

III-a (9)

F/A-267

WANISHI IRON WORKS

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ASSISTANT CHIEF OF AIR STAFF, INTELLIGENCE  
BY COMBINED PERSONNEL OF  
U. S. AND BRITISH SERVICES  
FOR THE USE OF ALLIED FORCES

FUNCTIONAL ANALYSIS REPORT NO. F/A - 267  
Date 14 August 1945

TARGET NO: 90:3-379

NAME OF TARGET: WANISHI IRON WORKS

LOCATION: WANISHI, HOKKAIDO, JAPAN COORDINATES: 42°20'N 141°01'E

PHOTOGRAPHY: 

<u>Date</u>	<u>Mission</u>	<u>Print Nos</u>
29 June 1945	5M306 21BC/3PR	5R:283-287 5L:283-287

1. This report has been prepared from a study of aerial photographs and a consideration of evaluated ground information supplied by the Joint Target Group.

2. FUNCTION:  
This plant produces pig iron and steel and does some steel rolling and probably casting. There are three separate coke oven and by-product plants.

3. LOCATION:  
On the E shore of MURORAN Harbor, NW of and adjoining the town of WANISHI.

4. SERVICES:  
The site is served by the MURORAN Main Line RR and has approximately 5,000 ft of docking facilities for shipping and for the receiving of raw materials.

5. IDENTIFICATION OF FACILITIES:

SECTION A BLAST FURNACE GROUP

1-3	Travelling loaders
4,5	Ore bridges (Transporter cranes, working area 160' x 700')
6	Ore storage yard - 160' x 700'
7	Contractors shed
8	Unidentified small building
9	Conveyor building
10	Ore preparation building
11	Ore preparation, probably sintering. Sintered ore is moved by conveyor to the three (3) blast furnaces in this section and by rail to the four (4) blast furnaces in Section G.
12	Boiler house
13	Probable office and laboratory
14	Probable truck maintenance garage
15,16	Storage and plant maintenance shops
17	Office
18	Probable maintenance shops
19	Power house
20	Probable sub-station and transformers for ore bridge (#4,5) operation
21	Probable sub-station and transformers for travelling loader (#1-3) operation
22,23	Unidentified
24-27	Travelling loaders
28	Conveyor system from loaders to ore yard (#32)
29-31	Ore bridges (Transporter cranes, working area 330' x 1,250')
32	Ore storage yard, 330' x 1,250'

## 5. IDENTIFICATION OF FACILITIES (Continued)

SECTION A BLAST FURNACE GROUP (Cont'd)

33 Charging bins  
 34-36a Blast furnace  
     b Vertical skip hoist  
     c Dust catchers (2)  
     d Hot stoves (3)  
 37,38 Casting sheds  
 39-41 Unidentified  
 42 Office building  
 43a Dust separation building  
     b,c Dorr thickeners  
     d Five (5) dust catchers.. Dust is probably collected from the blast furnace gas for removal of iron ore to be re-sintered for use in the furnace  
 44 Electric sub-station  
 45 Unidentified  
 46 Probable transformer sub-station  
 47 Office building  
 48a Dust separation building  
     b Dorr thickener  
     c Two (2) dust catchers  
 49,50 Unidentified  
 51 Probable pig boat and ladle cleaning and maintenance  
 52 Unidentified  
 53 Storage type building  
 54-56 Probable maintenance buildings  
 57 Water treatment  
 58 Shop type building, reveted, use undetermined  
 59 Settling tanks, probably for coal washer in conveyor system to power house (bldg #61)  
 60 Probable office building  
 61a Boiler house, probably has five (5) boilers  
     b Generator hall  
     c Transformers  
     d Blasting engines  
 62,63 Ladle maintenance buildings  
 64,65 Probable maintenance shops and office  
 66 Unidentified  
 67 Gasometer, wet type, 165' diameter, height approximately 175'  
 68 Garage, vehicle maintenance  
 69 Unidentified  
 70 Storage type building  
 71 Unidentified  
 72 Pig casting house  
 73,74 Unidentified small buildings  
 75 Conveyor from coke ovens in Section B to blast furnaces #34-36  
 76 Conveyor, probably for limestone to charging bins  
 77-81 Small shops and offices

