DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

2. These equipment have been allocated to this applicant by the Ministries concerned according to the suggestion of your Headquarters.

3. As the warehouses where the equipment belonging to the Tokuyama Fuel Depot out of the above-said equipment are now stored have to be promptly evacuated for the Occupation needs, it is requested that your most favorable consideration be given to this application at the earliest practicable date.

(Y. Katsuno)
Director, Reparations Division,
Reparations Agency.

Incls:
1. Application of the Ministry of Fiance.
2. Recommendation of the Ministry of International Trade and Industry.
3. Application of the subject Refinery.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

APPLICATION FOR MOVEMENT AND AUTHORIZED
USE OF DESIGNATED
REPARATION MACHINERIES AND EQUIPMENTS

Code No. 45-05

Former Iwakuni ~~Army~~ Military Fuel Depot

Code No. 45-05

Former Iwakuni ~~Army~~ Military Fuel Depot

DAIKYO OIL CO., LTD.

December 1950

25.12.27
山口県総務部
岩國管財支所

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

ATTACHED DOCUMENT

I hereby pledge that, when if you approve my application, dated 16 December 1950 for movement and authorized use of the machinery and or equipment in the Iwakuni Army Fuel Depot, I will observe any and all directives affecting custody and maintenance of reparation machinery and equipment which have been issued or may hereafter be issued by the Supreme Commander for the Allied Powers.

Signed by Masuo Takahashi
President of Daikyo Oil Co., Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Application for Movement and Authorized Use
of Designated Reparation Machineries and
Equipmant

Date: 16 December 1950

TO: Mr. H. Ikeda
Ministry of Finance

FROM: Daikyo Oil Co., Ltd.
3-1, Ginza-nishi, Chuo-ku, Tokyo-to.

1. Name Code No. and Location of the plant which intends to use designated reparation machineries and equipment.

Yokkaichi Refinery, Daikyo Oil Co., Ltd.
1274, Toratakairi, Yokkaichi-City, Mie Prefecture.

2. Name(Code No.) category and location of the plant where designated reparation machineries and equipment to be actually exist.

Former Iwakuni ~~Army~~ Military Fuel Depot 45-05
550, Shozoku, Iwakuni-City, Yamaguchi Prefecture

3. List of designated reparation machineries and equipment to be moved and used.

Attached List

4. Necessity for movement and use of machineries and equipments.

a) Purpose of Use

At present, the Yokkaichi Refinery is not equipped with a topping, and unsuitable to handle Middle East Crude Oil. So, we are planning to install the above equipment in Yokkaichi Refinery.

b) Necessity for Use

For the several reason mentioned in the next few lines, we requested GHQ the permission to erect a 4,000 bbls topping unit next to our Badger's Vacuum unit in Yokkaichi Refinery and we have been authorized to install the above equipment on 2nd, November 1950.

1) Crude Oil Purchasing Advantage:

550, Shozoku, Iwakuni-City, Yamaguchi Prefecture

3. List of designated reparation machineries and equipment to be moved and used.

Attached List

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a) Purpose of Use

At present, the Yokkaichi Refinery is not equipped with a topping, and unsuitable to handle Middle East Crude Oil. So, we are planning to install the above equipment in Yokkaichi Refinery.

b) Necessity for Use

For the several reason mentioned in the next few lines, we requested GHQ the permission to erect a 4,000 bbls topping unit next to our Badger's Vacuum unit in Yokkaichi Refinery and we have been authorized to install the above equipment on 2nd, November 1950.

1) Crude Oil Purchasing Advantage:

It will be quite difficult to us to purchase topped crude oil in the near future. On the other hand the virgin crude oil can be purchased in several countries at comparatively low price.

2) Operating Advantage:

We could save the furnace fuel at the topping plant and fuel to be used during the transportation. (Actually, in our vacuum still we burn 50% of total distillation fuel oil at the pre-heating section. If we had topping unit we could cut this pre-heatinf fuel to zero.)

3) Distbibution Advantage:

In Nagoya district there is not a gasoline and diesel fuel supplling refinery.

Considerable saving of transportation expenses and loss of oil products can be realised after the operation of topping plant.

Monthly production
(Processing 120,000 bbls of Arabian Crude)

Motor Gasoline	36,000 Bbls	30 %
Solvent Gasoline	6,000 Bbls	5 %
Kerosene	12,000 Bbls	10 %
Diesel Oil	18,000 Bbls	15 %
Fuel Oil	48,000 Bbls	40 %

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Morever, we apply to use these designated reparation machineries and equipment, for we would require longer period, and more expenses and materials to construct a new plant.

Signed by Masuo Takahashi
President of Daikyo Oil Co., Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Signed by Masuo Takahashi
President of Daikyo Oil Co., Ltd.

Attached document:

Approval of the applicant concerning responsibility of custody for designated reparation machinery and equipment.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

3) List of designated reparation machinery and equipment to be moved and used.

Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
1F2	Pump	Reciprocating Steam Driven, Cap. 13 KL/H, 225x150x305	1	
[illegible]	Pump	Reciprocating Steam Driven, Cap. 25KL/H, 357x165x305	1	
3F2	Evaporator	Bubble Cap, Inside Dia.1.220 mm Height 13.970 mm	1	
4F2	Shower Cooler	Sprinkling Water Type, Cooling Surface 25 m^2	1	
5F2	Tank	Horizantal, Cap. 50 KL Welded	1	
6F2	Pump	Reciprocating Steam Driven [illegible]. 357x165x305 Cap.25KL/H	1	
7F2	Furnace	Pipe Still, Oil Heating, L.:6,480 mm W.:6,480 mm H.:7,800 mm	1	
8F2	Tank	Vertical, Cap. 40 KL	1	
9F2	Pump	Reciprocating, Steam Driven, Duplex, Cap. 1.5 KL/H 90x50x100	1	
10F2	Fractionating Tower	Bubble Cap. Tower Inside Dia.:1,752 mm Height:26,875 mm	1	
11F2	Steel Structure	For Towers, Steel Construction 8 Stairs, Length:4,420 mm Width:3,962 mm, Height:30,060 mm	1	
12F2	Vapor Heat-Exchanger	Horizontal Shell and Tube Heating Surface:151 m^2	1	
13F2	Vapor Heat-Exchanger	Horizontal Shell and Tube Heating Surface:135 m^2	1	

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

		90x50x100	
10F2	Fractionating Tower	Bubble Cap. Tower Inside Dia.:1,752 mm Height:26,875 mm	1
11F2	Steel Structure	For Towers, Steel Construction 8 Stairs, Length:4,420 mm Width:3,962 mm, Height:30,060 mm	1
12F2	Vapor Heat-Exchanger	Horizontal Shell and Tube Heating Surface:151 m^2	1
13F2	Vapor Heat-Exchanger	Horizontal Shell and Tube Heating Surface:135 m^2	1
14F2	Condunser	Box and Submerged Pipe, Cooling Surface:245 m^2	1
15F2	Water Separator	Vertical, Cylindrical, Volume: 8KL	1
16F2	Water Separator	- ditto -	1
17F2	Pump	Reciprocating, Steam Driven Simplex,150x100x150, Cap. 5KL/H	1
18F2	Pump	Reciprocating, Steam Driven, Simplex, 150x100x150, Cap · 5KL/H	1
19F2	Rerun Tower	Bubble Cap, Inside Dia.:1,070 mm Height: 17,821 mm	1
20F2	Vapor Heat Exchanger	Horizontal, Shell and Tube, Cooling Surface:91.28 m^2	1
21F2	Condenser	Horizontal, Shell and Tube, Cooling Surface:91.28 m^2	1
22F2	Water Separator	Vertical, Cylindrical, Dia.:1,219 mm Height:6,97(mm	1
23F2	Pump	Reciprocating, Steam Driven, Duplex, 190x100x255, Cap.9KL/H	1
24F2	Pump	- ditto -	1

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
25F2	Stabilizer	Bubble Cap, Inside Dia.:900mm Height: 18,810 mm	1	
26F2	Reflux Condenser	Horizontal, Shell and Tube Cooling Surface:91.28 m^2	1	
27F2	Heat Exchanger	Double Tube Type, Heating Surface:9,55 m^2	1	
28F2	Gas Separator	Vertical,Cylindrical, Volume5 KL	1	
29F2	Pump	Reciprocating,Steam Driven Simplex,100x77x165,Cap.2 KL/H	1	
30F2	Pump	Reciprocating,Steam Driven, Simplex,100x77x165,Cap.2 KL/H	1	
31F2	Pump	Reciprocating, Steam Driven, Duplex,255x155x305,Cap.13KL/H	1	
32F2	Pump	Reciprocating,Steam Driven, Duplex,255x155x305, Cap. 13KL/H	1	
33F2	Reflux Tank	Vertical, Cylindrical,Volume:7.2KL	1	
34F2	Pump	Reciprocating, Steam Driven, Duplex, 230x150x230, Cap.18 KL/H	1	
35F2	Pump	Reciprocating, Steam Driven, Duplex,230x150x230, Cap. 15 KL/H	1	
36F2	Kerosene Diesel Cooler	Box and Submerged Pipe, Cooling Surface:199 m^2	1	
~~37F2~~	~~Tank~~	~~Vertical Cylindrical, Cap. 15(KL~~	~~1~~	
~~38F2~~	~~Tank~~	~~- ditto -~~	~~1~~	
39F2	Naphtha Seal	Bubble Cap Type, Inside Dia.600 mm Height 2.482 mm	1	
40F2	Pump	Reciprocating, Steam Driven, Duplex,255x150x305,Cap. 1.3 KL/H	1	
41F2	Pump	Reciprocating, Steam Driven,	1	

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

36F2	Kerosene Diesel Cooler	Box and Submerged Pipe, Cooling Surface:199 m^2	1
~~37F2~~	~~Tank~~	~~Vertical Cylindrical, Cap. 15(KL~~	~~1~~
~~38F2~~	~~Tank~~	~~- ditto -~~	~~1~~
39F2	Naphtha Seal	Bubble Cap Type, Inside Dia.600 mm Height 2.482 mm	1
40F2	Pump	Reciprocating, Steam Driven, Duplex,255x150x305,Cap. 1.3 KL/H	1
41F2	Pump	Reciprocating, Steam Driven, Duplex, 255x150x305,Cap.1.3 KL/H	1
42F2	Tank	Vertical, Cylindrical, Cap2,000 KL	1
43F2	Bottom Heat Exchanger	Horizontal, Shell and Tube, Heating Surface 59.46 m^2	1
44F2	Bottom Heat Exchanger	Horizontal, Shell and Tube, Heating Surface:29.5 m^2	1
45F2	Support for Heat Exchanger	Steel Construction	1
46F2	Reflux Tank	Vertical, Cylindrical, Volume: 7.3 KL	1
47F2	Pump	Reciprocating, Steam Driven, Simplex, 150x100x255, Cap.45 KL/H	1
48F2	Pump	- ditto -	1
49F2	Rerun Tower Side Stripper	Bubble Cap, Dia.485 mm, Height 3,720 mm	1
50F2	Heat Exchanger	Double Tube,Heating Surface:955 m^2	1
~~51F2~~	~~Tank~~	~~Vertical, Cylindrical, Cap.150KL~~	~~1~~
52F2	Pump	Reciprocating, Steam Driven, Simplex,150x100x225,Cap.4.5 KL/H	1
53F2	Pump	- ditto -	1
54F2	Heat Exchanger	Horizontal, Shell and Tube Heating Surface:14.25 m^2	1
55F2	Heat Exchanger	Double Tube Type, Heating Surface: 9.55 m2	1

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Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
56F2	Stabilizer	Horizontal, Shell and Tube Heating Surface: 24m^2	1	
57F2	Pump	Reciprocating, Steam Driven, Duplex,190x100x225, Cap. 10 KL/H	1	
58F2	Heat Exchanger	Horizontal, Shell and Tube, Heating Surface:40.27 m^2	1	
59F2	Heat Exchanger	Double Tube type, Heating Surface: 28.65 m^2	1	
60F2	Pump	Reciprocating, Steam Driven, Duplex,230x150x230, Cap.18 KL/H	1	
61F2	Compressor	Air,Reciprocating, Vertical, Simplex, Double Acting, Cylinder Dia.: 150 mm Stroke: 150 mm, Del.Press. 5 Kg/cm^2	1	
62F2	Air Receiver	Vertical, Cylindrical, Dia.: 700 mm, Height:1,400 mm	1	
63F2	Compressor	Air, Reciprocating,Horizontal, Simplex, Double Acting, Cylinder Dia.: 280 mm Stroke:305 mm, Del.Press.100Lbs/in^2	1	
64F2	Motor	A.C. Induction, 75 HP, 3300 V	1	
65F2	Switch Box	A.C. 75 HP, 3300 V	1	
66F2	Air Receiver	Vertical, Cylindrical, Dia.:1,000 mm, Height: 2,900 mm	1	
67F2	Peep Tube Board	Steel Plate, Length:2,150 mm Width: 1,200 mm, Height: 210 mm	1	
68F2	Look Box	Vertical, Cylindrical,	1	
69F2	Look Box	Vertical, Cylindrical,	1	

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63F2	Compressor	Air, Reciprocating, Horizontal, Simplex, Double Acting, Cylinder Dia.: 280 mm Stroke: 305 mm, Del.Press.100Lbs/in^2	1
64F2	Motor	A.C. Induction, 75 HP, 3300 V	1
65F2	Switch Box	A.C. 75 HP, 3300 V	1
66F2	Air Receiver	Vertical, Cylindrical, Dia.:1,000 mm, Height: 2,900 mm	1
67F2	Peep Tube Board	Steel Plate, Length:2,150 mm Width: 1,200 mm, Height: 210 mm	1
68F2	Look Box	Vertical, Cylindrical,	1
69F2	Look Box	Vertical, Cylindrical,	1
70F2	Look Box	Vertical, Cylindrical,	1
71F2	Look Box	Vertical, Cylindrical,	1
72F2	Peep Tube	Vertical, Cylindrical, Height:650 mm, Glass Tube 0 Dia. 65 mm	1
73F2	Peep Tube	- ditto -	1
74F2	Peep Tube	- ditto -	1
75F2	Peep Tube	- ditto -	1
76F2	Peep Tube	- ditto -	1
77F2	Peep Tube	- ditto -	1
78F2	Platform	For Tank Yard, Steel Construction	1

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
79F2	Flowmeter Board	Steel Plate, Length: 1,800 mm Width: 440 mm, Height: 2,100 mm	1	
80F2	Instrument Board	Steel Plate, Length: 6,850 mm Width: 1,850 mm, Height: 2,210 mm	1	
81F2	Lamp Stand for Level Controller	Steel Plate, Length: 1,380 mm Width: 430 mm, Height: 1,380 mm	1	
82F2	Steam Meter Board	Steel Plate, Length: 1,300 mm Width: 1,530 mm, Height: 1,500 mm	1	
83F2	Gate Valve	8 inches, Rising Spindle,	1	
84F2	Gate Valve	6 inches, Rising Spindle,	1	
85F2	Gate Valve	6 inches, Rising Spindle,	1	
86F2	Gate Valve	6 inches, Rising Spindle,	1	
87F2	Gate Valve	6 inches, Rising Spindle,	1	
88F2	Gate Valve	6 inches, Rising Spindle,	1	
89F2	Gate Valve	6 inches, Rising Spindle,	1	
90F2	Glove Valve	6 inches, Valve: Stainless Steel	1	
91F2	Gate Valve	6 inches, Rising Spindle,	1	
92F2	Gate Valve	6 inches, Rising Spindle,	1	
93F2	Gate Valve	6 inches, Rising Spindle,	1	
94F2	Gate Valve	6 inches, Rising Spindle,	1	
95F2	Gate Valve	6 inches, Rising Spindle,	1	
96F2	Gate Valve	6 inches, Rising Trim,	1	
97F2	Gate Valve	6 inches, Rising Trim,	1	
98F2	Gate Valve	6 inches, Rising Trim,	1	

