HP
5. Grinding Machines	3	-	6. Mechanical Hammers	-	-	b. Cranes	-	- HP
6. Lathes	13	2	7. Miscellaneous	-	-	4. Power Supply	-	-
7. Milling Machines	2	-	C MISCELLANEOUS EQUIPMENT			a. Generators	-	- KVA
8. Planers	1	-				(1) Voltage ( )	-	
9. Shaper & Slotters	2	-	1. Foundry	No of Units	Aggregate Capacity	(2) Cycles ( )	-	-
10. Saws	2	-	a. Electric Cupolas	-	- Kg/D	b. Transformers	21	315KVA
11. Miscellaneous	3	-	b. Other Cupolas	2	1,000 Kg/D	(1) Voltage ( )	-	-
						(2) Cycles ( )	-	-