SECTION B COKE OVENS

82 Coke conveyor from stock pile into main conveyor system between coke ovens and charging bins  
 83 Transformer building  
 84,85 Unidentified small buildings  
 86 Shop type building  
 87,88 Unidentified small buildings  
 89-91 Storage buildings  
 92 Condensers and water tanks  
 93 Gasometer, wet type, 90' diameter  
 94 Probable offices  
 95 Small shop  
 96-98 Unidentified small buildings  
 99 Small building with blast walls

## 5. IDENTIFICATION OF FACILITIES (Continued)

SECTION B COKE OVENS (Cont'd)

100	Probable shop building
101	Office
102	Small transformer station
103	Small office
104,105	Shops, probably for trucks
106	Unidentified
107	Storage
108	Unidentified
109	Storage
110	Offices
111	Coal loading building
112	Transformer station
113	Storage, three units, one is roofed, two have wall frame only
114	Conveyor from coke wharf
115	Quenching tower
116	Coke oven, approximately 80 ovens. Cokewharf is enclosed
117	Coaling tower
118	New coke oven under construction, some excavation, small contractors sheds and chimney footing on the site
119	Quenching tower
120	Coke oven, approximately 80 ovens
121	Coaling tower
122	Coke oven, approximately 80 ovens
123	Quenching tower
124	Coke conveyor
125	Storage type building
126	Coal conveyor
127,128	Coal preparation and treatment buildings
129,130	Coal conveyors
131	Small shed
132	Probable garage
133	Unidentified
134	Office building
135	Transformer station
136-147	Storage buildings
148	Building material plant, probably concrete
149-154	Storage type buildings
155	Unidentified

SECTION C BY-PRODUCTS PLANT

156	Primary coolers
157	Ammonia liquor cooling coils
158	Decanting tanks
159	Exhauster house and by-products building
160-162	Final coolers and benzol scrubbers
163	Benzol building
164	Storage tanks for building #163
165	Transformer station
166	Storage type building
167-169	By-products processing buildings
170a	Three vertical tanks probably processing
b	Horizontal tanks
c	Processing building, product undetermined
171	Two (2) storage tanks - 25' diameter
172	Storage tank, 26' diameter, reveted
173	Probable pump house
174	Two storage tanks, 25' diameter, reveted
175	Storage tank, 60' diameter, reveted
176-178	Possible contact sulphuric acid plant
179	Unidentified
180	Offices and laboratory

5. IDENTIFICATION OF FACILITIES (Continued)SECTION C BY-PRODUCTS PLANT (Cont'd)

181 Transformer station  
 182 Probable distillation or roaster unit  
 183 Processing building, hopper or tank at one end  
 184 Processing building, product undetermined  
 185 Eleven (11) horizontal storage tanks, approximately 8' diameter  
 22' long  
 186 Settling tanks, probably tar residue  
 187,188 Processing buildings  
 189a Settling tanks  
 b Processing building  
 190 Transformer building  
 191 Probable pump building  
 192-194 Processing buildings  
 195,196 Garages  
 197 Storage building  
 198 Probable pump house  
 199,200 Processing buildings  
 201 Processing building, and running tanks  
 202 Six (6) storage tanks  
 203 Probable pump building  
 204 Processing building  
 205 Transformer station  
 206 Storage tanks, five (5), 30' diameter  
 207-209 Offices  
 210 Unidentified  
 211 Storage  
 212 Unidentified  
 213-215 Storage

SECTION D STORAGE YARD

216 Car loading building  
 217 Small office

SECTION E COKE OVEN AND UNIDENTIFIED TYPE OF BY-PRODUCTS PLANT

218-220 Storage type buildings  
 221 Administration buildings  
 222 Office  
 223,224 Unidentified small buildings  
 225 Storage  
 226 Elevator building, car loading from boat  
 227 Loading building  
 228 Unidentified small building  
 229 Coke storage and car loading building  
 230a Coke oven, approximately 40 ovens  
 b Coaling tower  
 c Ram  
 231-233 Coal preparation buildings  
 234 Probable producer gas building  
 235 Boiler house  
 236 Quenching tower  
 237 Processing equipment, probably decanting tanks and coolers  
 238 Processing equipment, use undetermined  
 239 Probable exhaustor house  
 240 Processing equipment, use undetermined  
 241 Unidentified small building  
 242 Unidentified probably reinforced concrete  
 building flat roofed, approximately 110' x 85'  
 243 Gasometer, approximately 45' diameter, 35' high  
 244 Probable tank car loading building - pumps etc.  
 245,246 Unidentified small buildings  
 247 Cooling ponds, overhead pipeline from building #240 drains into  
 these ponds.