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

89F2	Gate Valve	6 inches, Rising Spindle,	
90F2	Glove Valve	6 inches, Valve:Stainless Steel	1
91F2	Gate Valve	6 inches, Rising Spindle,	1
92F2	Gate Valve	6 inches, Rising Spindle,	1
93F2	Gate Valve	6 inches, Rising Spindle,	1
94F2	Gate Valve	6 inches, Rising Spindle,	1
95F2	Gate Valve	6 inches, Rising Spindle,	1
96F2	Gate Valve	6 inches, Rising Trim,	1
97F2	Gate Valve	6 inches, Rising Trim,	1
98F2	Gate Valve	6 inches, Rising Trim,	1
99F2	Gate Valve	6 inches, Rising Trim,	1
459	Gate Valve	4 inches, Rising Spindle,	7
460	Gate Valve	4 inches, Rising Spindle,	2
461	Gate Valve	4 inches, Rising Trim,	15
462	Globe Valve	4 inches, Valve:Stainless Steel	3
463	Gate Valve	3 inches, Rising Spindle,	16
464	Gate Valve	3 inches, Rising Spindle,	20
465	Gate Valve	3 inches, Rising Trim,	32
466	Globe Valve	3 inches,	1
468	Cook	3 inches,	54
470	Gate Valve	2 inches, Rising Spindle,	95
471	Gate Valve	2 inches, Rising Trim,	21
472	Gate Valve	2 inches, Rising Trim,	35

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
473	Globe Valve	2 inches	97	
474	Globe Valve	2 inches	7	
475	Cock	2 inches, Plug:Stainless Steel	3	
476	Gate Valve	1½ inches, Rising Spindle,	6	
477	Gate Valve	1½ inches, Rising Trim,	12	
478	Globe Valve	1½ inches,	4	
479	Globe Valve	1½ inches,	86	
480	Cock	1½ inches,	16	
481	Globe Valve	1 inch,	87	
482	Cock	¾ inches,	1	
483	Globe Valve	¾ inch,	61	
484	Globe Valve	½ inch,	58	
485	Cock	½ inch,	~~95~~ 1	
486	Pipe	12 inches,	15 m	
487	Pipe	10 inches,	10 m	
488	Pipe	8 inches,	95 m	
489	Pipe	6 inches,	276 m	
490	Pipe	4 inches,	1,285 m	
491	Pipe	3 inches,	855 m	
492	Pipe	2 inches,	748 m	
493	Pipe	1½ inches,	290 m	
494	Pipe	1 inch,	366 m	

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486	Pipe	12 inches,	15 m
487	Pipe	10 inches,	10 m
488	Pipe	8 inches,	95 m
489	Pipe	6 inches,	276 m
490	Pipe	4 inches,	1,285 m
491	Pipe	3 inches,	855 m
492	Pipe	2 inches,	748 m
493	Pipe	1½ inches,	290 m
494	Pipe	1 inch,	366 m
495	Pipe	¾ inch,	65 m
496	Pipe	½ inch,	15 m
497	Pipe	⅜ inch,	235 m
498	Pipe	¼ inch,	240 m
499	Brass Pipe	¼ inch,	100 m
100FZ	Flow Indicator	Cap. 0.5 KL/H	1
101FZ	Flow Indicator	- ditto -	1
102FZ	Flow Indicator	- ditto -	1
103FZ	Flow Indicator	- ditto -	1
104FZ	Flow Indicator	- ditto -	1
105FZ	Level Indicator	Pressure 0.5 Kg/cm^2	1
106FZ	Level Indicator	- ditto -	1
107FZ	Level Indicator	- ditto -	1
108FZ	Level Indicator	- ditto -	1
509	Relief Valve	Lever Type	3

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
510	Relief Valve		7	
511	Steam Trap	Bucket, Pipe Size: 25 mm	5	
512	Steam Trap	Bucket, Pipe Size: 19 mm	4	

Total

Name	Item Total	Quantity Total
Machineries	~~91~~ 88	~~91~~ 88
Valves and Cocks	~~45~~ ~~46~~ ~~44~~	~~707~~ ~~274~~ 767
Steam Traps	2	9

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Total

Name	Item Total	Quantity Total
Machineries	~~88~~ ~~91~~	~~88~~ ~~91~~
Valves and Cocks	~~44~~ ~~46~~ ~~45~~	~~767~~ ~~974~~ ~~707~~
Steam Traps	2	9
Pipes	14	~~4,595~~ ~~4,305~~ m
	~~160~~ 148	

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Application for movement
and Authorized use of Designated
Reparation Machineries and Equipments

Code No. 45-07
Former Tokuyama ~~Naval~~ Fuel Depot

Code No. 45-07

Former ~~3rd Naval~~ Tokuyama Fuel Depot

Daikyo Oil Co., L.T.D.

December 1950

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Application for movement and Authorized use of
Designated Reparation Machineries and Equipment

Date : December 1950

TO : Mr. H. Ikeda,
Ministry of Finance.

FROM : Daikyo Oil Co., Ltd.,
3-1, Ginza-nishi, Chuo-ku, Tokyo.

1. Name (Code No.) and Location of the plant which intends to use designated reparation machineries and equipments.
Yokkaichi Refinery, Daikyo Oil Co., Ltd.
1274, Toratakairi, Yokkaichi-City, Mie prefecture

2. Name (Code No.) category and Location of the plant where designated reparation machineries and equipments to be actually exist.
Former ~~Third Naval~~ Tokuyama Fuel Depot (Code No. 45-07)
Tokuyama City, Yamaguchi Prefecuture.

3. List of designated reparation machineries and equipment to be moved and used.
attached List

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

2. Name (Code No.) category and Location of the plant where designated reparation machineries and equipments to be actually exist.

Former ~~Third Naval~~ Tokuyama Fuel Depot (Code No. 45-07)

Tokuyama City. Yamaguchi Prefecuture.

3. List of designated reparation machineries and equipment to be moved and used.

attached List

4. Necessity for movement and use of machineries and equipments.

At present. the Yokkaichi Refinery is not equipped with a topping and vacuum distillation plant and unsuitable to handle Middle East Crude Oil.

For the several reason mentioned in the next few lines. we requested G. H. Q. the permission to erect a 4.000 bbls. topping unit next to our Badger's Vacuum unit in Yokkaichi Refinery and we have been authorized to install the above equipment on 2nd, November 1950

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

1) Crude Oil purchasing Advantage :

It will be quite difficult to us to purchase topped crude Oils in the near future. In the other hand the virgin crude oil can be purchased in several countries at comparatively low price.

2) Operating Advantage :

We could save the furnace fuel at the topping plant and fuel to be used during the transportation. (Actually in our vacuum still we burn 50% total distillation fuel Oil at the pre-heating section. If we had topping unit we could cut this pre-heating fuel to zero.)

3) Distribution Advantage :

In Nagoya district there is not a gasoline and diesel fuel suppling refinery.

Considerable saving of transportation expenses and loss of oil products can be realized after the operation of topping plant.

Monthly Production

(Processing 48.000 bbls of material oil)

Lubricating Oil	24.000 bbls	50%

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

3) Distribution Advantage:

In Nagoya district there is not a gasoline and diesel fuel suppling refinery.

Considerable saving of transportation expenses and loss of oil products can be realized after the operation of topping plant.

Monthly Production

(Processing 48.000 bbls of material oil)

Lubricating Oil	24.000 bbls	50%
Paraffin and Petrolatum	2.400 bbls	5%
Blown Asphalt	7.200 bbls	15%
Fuel Oil	8.400 bbls	17.5%

Morever, we apply you to use these designated reparation machineries and equipments. for we would require longer period, and more expenses and materials to construct a new plant

Signed by Masuo Takahashi

president of Daikyo Oil Co., Ltd.

Attached document

Approved of the applicant concerning responsibility of custody for designated reparation machinery and, equipment.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Attached document

I hereby pledge that, when if you approve my application, dated _____ for movement and authorized use of the machinery and or equipment in the Tokuyama Ex-3rd Naval Fuel Depot, I will observe any and all directives affecting custody and maintenance of reparation machinery and equipment which have been issued on may hereafter be issued by the Supreme Commander for the Allied Powers.

Signed by Masuo Takahashi
president of Daikyo Oil Co., Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

3) List of designated reparation machinery and equipment to be moved and used.

Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
319(1)	Coal Lift	Bucket Elevator, Cap. 9 T/H	1	802-1
319(2)	Mechanical Stoker	Chain Grate, Natural Draught, Fire Grate 2 m^2	1	"
319(3)	Fractionating Tower	Vertical Tray and Cap, Volume 86 m^3	1	"
319(4)	Recovering Tower	Vertical Tray and Cap, Volume 5 m^3	1	802-2
319(5)	Box Condenser	Condensing Surface 50 m^2	1	"
319(6)	Box Condenser	Condensing Surface 50 m^2	1	"
319(7)	Heat Exchanger	Shell and Tube, Heat Exchanging Surface 15 m^2	1	"
319(8)	Heat Exchanger	- ditto -	1	802-3
319(9)	Heat Exchanger	- ditto -	1	"
319(10)	Vacuum Receiver	Vertical Cylindrical, Cap. 3 KL	1	"
319(11)	Vacuum Receiver	- ditto -	1	"
319(12)	Steam Ejector	Body: Cast Iron, Steam Nozzle, Dia. 0.8 m. Height 13.0 m	1	"
319(13)	Steam Jet Pump	Body: Cast Iron, Multiple Steam Nozzle, Dia. 0.4 m, Height 1.5 m	1	802-4
319(14)	Steam Jet Pump	- ditto -	1	"
319(15)	Steam Jet Pump	- ditto -	1	"
319(16)	Condenser	Shell and Tube, Condensing Surface 60 m^2	1	"
319(17)	Condenser	- ditto -		

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

319(8)	Heat Exchanger	- ditto -	1	802-3
319(9)	Heat Exchanger	- ditto -	1	"
319(10)	Vacuum Receiver	Vertical Cylindrical, Cap. 3KL	1	"
319(11)	Vacuum Receiver	- ditto -	1	"
319(12)	Steam Ejector	Body: Cast Iron, Steam Nozzle, Dia. 0.8 m. Height 13.0 m	1	"
319(13)	Steam Jet Pump	Body: Cast Iron, Multiple Steam Nozzle, Dia. 0.4 m, Height 1.5 m	1	802-4
319(14)	Steam Jet Pump	- ditto -	1	"
319(15)	Steam Jet Pump	- ditto -	1	"
319(16)	Condenser	Shell and Tube, Condensing Surface 60m²	1	"
319(17)	Condenser	- ditto -	1	"
319(18)	Steam Pump	Horizontal Duplex Double Acting Cap. 1KL/H 3" x 2" x 3"	1	"
319(19)	Air Compressor	Horizontal Simplex Double Acting Cap. 6.5 m³/H	1	802-5
319(20)	Steam Pump	Horizontal Simplex Double Acting Cap. 10KL/H 7" x 7" x 12"	1	"
319(21)	Steam Pump	Horizontal Duplex Double Acting Cap. 30 KL/H 8" x 6" x 12"	1	"
319(22)	Steam Pump	- ditto -	1	"
319(23)	Steam Pump	- ditto -	1	802-6
319(24)	Steam Pump	Horizontal Duplex Double Acting Cap. 30KL/H 12" x 5" x 12"	1	"
319(25)	Steam Pump	- ditto -	1	"
319(26)	Steam Pump	Horizontal Simplex Double Acting Cap. 20KL/H 10" x 5½" x 12"	1	"
319(27)	Steam Pump	- ditto -	1	"

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Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
319(28)	Steam Pump	Horizontal Simplex Double Acting Cap. 20 KL/H. 10" x 5½" x 12"	1	802-7
319(29)	Steam Pump	- ditto -	1	"
319(30)	Steam Pump	Horizontal Simplex Double Acting Cap. 20 KL/H 8" x 6" x 8"	1	"
319(31)	Oil Tank	Vertical Cylindrical, Cap. 50 KL	1	"
319(32)	Oil Tank	- ditto -	1	"
319(33)	Oil Tank	- ditto -	1	802-8
319(34)	Oil Tank	- ditto -	1	"
~~319(35)~~	~~Oil Tank~~	~~Vertical, Cylindrical, Cap. 200 KL~~	1	"
319(36)	Steam Pump	Horizontal Simplex Double Acting Cap. 10 KL/H 7" x 7" x 12"	1	"
319(37)	Barometric Condenser	Vertical Condensing Surface 40 m² Normal temp. 30°C, Normal Press. 17 mm	1	"
319(38)	Furnace	Foster type Pipe Still, Coal Fired Cap. 160 KL/D. Heating Surface 118 m²	1	"
319(39)	Water Tank	Box type, Cap. 2.5 KL	1	802-9
319(40)	Water Separator	Vertical, Cylindrical, Cap. 0.27 KL	1	"
319(41)	Water Separator	- ditto -	1	"
319(42)	Water Separator	Vertical, Cylindrical, Cap. 0.37 KL	1	"
319(43)	Water Separator	- ditto -	1	"
319(44)	Vacuum Receiver	Vertical, Cylindrical, Cap. 0.57 KL	1	802-10
319(45)	Vacuum Receiver	- ditto -		

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319(37)	Condenser	Normal temp. 30°C, Normal Press. 17 mm		
319(38)	Furnace	Foster type Pipe still, Coal Fired Cap. 160 KL/D. Heating Surface 118 m²	1	〃
319(39)	Water Tank	Box type, Cap. 2.5 KL	1	802-9
319(40)	Water Separator	Vertical, Cylindrical, Cap. 0.27 KL	1	〃
319(41)	Water Separator	- ditto -	1	〃
319(42)	Water Separator	Vertical, Cylindrical, Cap. 0.37 KL	1	〃
319(43)	Water Separator	- ditto -	1	〃
319(44)	Vacuum Receiver	Vertical, Cylindrical, Cap. 0.57 KL	1	802-10
319(45)	Vacuum Receiver	- ditto -	1	〃
319(46)	Vacuum Receiver	- ditto -	1	〃
319(47)	Structure	Steel, L. 4.5m W 3.0m H. 2.50m	1	〃
49	Gate Valve	8", Face to Face : 300 mm	4	〃
50	Gate Valve	7", Face to Face : 250 mm	1	〃
51	Gate Valve	6", Face to Face : 240 mm	5	802-11
52	Gate Valve	6", Face to Face : 270 mm	4	〃
53	Gate Valve	4½", Face to Face : 210 mm	23	〃
54	Gate Valve	4", Face to Face : 230 mm	54	〃
55	Gate Valve	3", Face to Face : 210 mm	14	〃
56	Gate Valve	3", Face to Face : 205 mm	9	〃
57	Gate Valve	3", Face to Face : 165 mm	50	〃

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DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
58	Gate Valve	2", Face to Face : 180 mm	11	802-11
59	Gate Valve	1", Face to Face : 160 mm	3	"
60	Globe Valve	3", Face to Face : 243 mm	2	"
61	Globe Valve	4", Face to Face : 321 mm	21	802-12
62	Globe Valve	2", Face to Face : 230 mm	12	"
63	Globe Valve	1", Face to Face : 158 mm	3	"
64	Globe Valve	3", Face to Face : 270 mm	5	"
65	Globe Valve	2", Face to Face : 155 mm	7	"
66	Globe Valve	2", Face to Face : 150 mm	3	"
67	Globe Valve	1½", Face to Face : 170 mm	21	"
68	Globe Valve	1", Face to Face : 80 mm	46	"
69	Globe Valve	1", Face to Face : 60 mm	20	"
70	Globe Valve	3/4", Face to Face : 80 mm	29	"
71	Globe Valve	½", Face to Face : 60 mm	18	802-13
72	Globe Valve	½", Face to Face : 50 mm	16	"
73	Steam Trap	3/4", Bucket Type	4	"
74	Steel Pipe	12"	20 m	"
75	Gas Pipe	12"	12 m	"

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66	Globe Valve	2". Face to Face : 150 mm	3	〃
67	Globe Valve	1½", Face to Face : 120 mm	21	〃
68	Globe Valve	1". Face to Face : 80 mm	46	〃
69	Globe Valve	1", Face to Face : 60 mm	20	〃
70	Globe Valve	3/4", Face to Face : 80 mm	29	〃
71	Globe Valve	½", Face to Face : 60 mm	18	802-13
72	Globe Valve	½". Face to Face : 50 mm	16	〃
73	Steam Trap	3/4", Bucket Type	4	〃
74	Steel Pipe	12"	20 m	〃
75	Gas Pipe	12"	12 m	〃
76	Gas Pipe	9"	26 m	〃
77	Gas Pipe	7"	2.5m	〃
78	Gas Pipe	6"	290 m	〃
79	Gas Pipe	5"	3 m	〃
80	Gas Pipe	4½"	44 m	〃
81	Gas Pipe	4"	510 m	802-14
82	Gas Pipe	3"	520 m	〃
83	Gas Pipe	2"	150 m	〃
84	Gas Pipe	1½"	65 m	〃
85	Gas Pipe	1"	80 m	〃
86	Gas Pipe	3/4"	160 m	〃
87	Gas Pipe	½"	120 m	〃

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Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
320(1)	Acid Mixer	Vertical Tower, Volume 5 m^3	1	802-196
320(2)	Acid Treating Tank	- ditto -	1	"
320(3)	Water Wash Tank	- ditto -	1	"
320(4)	Water Wash Tank	- ditto -	1	"
320(5)	Acid Settling Tank	- ditto -	1	"
320(6)	Acid Settling Tank	- ditto -	1	"
320(7)	Soda Tank	Vertical, Cylindrical, Volume 3.4 m^3	1	"
320(8)	Soda Tank	- ditto -	1	802-197
320(9)	Water Wash Tank	- ditto -	1	"
320(10)	Water Wash Tank	- ditto -	1	"
320(11)	Soda Settling Tank	- ditto -	1	"
320(12)	Soda Settling Tank	- ditto -	1	"
320(13)	Air Compressor	Vertical, Duplex Single Acting 1 Stage, Cap. 150 m^3/H Normal Press. 5 Kg/Cm^2	1	"
320(14)	Tank	Vertical, Cylindrical, Cap. 4.5 HL	1	802-198
320(15)	Tank	- ditto -	1	"
320(16)	Tank	- ditto -	1	"
1.062	Gate Valve	3", Face to Face : 205 mm	20	"
1.063	Gate Valve	2", Face to Face : 90 mm	40	"
		2" Face to Face : 220 mm	3	"

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

		- ditto -	1	"
320(10)	Water Wash Tank	- ditto -	1	"
320(11).	Soda Settling Tank	- ditto -	1	"
320(12).	Soda Settling Tank	- ditto -	1	"
320(13)	Air Compressor	Vertical, Duplex Single Acting 1 Stage Cap. 150 m^3/H Normal Press. 5 Kg/cm^2	1	"
320(14).	Tank	Vertical, Cylindrical, Cap. 4.5 KL	1	802-198
320(15).	Tank	- ditto -	1	"
320(16)	Tank	- ditto -	1	"
1.062	Gate Valve	3", Face to Face : 205 mm	20	"
1.063	Gate Valve	2", Face to Face : 40 mm	40	"
1.064	Globe Valve	2", Face to Face : 220 mm	3	"
1.065	Globe Valve	2", Face to Face : 140 mm	10	"
1.066	Globe Valve	1", Face to Face : 100 mm	15	"
1.067	Gate Valve	1", Face to Face : 65 mm	10	802-149
1.068	Globe Valve	3/4", Face to Face : 90 mm	20	"
1.069	Cross Valve	2", Face to Face : 205 mm	1	"
1.070	Gas Pipe	2"	200 m	"
1.071	Gas Pipe	1"	50 m	"
321(1)	Acid Treating Tower	Vertical, Cylindrical Cone, Volume 120 KL Riveted	1.	302-192
321(2)	Soda Tank	Vertical, Cylindrical Cone. Cap. 60 KL. Riveted	1	"

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Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
321(3)	Soda Treating Tank	Vertical, Cylindrical Cone, Volume 6.0 KL Riveted	1	802-192
321(4)	Sulphuric Acid Tank	Horizontal, Cylindrical Cap. 35 KL. Riveted	1	"
321(5)	Sulphuric Acid Tank	- ditto -	1	"
321(6)	Oil Receiver	Vertical Cylindrical, Cap. 6 KL Riveted	1	"
321(7)	Oil Receiver	- ditto -	1	802-193
321(8)	Soda Dissolving Tank	Horizontal, Cylindrical Cap. 1.5 KL	1	"
321(9)	Round Steps	Total Length 15.00 m	1	"
321(10)	Rattles	Length 5.00 m	4	"
1.028	Steel Pipe	5"	100 m	"
1.029	Gas Pipe	6"	50 m	"
1.030	Gas Pipe	4"	440 m	"
1.031	Gas Pipe	3"	90 m	"
1.032	Gas Pipe	2"	200 m	"
1.033	Cock	6", Face to Face : 350 mm	3	"
1.034	Ariron Cock	4", Face to Face : 300 mm	3	"
1.035	Gate Valve	4", Face to Face : 230 mm	10	802-194
1.036	Ariron Cock	3", Face to Face : 240 mm	6	"
1.037	Gate Valve	3", Face to Face : 170 mm	22	"

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

1.031	Gas Pipe	3"	90 m	"
1.032	Gas Pipe	2"	200 m	"
1.033	Cock	6", Face to Face : 350 mm	3	"
1.034	Ariron Cock	4", Face to Face : 300 mm	3	"
1.035	Gate Valve	4", Face to Face : 230 mm	10	802-194
1.036	Ariron Cock	3", Face to Face : 240 mm	6	"
1.037	Gate Valve	3", Face to Face : 170 mm	22	"
1.038	Gate Valve	2", Face to Face : 180 mm	47	"
1.039	Ariron Cock	2", Face to Face : 175 mm	20	"
1.040	Globe Valve	2", Face to Face : 215 mm	10	"
1.041	Ariron Cock	1/2", Face to Face : 155 mm	5	"
1.042	Globe Valve	1", Face to Face : 100 mm	30	"
1.043	Globe Valve	3/4", Face to Face : 90 mm	10	"
1.044	Globe Valve	1/2", Face to Face : 70 mm	10	"
1.045	Steam Trap	Face to Face : 470 mm	2	802-195
519(1)	Oil Tank	Vertical Cylindrical, Cap. 70 KL Riveted	1	802-454
519(2)	Oil Tank	Vertical Cylindrical, Cap. 80 KL Riveted	1	802-455
519(3)	Oil Tank	- ditto -	1	"
519(4)	Oil Tank	- ditto -	1	"
519(5)	Oil Tank	- ditto -	1	"
519(6)	Oil Tank	- ditto -	1	"

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Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
519(7)	Oil Tank	Vertical Cylindrical, Cap. 45 KL Riveted	1	802-456
519(8)	Oil Tank	- ditto -	1	"
519(9)	Oil Tank	- ditto -	1	"
~~393~~	~~Oil Tank~~	~~Vertical Cylindrical, Cap. 80 KL Riveted~~	~~1~~	~~802-457~~
	~~Gate Valve~~	~~4", Face to Face : 230 mm~~	~~29~~	~~"~~
	~~Gate Valve~~	~~3", Face to Face : 205 mm~~	~~8~~	~~"~~
	~~Globe Valve~~	~~1½", Face to Face : 120 mm~~	~~4~~	~~"~~
	~~Globe Valve~~	~~1", Face to Face : 85 mm~~	~~13~~	~~"~~
324(25)	Oil Tank	Vertical Cylindrical, Cap. 100 KL Riveted	1	802-154
313(40)	Oil Tank	- ditto -	1	802-236
313(43)	Oil Tank	Vertical Cylindrical, Cap. 150 KL Riveted	1	802-238
313(39)	Oil Tank	Vertical Cylindrical, Cap. 100 KL Riveted	1	802-236
314(9)	Oil Tank	- ditto -	1	802-214
312(10)	Oil Tank	Vertical Cylindrical, Cap. 150 KL Riveted	1	802-265
312(11)	Oil Tank	- ditto -	1	"
312(12)	Oil Tank	Vertical Cylindrical, Cap. 250 KL Riveted	1	"
312(13)	Oil Tank	- ditto -	1	"
310(1)	Oil Tank	Horizontal Cylindrical, Cap. 150 KL Riveted	1	802-721

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313 (48)	Oil Tank	Vertical Cylindrical, Cap. 150 KL Riveted	1	802-238
313 (39)	Oil Tank	Vertical Cylindrical, Cap. 100 KL Riveted	1	802-236
314 (9)	Oil Tank	- ditto -	1	802-214
312 (10)	Oil Tank	Vertical Cylindrical, Cap. 150 KL Riveted	1	802-265
312 (11)	Oil Tank	- ditto -	1	"
312 (12)	Oil Tank	Vertical Cylindrical, Cap. 250 KL Riveted	1	"
312 (13)	Oil Tank	- ditto -	1	"
310 (1)	Oil Tank	Horizontal Cylindrical, Cap. 150 KL Riveted	1	802-721
310 (2)	Oil Tank	- ditto -	1	802-558
225 (23)	Oil Tank	Horizontal Cylindrical, Cap. 70 KL Riveted	1	802-632
225 (24)	Oil Tank	- ditto -	1	"
225 (25)	Oil Tank	- ditto -	1	"
225 (26)	Oil Tank	- ditto -	1	"
322 (32)	Oil Tank	Vertical Cylindrical, Cap. 30 KL Riveted	1	802-173
322 (33)	Oil Tank	- ditto -	1	"
322 (36)	Oil Tank	- ditto -	1	802-174
322 (37)	Oil Tank	Vertical Cylindrical, Cap. 50 KL	1	"

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Inventory No.	Name of Machinery	Type and Specifications	Quantity	Remarks
~~2(21)~~	~~Oil Tank~~	~~Vertical Cylindrical, Cap. 100 KL Riveted~~	~~1~~	~~802-641~~
2(27)	Oil Tank	Vertical Cylindrical, Cap. 80 KL Riveted	1	"
2(28)	Oil Tank	-ditto-	1	802-642
2(34)	Oil Tank	Vertical Cylindrical, Cap. 40 KL Riveted	1	802-643
2(35)	Oil Tank	Vertical Cylindrical, Cap. 100 KL Riveted	1	"
313(41)	Oil Tank	Vertical Cylindrical, Cap. 150 KL Riveted	1	802-236
313(42)	Oil Tank	-ditto-	1	802-237
313(43)	Oil Tank	-ditto-	1	"
313(44)	Oil Tank	-ditto-	1	"
313(45)	Oil Tank	-ditto-	1	"
313(46)	Oil Tank	-ditto-	1	"
313(47)	Oil Tank	-ditto-	1	802-238

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Inventory no.	Name of Machinery	Type and Specifications	Quantity	Remarks
07(1)	Tank	Vertical. Cylindrical, Constr. Riveted Cap. 50 KL	1	
07(4)	Tank	Horizontal, Cylindrical, Constr. Welded Cap. 100 KL.	1	
07(5)	Tank	— ditto —	1	
07(9)	Tank	Horizontal. Cylindrical Constr. Riveted Cap. 150 KL	1	

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Inventry no.	name of machinery	Type and Specifications	Quantity	R.marks
316(8)	Turbine Pump	1 Stage, Motor drivene, Cap. 400 KL/H 1.750 R.P.M re 8", Head : Unknown	1	802-468
459	Turbine Pump	1 Stage, Motor drivene, Cap. 160 KL/H Head 110 m R.P.M. 1,750. Suc. Bore 6" Del. Bore 6"	1	802-765
~~460~~ ~~453~~	Turbin Pump	—ditto—	1	802-765
239(15)	Turbin Pump	Single Suction, Motor driven Cap. 400 KL/H, Normal Press 140 M/H_2O R.P.M. 1.140, Suc. Bore 10" Del. Bore 10"	1	802-651
241(145)	Turbin Pump	Double Suction, Singh Stage Motor driven, Cap. 4,2 KL/H Head 60 m. Suc. Bore 8" Del. Bore 8", Induction Motor Enclosed Cage Rotor 75 HP. 3phase 250 ▽ 14 A 4 Poles.	1	802-673
~~333~~ ~~237~~ (72)	Turbin Pump	2 Stages, Single Suction. Cap. 38 KL/H Motor driven Head 60 KL/H_2O', R.P.M. 1750 Suc. Bore 6"	1	802-358
546	Contrifugal Separater	Deravel ability, 4.5 KW R.P.M. 6000. Cap. 0.3 KL/H	1	
~~547~~	Contrifugal Separater	—ditto—		

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		Del. Bore 10"		
241(145)	Turbin Pump	Double Suction, Singh Stage Motor driven, Cap. 4.2 KL/H Head 60 m. Suc. Bore 8" Del. Bore 8", Induction Motor Enclosed Cage Rotor 75 HP. 3phase 250 V 14 A 4 Poles.	1	802 - 673
~~333~~ ~~237~~ (72)	Turbin Pump	2 Stages, Single Suction. Cap. 38 KL/H Motor driven Head 60 KL/H_2O, R.P.M. 1750 Suc. Bore 6"	1	802 - 358
546	Contrifugal Separater	Deravel ability, 4.5 KW R.P.M. 6000. Cap. 0.3 KL/H	1	
547	Contrifugal Separater	— ditto —	1	
548	Contrifugal Separater	— ditto —	1	
549	Contrifugal Separater	— ditto —	1	
550	Contrifugal Separater	— ditto —	1	
317(44)	Stack	Steel plate, Plate Thickness 6 mm Top Dia. 0.92 m, Height 34.00 m	1	802 - 143
225 (40)	Stack	Steel plate. Dia 100 m Height : 31.50 m Plate Thickeness 9 mm		
301	Automatic Oil Filling Machine	Rotary Continuous Cap. 250 cans / hours.	1	

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

Total

Name	Item Total	Quantity Total
machineries	115	118
Valves and Cocks	44	676 (159 missing)
Steam Traps	2	6 (1 broken)
pipes	21	3,182.5 m (730 m. missing)
	182	821

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DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

ECONOMICS
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CHUGOKU
FEB 19 1951
O.D. 11
INFORMATION

GENERAL HEADQUARTERS
SUPREME COMMANDER FOR THE ALLIED POWERS
Economic and Scientific Section
APO 500

387.6(13 Feb 51)ESS/IND

WT/MWH/RAS/yy
13 February 1951

MEMORANDUM FOR: Reparations Agency, Tokyo

SUBJECT: Application for Movement and Authorized Use of Items Listed for Reparations

1. Reference is attached R.A.R. No. 292 (MB), 12 February 1951, subject: Application for Urgent Movement and Authorized Use of Reparations Equipment of Tokuyama Fuel Depot (Code No. 45-07) Filed by Wakayama Refinery, Toa Nenryo Kogyo K.K. (Toa Oil Industry Co., Ltd.) (Non-reparations plant).