## 5. IDENTIFICATION OF FACILITIES (Continued)

SECTION F STORAGE YARD, COAL AND ORE

248 Car loading building, probably lime stone  
 249 Office  
 250 Unidentified small building under construction  
 251 Transporter crane, working area 410' x 750'  
 252 Unidentified building  
 253 Ore and limestone receiving building  
 254 Conveyor from #253 to processing building #255  
 255 Processing building probably contains rotary kilns for ore treatment  
 256 Conveyor and collecting hopper from building #255  
 257 Transformer building  
 258 Unidentified building  
 259 Probable office  
 260-262 Unidentified small buildings  
 263-264 Small storage type buildings under construction  
 265 Shop type building, use undetermined  
 266,267 Unidentified small buildings

SECTION G BLAST FURNACE AREA

268 Gasometer, wet type, approximately 80' diameter, 65' high  
 269 Pump house for #270  
 270 Cooling pond  
 271 Storage type building  
 272-287 Small shops and storage  
 288 Ore unloading building  
 289 Ore conveyor system  
 290,291 Mobile ore conveyors  
 292 Ore bridge, ore yard 135' x 800'  
 293 Ore preparation building, sintering etc  
 294 Probable coke preparation  
 295 Charging shed  
 296-299a Blast furnaces  
       b Skip hoist  
       c Hot stoves  
       d Casting house  
 300 Power house, probably uses gas boilers. There is no other visible fuel supply.  
 301 Dust collectors and gas cleaning building  
 302 Probable blasting engine house  
 303,304 Unidentified  
 305 Dust collectors and gas cleaning building  
 306 Probable producer gas plant  
 307 Probable blasting engine house  
 308 Unidentified  
 309 Boiler house  
 310 Small boiler house  
 311,312 Ladle cleaning and lining  
 313 Probable spray pond  
 314 Stand-pipe  
 315 Pump house  
 316 Static water storage tank  
 317-322 Unidentified small buildings  
 323,324 Storage type buildings  
 325,326 Pig casting building  
 327,328 Small sheds  
 329 Coal and coke storage  
 330 Probable maintenance shop  
 331 Shop, use undetermined  
 332 Unidentified small buildings  
 333 Probable garage  
 334-337 Probable offices  
 338-340 Offices

## 5. IDENTIFICATION OF FACILITIES (Continued)

SECTION G BLAST FURNACE AREA (Cont'd)

341 Unidentified  
342 Storage type building  
343 Vehicle maintenance

SECTION H COKE OVENS AND BY-PRODUCTS PLANT

344 Coal treatment building  
345 Conveyor to coaling towers on coke ovens  
346 Coaling tower  
347 Coke ovens, approximately 75 ovens  
348 Quenching tower  
349,350 Water storage tanks and pump houses for quenching  
351 Coaling tower  
352 Coke ovens, approximately 50 ovens  
353 Primary coolers  
354 Decanting tanks  
355 Probable tar storage, six (6) approximately 18' diameter  
356,357 Probable ammonia liquor storage tanks  
358a Exhauster house  
    b,c By-products building  
359 Benzol scrubbers and final coolers  
360 Processing equipment, two (2) towers  
361 Processing building  
362 Storage tank, 30' diameter  
363 Processing equipment, probably four (4) towers  
364 Storage tanks, one 35' diameter, one 18' diameter  
365 Storage tanks, one 35' diameter, one 18' diameter  
366 Probable gas producer  
367,368 Unidentified small buildings  
369,370 Processing buildings, probably tar  
371 Horizontal tanks  
372 Unidentified  
373 Storage tanks, three (3) 34' diameter in blast walls  
374 Unidentified building  
375 Storage type building  
376 Storage tanks, four (4) 30' diameter, with blast walls  
377 Running tanks  
378 Processing building  
379 Spray pond  
380 Probable pump building  
381 Car loading building  
382 Storage tanks, 6 total; 5, 35' diameter; 1, 12' diameter, 1 column  
383 Processing building  
384 Probable residue beds  
385 Office type building  
386-388 Processing buildings  
389 Storage tanks, two (2) 30' diameter with blast walls  
390 Probable sludge or residue beds  
391,392 Probable office and labs  
393,394 Unidentified  
395 Gate guard office  
396-399 Unidentified small buildings  
400 Processing group  
401 Storage tanks  
402 Unidentified  
403 Three pits, 25' diameter with framework above, possibly building  
    under construction  
404,405 Unidentified  
406 Transformer sub-station  
407 Processing building  
408 Probably cooling coils  
409,410 Unidentified small buildings  
411,412 Large storage type bldg with RR spurs entering bldg.  
413-420 Various small shops and storage type buildings