2. The application requesting permission for the transfer and authorized use of the 128 items of reparations machinery and equipment listed in reference 1, above, is approved as indicated below:

Present Location	No. of Items	To Be Transferred To
Tokuyama Fuel Depot (45-07)	128	Toa Nenryo Kogyo K.K., Wakayama Refinery 1,000, Hajikami-hama, Hajikami-mura, Kaiso-gun, Wakayama Prefecture

3. A rental fee shall be established for the authorized use of the equipment listed in reference 1, above, based upon current valuation and comparable to rental charges assessed by private interests for the use of similar equipment.

4. This permit is issued subject to any and all directives affecting reparations plants which have been issued or may hereafter be issued by the Supreme Commander for the Allied Powers. Reports will be rendered as required by current directives and instructions.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

45-07 Sect. II B

1 Incl
as indicated. (dup)

MAURICE M. CLASS
Chief, Industry Division

Cys furnished:
CA Sec (dup)
CPC

MEMO FOR RECORD:
The above ltr is self-explanatory.
Mr. R.A. Steele: M. M. C.
26-7842

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CA Sec Copy

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

TO : GENERAL HEADQUARTERS, SUPREME COMMANDER FOR THE ALLIED POWERS.

FROM : Reparations Agency, Tokyo.

SUBJECT: Application for Urgent Movement and Authorized Use of Reparations Equipment of Tokuyama Fuel Depot (Code No. 45-07) Filed by Wakayama Refinery, Toa Nenryo Kogyo K.K. (Toa Oil Industry Co., Ltd.) (Non-reparations plant).

R.A.R. No. 292 (MS) 12 February 1951.

1. The Reparations Agency hereby submits to your Headquarters an application for urgent movement and authorized use of 128 items of reparations equipment now lying idle in the Tokuyama Fuel Depot (Code No. 45-07) filed by the Wakayama Refinery, Toa Nenryo Kogyo K.K. (Toa Oil Industry Co., Ltd.) (Non-reparations plant), together with an application of the Ministry of Finance and a recommendation of the Ministry of International Trade and Industry as enclosed herewith.

2. These equipment have been allocated to this applicant by the Ministries concerned according to the suggestion of your Headquarters.

3. As the warehouses where these equipment are now stored have to be promptly evacuated for the Occupation needs, it is requested that your most favorable consideration be given to this application at the earliest practicable date.

(Y. Katsuno)
Director, Reparations Division,
Reparations Agency.

Incls:
a. Application of the Ministry of Finance.
b. Recommendation of the Ministry of International Trade and Industry.
c. Application of the subject refinery.

bnd 1

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

List of Facilities for Application

Toa Nenryo Kogyo K. K.

(Toa Oil Company, Ltd.)

LIST OF FACILITIES FOR APPLICATION

Code No.: 45 - 7

Name of Plant: Tokuyama ~~Third Naval~~ Fuel Depot.

Address of Plant: Tokuyama-city, Yamaguchi-prefecture.

(1) For Solvent Deasphalting Unit. (Pump)

Inventory No.	Name of Machinery	Brief Specifications	Quantity	Remarks
			Set	
312 - (7)	Steam Pump	Vertical, Simplex. Double Act. Gun Metal. Cap. 4 Kl/Hr. $4\frac{1}{2}$" x $3\frac{1}{2}$" x 6". Wt. 400 Kg	1	
(8)	"	Ditto		
(9)	"	Horizontal, Duplex. Double Act. Cast Iron. Cap. 25 KL/Hr. 7" x 6" x 10". Wt. 1500Kg	1	
314 - (3)	"	Horizontal, Duplex. Doublt Act. Cast Steel. Cap. 0.9 KL/Hr. 3" x 2" x 3". Wt. 100Kg	1	
315 - (16)	"	Horizontal, Duplex. Double Act. Cast Steel. Cap. 6 KL/Hr. $6\frac{1}{2}$"x$3\frac{1}{4}$"x8". Wt. 500Kg	1	
(17)	"	Ditto		
(18)	"	Horizontal, Duplex. Double Act. Cast Steel. Cap. 7 KL/Hr. 10"x5"x12". Wt. 1000Kg	1	

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312 - (7)	Steam Pump	Vertical, Simplex. Double Act. Gun Metal. Cap. 4 Kl/Hr. 4½" x 3½" x 6". Wt. 400 Kg	1
(8)	"	Ditto	
(9)	"	Horizontal, Duplex. Double Act. Cast Iron. Cap. 25 KL/Hr. 7" x 6" x 10". Wt. 1500Kg	1
314 - (3)	"	Horizontal, Duplex. Doublt Act. Cast Steel. Cap. 0.9 KL/Hr. 3" x 2" x 3". Wt. 100Kg	1
315 - (16)	"	Horizontal, Duplex. Double Act. Cast Steel. Cap. 6 KL/Hr. 6½"x3¼"x8". Wt. 500Kg	1
(17)	"	Ditto	
(18)	"	Horizontal, Duplex. Double Act. Cast Steel. Cap. 7 KL/Hr. 10"x5"x12". Wt. 1000Kg	1
317 - (37)	"	Horizontal, Duplex. Double Act. Cast Steel. Cap. 10 KL/Hr. 7"x5"x7". Wt. 800 Kg	1
(38)	"	Horizontal, Duplex. Double Act. Forged Steel. Cap. 20 KL/Hr. 10"x5"x24". Wt. 1000Kg	1
(39)	"	Horizontal, Simplex. Double Act. Forged Steel. Cap. 20 KL/Hr. 10"x6"x24". Wt. 1000Kg	1
(40)	"	Horizontal, Duplex. Double Act. Cast Steel. Cap. 8 KL/Hr. 6"x4"x6". Wt. 300 Kg	1

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For Solvent Deasphalting Unit. (Tank)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Remarks
225 - (37)	Tank	Cap. Wt. D. L. Vertical 140 KL. 2.5 Ton. 2.25x3.0M. Cylindrical.	1	
(38)	"	Ditto	1	
288	"	Cap. Wt. D. L. 100 KL. 15 Ton. 3.4x12.25M. Horizontal.	1	
289	"	Ditto	1	
290	"	Ditto	1	
291	"	Ditto	1	
310 - (1)	"	Cap. Wt. D. L. 150 KL. 21.3 Ton. 4.6x8.7M.	1	
(2)	"	Ditto	1	
(3)	"	Cap. Wt. D. L. 80 KL. 13.7 Ton. 4.0x7.1M. Horizontal.	1	
(4)	"	Ditto	1	
313 - (39)	"	Cap. Wt. D. H. Vertical 100 KL. 7.6 Ton. 6.3x3.6M. Cylindrical.	1	
(40)	"	Ditto	1	
(41)	"	Cap. Wt. D. H. Vertical 150 KL. 10 Ton. 6.3x5.3M. Cylindrical.	1	
(42)	"	Ditto	1	

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(2) For Solvent Extraction Unit. (Pump)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
331 - (1)	Steam Pump	Horizontal, Simplex. Double Acting. Cap. 30 KL/Hr. 12" x 8" x 16". Cast Steel. Wt. 2,000 Kg.		1	
(2)	"	Ditto		1	
(3)	"	Ditto		1	
(4)	"	Horizontal, Simplex. Double Acting. Cap. 10 KL/Hr. 8" x 6" x 10". Cast Steel. Wt. 700 Kg.		1	
(5)	"	Ditto			
(6)	"	Horizontal, Duplex. Double Acting. Cap. 50 KL/Hr. 12" x 6" x 12". Cast Iron. Wt. 2,000 Kg.		1	
(7)	"	Ditto		1	
(8)	"	Ditto		1	
(11)	"	Horizontal, Simplex. Double Acting. Cap. 5 KL/Hr. 6" x 4" x 6". Cast Steel. Wt. 500 Kg.		1	
(12)	"	Ditto		1	
(13)	"	Horizontal, Simplex. Double Acting. Cap. 30 KL/Hr. 12" x 8" x 16". Cast Steel. Wt. 2,000 Kg.		1	
(14)	"	Horizontal, Simplex. Double Acting. Cap. 50 KL/Hr. 22" x 8" x 24". Forged Steel. Wt. 6,000 Kg.		1	
(15)	"	Ditto			

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(3)	"	Ditto	1
(4)	"	Horizontal, Simplex. Double Acting. Cap. 10 KL/Hr. 8" x 6" x 10". Cast Steel. Wt. 700 Kg.	1
(5)	"	Ditto	
(6)	"	Horizontal, Duplex. Double Acting. Cap. 50 KL/Hr. 12" x 6" x 12". Cast Iron. Wt. 2,000 Kg.	1
(7)	"	Ditto	1
(8)	"	Ditto	1
(11)	"	Horizontal, Simplex. Double Acting. Cap. 5 KL/Hr. 6" x 4" x 6". Cast Steel. Wt. 500 Kg.	1
(12)	"	Ditto	1
(13)	"	Horizontal, Simplex. Double Acting. Cap. 30 KL/Hr. 12" x 8" x 16". Cast Steel. Wt. 2,000 Kg.	1
(14)	"	Horizontal, Simplex. Double Acting. Cap. 50 KL/Hr. 22" x 8" x 24". Forged Steel. Wt. 6,000 Kg.	1
(15)	"	Ditto	1
(16)	"	Ditto	1
(17)	"	Ditto	1
(18)	"	Ditto	1
(19)	"	Ditto	1

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Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
331 - (20)	Steam Pump	Horizontal, Simplex. Double Acting. Cap. 5 KL/Hr. 10" x 2" x 12". Forged Steel. Wt. 1,000 Kg.		1	
(21)	"	Horizontal, Simplex. Double Acting. Cap. 5 KL/Hr. 8" x 6" x 13". Cast Steel. Wt. 500 Kg.		1	
(22)	"	Ditto		1	
(23)	Air Compressor	Vertical, Simplex. Double Acting. Cap. 10 Cu.M/Hr. 1 Kg/Sq.cm. 8"x8"x12". Wt. 200 Kg.		1	
(24)	"	Ditto		1	
(25)	Steam Pump	Horizontal, Duplex. Double Acting. Cap. 50 KL/Hr. 12" x 10" x 12". Cast Iron. Wt. 2,000 Kg.		1	
(26)	"	Ditto		1	
(27)	"	Ditto		1	
(28)	"	Ditto		1	
(29)	"	Ditto		1	
(30)	"	Horizontal, Duplex. Double Acting. Cap. 5 KL/Hr. 6" x 4" x 6". Cast Iron. Wt. 500 Kg.		1	
(31)	"	Horizontal, Simplex. Double Acting. Cast Steel. Wt. 2,000 Kg. 18" x 10" x 20".		1	
(32)	"	Ditto		1	
(33)	"	Ditto		1	
(34)	"	Ditto		1	

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(22)	"	Ditto	1
(23)	Air Compressor	Vertical, Simplex. Double Acting. Cap. 10 Cu.M/Hr. 1 Kg/Sq.cm. 8"x8"x12". Wt. 200 Kg.	1
(24)	"	Ditto	1
(25)	Steam Pump	Horizontal, Duplex. Double Acting. Cap. 50 KL/Hr. 12" x 10" x 12". Cast Iron. Wt. 2,000 Kg.	1
(26)	"	Ditto	1
(27)	"	Ditto	1
(28)	"	Ditto	1
(29)	"	Ditto	1
(30)	"	Horizontal, Duplex. Double Acting. Cap. 5 KL/Hr. 6" x 4" x 6". Cast Iron. Wt. 500 Kg.	1
(31)	"	Horizontal, Simplex. Double Acting. Cast Steel. Wt. 2,000 Kg. 18" x 10" x 20".	1
(32)	"	Ditto	1
(33)	"	Ditto	1
(34)	"	Ditto	1

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Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
331 - (35)	Steam Pump	Horizontal, Duplex. Double Acting. Cap. 10 KL/Hr. 7½" x 5" x 8". Cast Iron. Wt. 700 Kg.		1	
(36)	"	Horizontal, Duplex. Double Acting. Cap. 30 KL/Hr. 9" x 6" x 8". Cast Iron. Wt. 1,000 Kg.		1	
(37)	"	Horizontal, Simplex. Double Acting. Cap. 15 KL/Hr. 12" x 6" x 18". Cast Steel. Wt. 1,000 Kg.		1	
(38)	"	Horizontal, Simplex. Double Acting. Cap. 10 KL/Hr. 8" x 6" x 14". Cast Steel. Wt. 600 Kg.		1	

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For Solvent Extraction Unit. (Tank)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
296 - (26)	Tank	150 KL. 11 Tons. 6.3 (D) x 5.3 (H). Vertical, Cylindrical.		1	
(27)	"	Ditto		1	
(28)	"	Ditto		1	
(46)	"	Ditto		1	
314 - (8)	"	100 KL. 7.6 Tons. 6.3 (D) x 3.6 (H). Vertical, Cylindrical.		1	
(9)	"	Ditto		1	
(10)	"	150 KL. 10 Tons. 6.3 (D) x 5.3 (H). Vertical, Cylindrical.		1	
(11)	"	Ditto		1	
(12)	"	Ditto		1	
315 - (24)	"	100 KL. 7 Tons. 6.3 (D) x 3.5 (H). Vertical, Cylindrical.		1	
(25)	"	Ditto		1	
(26)	"	150 KL. 10 Tons. 6.3 (D) x 5.3 (H). Vertical, Cylindrical.		1	
(27)	"	Ditto		1	
(28)	"	Ditto		1	
(29)	"	Ditto		1	
226 - (46)	Nitrogen Generator	2.2 cu.m./minu.		1	

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	(46)	"	Ditto	1
314 -	(8)	"	100 KL. 7.6 Tons. 6.3 (D) x 3.6 (H). Vertical, Cylindrical.	1
	(9)	"	Ditto	1
	(10)	"	150 KL. 10 Tons. 6.3 (D) x 5.3 (H). Vertical, Cylindrical.	1
	(11)	"	Ditto	1
	(12)	"	Ditto	1
315 -	(24)	"	100 KL. 7 Tons. 6.3 (D) x 3.5 (H). Vertical, Cylindrical.	1
	(25)	"	Ditto	1
	(26)	"	150 KL. 10 Tons. 6.3 (D) x 5.3 (H). Vertical, Cylindrical.	1
	(27)	"	Ditto	1
	(28)	"	Ditto	1
	(29)	"	Ditto	1
226 -	(46)	Nitrogen Generator	2.2 cu.m./minu.	1
	(47)	Gas Holder	50 cu.m. D. 5.0m x H. 3.0m	1

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(3) For Lube Oil Blending Unit. (Pump)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
314 - (4)	Steam Pump	Horizontal, Duplex. Double Acting. Cap. 17 KL/Hr. Wt. 800 Kg. 10" x 4" x 10"		1	
(5)	"	Horizontal, Duplex. Double Acting. Cap. 22 KL/Hr. Wt. 800 Kg. 7½" x 5" x 10"		1	
(6)	"	Ditto		1	