## 5. IDENTIFICATION OF FACILITIES (Continued)

SECTION J ADMINISTRATION AND PROBABLE FOUNDRY GROUP

421	Office
422-424	Storage buildings
425	Probable RR car maintenance shop
426,427	Vehicle maintenance shops
428,429	Office buildings
430-432	Storage buildings
433	Probable office
434-436	Office buildings
437	Main administration building
438	Unidentified structure
439	Administration building
440	Probable garage
441,442	Storage type buildings
443	Boiler house
444	Storage type building under construction
445	Transformer sub-station
446	Shop building, use undetermined
447	Probable foundry
448	Shop building, use undetermined
449,450	Probable foundry buildings
451	Shop, possible machining or casting, cleaning
452-455	Storage buildings
456	Foundry building
457	Transformer sub-station
458,459	Probable storage
460,461	Unidentified
462	Probable RR car repair shop

SECTION K OPEN HEARTH AND ROLLING MILLS

463-465	Unidentified
466,467	Office buildings
468-470	Unidentified
471a	Open hearth building, five (5) furnace stacks, charging
b	Furnace area
c	casting pit
472a	Rolling mill group. Probable soaking pits
b-j	Rolling mills
k,m	Storage yards with overhead travelling cranes
473	Conveyor from #472 to storage yard
474	Area under construction, various small sheds, probably contractor's
475	Probable laboratory
476	Office
477	Building under construction
478	Storage type building
479	Office
480-484	Storage
485-487	Office buildings
488,489	Storage buildings
490	Storage yard, finished products
491	Crane, loader
492	Scrap storage yard
493	Office building

SECTION L STORAGE AREA

494-496	Unidentified
497-500	Storage buildings
501	Reveted building, use undetermined
502-515	Storage buildings
516	Offices
517-523	Storage buildings
524	Scrap storage yard



5. IDENTIFICATION OF FACILITIES (Continued)

SECTION L STORAGE AREA (Cont'd)

525-531 Storage buildings

532,533 Buildings under construction, probably storage

6. DISCUSSION:

Section H of this plant is reported in Air Objective Folder No.90.3 as the MITSUBISHI COAL LIQUEFACTION PLANT (Target No. 988). Photography indicates this to be coke ovens with a general by-product plant.

7. ACTIVITY:

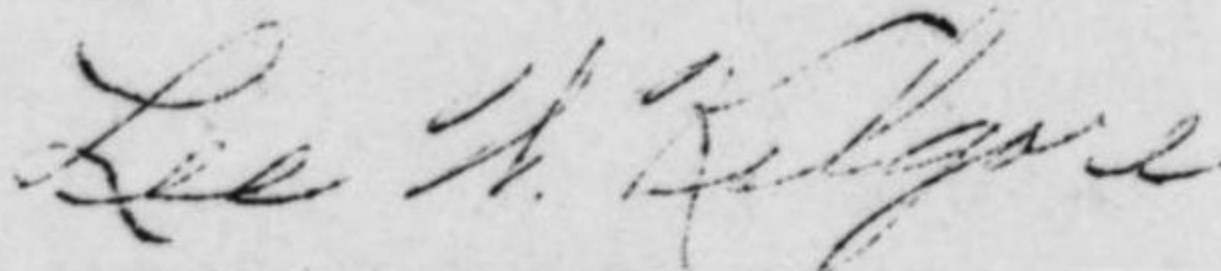
General truck and rail movement is visible on the photography. All coke oven batteries appear to be in production. No smoke is visible from the stacks of the open hearth or rolling mill buildings. Gasometers are approximately 1/3 filled. No shipping activity is visible.

ENCL: CFL '750.805

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COMPLETED

APPROX. COORD. 42° 20' N-141° 01' E PHOTO DATE 29 June 1945 SCALE 1:6,000

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