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For Lube Oil Blending Unit, (Tank)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
322 - (32)	Tank	Cap. 30 KL, Wt. 3.0 Tons. D. 4.5 x H. 3.5 M. Vertical, Cylindrical.		1	
(33)	"	Ditto		1	
(36)	"	Ditto		1	
(37)	"	Cap. 50 KL, Wt. 7.0 Tons, D. 6.5 x H. 2.5 M.		1	
(38)	"	Ditto		1	
324 - (27)	"	Cap. 50 KL. Wt. 5.0 Tons. D. 6.0 x H. 1.9M. Closed Type.		1	

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(4) For Accessories. (Pump)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
312 - (6)	Steam Pump	Horizontal, Duplex. Double Acting. Cast Steel. Cap. 18 KL/Hr. 7"x5"x10". Wt. 1,800 Kg.		1	
317 - (34)	"	Horizontal, Duplex. Double Acting. Cast Steel. Cap. 30 KL/Hr. 8"x4"x10". Wt. 950 Kg.		1	
(35)	"	Ditto		1	
(36)	"	Ditto		1	
318 - (1)	"	Horizontal, Duplex. Double Acting. Cast Iron. Cap. 50 KL/Hr. 10"x6"x8". Wt. 950 Kg.		1	
(2)	"	Ditto		1	
322 - (27)	"	Horizontal, Simplex. Double Acting. Cap. 10 KL/Hr. 8"x6"x10". Wt. 1,200 Kg.		1	
(28)	"	Ditto		1	
(29)	"	Ditto		1	
(30)	"	Horizontal, Duplex. Double Acting. Cast Iron. Cap. 5 KL/Hr. 5"x3½"x6". Wt. 400 Kg.		1	

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Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
322 - (31)	Air Compressor	Vertical, Simplex. Double Acting. Cast Iron. Cap. 6.5 KL/Hr. Wt. 550 Kg.		1	
(42)	Steam Pump	Horizontal, Duplex. Double Acting. Cap. 10 KL/Hr. Cast Steel. 9"x4"x12". Wt. 1,000 Kg.		1	
(43)	"	Ditto		1	
(44)	"	Ditto		1	
(45)	"	Ditto		1	
(46)	"	Ditto		1	Located in No. 153 warehouse.
(47)	"	Ditto		1	
(48)	"	Ditto		1	
(49)	"	Horizontal, Duplex. Double Acting. Cap. 10 KL/Hr. Cast Iron. 6"x4"x10". Wt. 1,400 Kg.		1	
(50)	"	Horizontal, Duplex. Double Acting. Cap. 15 KL/Hr. Cast Iron. 7"x6"x10". Wt. 1,500 Kg.		1	
(51)	"	Horizontal, Duplex. Double Acting. Cap. 20 KL/Hr. Cast Iron. 7"x6"x10". Wt. 1,400 Kg.		1	

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For Accessories. (Tank)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
226 - (48)	Tank	100 KL. 7 Tons. 4.7(D) x 5.54(H). Vertical, Cylindrical.		1	
(49)	"	Ditto		1	
(52)	"	73 KL. 7 Tons. 4.7(D)x5.50(H).		1	
275 -	"	12 M3. 15 Tons. 1.4(D)x7.5(H). Vertical, Cylindrical.		1	
276	"	Ditto		1	
297 - (17)	"	100 KL. 8.0 Tons. 4.5(D)x8.3(L). Closed Type. For Gascline Storage.		1	
(18)	"	Ditto		1	
(19)	"	Ditto		1	
(20)	"	Ditto		1	
324 - (26)	"	100 KL. 7.0 Tons. 7.5(D)x3.2(H). Closed Type.		1	
339 - (21)	"	50 KL. 4.0 Tons. 3.35(D)x6.55(L)			

For Accessories. (Tank)

Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
226 - (48)	Tank	100 KL. 7 Tons. 4.7(D) x 5.54(H). Vertical, Cylindrical.		1	
(49)	"	Ditto		1	
(52)	"	73 KL. 7 Tons. 4.7(D)x5.50(H).		1	
275 -	"	12 M³. 15 Tons. 1.4(D)x7.5(H). Vertical, Cylindrical.		1	
276	"	Ditto		1	
297 - (17)	"	100 KL. 8.0 Tons. 4.5(D)x8.3(L). Closed Type. For Gasoline Storage.		1	
(18)	"	Ditto		1	
(19)	"	Ditto		1	
(20)	"	Ditto		1	
324 - (26)	"	100 KL. 7.0 Tons. 7.5(D)x3.2(H). Closed Type.		1	
339 - (21)	"	50 KL. 4.0 Tons. 3.35(D)x6.55(L). Horizontal.		1	
(22)	"	Ditto		1	
(23)	"	Ditto		1	
519 - (1)	"	70 KL. 4.5 Tons. 6.1(D)x2.4(H).		1	

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Inventory No.	Name of Machinery	Brief Specifications	Quantity Set	Quantity No.	Remarks
519 - (2)	Tank	80 KL. 4.65 Tons. 4.8(D) x 4.5 (H).	1		
(3)	"	Ditto		1	
07 - (6)	"	100 KL. 15 Tons. 4.3(D) x 8.0(H).	1		
(7)	"	Ditto		1	
(8)	"	Ditto	1		
(10)	"	Ditto	1		
			1		

128 Items

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

C O P Y

GENERAL HEADQUARTERS
SUPREME COMMANDER FOR THE ALLIED POWERS
Economic and Scientific Section
APO 500

387.6(10 Nov 50)ESS/IND

HBO/MWH/RAS/yy
10 November 1950

MEMORANDUM FOR: Reparations Agency, Tokyo

SUBJECT: Applications for Movement and Authorized Use of Items Listed for Reparations.

1. References are:

a. Memorandum from Reparations Agency, Tokyo, R.A.R. No. 1305 (MS), 11 October 1950, subject, "Application for Movement and Authorized Use of Reparations Equipment of Tokuyama Fuel Depot (Code No. 45-07) Filed by Wakayama Refinery, Toa Nenryo Kogyo K.K. (Non-reparations Plant)".

b. Memorandum from Reparations Agency, Tokyo, R.A.R. No. 1315 (MS), 11 October 1950, subject, "Application for Movement and Authorized Use of Reparations Equipment of Tokuyama Fuel Depot (Code No. 45-07) Filed by Daikyo Oil Co., Ltd. (Non-reparations Plant)".

c. Memorandum from Reparations Agency, Tokyo, R.A.R. No. 1316 (MS), 11 October 1950, subject, "Application for Movement and Authorized Use of Reparations Equipment of Iwakuni Fuel Depot (Code No. 45-05, 45-32) Filed by Koa Oil Co., Ltd. (Non-reparations Plant)".

d. Memorandum from Reparations Agency, Tokyo, R.A.R. No. 1317 (MS), 11 October 1950, subject, "Application for Movement and Authorized Use of Reparations Equipment of Tokuyama Fuel Depot (Code No. 45-07) Filed by Kawasaki Refinery, Showa Oil Co., Ltd. (Non-reparations Plant)".

e. Memorandum from Reparations Agency, Tokyo, R.A.R. No. 1319 (MS), 12 October 1950, subject, "Application for Movement and Authorized Use of Reparations Equipment of Iwakuni Fuel Depot (Code No. 45-05) and Tokuyama Fuel Depot (Code No. 45-07) Filed by Kawasaki Refinery, Mitsubishi Oil Co., Ltd. (Non-reparations Plant)".

2. The above applications requesting permission for the transfer and authorized use of the 4,520 items of reparations machinery and equipment listed in references 1 a. through 1 e. inclusive are approved as indicated below:

MANUFACTURE AND INDUSTRY
FILE 45-7

dec. 47 B

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Memo ESS, GHQ, SCAP to Reparations Agency, Tokyo, File No. 387.6(10 Nov 50)ESS/IND, Subject: Applications for Movement and Authorized Use of Items Listed for Reparations, 10 November 1950, R.A.R. No. 1305, 1315, 1316, 1317, 1319 (MS).

Present Location	No. of Items	To Be Transferred To
Tokuyama Fuel Depot (45-07)	828	Toa Nenryo Kogyo K.K. Wakayama Refinery 1,000, Hajikami-hama Hajikami-mura, Kaiso-gun, Wakayama Prefecture.
	762	Daikyo Oil Co., Ltd. Yokkaichi Refinery 1,274, Toratakairi, Yokkaichi City, Mie Pref.
Iwakuni Fuel Depot		
a. Shozuku Factory (45-05)	2,258	Koa Oil Co., Ltd. Marifu Refinery 2,000, Waki, Waki-mura Kuga-gun, Yamaguchi Pref.
b. Tokuyama Naval Munitions Branch (45-32)	116	"
Tokuyama Fuel Depot (45-07)	193	Showa Oil Co., Ltd. Kawasaki Refinery 46, Ogimachi, Kawasaki City, Kanagawa Prefecture
	254	Mitsubishi Oil Co., Ltd. Kawasaki Refinery 16, Ohgi-machi, Kawasaki City, Kanagawa Prefecture
Iwakuni Fuel Depot Shozuku Factory (45-05)	109	"
Total	4,520	

3. A rental fee shall be established for the authorized use of the equipment listed in reference 1, above, based upon current valuation and comparable to rental charges assessed by private interests for the use of similar equipment.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Memo ESS, GHQ, SCAP to Reparations Agency, Tokyo, File No. 387.6(10 Nov 50)ESS/IND, Subject: Application for Movement and Authorized Use of Items Listed for Reparations, 10 November 1950, R.A.R. No. 1305, 1315, 1316, 1317, 1319 (MS).

4. This permit is issued subject to any and all directives affecting reparations plants which have been issued or may hereafter be issued by the Supreme Commander for the Allied Powers. Reports will be rendered as required by current directives and instructions.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

5 Incl
as indicated.
(dup)

MAURICE M. CLASS
Chief, Industry Division

Cys furnished:
CA Sec (Dup)
CPC

C O P Y

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

C O P Y

TO : GENERAL HEADQUARTERS, SUPREME COMMANDER FOR THE ALLIED POWERS

FROM : Reparations Agency, Tokyo

SUBJECT : Application for Movement and Authorized Use of Reparations Equipment of Iwakuni Fuel Depot (Code No. 45-05) and Tokuyama Fuel Depot (Code No. 45-07) Filed by Kawasaki Refinery, Mitsubishi Oil Co., Ltd. (Non-reparations Plant).

R.A.R. No. 1319 (MS) 12 October 1950

1. Reference:

ESS, GHQ, SCAP Memorandum dated 3 October 1950, subject: "Authorized Use of Equipment from Ex-Military Petroleum Refineries".

2. The Reparations Agency hereby submits to your Headquarters an application for movement and authorized use of fillowing reparations equipment now lying idle in the Iwakuni Fuel Depot (Code No. 45-05)and Tokuyama Fuel Depot (Code NO. 45-06) filed by the Kawasaki Refinery, Mitsubishi Oil Co., Ltd. (Non-reparations Plant), together with an application of the Ministry of Finance and a recommendation of the Ministry of International Trade and Industry as enclosed herewith.

Name of Arsenal	Code No.	No. of Items
a. Iwakuni Fuel Depot	45-05	109 Items (114 pieces)
b. Tokuyama Fuel Depot	45-07	254 " (254 ")
	Total	363 Items (368 pieces)

3. This application has been investigated and has been coordinated with other interested government agencies.

4. It is requested that your most favorable consideration be given to this application at the earliest practicable date.

(Y. Katsuno)
Director, Reparations Division,
Reparations Agency.

5 Incls:

MANUFACTURING AND INDUSTRY FILE 45-7

Sec. IVB

C O P Y

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

List of Facilities for Application

Code No. 45 – 07

Name of Plant Former ~~3rd Naval~~ Tokuyama Fuel Depot

Address of Plant Tokuyama City, Yamaguchi Pref.

1. Machinery (1st Solvent Extraction and Dewaxing Plant)

Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg. No.)
20 (6)	Propane Tank	Vertical Cylindrical. Cap. 4Kl	1	Sheet 15 of 802 Sheet	Area No. 4
		Dia 1.4M H. 8.5m Shell Thick			
		25 mm Normal Press 9~16 Kg/cm²			
		Construction Welded			
20 (7)	"	"	1	"	"
20 (8)	"	"	1	"	"
20 (9)	"	"	1	"	"
20 (10)	Extracting Tower	Vertical Rushing and Bubble	1	Sheet 33 of 802 Sheet	"
		Normal Temp. 50°C Normal			
		Press. 15 Kg/cm² Dia. 1.90m			
		H. 22.4m Shell Thick 32 mm			
20 (11)	Evaporator	Vertical Bubble Plate × 7 and	1	Sheet 40 of 802 Sheet	"
		Tray × 8			
		Normal Temp 206°C~110°C			
		Normal Press 1 Kg/cm²			
		Dia 1.9m H. 15.36m Shell Thick 12mm			
20 (12)	"	Vertical Bubble Plate × 12 and	1	Sheet 39 of 802 Sheet	"
		Bubble Tray × 7			
		Normal Temp 300°C ~ 206°C			
		Normal Press 1.5 Kg/cm²			
		Up. Dia 1.9m H 10.2m T. 15 mm			
		Under Dia 1.2m H. 8.1m			
		Shell Thick 25 mm			
20 (13)	Boiler	Horizontal Smoke Tubular	1	Sheet 45 of 802 Sheet	"
		Evaporating Cap. 2 T/H			
		Heating Area 90 m²			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20(13)	Boiler	Superheated Steam Press 1.5kg/cm²			
		Superheated Steam Temp 400°C			
		Dia 1.70m L.550m			
		Shell Thick 12mm			
		Smoke Tube. Dia 3½"			
		L.5.50m 72 Pieces			
20(14)	Rotary Filter	Vacuum Rotary Motor Driven	1	Sheet 25 of 802 Sheet	Area No.2 & Bldg No.22
		Normal Temp. -42°C			
		Press 8kg/cm²			
		Filting Area 9.5m²			
		Cap. 2.5 kl/h (E) 20 R.P.M			
		Normal Size Dia 3.8m L.3m			
20(15)	〃	〃	1	Sheet 26 of 802 Sheets	〃
20(16)	Evaporator	Vertical Cylindrical Bubble Plate	1	Sheet 19 of 802 Sheet	Area No.4
		Normal Temp. 100°C			
		Press 1 kg/cm²			
		Dia. 0.60m H.8m			
		Shell Thick 9mm			
20(17)	〃	Vertical Bubble Plate×13	1	Sheet 29 of 802 Sheet	〃
		Normal Temp. 100°C			
		Press 1 kg/cm²			
		Dia. 0.60m H. 8m			
		T. 12mm			
20(20)	Receiver	Vertical Cylindrical	1	Sheet 38 of 802 Sheet	〃
		Cap. 15 kl/H Dia 1.9m H.5.3m			
		Shell Thick 32mm			
		Normal Press 16 kg/cm²			
		Normal Temp. 100°C			
20(21)	〃	〃	1	〃	〃
20(22)	Oil Middle Tank	Vertical Cylindrical	1	Sheet 34 of 802	〃
		Cap. 15 kl Dia 1.9m		Sheet	

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Inv: No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20(22)	Oil Middle Tank	H. 5.3m Shell Thick 32mm			
		Normal Press 16 Kg/cm²			
20(23)	Asphalt Separator	Horizontal Cylindrical	1	Sheet 19 of 802	Area No.4
		Bubble Plate		Sheet	
		Normal Press 16 Kg/cm²			
		Temp. 50°C Dia. 1.90m			
		L. 8.30m Shell Thick 32 mm			
20(25)	Air Compressor	Vertical Steam Driven	1	Sheet 42 of	Bldg No.22
		Simplex. Cap. 12 m³/H		802 Sheet	
		7½" × 5" × 10"			
		Normal Press 3 Kg/cm²			
		Del Bore 1½" Air Cooling			
20(26)	Induction Motor	Enclosed cage Rotor 15 HP	1	Sheet 27 of	"
		3 Phase. 220V, 485 R.P.M		802 Sheet	
		14P. 42A 60 Cycle.			
20(27)	"	Enclosed Cage Rotor 15 KW	1	Sheet 26 of	"
		3 Phase. 220V. 51A. 6P		802 Sheet	
		1,150 R.P.M. 60 Cycle			
20(28)	"	"	1	"	"
20(30)	Plunger Pump	Vertical Triplex. Motor Driven	1	Sheet 24 of	"
		Cap. 15 Kg/H Normal Press 6 Kg/cm²		802 Sheet	
		Nominal Size 105 mm × 120 mm			
		Normal Temp. −42°C			
		90 R.P.M			
		Induction Motor Enclosed			
		5 HP. 1150 R.P.M 220V Motor Missing			
20(31)	Steam Pump	Duplex Double Acting	1	Sheet 36 of	"
		Cap. 18 Kg/H. 10"×8"×12"		802 Sheet	
		Normal Press 16 Kg/cm²			
		Suc. Bore 6" Del. Bore 4"			
		Cylinder Body Cast Iron			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20(32)	Steam Pump	Horizontal Duplex Double Acting	1	Sheet 21 of	〃
		Cap. 13 Kl/H 9"x 7"x11"		802 Sheet	
		Normal Press Unknown.			
		Suc. Bore 6" Del. Bore 4"			
		Cylinder Body. Cast Iron.			
20(33)	〃	Horizontal Duplers Double	1	Sheet 20 of	〃
		Acting Cap. 10 Kl/H		802 Sheet	
		8½"x6"x6"			
		Normal Press 3 Kg/cm²			
		Suc. Bore 4" Del. Bore 4"			
		Cylinder Body Cast Iron			
20(34)	〃	Simplex Double Acting Hydol	1	Sheet 34 of	〃
		Cap. 9 Kl/H. 3"x6"x12"		802 Sheet	
		Normal Press. 16 Kg/cm²			
		Temp. 80°C			
		Oil Cylinder Cast Iron			
20(35)	Vacuum Pump	Vertical Simplex Double Acting.	1	Sheet 24 of	〃
		Motor Driven Cap. 370 m³/H		802 Sheet	
		Vacuum 200 mm HG Water			
		Cooling. Suc. Bore 6". Del. Bore			
		8". 210 R.P.M Induction Motor			
		Enclosed Type Ⓔ 75HP			
		800 R.P.H 3,300 V			
		Motor missing			
20(36)	〃	〃	1	〃	〃
20(37)	Plunger Pump	Horizontal Duplex Single	1	Sheet 22 of	〃
		Acting Steam Driven Cap.		802 Sheet	
		3 Kl/H 6"x4"x6" Normal			
		Press 8 Kg/cm²			
20(38)	Gas Suction Pump	Vertical Simplex Single Acting	1	Sheet 27 of	〃
		Motor Driven. Cap. 40 Kg/H		802 Sheet	
		Vacuum 200 mm HG			

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Ind. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20(39)	Gas Suction Rmp	Nominal Size 150mm×150mm			
		110 R.P.M			
20(39)	Gas Compressor	Horizontal Simplex Double Acting	1	Sheet 45 of	Bldg No. 23
		2 Stages. Motor Driven		802 Sheet	
		Cap. 500 m^3/H Suc. Press 1 kg/cm^2			
		Del Press 17 kg/cm^2 Suc. Temp-10°C			
20(39)	Cooler	Shell and Tubes Cooling	1	"	Area No.3
		Surface 35 m^2 Tube Admiralty			
		2 Pass O.D 20mm L. 2.2 m			
		250 Pieces Shell. Steel Plate			
		Dia 0.67m H. 2.7m			
20(39)	"	Vertical Shell and Tubes	1	"	"
		Cooling Surface 25 m^2 Tube.			
		Extra Steel Tube O.D. 32mm			
		L. 2.06m 58 Pieces Shell Steel			
		Plate Dia. 0.6m H. 2.7m			
20(39)	"	"	1	"	"
20(40)	"	Vertical Shell and Tubes	1	Sheet 43 of	"
		Cooling Surface 130 m^2		802 Sheet	
		Dia 0.95m H. 5m			
		Tube Extra Steel Tube			
		O.D 60mm L. 5m 144 Pieces			
		Shell Steel Plate			
		Side Inlet 1" Outlet 4"			
20(41)	"	"	1	Sheet 44 of 802 Sheet	"
20(42)	"	"	1	"	"
20(43)	"	Vertical. Shell and Tubes	1		
		Cooling Surface 45 m^2			
		Dia. 0.5m H. 5 m			
		Tube. Extra Steel Tube			
		O.D 60 mm L. 4.9m 53 Pieces			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20(43)	Cooler	Shell Steel Plate			
		Side Inlet 1" Outlet 2"			
20(44)	"	Vertical. Shell and Tubes	1	Sheet 44 of	Area No.3
		Cooling Surface 45 m²		802 Sheet	
		Dia. 0.6 m L. 5 m Tube.			
		Extra Steel Tube O.D 60 mm			
		L. 4.9 m 53 Pieces Shell. Steel			
		Plate Side Inlet 1" Outlet 2"			
20(45)	Receiver	Vertical Cylindrical	1	Sheet 28 of	"
		Cap. 1.8 Kl Dia. 0.95 m		802 Sheet	
		H. 2.4 m T. 12 m.m Temp.			
		-42°C Press 3 Kg/cm²			
20(46)	Gas Separator	Vertical Column Normal	1	Sheet 24 of	"
		Temp. -25°C Press A.T.M		802 Sheet	
		Dia. 0.5 m H. 1.6 m			
		Shell Thick. 9 m m			
20(47)	Asphalt Separator	Horizontal Cylindrical	1	Sheet 13 of	Area No.5
		Bubble Plate		302 Sheet	
		Normal Press 16 Kg/cm²			
		Temp. 50°C			
		Dia 1.9 m L 8.3 m T. 32 m.m			
20(48)	Receiver	Horizontal Cylindrical	1	Sheet 27 of	"
		Cap. 12 Kl Dia. 1.9 m L. 3.2 m		802 Sheet	
		Shell Thick 20 m m			
		Construction Welded			
20(49)	Water Receiver	Vertical Cylindrical	1	Sheet 40 of	"
		Cap. 10 Kl Dia 1.5 m H. 5.5 m		802 Sheet	
		Shell Thick 8 m m			
		Construction Welded			
20(51)	Oil Tank	Vertical Cylindrical	1	Sheet 49 of	Area No.3
		Cap. 100 Kl Dia 4.5 m H. 7.5 m		802 Sheet	

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20(51)		Side Plate Thick 8 m/m			
		Construction Riveted			
20(52)	Oil Tanks	"	1	Sheet 49 of 802 Sheet	Area No. 3
20(53)	"	Vertical Cylindrical	1	"	"
		Cap. 80Kl Dia 4.5m H. 5m			
		Side Plate Thick 6~8 m/m			
20(54)	"	Vertical Cylindrical	1	Sheet 50 of	"
		Cap. 100Kl Dia 5m H. 6m		802 Sheet	
		Side Plate Thick 8 m/m			
		Construction Riveted			
20(55)	"	Vertical Cylindrical	1	"	"
		Cap. 80 Dia 4.5m H. 5m			
		Side Plate Thick 6~8 m/m			
		Construction Riveted			
20(56)	Steam Pump	Duplex Double Acting	1	Sheet 31 of	No. 22
		Cap. 12 Kl/H 8"×6"×8"		802 Sheet	
		Normal Press 8 Kg/cm²			
		Suc. Bore 3" Del Bore 2½"			
		Oil Cylinder Body Cast Iron			
20(57)	Oil Tank	Vertical Cylindrical	1	Sheet 47 of	Area No. 4
		Cap. 230Kl Dia 7m H. 6m		802 Sheet	
		Side Plate Thick 9 m/m			
		Construction Riveted			
20(58)	"	"	1	"	"
20(59)	"	"	1	"	"
20(60)	Heater	Shell and Tubes	1	Sheet 18 of	"
		Heating Surface 25 m²		802 Sheet	
		Normal Temp. 50°C			
		Normal Press 16 Kg/cm²			
		Tubes Admiralty Brass 2 Pass			
		O.D. 20 mm L 2.6 m 166 Pieces			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Unit)	Sheet No.	Remarks (Bldg No.)
		Shell Steel Plate O.D 0.48m			
		L. 3m Side Inlet 1½"			
		Outlet 3"			
20(61)	Oil Tank	Vertical Cylindrical	1	Sheet 48 of	Area No. 4
		Cap. 200Kl Dia 9.5m H. 3m		802 Sheet	
		Side Plate Thick 8 mm			
		Construction Riveted			
20(62)	Steam Pump	Duplex Double Acting	1	Sheet 36 of	Bldg No. 71
		Cap. 8 Kl/H 8"×4"×8"		802 Sheet	
		Normal Press 16 Kg/cm²			
		Suc. Bore 4" Del Bore 3"			
		Cylinder Body Cast Iron			
20(67)(66)	Plunger Pump	Vertical Triplex Motor Driven	1	Sheet 32 of	"
		Cap. 3 Kl/H		802 Sheet	
		Normal Press Unknown			
		95 R.P.M Nominal Size			
		3"×4" Induction Motor			
		Enclosed 5 HP 1,160 R.P.M 220V Motor missing			
20(68)	Plunger Pump	"	1	Sheet 40 of 802 Sheet	"
20(69)	Propane Receiver	Horizontal Cylindrical	1	Sheet 17 of	Fukugawa
		Cap. 16 Kl Dia 1.9m L. 6.8m		802 Sheet	
		Shell Thick 32mm			
		Normal Press 16 Kg/cm²			
20(72)	Heater	Shell and Tubes	1	Sheet 31 of	"
		Heating Surface 5m²		802 Sheet	
		Normal Temp 80°C			
		Press 2 Kg/cm²			
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L 0.65m 19 Pieces			
		Shell Steel Plate			
		Dia. 0.19m L. 0.75m			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20(85)	Steam Pump	Horizontal Double Acting.	1	Sheet 17 of	Bldg No 71
		Duplex Cap. 16 KG/H 8"x6"x8"		802 Sheet	
		Press 16 KG/cm² Suc. Bore 4"			
		Del Bore 3" Cylinder Body			
		Cast Iron			
20(86)	"	Horizontal Duplex Worthington	1	"	"
		Cap. 16 KG/H 8"x6"x8"			
		Press 16 KG/cm²			
		Suc. Bore 4" Del Bore 3"			
		Cylinder Body Cast Iron			
20(87)	"	Horizontal Duplex Worthington	1	"	"
		Cap. 20 KG/H 8"x6"x8"			
		Normal Press 16 KG/cm²			
		Suc. Bore 4" Del Bore 3"			
		Cylinder Body: Cast Iron			
20(88)	"	Simplex Double Acting Hybol	1	Sheet 30 of	"
		Cap. 18 KG/H 14"x7½x12"		802 Sheet	
		Normal Press 16 KG/cm²			
		Suc. Bore 4" Del Bore 3"			
		Oil Cylinder Body: Cast Steel			
20(89)	"	Horizontal Simplex Hybol	1	Sheet 31 of	"
		Cap. 13 KL 14"x7"x12"		802 Sheet	
		Normal Press 16 KG/cm²			
		Suc. Bore 4" Del Bore 3"			
		Oil Cylinder Body: Cast Steel			
20(96)	"	Simplex Double Acting Hybol	1	Sheet 30 of	Bldg No 71
		Cap. 12 KG/H 10"x6"x10"		802 Sheet	
		Normal Press 16 KG/cm²			
		Suc. Bore 3" Del Bore 2½"			
		Oil Cylinder Body Cast Steel			
26(97)	"	Simplex Double Acting Hybol	1	Sheet 18 of 802 Sheet	"

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Drw. No.	Name of Machinery	Brief Specification	Quantity (Unit)	Sheet No.	Remarks (Bldg No.)
1	Steam Pump	Cap. 6 Kg/H 10"×6"×10"			
		Normal Press 16 Kg/cm²			
		Suc. Bore 3" Del Bore 2"			
		Oil Cylinder Body Cast Steel			
2 6(99)	"	Vertical Simplex Double Acting Weir	1	Sheet 41 of	Bldg No. 71
		Cap. 10 Kg/H 7"×5"×7"		802 Sheet	
		Normal Press 5 Kg/cm²			
		Cylinder Body Gun Metal			
20(100)	"	Simplex Double Acting Weir	1	"	"
		Cap. 10 Kg/H 7"×5"×7"			
		Suc. Bore 3" Del Bore 3"			
		Cylinder Body Gun Metal			
20(101)	Air Compressor	Vertical Steam Driven Simplex	1	Sheet 42 of	"
		Cap. 12 m³/H 7½"×5"×10"		802 Sheet	
		Normal Press 3 Kg/cm²			
		Del. Bore 1½" Air Cooling			
20(102)	"	Vertical Steam Driven Simplex	1	Sheet 44 of	"
		Cap. 10 m³/H 7½"×5"×10"		802 Sheet	
		Normal Press 3 Kg/cm²			
		Del. Bore 1½ Air Cooling			
20(105)	Steam Pump	Duplex Double Acting	1	Sheet 41 of	"
		Cap. 2 Kg/H 4"×3"×6"		802 Sheet	
		Suc. Bore 1½" Del. Bore 1½"			
		Cylinder Body Cast Iron			
20(107)	"	Simplex Double Acting Hyhol	1	Sheet 38 of	"
		Cap. 12 Kg/H 14"×6"×12"		802 Sheet	
		Normal Press Unknown			
		Suc. Bore 4" Del Bore 3"			
		Oil Cylinder Body. Cast Steel			
20(110)	"	Simplex Double Acting Hyhol	1	Sheet 35 of	"
		Cap. 4 Kg/H 6"×4"×10"		802 Sheet	

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Ord. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No	Remarks (Bldg No.)
	Steam Pump	Normal Press 5 kg/cm²			
		Temp. 180°C Suc. Bore 4"			
		Del. Bore 3" With Water Jacket			
		Oil Cylinder Body Cast Steel			
20 (111)	"	Simplex Double Acting Hyhol	1	Sheet 35 of	Bldg No. 71
		Cap. 6 kg/H 6"×5"×12"		802 Sheet	
		Normal Press 2 kg/cm²			
		Normal Temp 200°C			
		Suc. Bore 3" Del. Bore 2"			
		With Water Jacket Oil			
		Cylinder Body Cast Steel			
20 (112)	"	Simplex Double Acting Hyhol	1	Sheet 18 of	"
		Cap. 6 kg/H 10"×6"×10"		802 Sheet	
		Normal Press 16 kg/cm²			
		Suc. Bore 3" Del. Bore 2"			
		Cylinder Body Cast ~~Iron~~ Steel			
20 (113)	"	Simplex Double Acting Hyhol	1	Sheet 38 of	"
		Cap. 5 kg/H 6"×4"×10"		802 Sheet	
		Normal Press 15 kg/cm²			
		Normal Temp 206°C			
		Cylinder Body Cast Steel			
		With Water Jacket Suc Bore			
		3" Del. Bore 2"			
20 (114)	"	Simplex Double Acting Hyhol	1	Sheet 39 of	"
		Cap. 6 kg/H 6"×5"×12"		802 Sheet	
		Normal Press 10 kg/cm²			
		Normal Temp 200°C			
		Cylinder Body Cast Steel			
		With Water Jacket			
		Suc. Bore 3" Del. Bore 2"			
20 (115)	"	Vertical Simplex Wesr	1	Sheet 42 of 802 Sheet	"

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Drw. No	Name of Machinery	Brief Specification	Quantity (Nos.)	Sheet No	Remarks (Bldg No.)
	Steam Pump	Cap. 10 kg/H 7"×5"×7"			
		Suc. Bore 3" Del. Bore 3"			
		Cylinder Body Gun Metal			
20 (1116)	"	Duplex Double Acting	1	Sheet 40 of	Bldg No. 71
		Cap. 3 kg/H $4\frac{1}{2}$"×$2\frac{3}{4}$"×4"		802 Sheet	
		Suc. Bore $1\frac{1}{2}$" Del. Bore 1"			
20 (1118)	"	Duplex Double Acting	1	Sheet 41 of	"
		Cap. 0.5 kg/H $2\frac{1}{2}$"×$1\frac{1}{2}$"×3"		802 Sheet	
		Suc Bore 1" Del. Bore 1"			
		Cylinder Body. Cast Iron			
		With Steam Heater Heating			
		Surface 3 m^2 Dia 0.3m L. 1.0 m			
20 (1119)	"	Duplex Doubll Acting	1	Sheet 42 of	"
		Cap. 0.5 kg/H $2\frac{1}{2}$"×$1\frac{1}{2}$"×3"		802 Sheet	
		Suc. Bore 1" Del Bore 1"			
		Cylinder Body Cast Iron			
20 (1120)	"	Simplex Double Acting. Weir	1	Sheet 31 of	"
		Cap. 8 kg/H 8"×6"×8"		802 Sheet	
		Normal Press Unknonown			
		Suc Bore 3" Del. Bore $2\frac{1}{2}$"			
		Cylinder Body Gun Metal			
20 (1121)	"	Duplex Double Acting	1	Sheet 33 of	
		Cap. 13 kg/H 7"×6"×8"		802 Sheet	
		Normal Press 15 kg/cm^2			
		Suc. Bore 4" Del. Bore 3"			
		Cylinder Body. Cast Iron			
20 (122)	"	Vertical Simplex Weir	1	Sheet 39 of	"
		Cap. 6 kg/H 6"×4"×10"		802 Sheet	
		Normal Press 10 kg/cm^2			
		Cylinder Body. Gun Metal			
		Suc. Bore 3" Del. Bore 2"			

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Inv. No	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20 (125)	Propane Tank	Vertical Cylindrical	1	Sheet 16 of	Fukuyama
		Cap. 14 Kl Dia 1.4m H. 3.3m		802 Sheet	
		Shell Thick 25 m/m			
		Construction Welded			
		Normal Press 4~16 kg/cm²			
20 (126)	"	"	1	Sheet 17 of 802 Sheet	"
20 (127)	Wash Tank	Horizontal Cylinderical Bubble	1	Sheet 32 of	
		Plate. Normal Temp 50°C		802 Sheet	"
		Press 16 kg/cm² Dia 1.4m			
		L. 6.5m Shell Thick 25 m/m			
20 (137)	Steam Pump	Horizontal Duplex Double Acting	1	Sheet 20 of	Bldg No. 71
		Cap. 4 Kl/H 3"x 4"x 3"		802 Sheet	
		Normal Press 3 kg/cm²			
		Suc. Bore 3" Del Bore 2½"			
		Cylinder Body. Cast Iron			
20 (141)	Tank	Vertical Column	1	Sheet 47 of	Fukuyama
		Cap. 20 Kl Dia 3m H. 3.5m		802 Sheet	
		Shell Thick 9 m/m			
		Construction Riveted			
20 (142)	Receiver	Vertical Column	1	Sheet 36 of	"
		Cap. 20 Kl Dia 3.2 mm H. 3 m		802 Sheet	
		Shell Thick 9 m/m			
		Construction Riveted			
20 (143)	Heat Exchanger	Shell and Tubes	1	Sheet 22 of	"
		Heating Surface 25 m²		802 Sheet	
		Normal Temp -19° C			
		Press 15 kg/cm²			
		Tubes Admiralty Brass 2 Pass			
		O.D 20mm L 2.6m 188 Pieces			
		Sheel Steel Plate			
		Dia 0.45m L 3.1m			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No	Remarks (Bldg No.)
20 (144)	Heat Exchanger	Shell and Tubes	1	Sheet 23 of	Fukuzawa
		Heating Surface 25 m²		302 Steel	
		Normal Temp -190°C			
		Press 1.5 kg/cm²			
		Tubes Admiralty Brass 2 Pass			
		O.D 20 mm L. 2.6 m 168 Pieces			
		Shell Steel Plate			
		Dia 0.45 m L. 3.1 m			
20 (146)	Gas Separator	Vertical Column	1	Sheet 25 of	"
		Normal Temp -40°C		302 Sheet	
		Press 2 kg/cm²			
		Dia 0.85 m H. 3 m T. 9 mm			
		Inlet 2" Outlet 2"			
20 (147)	"	"	1	"	"
20 (148)	Middle Tank	Horizontal Cylindrical	1	"	"
		Cap. 5 kl Dia 1.4 m L. 3.5 m			
		Shell Thick 12 mm			
		Construction Welded			
20 (149)	Receiver	Horizontal Cylindrical	1	Sheet 28 of	"
		Cap. 12 kl Dia 1.9 m L. 4.8 m		302 Sheet	
		Shell Thick 20 mm			
		Press 9 kg/cm²			
		Construction Riveted			
20 (151)	Cooling Tower	Vertical Bubble Plate ×5	1	Sheet 21 of	"
		Normal Temp -23°C		302 Sheet	
		Press 1.2 kg/cm²			
		Up. Dia 0.4 m H. 3 m T. 9 mm			
		Under Dia 0.8 m H. 1.1 m T 12 mm			
		Oil Inlet 35 mm Outlet 35 mm			
		Vapor 3". Construction Welded			
20 (152)	"	"	1	Sheet 22 of 302 Sheet	"

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20 (153)	Cooling Tower	Vertical Bubble Plate ×5	1	Sheet 22 of	Fukugawa
		Normal Temp −23°C		802 Sheet	
		Press 1.2 kg/cm²			
		Up. Dia 0.4m H.3m T.9mm			
		Under Dia 0.8m H.4.1m T.12mm			
		Oil Inlet 35mm Outlet 35mm			
		Vapor 3" Construction Welded			
20 (154)	"	Vertical Bubble Plate ×14	1	Sheet 23 of	"
		Normal Temp −42°C		302 Sheet	
		Press 1.4 kg/cm² Up. Dia 0.61m			
		H.4m Shell Thick 9mm			
		Under Dia 1.4m H.5m			
		Thick 25mm			
20 (155)	Cooling Tower	Vertical Bubble Plate ×14	1	Sheet 20 of	"
		Normal Temp 27°C		802 Sheet	
		Press 9 kg/cm²			
		Up. Dia 0.61m H.4m T.12mm			
		Under Dia 1.4m H.5m T.22mm			
		Construction Riveted			
20 (156)	"	Vertical Bubble Plate ×14	1	Sheet 21 of	"
		Normal Temp 25°C		302 Sheet	
		Press 8 kg/cm²			
		Up. Dia 0.61m H.4m T.12mm			
		Under Dia 1.4m H.5m T.22mm			
		Construction Riveted.			
20 (160)	Heat Exchanger	Shell and Tubes	1	Sheet 23 of	"
		Heating Surface 25 m²		302 Sheet	
		Normal Temp −19°C			
		Press 1.5 kg/cm²			
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L.2.6m 168 Pieces			
		Shell. Steel Plate	1		
		Dia. 0.45m L.3.1m			

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Inv No.	Name of Machinery	Brief Specification	Quantity (Unit)	Sheet No	Remarks (Bldg No.)
20 (161)	Evaporating Tower	Vertical Bubble Plate ×14	1	Sheet 19 of	Fukugawa
		Normal Temp 50°C		802 Sheet	
		Press 16 kg/cm²			
		Up. Dia 0.61m H. 4m T. 12mm			
		Under Dia 1.40m H. 5m T. 25mm			
		Construction Riveted			
20 (162)	Propane Heater	Shell and Tubes	1	Sheet 30 of	"
		Heating Surface 20 m²		802 Sheet	
		Normal Temp. 50°C Press 16 kg/cm²			
		Tube Admiralty Brass 2 Pass			
		O.D. 20mm L. 2.06m 166 Pieces			
		Shell Steel Plate			
		Dia. 0.47m L. 2.57m			
20 (163)	Heat Exchanger	Shell and Tubes	1	Sheet 34 of	"
		Heating Surface 5 m²		802 Sheet	
		Normal Temp Unknown			
		Tube. Admiralty Brass 2 Pass			
		O.D 20mm L. 2.07m 103 Pieces			
		Shell. Steel Plate			
		Dia. 0.38m L. 2.5m			
20 (164)	"	Shell and Tubes	1	Sheet 35 of	"
		Heating Surface 15 m²		802 Sheet	
		Normal Temp. Unknown			
		Tube. Admiralty Brass 2 Pass			
		O.D 20mm L. 2.21m 103 Pieces			
		Shell. Steel Plate			
		Dia 0.38m L. 2.60m			
20 (165)	Propane Evaporator	Vertical Bubble Plate ×13	1	Sheet 34 of	"
		Normal Temp 95°C Press 15 kg/cm²		802 Sheet	
		Dia 0.7m H. 10m T. 16mm			
20 (166)	Heat Exchanger	Shell and Tubes	1	Sheet 21 of 802 Sheet	"

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No	Remarks (Bldg No.)
	Heat Exchange	Heating Surface 25 m²			
		Normal Temp −1°C			
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L 2.6m 166 Pieces			
		Shell Steel Plate Dia. 0.45m L. 3.1m			
20 (167)	〃	Shell and Tubes	1	Sheet 33 of	Fukugawa
		Heating Surface 25 m²		802 Sheet	
		Normal Temp. Unknown			
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L. 2.6m 166 Pieces			
		Shell Steel Plate			
		Dia 0.47m L 3.1m			
20 (168)	Solvent Tank	Horizontal Cylindrical	1	Sheet 31 of	〃
		Cap. 1 Kl. Dia. 1.9 m L. 6.65m		802 Sheet	
		Shell Thick 12 mm			
		Construction Welded			
20 (170)	Evaporator	Vertical Bubble Plate × 11	1	Sheet 35 of	〃
		and Bubble. Tray × 8		802 Sheet	
		Normal Temp. 250°C			
		Normal Press 1.5 kg/cm²			
		Dia 0.7m H. 10m T. 9 mm			
20 (171)	Wash Tank	Horizontal Cylindrical Bubble	1	Sheet 32 of	〃
		Plate. Normal Temp. 50°C Press. 16 kg/cm²		802 Sheet	
		Dia. 1.4m L. 6.5m Shell Thick 25 mm			
20 (172)	Evaporator	Vertical Bubble Plate × 11	1	Sheet 37 of	〃
		Normal Press .16 kg/cm²		802 Sheet	
		Temp. 75°C			
		Up. Dia. 0.7m H. 6m T. 16 mm			
		Under Dia 1.4m H. 4.5m Shell Thick 25 mm			
20 (173)	Middle Tank	Vertical Cylindrical Cap. 5 Kl Dia 1.4m L. 3.5m	1	Sheet 27 of 802 Sheet	〃
		Shell Thick 12 mm Construction Welded			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
20 (174)	Solvent Tank	Horizontal Cylindrical	1	Sheet 31 of	Fukugawa
		Cap. 14Kl Dia 1.8m L. 5.65m		802 Sheet	
		Shell Thick 12mm			
		Construction welded			
20 (175)	Induction Motor	Enclosed Cage. Cage Rotor 10KW	1	Sheet 28 of	Bldg No. 27
		3 Phase 220V. 34A		802 Sheet	
		1,150 R.P.M 6P. 60 cycle			
20 (176)	Gear Pump	Motor Driven Cap. 3 Kl/H	1	"	Bldg No. 153
		Normal Press 15 Kg/cm²			
		Temp. Unknown			
		Nominal Size Unknown			
		110 R.P.M Suc. Bore 2"			
		Del Bore 2"			
20 (178)	Power Pump	Horizontal Duplex. Double Acting	1	Sheet 27 of	"
		Belt Driven by Motor		802 Sheet	
		Cap. 15 Kg/H Press 21 Kg/cm²			
		Nominal Size 105 mm x 150 mm			
		58 R.P.M. Suc. Bore 2½"			
		Del. Bore 2"			
		Body Cast Iron			
		Induction Motor Enclosed			
		20 HP 1,160 R.P.M 220V			
		Motor missing			
20 (179)	Plunger Pump	Vertical Triplex Motor Driven	1	Sheet 25 of	"
		Cap. 15 Kg/H Normal Press		802 Sheet	
		6 Kg/cm² Nominal size 105 mm			
		x 120 mm Temp — 40°C			
		90 R.P.M. Suc. Bore 2½"			
		Del. Bore 2" Induction			
		Motor Enclosed 5 HP.			
		1,150 R.P.M. 220V			
		motor missing			
20 (180)	Potary Pump	Motor Driven Kagano	1	"	"
		Cap. 15 Kl/H Normal Press 5 Kg/cm²			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
	Rotary Pump	Temp −40°C Nominal Size unknown			
		300 R.P.M Suc. Bore 4"			
		Del. Bore 3"			
		Induction Motor Enclosed			
		(E) 7.5 HP 1,160 R.P.M 220V Motor missing			
20 (181)	Steam Pump	Duplex Double Acting	1	Sheet. 25 of	Bldg No. 3
		Cap. 0.2 kg/H 2½"×1½"×4"		802 Sheet	
		Nominal Press 2 kg/cm²			
		Suc. Bore 1½" Del. Bore ¾"			
		Cylinder Body Cast Iron			
20 (182)	Rotary Pump	Motor Driven. Cap. 15 kg/H	1	Sheet 32 of	"
		Normal Press Unknown		802 Sheet	
		300 R.P.M			
		Nominal Size Unknown			
		Induction Motor Enclosed			
		(E) 10 HP 1,160 R.P.M 220V Motor missing			
20 (184)	"	Motor Driven Kagano	1	Sheet 28 of	"
		Cap. 5 kg/H Normal Press 1 kg/cm²		802 Sheet	
		290 R.P.M			
		Nominal Size 152 m m			
		Induction Motor Enclosed			
		3 HP 220V 1,150 R.P.M Motor missing			
20 (185)	"	"	1	Sheet 29 of 802 Sheet	"
20 (186)	Gear Pump	Motor Driven. Cap. 3 kg/H	1	Sheet 30 of	"
		Normal Press 15 kg/cm²		802 Sheet	
		110 R.P.M Suc. Bore 2"			
		Del. Bore 2" Body Cast Iron			
		Induction Motor Enclosed			
		5 HP 1,150 R.P.M 220V Motor missing			
20 (193)	Heater	Shell and Tubes Heat	1	Sheet 18 of	Area No. 5
		Exchanging Surface 20 m²		802 Sheet	

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
		Normal Temp 50°C			
		Normal Press 16 Kg/cm²			
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L. 2.16m 166 Pieces			
		Shell Steel Plate			
		Dia 0.48m L. 2.5m			
20 (194)	Heat Exchanger	Shell and Tubes	1	Sheet 36 of	Fukugawa
		Heating Surface 35m²		802 Sheet	
		Normal Temp 100°C			
		Tube. Admiralty Brass 2 Pass			
		O.D 20mm L. 2.6m 216 Pieces			
		Shell Steel Plate			
		Dia. 0.52m L. 3.1m			
20 (195)	Solvent Cooler	Shell and Tubes	1	Sheet 33 of	Area No 5
		Cooling Surface 15m²		802 Sheet	
		Normal Temp Unknown			
		Press 16 Kg/cm²			
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L. 2.2m 103 Pieces			
		Shell Steel Plate			
		Dia. 0.38m L. 2.6m			
20 (196)	Heat Exchanger	Shell and Tubes	1	Sheet 34 of	"
		Heating Surface 16m²		802 Sheet	
		Normal Temp. Unknown			
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L. 2.6m 103 Pieces			
		Shell Steel Plate			
		Dia 0.38m L. 3m			
20 (197)	Heater	Shell and Tubes	1	Sheet 19 of	"
		Heating Surface 10m²		802 Sheet	
		Normal Temp 100°C			

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
		Press 16 kg/cm²			
		Tubes Admiralty Brass 2 Pass			
		O.D 20mm L. 2.06m 72 Pieces			
		Shell Steel Plate			
		Dia. 0.38m L. 2.5m			
20 (198)	Cooler	Shell and Tubes	1	Sheet 20 of	Area No. 5
		Cooling Surface 10 m²		.802 Sheet	
		Normal Temp 32°C			
		Tubes Admiralty Brass 2 Pass			
		O.D 20mm L. 2.2m 72 Pieces			
		Shell Steel Plate			
		Dia. 0.38m L. 2.5m			
20 (199)	Heater	Shell and Tubes	1	Sheet 29 of	"
		Heating Surface 30 m²		802 Sheet	
		Normal Temp 100°C			
		Press 1 kg/cm²			
		Tube. Admiralty Brass 2 Pass			
		O.D 20mm L. 2.6m 210 Pieces			
		Shell Steel Plate			
		Dia. 0.52m L. 3.1m			
20 (200)	Heat Exchanger	Shell and Tubes	1	Sheet 37 of	"
		Heating Surface 25 m²		802 Sheet	
		Normal Temp 50°C			
		Normal Press 16 kg/cm²			
		Tube Admiralty Brass 2 Pass			
		O.D. 20mm L. 2.6m. 168 Pieces			
		Shell; Steel Plate			
		Dia. 0.47m L. 3.1m			
20 (201)	"	Shell and Tubes	1	"	"
		Heating Surface 30 m²			
		Normal Temp. 50°C Press 16 kg/cm²			

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Drw. No	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
		Tube Admiralty Brass 2 Pass			
		O.D 20mm L. 2.6m 210 Pieces			
		Shell Steel Plate			
		Dia 0.52m L. 3.15m			
20 (202)	Heat Exchanger	Shell and Tubes	1	Sheet 37 of	Area No.5
		Heating Surface 5m²		802 Sheet	
		Normal Temp. 50°c Press 16 kg/cm²			
		Tube Admiralty Brass 2 Pass			
		Shell Steel Plate			
		Dia 0.3m L. 1.6m			
20 (203)	Oil Tank	Vertical Cylindrical	1	Sheet 48 of	Area No4
		Cap. 100 kl Dia 4.3m H.7m		802 Sheet	
		Steel Plate Thick 6mm			
		Construction Riveted			
		Concreted Around			
20 (204)	〃	〃	1	〃	〃
20 (205)	〃	〃	1	〃	〃
20 (206)	〃	〃	1	〃	〃
20 (207)	〃	〃	1	Sheet 49 of 802 Sheet	〃
20 (208)	〃	〃	1	〃	〃
20 (212)	Steam Pump	Simplex Double Acting	1	Sheet 42 of	Bldg No.71
		Cap. 2 kl/h 4"×3"×6"		802 Sheet	
		Suc. Bore 1½" Del. Bore 1½"			
		With Seal Box			
		Cylinder Body Cast Iron			
20 (213)	〃	Horizontal Simplex	1	Sheet 20 of	〃
		Cap. 4 kl/h 6"×4"×10"		802 Sheet	
		Normal Press 2 kg/cm²			
		Del. Bore 1½" Suc. Bore 1½"			
		Cylinder Body Cast Iron			
20 (214)	〃	Simplex Double Acting	1	Sheet 40 of 802 Sheet	〃

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
)		Cap. 2 KG/H 4"×3"×6"			
		Normal Press Unknown			
		Suc. Bore 1½" Del. Bore 1½"			
		Cylinder Body Cast Iron			
20 (216)	Plunger Pump	Vertical Triplex Motor Driven	1	Sheet 29 of	Bldg No. 71
		Cap. 2 KG/H		802 Sheet	
		Normal Press Unknown			
		Nominal Size 25 MM × 25 MM			
		Suc. Bore 2" Del. Bore 1½"			
		Induction Motor Enclosed			
		5 HP 220 V 1,150 R.P.M Motor missing			
20 (217)	Steam Pump	Duplex Double Acting	1	Sheet 41 of	"
		Cap. 2 KG/H 4"×3"×6"		802 Sheet	
		Suc. Bore 1½" Del Bore 1½"			
		Cylinder Body Cast Iron			
20 (218)	Stack	Steel Plate Stack	1	Sheet 49 of	Area No. 4
		Top. Dia 1.48 M H. 35 M		802 Sheet	
		Plate Thick 6~9 m m			
146	Gas Compressor	Horizontal Simplex Double	1	Sheet 23 of	Bldg No. 12
		Acting 2 Stages Motor		802 Sheet	
		Driven Cap. 500 M³/H Suc. Press			
		1 KG/cm² Del. Press 17 KG/cm²			
		Suc. Temp −100°C Water			
		Cooling Del Bore 3"			
147	"	"	1	"	"
241 (6)	Induction Motor	Enclosed Cage Rotor	1	"	Bldg No. 51
		110 HP 3,300 V 17.9 AMP			
		8 Pole 60 Cycle 873 R.P.M			
241 (7)	"	"	1		"
241 (8)	"	"	1	Sheet 46 of 802 Sheet	"
676	Oil Tank	Vertical Cylindrical	1	Sheet 47 of 802 Sheet	Area No. 4

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Ser. No.	Name of Machinery	Brief Specification	Quantity (Nos.)	Sheet No.	Remarks (Bldg No.)
		Cap. 250 Kl Dia 6.0 m			
		H. 7.70 m			
		Side Plate Thick 8 mm			
		Construction Riveted			
			~~Total~~ 154		

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Inv. No.	Nam of Machinery	Brief Specification	Quantity (Item)	sheet No.	Remarks (Blag No)
20 (18)	Tank	Vertical Cylindrical Cap. 15 kL Dia. 200m H. 6.5m Const. welded. plate thickness 32 m.m.	1	Sheet No. 616 of 802 sheets	area No. 4
20 (19)	Evaporating Tower	Vertical Dia. 1.40m H. 2.00m Shell thickness 25 m.m.	1	Sheet No. 617 of 802 sheets	"
20 (24)	steam pump	2 kl/H	1	Omitted from Reporation list in Error	Bldg No. 22
20 (29)	Blower	1130 r.p.m. 2HP.	1	"	" 27
20 (50)	Oil Tank	Vertical Cylindrical cap. 6 kl Dia. 1.50m H 3.50m const. Riveted. plate thickness 16 m.m.	1	Sheet No. 630 of 802 sheets	area No. 5.
20 (63)	Filter	Hand Press plate Dimention 570 m.m. × 570 m.m. Filter plate 25 p'cs	1	Sheet No. 685 of 802 sheets	Bldg. No. 71
20 (64)	"	" Filter plate 24 "	1	"	"
20 (65)	"	" Filter plate 26"	1	"	"
20 (71)	Heat Exchanger	Shell and tube Heating Surface 10 m² Normal Press. 16 kg/cm² tube inlet 2" Outlet 2" shell " 2" " 2"	1	Sheet No. 786 of 802 Sheets	Fukugawa

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Blag No.)
		Dia 0.38m L. 23.5m			
20 (74)	Tank	Horizontal Cylindrical Cap. 4kl Dia. 1.3m L. 30m Const. Riveted Plate thickness 25mm	1	Sheet No. 786 of 802 sheet	Fukugawa
20 (76)	Propane Sepd-rating Tower	Dia 0.3m H 9.0m	1	Omitted from Reparation List in Error	"
20 (78)	Heat Exchanger "	Shell and tube Heat surface 2m² tube inlet 2" outlet 2" shell inlet 2" outlet 2" Dia 0.18m L. 5.5m	1	Sheet No. 786 of 802 sheet	"
20 (79)	"	Shell and tube Heat surface 5m² tube inlet 4" outlet 4" shell " 2" " 2" Dia. 0.35m L. 4.4m	1	Sheet No. 786 of 802 sheets	"
20 (81)	Heater	Shell and tube Heating surface 10m²	1	Sheet No. 785 of 802 sheets	"
20 (32)	"	Shell and Tube Heating Surface 10m² Dia 0.5m L. 2.2m	1	Sheet No. 785 of 802 sheets	"

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Inv. No	Name of Machinery	Brief Specification	Quantity (Item)	sheet No.	Remarks (Blag No.)
20 (83)	Heater	Shell and Tube Heating Surface 10m² Dia 0.5m L. 2.2m	1	Sheet No. 786 of 802 sheets	Fukugawa
20 (84)	Receiver	Vertical Cylindrical Cap. 0.7 Kl Dia. 0.8m H. 1.4m	1	sheet No. 786 of 802 sheets	"
20 (90)	Induction Motor	Enclosed Case Rotor 1 HP 3phase 220V 6poles 60 cycle 1150 R.P.M	1	sheet No. 685 of 802 sheets	Bldg No. 71
20 (92)	Steam pump	0.1 Kl/H	1	Omitted from Reparation List in Error	Bldg No. 71
20 (94)	Heater	shell and tube Heating surface 3m² tube steel Inlet Bore 2" outlet Bore 2" shell steel Inlet Bore 2" outlet Bore 2" Dia 0.25m L 1.10m	1	sheet No. 685 of 802 sheets	"
20 (96)	Compressor	Specification unknown	1	Omitted from Reparations List in Error	Bldg No. 71
20 (98)	Steam pump	about 10 Kl/H	1	"	"
20 (103)	"	Horizontal Simplex Double	1	sheet No. 685	"

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Inv. NO.	Name of machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
		Acting cap 1 Kg/H 4"x3"x6" normal press 20 Kg/cm² Suc. Bore 1½" Del Bore 1" Cylinder Body Cast Steel Note : For turbine oil with water Jacket			
20 (104)	Steam pump	Horizontal Simplex Double Acting Cap 2 Kg/H 6"x3½"x6" Normal press 20 Kg/cm² Suc. Bore 1½" Del Bore 1" Cylinder Body Cast steel Note : For Reflux Oil	1	sheet No. 686 of 802 sheets	Bldg No. 71
20 (106)	"	Horizontal Simplex Double acting Hyhol Cap. 15 Kg/H 6"x4"x8" Normal press 10 Kg/cm² Suc Bore 4" Del Bore 3" Cylinder Body Cast steel Note : with water jacket	1	"	"
20 (108)	"	Horizontal ~~Simplex~~ Double Acting Cap 2 Kg/H 6½"x2¼"x7" Normal press 15 Kg/cm² Suc. Bore 2" Del Bore 1½"	1	sheet No. 689 of 802 sheets	"

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Inv. NO.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
		Cylinder Body Cast Steel			
20 (109)	Steam pump	Horizontal Simplex Double acting Cap. 2.6 Kl/H 6"×3"×6" Normal press 16 kg/cm² Suc. Bore 2½". Del Bore 2" Cylinder Body Cast steel	1	sheet No. 689 of 802 sheets	Bldg No. 71
20 (117)	plunger pump	2 Kl/H	1	Omitted from Reparations List in Error	"
20 (123)	Reduction Gear	Gear Speed Ratio unknown	1	Sheet No. 685 of 802 sheets	"
20 (124)	"	" "	1	"	"
20 (128)	Gas Compressor	Horizontal Simplex 4 stages motor and steam Driven Cap. 500 m³/H press 50 kg/cm² r.p.m. Unknown Del. Bore 25 m.m. Suc Bore 100 m.m Induction ~~motor~~ missing	1	sheet No. 595 of 802 sheets	Bldg No. 12
20 (131)	Heat Exchanger	Shell and tube Heating Surface 50 m² tube inlet 4" outlet 4" Shell inlet 6" outlet 6"	1	Sheet No. 786 of 802 sheets	Fukugawa

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Inv. No.	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
		Dia 0.55m L. 5.0m			
20 (132)	"	"	1	"	"
20 (133)	Heat Exchanger	Shell and tube Heating Surface 50m² tube inlet 4" outlet 4" Shell " 6" " 6" Dia 0.55m L. 5.0m	1	Sheet No. 780 of 802 Sheets	Fukugawa
20 (134)	"	"	1	"	"
20 (135)	Tank	Vertical Cylindrical Cap. 6kl Dia 1.8m H 2.4m Const. welded plate thickness 8mm	1	"	"
20 (136)	Cooler	Shell and ~~tube~~ cooling Surface 10m² ~~tube~~ inlet 1½" outlet 1½" shell " 2" " 2" Dia 0.7m L. 2.55m	1	"	"
20 (145)	Water Separator	Vertical Cylindrical Cap 3.5kl Dia 1.2m H. 3.3m Const. Riveted plate thickness 9m.m	1	sheet No. 788 of 802 sheets	"
20 (150)	Acid Treating Tower	Vertical Cylindrical Cap 6kl Dia 1.0m H 6.5m	1	"	"

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Inv. No	Name of Machinery	Brief Specification	Quantity (Item)	Sheet No.	Remarks (Bldg No.)
		Const. welded plate thinkness 6 m m			
20 (158)	Receiver	Vertical Cylindrical Cap. 6kl Dia 1.9m H 2.8m Const Riveted plate thickness 9m.m	1	Sheet No. 786 of 802 sheets	Fukugawa
20 (159)	Cooler	Shell and tube Cooling Surface 10 m² tube inlet 1½" outlet 1½" Shell inlet 2" " 2" Dia. 0.7m L. 2.55m	1	Sheet No. 787 of 802 sheets	"
20 (169)	Tank	Vertical Cylindrical Cap 10 kl Dia 2.6m H 2.2m Const. Rivcted plate thinkness 9m.m	1	Sheet No. 788 of 802 sheets	"
20 (177)	steam pump	10 kl/H	1	Omitted from Reparation List in Error	Bldg No 163
20 (183)	"	2 kl/H	1	"	"
20 (190)	Gas Separator	Vertical Cylindrical Cap 1.7 kl Dia 0.85m H 3.00 m const. Riveted plate thickness 9 m.m	1	Sheet No. 631 of 802 Sheets	Area No. 5
20 (191)	Cooler	Shell and tubes Vertical	1	"	"